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# **UNIVERSITY OF SOUTHAMPTON**

Faculty of Health Sciences

Improving Access to Clinical Supervision through Action Research with Community  
Nurses

What are the Build and Design Criteria for an Online Virtual Environment for Clinical  
Supervision?

**Mark Roland Rawlinson**

Thesis for the Degree of Doctor of Clinical Practice  
August 2011



## **ABSTRACT**

**UNIVERSITY OF SOUTHAMPTON** - Faculty of Health Sciences

### Doctor of Clinical Practice

#### **IMPROVING ACCESS TO CLINICAL SUPERVISION THROUGH ACTION RESEARCH WITH COMMUNITY NURSES: WHAT ARE THE DESIGN AND BUILD CRITERIA FOR AN ONLINE VIRTUAL ENVIRONMENT FOR CLINICAL SUPERVISION?**

Mark Roland Rawlinson

Access to clinical supervision is an enduring enigma to many nurses and other healthcare professionals. The aim of this action research study was to bring about the potential for a change in the practice of clinical supervision (CS) by developing a solution to the problem of access. This was achieved in collaboration with community nurses and a range of other staff from one NHS Primary Care Trust. The solution proposed was the development of a new mode of delivery: online clinical supervision.

Holter and Schwartz-Barcott's (1993) Technical Collaborative Approach was used to identify potential user (Supervisee, Supervisors and Management) requirements for an online environment for CS. The research was conducted in three stages. The first stage 'Conceptualisation' involved the identification and exploration of the problem as well as the initial steps in discovering how the problem could be addressed. Central to this was the engagement with the stakeholders. The second stage 'Designing the Solution' was a synthesis of activities undertaken by focus groups in order to determine what a potential online environment might look and feel like, as well as how it might function. Analysis was through a continuous, iterative, cyclical process of member checking. Schach's (1999) Life Cycle Model (adapted) and Lengel's (2001) Website Design Principles were used as a theoretical frame to guide the solicitation of the required design and build criteria. The final stage was 'Evaluation', participants evaluated the design and build criteria they had developed using a SWOT analysis, and finally the experience of undertaking action research was captured through a self completion questionnaire.

In conclusion, this research has identified what an online environment for CS could look like, as well as how it might function, thus opening up the possibility of improving access to CS. The research also highlighted a potential tension between the users' desire for privacy and the employers' desire for access to information. Future negotiations are required to determine how this tension could be managed.

The likely impact of this development, if implemented, will be more community nurses and others undertaking CS at a time and place that is convenient to them, potentially making CS available (via a user-centred design) 24 hours-a-day, seven days-a-week a reality.



<b>CHAPTER 1 THE CYCLE BEGINS .....</b>	<b>1</b>
1.1 Why conduct an inquiry into clinical supervision? .....	1
1.2 Background to clinical supervision: finding a start point .....	2
1.3 Introduction to the thesis.....	6
1.4 Alternative approaches for the research project .....	8
1.5 Preferred approach for the research project.....	9
1.6 Participation and collaboration .....	10
1.7 Aims of the research project .....	11
1.8 Overall structure of the research project .....	12
1.9 Structure and content of chapters.....	13
<b>CHAPTER 2 RESEARCH DESIGN .....</b>	<b>17</b>
2.1 Introduction .....	17
<b>Part A: Research Design Theory .....</b>	<b>17</b>
2.2 The technical collaborative approach to action research .....	17
2.3 Commonality .....	17
2.4 A cyclical process .....	18
2.5 Explanation of the action research cycle for this product .....	20
2.6 A research partnership .....	20
2.7 Understanding 'quality' in this action research project .....	21
2.9 Summary of research design theory .....	25
<b>Part B: Software Development Theory .....</b>	<b>26</b>
2.10 Software development process .....	26
2.11 Requirements analysis.....	26
2.12 Schach's (1999) life cycle model .....	27
2.13 Lengel's (2001) design principles.....	29
2.14 Choosing a software design framework.....	29
<b>Part C: How the Research Study was Conducted .....</b>	<b>32</b>
2.15 A detailed description of the study.....	32
2.16 Data collection.....	32
2.17 Data analysis .....	36
2.18 Implementation of the research design.....	37
2.19 Stage 1: Conceptualisation.....	40
2.20 Stage 2: Solution design .....	41
2.21 Stage 3: Evaluation .....	43
2.22 Summary.....	45
<b>CHAPTER 3 STAGE 1: CONCEPTUALISATION OF ISSUES .....</b>	<b>47</b>
3.1 Introduction .....	47
3.2 Stimulus for the study.....	48
3.3 Background work .....	50
3.4 Documentary analysis.....	54
3.4.1 Strategy adopted for the documentary analysis.....	54
3.4.2 Findings of the documentary analysis .....	56
3.5 Literature review.....	56
3.5.1 Reported obstacles, issues and barriers to access .....	57
3.5.2 Two dominant themes.....	58
3.5.3 The problem of access identified .....	62

3.6 Parallel processes .....	62
3.7 Identification of benefits of online reflective learning.....	62
3.8 Improving access to clinical supervision by bypassing time .....	65
3.9 Stakeholder meeting.....	66
3.9.1 Aims of the stakeholder meeting .....	67
3.9.2 Strategy of the stakeholder meeting .....	67
3.9.3 Outcomes of the stakeholder meeting.....	68
3.10 Summary .....	69
<b>CHAPTER 4 STAGE 2: DESIGNING A SOLUTION .....</b>	<b>71</b>
4.1 Introduction.....	71
<b>Part A: Focus Groups .....</b>	<b>71</b>
4.2 Objectives .....	72
4.3 Method of data collection and analysis .....	72
4.4 Focus group model.....	72
4.5 Recruitment strategy .....	73
4.6 Focus group identity.....	74
4.7 Recruitment to focus groups .....	74
4.8 Focus Groups 1 and 2: Supervisees and supervisors .....	75
4.9 Focus Group 3: Techno-managerial .....	76
4.10 Knowledge generation in focus groups.....	77
<b>Part B: Activity Phases .....</b>	<b>79</b>
4.11 Activity Phase 2: Developing the solution .....	79
4.11.1 Part 1 of the first set of focus group meetings .....	79
4.11.2 Part 2 of the first set of focus group meetings .....	82
4.11.3 The style of facilitation adopted .....	83
4.11.4 Findings relating to clinical supervision .....	83
4.11.5 Findings relating to the website .....	86
4.11.6 Summary of Activity Phase 2.....	89
4.12 Activity Phase 3: First cycle of reflection and analysis .....	90
4.12.1 Data generated from Activity Phase 3 .....	90
4.13 Activity Phase 4: Refining the solution.....	91
4.13.1 Part 1 of the second set of focus group meetings.....	92
4.13.2 Part 2 of the second set of focus group meetings.....	92
4.13.3 Review of storyboards .....	92
4.13.4 Emergent design and build criteria.....	94
4.13.5 Websites: the good, the bad and the ugly!.....	95
4.13.6 Summary of Activity Phase 4.....	96
4.14 Managing bias and empowering participants.....	97
4.15 Activity Phase 5: Second cycle of reflection and analysis .....	100
4.15.1 Data generated from Activity Phase 5 .....	100
4.16 Activity Phase 6: Evaluation cycle .....	101
4.16.1 Part 1 of the third set of focus group meetings .....	101
4.16.2 Findings.....	101
<b>CHAPTER 5 STAGE 3: EVALUATION .....</b>	<b>105</b>
5.1 Introduction.....	105
5.2 The relevance of evaluation .....	105
<b>Part A: Evaluation of the Product.....</b>	<b>107</b>
5.3 Group SWOT analysis .....	107
5.4 Process of data collection and analysis: SWOT analysis.....	107
5.5 Findings of the SWOT analysis .....	108
5.5.1 Strengths.....	109
5.5.2 Weaknesses .....	113

5.5.3 Opportunities .....	116
5.5.4 Threats.....	118
<b>5.6 Summary of the SWOT analysis .....</b>	<b>120</b>
<b>Part B: Evaluation of the Research Process.....</b>	<b>120</b>
5.7 Self-completion questionnaires.....	120
5.8 Principles of action research .....	122
5.9 Process of data collection and analysis: questionnaire.....	122
5.9.1 Questionnaire extract.....	123
5.9.2 Responses .....	123
5.9.3 Findings from the questionnaire .....	123
5.10 Summary of questionnaire.....	129
5.11 Summary.....	130
<b>CHAPTER 6 UNDERSTANDING THE SOLUTION AS A VIRTUAL ENVIRONMENT .....</b>	<b>131</b>
6.1 Introduction .....	131
6.2 The design and build criteria as a cognitive landscape .....	131
6.3 The key design and build criteria .....	132
6.4 The preference matrix .....	133
6.4.1 The home page .....	134
6.4.2 The log on page .....	138
6.4.3 The profile page .....	139
6.4.4 The individual clinical supervision page .....	142
6.4.5 The forum page.....	144
6.4.6 Conclusion to preference matrix.....	147
6.5 Multimedia technologies and the website design.....	148
6.6 Multimedia technologies and cognitive load .....	149
6.7 Summary of the solution as a virtual environment.....	151
<b>CHAPTER 7 UNDERSTANDING THE SOLUTION IN RELATION TO CLINICAL SUPERVISION.....</b>	<b>153</b>
7.1 Introduction .....	153
7.2 Clinical supervision framed in a virtual environment.....	154
7.3 Exposing some potential benefits of online clinical supervision .....	156
7.4 Potential drawbacks to online clinical supervision .....	160
7.5 Summary.....	165
<b>CHAPTER 8 THE END OF A CYCLE AND THE START OF THE NEXT .....</b>	<b>167</b>
8.1 Introduction .....	167
8.2 Generisability .....	167
8.3 Emerging issues and tensions .....	168
8.3.1. Safety, privacy and security .....	168
8.3.2 Development of communities and co-communities of common interest.....	169
8.4 The wider context.....	170
8.4.1 Clinical supervision today .....	170
8.5 Looking back at the journey .....	173
8.5.1 Access to clinical supervision .....	174
8.5.2 Action research .....	175
8.5.3 In the thick of it .....	177
8.5.4 Software development .....	177
8.5.5 Coming to the end of the cycle .....	178
8.6 What next?.....	179
<b>APPENDICES .....</b>	<b>181</b>
<b>GLOSSARY .....</b>	<b>299</b>
<b>REFERENCES .....</b>	<b>301</b>

## LIST OF BOXES

Box 2.1: Unifying features of action research .....	18
Box 2.2: Phases of product development .....	27
Box 2.3: Schach's (1999) product development model (adapted) .....	27
Box 2.4: Focus groups .....	33
Box 2.5: Key questions addressed by the focus groups .....	35
Box 3.1: DClinP modules and reports .....	52
Box 3.2: Definition of clinical supervision adopted for the study .....	68
Box 4.1: Collective responses to Questions 4, 5 and 6 .....	87
Box 4.2: Goal statement (version 1) .....	88
Box 4.3: Goal statement (version 2) .....	93
Box 4.4: Outstanding issues for the final set focus group meetings .....	99
Box 5.1: Strengths of the clinical supervision website .....	109
Box 5.2: Weaknesses of the clinical supervision website .....	113
Box 5.3: Opportunities of the clinical supervision website .....	117
Box 5.4: Threats of the clinical supervision website .....	118
Box 6.1: Design and build criteria .....	132
Box 6.2: Goal statement (version 2) .....	137
Box 7.1: Emergent definition of clinical supervision .....	158
Box 7.2: Goal statement (version 2) .....	159

## LIST OF FIGURES

Figure 2.1: Action research cycle for this project .....	19
Figure 2.2: Illustration of the knowledge generation process .....	36
Figure 2.3: Implementation flow chart .....	38
Figure 3.1: Analysis of literature review .....	58
Figure 4.1: Home page .....	102
Figure 4.2: Sign up page .....	102
Figure 4.3: Log on page .....	103
Figure 4.4: Individual clinical supervision page .....	103
Figure 4.5: Forum page .....	104
Figure 5.1: Democracy .....	124
Figure 5.2: Equity .....	125
Figure 5.3: Liberation .....	126
Figure 5.4: Life enhancement .....	128
Figure 6.1: Home page .....	135
Figure 6.2: Log on page .....	138
Figure 6.3: Profile page .....	140
Figure 6.4: Individual clinical supervision page .....	142
Figure 6.5: Forum page .....	145

## LIST OF TABLES

Table 2.1: Theoretical models for software design and development (Schach 1999).....	31
Table 3.1: Documentary analysis .....	55
Table 3.2: Option appraisal table: the problem of time .....	64
Table 4.1: Box labels .....	81
Table 4.2: Key design and build criteria for the website .....	94
Table 4.3: Website feedback .....	96
Table 6.1: Preference matrix .....	134

## LIST OF APPENDICES

Appendix 1: Letter of ethical approval .....	181
Appendix 2: Group SWOT analysis .....	185
Appendix 3: Self-completion questionnaire .....	187
Appendix 4: Literature review .....	191
Appendix 5: Overview of the study .....	201
Appendix 6: Consent form .....	205
Appendix 7: Presentation of the project .....	209
Appendix 8: Example of activity sheet .....	211
Appendix 9: Collated responses to Questions 1-3 .....	212
Appendix 10: Storyboards .....	217
Appendix 11: Website addresses .....	229
Appendix 12: Website review template.....	231
Appendix 13: Feedback of websites reviewed .....	233
Appendix 14: Responses to outstanding questions .....	237
Appendix 15: Outline specification document .....	247

# Declaration of Authorship

I, Mark Rawlinson, declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

Improving Access to Clinical Supervision through Action Research with Community Nurses: What are the Build and Design Criteria for an Online Virtual Environment for Clinical Supervision?

I confirm that:

1. This work was done wholly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission

Signed:

Date: 19<sup>th</sup> August 2011

x

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With the oversight of my supervisor, editorial advice has been sought. No changes to intellectual content were made as a result of this advice.



# Chapter 1

## THE CYCLE BEGINS

### 1.1 Why conduct an inquiry into clinical supervision?

Clinical supervision (CS) is one of the most important supportive strategies available to healthcare practitioners according to Butterworth (2011), a value based observation that I personally endorse, but one that has become increasing difficult to realise in recent times with increased workloads, financial constraints and an ever-changing political environment in healthcare. Paradoxically, it is at times like this, when the service is facing increased pressure and stress, that access to CS as a supportive and developmental strategy is required even more; yet it would seem that access continues to be problematic for a number of reasons, despite the Nursing and Midwifery Council (NMC) stating that “CS should be available for all nurses” (NMC 2008a). Additionally, the NHS Litigation Authority is insisting that all clinical staff have access to clinical supervision (NHS LA 2011).

CS has become a very important part of my personal theory of practice in recent years and as a result of CS I have been able to identify (and often rediscover) the values which underpin my practice as a nurse. Through CS, I consider, I have been empowered to see the nurse I wish to be, and have been provided with a platform from which I can develop as a person, who is a nurse. My own personal positive experience of CS is the inspiration for this research idea: the development of an online environment as a means of improving access to CS. It is hoped that the outcome of this research will see CS become accessible to all, not just a few.

Identifying the design and build criteria for a virtual environment that could potentially make CS available twenty-four hours-a-day, seven days-a-week, from anywhere that there is an internet connection, is a step towards universal access. It is acknowledged that this is not a complete answer to such a complex issue; it is, however, an initiative with enormous potential. Equity and parity are core values embedded in this research project, demonstrated not only through the research design, but also in the project’s aims and outcomes.

From a theoretical perspective, CS has developed into a global phenomenon (Cutcliffe *et al* 2011). The literature being published today is not so much restating the concept or introducing the idea, but is orientated to developing the evidence base for practice by addressing the problems or issues and providing further evidence of its effectiveness. Even though this research is situational and localised, it contains knowledge that may well be useful to many others in addressing the problem of access and as such is submitted as evidence of original research that makes a unique contribution to the body of knowledge associated with CS.

## **1.2 Background to clinical supervision: finding a start point**

No singular unifying definition of CS is available despite over 20 years of research and debate. This lack of clarity over what CS is often results in confusion and uncertainty for individual practitioners as well as for their employers (Buus and Gonge 2009). So for the purpose of explanation, I will start by loosely defining CS from a personal perspective:

*CS is a planned activity to improve the quality of care delivery by capturing an understanding of the art and science of nursing through reflection and sharing with other experienced practitioners.*

As stated previously, access to CS is a 'right' for qualified nurses (NMC 2008a). NHS employers have in recent years been charged with the responsibility to provide access to CS for their staff (DH 2007, NHS Litigation Authority 2008 / 2011), yet it would seem that for many nurses access is still extremely problematic. CS thus remains an enduring enigma to the nursing and other professions. I suggest that the position proffered by Bishop (1994, p36) is still as relevant and credible today as it was 17 years ago: "CS affords nurses [and others] the opportunity to flourish if they are willing to embrace it and if management is supportive", that is of course providing that they can access it.

This thesis presents an action research study that actively addresses the enduring problem of access to CS for community nurses in one NHS Primary Care Trust (PCT) in the South of England. The solution proposed is an additional and new mode of delivery: online clinical supervision. The design of the potential virtual environment for

CS was developed in partnership with those who are affected by the problem: community nurses and other staff from the NHS PCT who supported the study. It is acknowledged that this proposed solution will also create new issues and problems, but identifying them as part of this research (which is only about identifying design and build criteria for a CS website) demonstrates the continuous cyclical nature of action research.

The thesis is written as a narrative of the study, reflecting the actual sequence of events (where possible) that occurred. Consequently, there is repetition in some sections due to the cyclical and iterative nature of action research. The thesis presents a highly structured account of the research process; the reporting style is that of a technical report at times. It is acknowledged that this is not the usual convention for presentation; it is however an accurate reflection of how the research project was undertaken and Koshy *et al* (2011) suggest that authenticity in writing is something which should be encouraged.

I first became aware of CS as a way of learning about my practice in the early 1990s, although according to Fish and Twinn (1999) it had been part of nursing and midwifery practice in one shape or form since the early 19th century and possibly before. As well as practising it, I have, in recent years as an educationalist, been involved in teaching the principles and process of undertaking CS to student nurses and a range of post qualifying healthcare practitioners, but mainly community nurses. In 2010 alone I delivered in excess of 10 sessions in one PCT in the South of England. So despite CS being ambiguous and to some extent a misunderstood concept, the need for ongoing education, support and training would seem to be enduring throughout the care-giving professions.

There is no clear or accepted starting date for CS in nursing or any other profession. Reference points tend to relate to guidance in policy or regulatory framework. According to Burns (1958, cited in Power 1999), CS started to be practised seriously and on a regular basis in the 1920s. It developed out of the theories and practice of psychoanalysis and has continued to evolve, gaining early prominence as part of professional practice in disciplines such as Mental Health, Children's Nursing and Health Visiting. For Midwives it is traceable back to 1936, when the title 'Supervisor of

Midwives' replaced 'Inspector of Midwives' (Bond and Holland 1998). The majority of literature in nursing relating to CS emerged in the 1990s; Kelly *et al* (2001a) associate this with a number of factors, such as the increased awareness of accountability stimulated by the development of the Professional Code of Conduct (UKCC 1984) and changes in nurse education, with a move away from task orientation to a more individualised evidence-based practice delivery of care, bringing with it an increased focus on responsibility. These factors, combined with a number of high profile failures in Health and Social Care management, highlighted in for example the Clothier Report (1994), have also been influential in the rise of CS into the mainstream culture of nursing. The 1990s saw an increase in the amount and quality of literature produced relating to CS, notably the many works of Tony Butterworth and Veronica Bishop. The, then, governing body of nursing set out in its position statement on CS that "the potential impact on care and professional development is sufficient to merit investment in CS" (UKCC 1996, p2). It also highlights that it has a significant role to play in clinical risk management, aiding recruitment and improving staff moral. Initially, these and other claims, such as that CS could assist in the development of knowledge, skills and professional values, had little or no evidence base to support them, but the UKCC (1996) amongst others, viewed it as a potential process that could link theory and practice. Whilst theoretically the beneficial claims for CS are understandable, it does not mean that they will be readily achievable as they appear to be inadequately defined and under-researched. Nursing research is a developing discipline and the desire to understand the link between theory and practice is omnipresent, resulting in several small and a few large scale studies being reported into the effectiveness of CS, not only in this country but globally. Examples are Butterworth (1996), Cutcliffe (1997), Sloan (2001) and, more recently, Hyrkās *et al* (2006).

The expectations of CS today seem to be titanic, ranging from it being seen as a private, personal, reflective interaction to a requirement of state. NHS care providers are monitored with respect to their ability to provide access to CS (DH 2007, NHS Litigation Authority 2008 / 2011). The progressive development of the expectation of what CS is and can potentially deliver becomes more and more questionable. Yet for a significant number of practitioners that I come into contact with as a nurse and as an educationalist, the desire for an accessible form of CS is, at times, an almost

desperate need. At a recent teaching session this point was clearly demonstrated by the fact that several of the participants attended on their day off. When asked what they hoped to achieve from the day, many stated that they were at a loss as to know how to deal with the pressures of practice and needed someone to talk to or somewhere to talk about their practice as a nurse. When asked about the nature of support they were receiving in their role, the majority reported that they were only receiving direct line management or caseload management supervision, which did not address their individual needs as a nurse; informally, they disclosed that they were surviving with a chat or a moan and they knew this was not good enough. Very few were accessing planned CS.

Regularly undertaking CS has never been made a mandatory aspect of re-registration for nurses. This seems at odds with the claims made about its importance and somewhat contradictory to the position of midwives for whom CS is a compulsory requirement for re-registration. It could be argued, however, that the nature of midwifery supervision is considerably different to that articulated in the nursing literature with its primary focus on competence to practice in a certain way rather than a personal reflection or learning concerning practice.

Historically, it is difficult to establish why the UKCC or even the NMC never made CS a compulsory activity. It could be that the UKCC's position was reflective of the prevailing ideology of the time - individualism, upholding the right of the individual to choose and take personal responsibility - actively moving away from state intervention and control. Alternatively, it could have been a fiscal decision by the government of the day, given the number of nurses it would affect. Then again, if the prevailing ideology in nursing is professionalism, it would be incumbent on individual nurses to demonstrate how they are maintaining a level of knowledge commensurate with their level of practice. This may involve individuals demonstrating responsibility by engaging in activities such as CS as and when needed and not expecting the regulator to determine what should happen, when. Common to all these positions is that it is not a mandatory aspect of practice, but an individual responsibility. The majority of nurses in the UK are employees of the NHS and under the NHS clinical governance framework the employer has a responsibility to provide access to CS, although what this actually means is not that clear. What is clear, however, is that CS

continues to stimulate much debate, inside and outside of the nursing profession, as to the role it plays in staff development and the quality of care delivery.

Nationally, the lack of compulsion for nurses to undertake CS has understandably influenced provision and uptake. For an organisation and for practitioners, there are benefits and costs associated with CS often resulting in compromises. If it were to become mandatory then, like other compulsory elements of a person's job description, CS would need to be adequately funded and resourced. The danger of compulsion is that it could threaten the integrity of the concept and be seen as a monitoring tool or a means of surveillance rather than for professional and personal development. It could also become resented as a tick box exercise deployed to meet governance targets.

Over a period of time it became apparent to me in my role as an educationalist with specific responsibilities for community nurses, that existing modes of CS requiring face-to-face meeting, made CS frustratingly inadequate or inaccessible for many community nurses. This seemingly insurmountable problem of access to CS became part of the inspiration for this doctoral research study. I did not want community nurses' passion for CS to be ignored or studied as a phenomenon. I wanted to find a way of capturing their creativity and enthusiasm for change and involve them in developing a solution so that undertaking CS could become a reality for the majority rather than an aspiration.

The content of this thesis not only represents the thinking behind the ideas generated but also a detailed description of the activities undertaken to address the problem of access to CS for community nurses. More importantly, it is an account of the views, beliefs and aspirations of the community nurses who, through participation in the research, articulated and identified their design and build criteria for the development of a online, virtual environment (the website) for CS.

### **1.3 Introduction to the thesis**

This thesis presents an action research study to identify the design and build criteria for a virtual environment for CS. The overall aim was to improve access to CS for community nurses in one PCT in the South of England.

The thesis comprises eight chapters detailing the three stages of the research study undertaken. Section 1.8 provides an overview of the content and structure of the thesis. In addition, this first chapter sets out the reasons for the preferred research design - action research - and the approach adopted - the technical collaborative approach (Holter and Schwartz-Barcott 1993). But before I explain about the journey travelled to achieve the aims of the research, I wish to clearly restate and elaborate on the relevance and importance of CS to me as an aspect of my personal theory of practice as suggested by (McNiff and Whitehead 2009). This I will do, as it were, from three interconnected persona - as a nurse, as an educationalist and as an action researcher - all of which shape my knowledge and understanding of CS, but from different perspectives.

### ***My personal theory of practice as a community nurse***

I practise a type of nursing that is frequently described as 'invisible' (QNI 2009, Audit Commission 1999). It takes place in peoples' own homes and as such is not normally seen by others; a type of nursing that is personal to patient, family and nurse. This style of independent, isolated practice should result in me, the practitioner, being acutely aware of my accountability and responsibilities. The burden of safety and ethical practice rests firmly on my shoulders. I carry my own thoughts and feelings about the quality of care I deliver, whether it is actively promoting health and wellbeing, or providing clinical care and support at the end of life. Generally the quality of my care is not seen or judged by any other professional colleague; therefore, as for many other nurses, CS is an important activity that affords me the opportunity to reflect upon my practice so I can learn how to improve the quality of care I deliver and have the opportunity to acknowledge the quality of care I have delivered.

### ***My personal theory of practice as an educationalist***

I am actively involved in promoting the idea of CS to nurses and other health and social care practitioners through the delivery of evidence-based teaching. I consider learning to be an essential component of professional practice and as such support the practice of CS as a learning opportunity, which can positively influence the quality of care delivery.

### ***My personal theory of practice as an action researcher***

The intention of action research is to bring about change to improve practice through participation (Kember *et al* 2001). Access to CS is a complex issue and problematic on many levels (Bond and Holland 2010) as will be explored throughout this thesis.

The action research approach adopted is Holter and Schwartz-Barcott's (1993) technical collaborative approach, which is about engaging the collective intelligence of others, through collaboration, to find a solution to a previously identified problem or issue. This normally involves working in partnership with those affected by the problem or issue, in this case, access to CS. I believe individuals, given the opportunity, have the capability of designing a solution to their own problem; my role as researcher is to facilitate the generation of ideas and present them in a comprehensible form.

### **1.4 Alternative approaches for the research project**

Different research approaches were considered for this study. My initial inclination was to undertake a survey to establish who was having CS in the PCT and what type. A survey would have determined activity levels, prevalence and distribution in that population (Polit and Hungler 1995), but it would not necessarily have presented a framework from which a solution could have been developed. Furthermore, this approach was rejected on the grounds of resource availability or more accurately, the lack of resources to undertake a survey of all the PCT personnel.

The next approach considered was the undertaking of a case study focusing on an individual, group or phenomenon (Holloway 2008). This would potentially have afforded an in-depth understanding of the phenomenon of CS, providing data about such things as staff attitudes and experiences of access to CS, but it would have been time-bound and constrained by the inclusion and exclusion criteria of the study. The main reason for its rejection, however, was to do with the nature of the enquiry needed; other methods were more appropriate. An approach was needed that focused on developing a solution to a problem, one that also acknowledged and accounted for the importance of the context in which the problem existed. The nature of enquiry required was one orientated to problem solving and one which accepted and embraced the existence of the researcher as an insider and an outsider at the same time; not one which demonstrated existence, or established  $x$  or  $y$  for a given

community, within a given time frame; thus this case study approach was also rejected.

### **1.5 Preferred approach for the research project**

Action research was the preferred research design for this study. The type of action research undertaken can be described as a technical collaborative approach (detailed in Chapter 2), which according to Holter and Schwartz-Barcott (1993) is where the researcher enters into a collaboration with an identified problem that is then advanced to implementation through facilitation and collaboration. This implies that the problem identification and recognition stage occurs separately to the solution design phase, suggesting that the relationship of the researcher could legitimately be external to the situation, although it would not necessarily have to be so.

Action research according to Chenail *et al* (2007) can be very pragmatic; as is the case with the research reported in this thesis. This research is about community nurses being facilitated to develop a solution to a problem affecting them. As demonstrated in the subsequent chapters, this accurate yet simple description, however, understates the complexity entailed in conducting this type of research. Action research by definition is dynamic; it involves people, the use of resources, the application of knowledge, problem-solving, and is normally cyclical in nature (Waterman *et al* 2001). Solutions emerge over time and are developed through the collaborative efforts of the participants. Action research is usually but not always described as an iterative process that involves the researcher and practitioners acting together on a particular cycle of activities (Avison *et al* 1999). Given that it involves people and their problems, it stands to reason that it is also situational in nature; a point made well by Cohen and Manion (1994) who suggest that action research needs to be situational, concerned not only with diagnosing the problem in a specific context (Stage 1 of this research project - conceptualisation) and attempting to solve it in that context (Stage 2 of this project – solution design), but it also needs to be able to be mindful of the context; the situation is as much a part of the problem as it is a dynamic of the solution, and therefore an insider perspective of the situation was perceived as beneficial. Finally, any proposed solution needs to be evaluated (Stage 3 of this project - evaluation). That said, evaluation in action research is a continuous cyclical process with an ultimate objective that has the potential to change practice in

some way. Given the nature of the problem of access to CS, Holter and Schwartz-Barcott's (1993) technical collaborative approach to action research was considered an appropriate approach to adopt. This particular approach to action research also demonstrates a high degree of constructive alignment with the process of software development. Traditionally, if a software solution is identified as a possible solution to a problem, the problem is presented to the software developers, who would work collaboratively with the client and potential users to develop a potential solution that is tailored to their specific needs and requirements. In this research I, the researcher, facilitated this approach.

Facilitating the generation of knowledge as an action researcher (either as an outsider or insider) through activities is an identifiable feature of most approaches to action research. This, however, is contrary to many other forms of research where objectivity is preferred (McNiff and Whitehead 2009). This research has three main stages, each requiring a different level of involvement from myself as the researcher. These stages will be explained in subsequent chapters. In the conceptualisation stage, I was very much an outsider looking in on the presenting problem; this was, however, tempered with the fact that as a community nurse I am also an insider who experiences the problem of access to CS, first hand. When working with the participants in the solution design and evaluation stages, I adopted the role of the researcher (an outsider). In reality I am therefore one person with multiple identities within the context of the research study. Being honest and open about my role and position throughout the research process enabled me, I believe, to reduce the effect of researcher bias by defining my position from the outset in order to reduce any ambiguity surrounding my identity. This is discussed in more depth in Chapter 2. Unlike many other forms of research where the involvement of the researcher is seen as a negative, action research often considers it desirable to be close to the context of the research environment as in this case (McNiff and Whitehead 2009). It is, however, complex.

## **1.6 Participation and collaboration**

Action research is usually collaborative and it is participatory, aiming to engage those who are affected by the issue or problem in the solution. This idea of collaboration extends throughout the whole project and to that end any solution designed will need

to be subject to internal evaluation. If meaningful participation is to be achieved, then the methods of data collection and analysis will need to encourage creativity and liberate people to develop a new or different solution. More crucially, it needs to be able to position the user or recipient of the proposed change at the centre of its development and not on the periphery.

Given that this research project is about active involvement of participants and aims to identify their design and build criteria for a online environment for CS, it was incumbent on me, as the researcher, to ensure the data collection and analysis methods used not only reflected the principles of action research but were also capable of generating sufficient and appropriate knowledge that could be used to develop the solution (a website). At the heart of this enquiry is the need to understand the users' and clients' requirements from the inside as it were. Getting to this type of information needs a process of enquiry that is open enough to capture potential users' views and aspirations but which also has an inherent way of distilling or analysing what things mean. The challenge is to ensure that the data generation and analysis undertaken is an authentic representation of participants' contributions and not an output generated by a mediating process. If the data generation was to be externally mediated (as is often the case) the danger is that the outcome could become a simplification of the situation as determined by theoretical abstraction. Indeed, Elliott (1991) warns action researchers to remember that analytical or theoretical understanding has a subordinate relationship to a synthetic understanding of the whole situation. This would suggest that action research is as much about developing a practical understanding of the complex and messy, as it is about the generation of knowledge. The type of knowledge generation, though, should also be relational to the purpose of the enquiry and have the potential to provide a means of developing a solution to a problem, to bring about change and potential improvement in practice

### **1.7 Aims of the research project**

The overarching aim of this project was to engage community nurses and their employer in the development of a solution to a problem affecting them.

### ***Specific aims***

- To establish an understanding of the problem presenting, including the management and organisation of CS for community nurses in the PCT.
- To develop and evaluate a solution to the problem by identifying the design and build criteria for an online system of CS, through the collective and collaborative efforts of the participants (community nurses and other PCT staff).
- To create a user-centred design that addresses individual and organisational needs.
- To evaluate the product developed and participants' experience of action research through the use of a self-completion questionnaire.

### **1.8 Overall structure of the research project**

This research project has three stages; each stage formed the foundation to the next, and thus all stages were inter-dependent. Each stage, however, also had an activity cycle of its own, often with multiple phases.

#### ***Stage 1: Conceptualisation***

This stage included identifying the problem of access to CS, developing an understanding of why it was a problem and contextualising the problem in order that it could be investigated.

#### ***Stage 2: Solution design***

This stage involved the theoretical construction of a website, an online forum for CS, as a solution to the problem of access. It included formulation, analysis and specification of user and client needs. Through the medium of focus groups, community nurses and their employer were facilitated to develop a solution to their problem.

#### ***Stage 3: Evaluation***

This had two parallel components: firstly, an evaluation of the product developed as the solution and, secondly, an evaluation of the process, in other words, participant's experiences of undertaking action research. The potential impact of the solution, in

terms of an additional approach for CS, is discussed and new knowledge to enhance the understanding of CS is presented.

Although the content of this thesis is highly structured and presented in three discreet, chronological stages, the reality was, as is often the case with action research, that it was a somewhat messy process with cyclical and iterative elements that were not sequential. This chaotic type of atmosphere is often attributable to the creative and discovery-orientated characteristics of this type of enquiry and not a lack of clarity of purpose or organisation. According to DePoy and Gitlin (2005), it is important that participants in action research are able to be creative and liberated in their thinking. This principle, I believe, equally applies to myself as the researcher. Chapter 2 is presented before the background information and literature review. This provides the reader with a detailed understanding of the structures and sequence of events prior to commencing the journey to design a solution. Chapters 3, 4 and 5 will relate to each of the stages of the study and include data collection, analysis and a discussion of the findings relating to the individual stage. No discreet chapters relating to data collection methods or findings will be presented. The justification for this departure from convention is a pragmatic one as well as being reflective of the nature of this approach to research. The purpose of this thesis is essentially to recount the journey of how a solution to a real problem was designed. It therefore seems logical and reasonable to have an early understanding of the process adopted and the descriptive narrative presented more or less as it occurred.

## **1.9 Structure and content of chapters**

### ***Chapter 1: The cycle begins***

This chapter has already introduced the research project; it will now explain the structure of the thesis.

### ***Chapter 2: Research design***

This chapter essentially presents the research design adopted for the project, describing the research process used to gain an understanding of the requirements of the participants. This includes an articulation of the underpinning theory to the

approach, as well as detail of the stages of knowledge generation needed to identify the design and build criteria for an online virtual environment for CS.

### ***Chapter 3: Conceptualisation of issues***

Together, the three elements of this chapter detailed below constitute the first stage of the action research approach adopted for this study, which involves the identification and exploration of the problem as well as the initial steps in discovering how the problem could be addressed. Central to this is the engagement with the stakeholders.

#### **Background and stimuli for the study**

Background information about CS and an explanation of why this study was undertaken is presented, including a description of the various stimuli for the study.

#### **Literature review**

The key literature informing the study is identified. CS as a concept and modes of delivery are explored as part of the conceptualisation and exploration of the situation; however the main focus of the literature review and discussion relates to verification of the existence of the problem of access to CS and how it manifests.

#### **Stakeholder meeting**

This meeting was a strategic step in the development of the collaborative relationship with the PCT. It also helped shape the content and some of the structure of the elements in Stages 2 and 3 of the research project.

### ***Chapter 4: Designing a solution***

This chapter presents a synthesis of activities undertaken by focus groups in order to determine what a potential online environment might look and feel like, as well as how it might function. Participants' ideas are depicted in word and image forms, allowing the reader to see how thoughts become represented as data. The process of analysis is also made explicit, as is how researcher bias was accounted for. Visualisations in the form of 'screen mock ups' serve the purpose of demonstrating what the product might actually look, feel and function like, if it were to become a reality.

### ***Chapter 5: Evaluation of product and process***

This chapter presents the user-created design and build criteria for a CS website. It consists of two parts: product evaluation and process evaluation.

#### **Product evaluation**

Explains how using a SWOT (strengths, weaknesses, opportunities and threats) analysis enabled participants to evaluate the product they designed, exposing its potential benefits and limitations.

#### **Process evaluation**

Details of participants' views on the process of being involved in this action research project. It was achieved through the completion and analysis of a self-completion questionnaire.

### ***Chapter 6: Understanding the solution as a virtual environment***

This chapter explores some of the key design and build criteria for the CS website (the findings) from the position that they are cognitive landscapes. In order to determine the strengths of the website design, Kaplan and Kaplan's (1989) user preference matrix is used as a theoretical framework to present this part of the discussion, followed by an examination of the influence of multimedia on cognitive load.

### ***Chapter 7: Understanding the solution in relation to clinical supervision***

The discussion focuses on how the design and build criteria relate to the practice of CS.

### ***Chapter 8: The end of a cycle and the start of the next***

This includes a personal reflection of the journey travelled as a researcher. The discussion also revisits the idea of a personal theory of practice. But those personal writings are subservient to the potential benefit and worth of the research to the wider community - its social intent. As with most action research, the end of one cycle of enquiry serves as the introduction to the next and this project is no different.



# Chapter 2

## RESEARCH DESIGN

### 2.1 Introduction

The overall aim of this chapter is to explain, discuss and justify the underpinning research approach and components of the research design. The chapter is divided into three parts:

**Part A** explains and discusses the action research design adopted.

**Part B** presents a brief overview of the underpinning theory associated with the software development process embedded within the action research design.

**Part C** presents a detailed account of how the research study was conducted.

### Part A: Research Design Theory

### 2.2 The technical collaborative approach to action research

Action research was the preferred research design for this study, but according to Parkin (2009), action research is more of an umbrella term used to describe an approach rather than a prescriptive formula, indicating that there is more than one way to undertake action research. This study is based on the technical collaborative approach to action research proposed by Holter and Schwartz-Barcott (1993). This differs from most other approaches to action research in one key respect, inasmuch as the researcher enters the collaboration with an already identified problem that is then advanced to implementation through facilitation and collaboration. This differs from the majority of action research approaches where the problem or issues are identified through collaboration, then advanced to implementation. In all other respects the technical collaborative approach follows the same principles as other approaches to collaborative action research.

### 2.3 Commonality

Although in the wider literature definitions of action research differ, agreement does exist as to the purpose of action research: to implement change and generate

knowledge (Elliott 1981, McNiff 1988, Whyte 1991, Greenwood 1994, McNiff *et al* 1996, McNiff and Whitehead 2009).

The literature relating to what action research is and what it is not is vast yet inconclusive. Many different and often conflicting definitions and categorisations are presented from many different professional groupings and disciplines (Waterman *et al* 2001). However, despite the elusiveness of an all-embracing definition, Waterman *et al* (2001) state that action research has certain distinguishing or unifying features (Box 2.1).

**Box 2.1: Unifying features of action research**

1. A cyclical process involving some kind of action or intervention.
2. A research partnership, which may be active on a number of levels at any stage of the project.

(Waterman *et al* 2001)

Needless to say, it is incumbent on any research project claiming to be action research to demonstrate an accord with the characteristics and unifying features of action research (Waterman *et al* 2001). Thus the remainder of Part A is given over to explaining how this project incorporated the basic structural concepts of action research and how the unifying features guided the various stages of the project.

## 2.4 A cyclical process

Within Waterman *et al*'s (2001) descriptions of action research is the suggestion that this type of research is about people being involved in the process of change relating to an issue or problem affecting them. A determining, even unifying feature, is that the process should be systematic and this ought to be cyclical.

The journey travelled in an action research project, like the one reported in this thesis, should therefore be circular in nature, which is not to say it should end up where it started as this would not demonstrate any progress or necessarily achieve anything. Hence, the cyclical nature of action research is often represented as a spiral or a series of interconnected loops as illustrated in Figure 2.1. According to McNiff *et al*

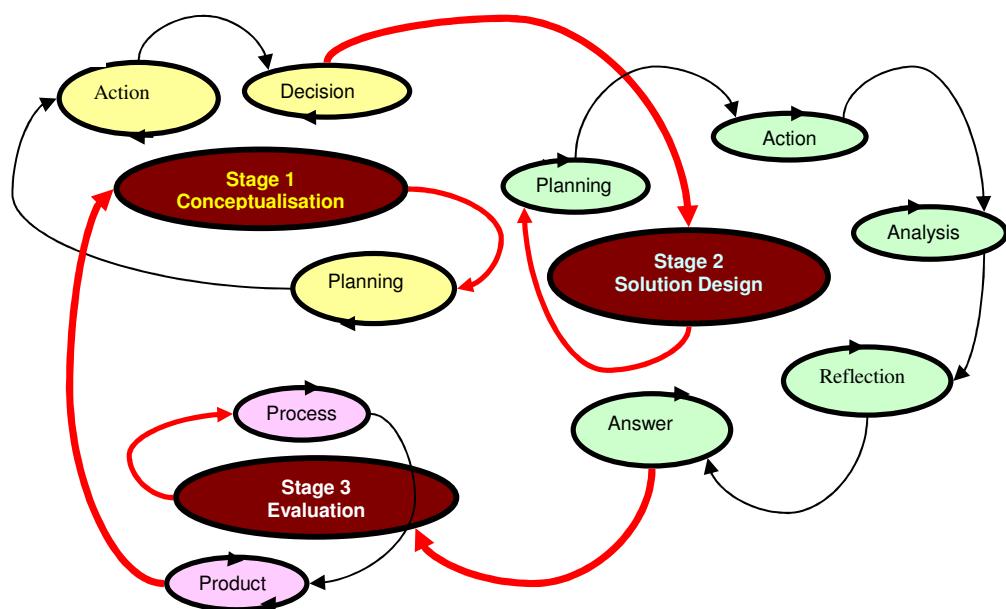
(1996), this type of diagram is normally used to organise the research, as opposed to being a way of representing the research.

The following elements are common to most descriptions of action research according to (Waterman *et al* 2001):

- Problem: identification and conceptualisation
- Planning: to address the problem
- Action: to provide a solution
- Evaluation: to test the solution and establish the type of knowledge output
- Reflection: on the experience and outcome.

Although not all projects demonstrate each element separately, they are all fundamental components in an action research project according to Kember *et al* (2001) and it is not uncommon for a project to go through these steps several times. Figure 2.1 is an illustration of the cyclical nature of this action research project and the descriptors used highlight the elements of the research design.

**Figure 2.1: Action research cycle for this project**



## 2.5 Explanation of the action research cycle for this product

Figure 2.1 illustrates the theoretical organisation of the research conducted. Stages 1 to 3 of the research, represented by brown ovals, have a number of orbiting ovals (yellow, green and pink). These present the nature of activity occurring within that stage of the research (planning, analysis, decision making, action, reflection and evaluation). The arrows show the direction of activity and that each stage is cyclical in its own right (cycles within cycles). As depicted, the overall cycle following the main red arrows, starts but also finishes at Stage 1. Whilst this is not actually possible because action and intervention would change understanding, it represents a return to Stage 1 to ascertain whether the solution addresses the problem it set out to resolve.

The combination of all cyclical actions in each stage results in the whole project being a cyclical system of research action.

## 2.6 A research partnership

This feature concerns the way in which action research happens (Waterman *et al* 2001). In essence it is about collaboration and the partnerships that develop to undertake the research in a given situation. The nature and extent of collaboration will, in part, be dependent on the problem being addressed; why it is a problem, the people the organisation involved and the resources allocated, including time. Another key factor that will determine the nature and extent of a partnership is the method of action research being adopted: for example, community action research projects could involve many tens of people and partnerships will be active on many levels; whereas practitioner-centred action research may only involve a few key individuals at any one point in time, or even just the researcher if their practice is the focus of the research (McNiff and Whitehead 2009). The technical collaborative approach adopted in this study (Holter and Schwartz-Barcott 1993) was a composite of the above; for example in Stage 1 (conceptualisation) only a few key individuals were involved in the identification and refinement of the problem, whereas in Stages 2 and 3 (solution design and evaluation) approximately 20 additional people were involved in many different ways over a sustained period of time (Chapters 3, 4 and 5). However, the success of any approach is to a large extent still dependent on the skills and

experience of the researcher to develop and then sustain meaningful working relationships with all participants.

As a way of understanding the nature of the working relationships established in this action research project, DePoy and Gitlin's (2005) principles of action research are used as an evaluative framework (See Section 5.8). Although it does not provide a measure of the degree of collaboration that occurred, this framework does represent the underpinning principles needed to support positive working relationships, or at least they do according to DePoy and Gitlin (2005).

## **2.7 Understanding 'quality' in this action research project**

An important aspect of any research design relates to quality, which according to Feldman (2007) is yet another contestable point in action research literature. Action research is by its very nature subjective and situational, therefore objective measures of quality would seem superfluous. It is however necessary to be transparent about what occurred and why, and how valid and rigorous the processes used to generate a solution were. The rigor of research is judged in a variety of ways and for differing purposes. Hope and Waterman (2003) state that rigor in research is an artefact of the positivist tradition and as such is value laden and possibly has no place in action research. Along with others, they favour alternative terms that describe the nature of the quality of the research, such as 'credibility', 'transferability' and 'dependability' (Parkin 2009). This will be discussed in more detail in Chapters 5, 6 and 7.

According to Parkin (2009), credibility of the study increases through validation of the findings, which was established in this study by the process of analysis, a form of member checking. This involved participants, as individuals and as groups, reviewing and refining the data they generated; in other words they were actively involved in reflection-on-action, by drawing understanding and meaning from feedback on the action or activity undertaken (Kitson 2008). The main potential weakness inherent in this approach to research is that there is no external process of validation or monitoring of the influence of the researcher or the effect of controlling or negative group dynamics. This will be discussed in more detail in Section 2.8.

As alluded to earlier, authors like DePoy and Gitlin (2005) purport that action research is about the quality and nature of interaction that occurs as a result of the process adopted to foster collaboration. What is needed then, in order to understand the concept of quality and minimise bias, is an open explanation of the methods used to collect and analyse the data generated (Koshy *et al* 2011). The credibility of the findings will, to a large extent, be determined by the quality of the explanation given, and the value of the findings will depend upon what extent the solution formulated addresses the issues it set out to address; in this case, did the research establish the requirements for a website through which community nurses can access CS and, more importantly, has this the potential to improve access to CS?

Quality is thus a subjective dynamic in action research and needs to be viewed from different perspectives. Therefore, the focus becomes more about the credibility and dependability of the processes used to discover the findings and it is up to others to determine whether the findings are transferable (Polit and Beck 2004). As the findings are as a result of the efforts of the participants, it would also seem prudent to ascertain how they perceived not only the findings but also their thoughts on their experience of being involved in the generation of them; this is discussed in more depth in Chapter 5.

## **2.8 Researcher bias and knowledge generation**

Action research can be seen as being involved with people and the process of generating knowledge; in this study that equates to developing a solution to a problem. Therefore, an inherent danger in action research (as defined through the partnership established) is the involvement and influence of the researcher. Unlike empirical research where the influence of the researcher is external, detached and kept separate so as not to contaminate or bias the data generated, action research expects the researcher to be integral to the process of data generation (Kember *et al* 2001). It is therefore necessary for the researcher to identify and explain their involvement in the process and demonstrate how they have accounted for or militated against bias. Consequently, the presentation of an objective, quantifiable, generalisable outcome i.e. beyond those gained from this study, is not possible or required. What however may emerge are findings that are potentially transferable and useful (Lewis and Ritchie 2003) – theory building. In this case adding to the body of knowledge about the practice of CS. Again what is needed, though, is an open

explanation of the methods used to collect and analyse the data generated. A detailed account of the methods of data collection and analysis adopted in this research study are outlined in Part C of this chapter.

First, I wish to attempt to establish who I am and what influence this may have had on the research. A positive starting point for building open and honest relationships is that the researcher is perceived as legitimate, which involves maintaining the ethical standards required for research. This research received full ethical approval in March 2008 (Appendix 1). Participants need to feel safe and secure, not only with each other but with the researcher and the process (Reed 2010). So it is necessary for the researcher to explain their role and communicate the capacity within which they are functioning. As an action researcher, who is also a practitioner within the community in which the research takes place, this poses additional challenges regarding the co-production of knowledge and an understanding of the potential impact of the research; put another way, “it is about the doing and using of research in practice” (McCormack 2011, p111-1275).

As a registered nurse holding an active NMC recordable qualification as a Specialist Practice Community Healthcare Nurse (District Nurse), I am a member of the broader community of community nurses. It is important that I have also held a community nurse position within the PCT involved in the study for the past 20 years; I therefore consider my legitimacy to conduct an inquiry into CS within community nursing in this PCT, to be robust and defensible. As regards my credibility as a researcher, I have been involved in the delivery and dissemination of evidence-based practice as a lecturer and pathway lead for community nursing since 1997. I have also undergone post-graduate research training and preparation for this doctoral study as an integral part of the Doctorate in Clinical Practice programme. Being employed as a part time community nurse as well as being an academic, gave me in-depth insights into various issues within the PCT, access to CS being one.

From a conceptual point of view, it would seem that I could be considered as both an insider and outsider (Reed 2010). This raises some interesting epistemological questions regarding the research, more specifically: what type of knowledge would the research generate? If I was considered as an outsider then the knowledge

produced (interpretation of the findings) could be regarded as being externally presented. If the interpretation was constructed from an objective, detached, position then it would not be situational. Likewise, if this knowledge generated was constructed through a process of reduction in order to remove the uniqueness, then it would be regarded as being detached and not to have emerged from the efforts of the participants but as a result of the external process used to understand it. This type of knowledge is considered by many to be of high standing as it is seen as objective and therefore potentially legitimate (with reduced bias) to inform the development of practice.

On the other hand, if I was perceived as an insider, then I might be considered as a practitioner generating knowledge. This type of knowledge is not always considered as valid because it is intentionally subjective and therefore inherently biased. This, however, is not a reasonable argument as it devalues the legitimate generation of knowledge from practice and fails to acknowledge the plausibility of the existence of personal theories of practice; it implies that the only knowledge worth anything has to be created in a decontextualised vacuum.

It may be that there is a third position from which to view the generation of knowledge. As an action researcher involved in the research and in practice I am concurrently considered an insider and an outsider as the researcher facilitating knowledge from or about practice. I traverse the dichotomous position in respect to knowledge generation in relation to it being subjective (insider-orientated) or objective (externally-orientated). The reliability and dependability of the knowledge generated might, then, be a more pertinent way of determining its value. Ultimately this would be concerned with how useful it was in addressing the problem or what contribution it made to the body of knowledge associated with the problem (McCormack 2011). Identifying the design and build criteria for a website requires the elicitation of subjective knowledge; action research requires a process that engages practitioners in the generation of such knowledge. It, therefore, stands to reason that if the process of knowledge generation is transparent and robust, then the findings will have some credibility. The challenge for me as the researcher is to understand and facilitate the process of knowledge generation and to be clear about my involvement in the process of analysis. As an action researcher I would describe the generation of knowledge as

being collaborative in nature. I actively facilitated this person-orientated process that concentrated on the participants and their individual and collective needs and wishes from which new knowledge and understanding emerged. The participants were not research subjects; they were the source of information and knowledge. Deliberately constructing an environment that promotes this type of knowledge to be developed is an important aspect of action research, according to MacPherson *et al* (2004), as it helps to distinguish it from other research designs. The view that knowledge is, to some extent, socially constructed also underpins the idea of situational knowledge at the centre of the research design (Kember 2001).

As the researcher providing a structured environment in which knowledge generation can occur (focus groups), I am not guilty of imposing a predetermined or contrived mediating process. On the contrary, if interaction and free expression is encouraged, then it can be a safe and secure environment that promotes creativity and innovation. If the participants are in control, then it can also become a forum in which bias is acknowledged and managed. To this end, all participants had equal opportunity to be involved in the process of knowledge generation and analysis through the various activity phases of the research project (see Figure 2.3). It is important to note that during the iterative process of analysis participants decided what was important and relevant; I only collated their responses and to this end participant and researcher bias is both acknowledged and managed. The knowledge that was generated could be said to be a product of the social milieu often referred to as practice (Reading 2008); in other words, it was constructed from individual personal and professional perspectives as well as being reflective of the organisation they were associated with.

## **2.9 Summary of research design theory**

Action research is often a dynamic, subjective, situational process influenced by internal and external factors. It should be cyclical in nature and generate knowledge through collaboration as a result of active partnerships (Waterman *et al* 2001).

Creating a structured environment to develop a solution to a previously identified issue was purposeful and in keeping with the research design. Good quality action research has transparent processes and should develop an answer or contribute to the body of knowledge related to the subject matter; it is therefore about change in practice (McNiff and Whitehead 2009).

## Part B: Software Development Theory

### 2.10 Software development process

An overview of the relevant underpinning theory associated with the software development process is presented in the next part of this chapter. It is intended that this will provide a theoretical justification and contextual explanation of the software development approach adopted.

### 2.11 Requirements analysis

A general starting point for most software projects is the elicitation of user and client needs starting with an understanding of the problem and context; this is commonly referred to as a requirements analysis. In software development terms this means building an understanding of the purpose of the technology, who will be using it and in what way (Lengel 2001). Normally this is undertaken by a team of software designers headed up by a company or organisation commissioned to design, build and maintain a piece of software within a fixed time frame and budget. Data is usually collected in a variety of ways, through working with users, observation, interviews and questionnaires (Hoffer *et al* 1996). This project, however, did not have access to this type of resource so an alternative approach to determining user and client requirements was needed as is depicted in the three stages of the project.

The analysis of requirements undertaken for this study was based on a conceptual adaptation of the two software design processes cited as a framework for data collection. They are not system build models (see Table 2.1). The first process was Schach's (1999) life cycle model, which informed the overall software design process at a macro level by giving a structure to the direction and scope to the data that would need to be collected. The second was Lengel's (2001) website design principles (see Section 2.13), which provided an internal structure, at a micro level, to the requirements analysis. Together, they formed the core of the requirements analysis, providing a comprehensive structure from which to collect and analyse data.

## 2.12 Schach's (1999) life cycle model

According to Schach (1999), software development, like most product developments, has a life cycle. Seven phases are identified and presented in Box 2.2.

### Box 2.2: Phases of product development

1. Conception
2. Specification generation
3. Design phase
4. Implementation and integration phase
5. Operations phase
6. Maintenance phase
7. Retirement phase

(Schach 1999)

Only the first two phases - conception and specification generation - of Schach's model (see Box 2.3) were necessary to complete this project as the scope of this research was only to determine what the design and build requirements for a CS website might be. The remaining five phases would occur after requirements analysis if this was the chosen build system. The actual build system would be determined at the time of commissioning and would be budget and expertise-dependent.

### Box 2.3: Schach's (1999) product development model (adapted)

#### Phase 1: Conception

This is often where a vague idea of the need to find a solution to a particular issue or problem is the focus. It is thought that some computer based system might be the answer.

#### Phase 2: Specification

This is where a detailed understanding of the client or user's needs are identified. A specification document is subsequently produced as a result of undertaking a requirements analysis. This can be achieved in a number of ways: for example through focus groups, interviews, documentary analysis and observation. This phase should represent what the system needs to do. The relationship between functions and the human interface are often represented in flow diagrams, storyboards or even through draft or early stage prototypes.

(Schach 1999)

The phases identified, and language used by Schach, are akin to a biological life span, existence being described as linear with recognisable milestones and progression to eventual decline. It is difficult to establish whether this is because technology-related products or artefacts are, in general, designed by naturalist scientists where deductive logic is a dominant discourse and chaotic systems have little relevance. Alternatively, the notion of inbuilt obsolescence could be a commercial design necessity as the market responds to the increasing demand, or push effect, of the consumer who often wants things to run quicker and easier. It is equally as likely that some technologies drive the market. This pull effect, however, is not the focus of this research.

Schach's model (1999) demonstrates that software development is a logical process that is time and resource dependent. It has sufficient detail in the explanation and uses jargon-free language so that non-technical individuals are able to follow and easily understand it. A significant difference from biological development is that software is designed for specific purposes and the content of each phase is normally predetermined. As human beings we in general seem to progress from one stage to another (conception - life - death), not so much in a purposeful way but as a biological, time-related process. Unlike software, what our purpose is or the way we live our lives is less easy to determine or define.

The conventional software development process described by Schach (1999) is representative of a closed system of design. According to Stolterman (2001), this is when technologies remain set as designed and built. The technologies are conceived, designed and built as a whole and are predictable and stable, unlike open systems that, by definition, are evolving in relationship to user preference and in the way they are used; the user becomes the designer. Strolterman (2001) describes the technology of open systems as being more radical and having a dialectical relationship with the user. It is, however, possible for open systems to have closed aspects. The speed with which technology is developing is frenetic but what remains constant is the need to design products or technologies to meet the needs of the users. Moggridge (2007) considers designing interactions as the biggest challenge facing developers, but it is fundamental if technology is to be useful.

## **2.13 Lengel's (2001) design principles**

Lengel's (2001) principles, listed below, guided the content of the activity phases; they were not used as a rigid, prescriptive framework in determining the design.

- Identifying your audience
- Determining your site's purpose
- Planning the structure of the site
- Understanding the possibilities of the web
- Understanding display information
- Determining navigation through the site
- Identifying opportunities for feedback and interaction
- The role of image logos and corporate identity

Lengel's (2001) website design principles start with the idea of knowing who your user will be and who the client is. From this very simple starting point, it is possible to clarify what the purpose of a website might be. Once this is established, it is necessary to determine what the function should be and finally what the site needs to look and feel like. User and client requirements were determined by the collective efforts of the participants. This open approach to software design is what Moggridge (2007) would describe as a user-centred design approach and something that should be aspired to.

## **2.14 Choosing a software design framework**

The initial stimulus for using Schach and Lengel's models as frameworks for data collection was through the recommendation of an expert in the field of software development, Dr Craig Saunders, formerly of the University of Southampton and now Project and ICT Development Lead for Xerox, Europe. He advised that as a novice without a background in computer science, I should follow a very straightforward system for understanding requirements: Schach (1999) and Lengel's (2001) models. His view was that I was ideally placed to undertake this aspect of the design process as I was not only a potential user of a system but that I had the necessary expertise as regards CS and access to potential users and client. Although an actual site is not

being built at this point in time and the model of system build preferred (Table 2.1) had not yet been defined, the advice was to get a detailed understanding of what participants needed. I was also advised not to ignore my own understanding of the problem being addressed but to use it to inform the process of knowledge generation. It was therefore a deliberate decision to have three focus groups organised around the known roles in CS: **supervisee**, **supervisor** and **techno-managerial**, from which requirements could be understood. All participants were fully aware of this and consented to this prospective approach to data generation. (Many indicated that if the site were ever to be built, they would be very happy to be involved in testing and piloting it.) To this end the approach could be understood to be *architectonic* in nature; the aspiration was to have an environment that was a whole, intentionally designed with a set purpose, with predefined functionality and goals (Stolterman 2001).

Table 2.1 presents Schach's (1999) comparative analysis of some of the established system build models that have been used for software development. This is not exhaustive, as new ways of working are being developed all the time. The different approaches favour different sizes and types of project. The approach adopted will to some extent be dependent on budget, expertise, time frame and purpose.

**Table 2.1: Theoretical models for software design and development (Schach 1999)**

Life Cycle Models	Strengths	Weaknesses
<b>Build and fix</b>	For short programmes that will not require any maintenance	Totally unsatisfactory for complex programs
<b>Waterfall</b>	Disciplined approach Document driven	Delivered product may not meet clients' needs
<b>Rapid prototyping</b>	Ensures that delivered product meets client's need	It is a rapid build and elements are discarded, the lack of documentation can make tracing of decisions difficult
<b>Incremental</b>	Maximises early return on investment. Promotes maintainability	Requires open architecture. May degenerate into a build and fix
<b>Synchronise and stabilise</b>	Future users' needs are met. Ensures components can be successfully integrated	Has not been widely used other than Microsoft
<b>Spiral</b>	Incorporates features of all of the above	Can only be used for large scale, in house products. Developers have to be competent in risk analysis and risk resolution
<b>Object-orientated</b>	Supports iteration within phases, parallelism between phases	May degenerate into CABTAB (code-a-bit-test-a-bit)

In conclusion, it can be deduced that Schach's (1999) and Lengel's (2001) software design processes are philosophically and strategically aligned to the underpinning research approach of action research – systematic, consultative and solution-focused in order to bring about change.

## Part C: How the Research Study was Conducted

### 2.15 A detailed description of the study

As previously stated this research study had three stages. Each stage had a number of cyclical activity phases (Figure 2.1). Initially, the problem was identified in Stage 1, the process of data generation and analysis took place in Stage 2 and the research process and solution designed was evaluated in Stage 3.

An introduction to each of the stages and activity phases follows. Chapters 3, 4 and 5 then go on to give a detailed account of each of the three stages. First, the underpinning approach to data collection and analysis that occurred will be presented. Focus groups were the main method of data collection and analysis so particular attention is afforded to them.

### 2.16 Data collection

#### ***Stage 1: Conceptualisation***

Data collection and analysis was undertaken by myself as the researcher. (See Section 2.20 and Chapter 3 for a detailed account of this aspect of the research study.) Essentially, this involved problem identification, refinement and strategic planning to design an environment in which the participants would be enabled and empowered to design their solution to the problem.

#### ***Stages 2 and 3: Solution design and evaluation***

Data were collected in both these stages via focus groups.

#### ***Focus groups***

According to Goodman and Evans (2010), focus groups are useful data collection methods especially when the aim is to clarify, explore and confirm ideas with a range of participants, on a predetermined set of issues; in this case, the identified problem of access to CS. What is evident is that the characteristics and process inherent in focus groups (Box 2.4) mirror those of action research (Sloan 1998). Focus groups are also used, where possible, by web designers as a method of data collection; this allows for a more comprehensive understanding of needs to be gained (Hoffer *et al* 1996). This inclusive approach also serves as a way of identifying different user

groups, although this was not relevant to this project as user groups were identified through background reading, prior knowledge and the stakeholder meeting (see Chapter 3).

**Box 2.4: Focus groups**

- Involving people who the change will affect will assist them to have ownership of the problem as well as be a part of the solution.
- Working with participants represents a commitment to the idea of collaboration and partnership in the research process.
- Discussion acts as a mechanism to reduce bias because it allows more than one viewpoint to be considered.
- The group process is representative of an action research approach.

(Sloan 1998)

Focus groups are able to generate large amounts of data in a very short period of time, thus creating potentially data rich outputs. This can, however, have negative as well as positive consequences for the researcher because too much data can be cumbersome and difficult to manage (Koshy *et al* 2011), whereas not enough can adversely affect the quality or reliability of the outcome. It is important to state that no claims are being made here that focus groups are necessarily representative of a sample of the population, although they might be. Needless to say, it is equally as important that the focus groups produce enough data of sufficient quality to address the issue or problem under investigation and have sufficient number of participants in them. With rich data sets, one particular problem that arises is the potential to miss data or have analytical processes that are not mature or sensitive enough to recognise what is being produced. This dynamic, however, was not that influential in this study as the analysis took place on two interconnected levels: by the individual participants and through the groups they belonged to. An important responsibility of the researcher is to be mindful of the potential for inherent bias from an existing knowledge base. Attempting to adopt a neutral stance as facilitator allowed for bias to be mediated by groups' functioning in a democratic open manner (Sloan 1998). This alongside member checking minimised the influence of researcher bias (Parkin 2009). Other factors that potentially affect the quality of the data produced are the group size, composition and ability to be open and creative. Group size and composition are

contested points in the literature, with the opinion tending towards the view that it will depend on the topic as to how many groups are needed and whether a group should be homogenic, comprising of participants with similar characteristics such as age, gender or job role, or heterogenic, comprising of participants with diverse characteristics. How many people should be in a group is equally as ambiguous in the literature, the norm being between five and 12 individuals (Goodman and Evans 2010). For this research, three focus groups was considered optimal as they represented the three key roles in CS - **supervisees**, **supervisors** and **techno-managerial**. The groups collectively contained a diverse range of participants so they were heterogenic. Participants had different job roles and were of different grades and each group had a mix of genders. Although the composition of each of the three groups, with an average membership of seven, was heterogenic in nature, the groups were organised on homogenic principles. These identities (**supervisee**, **supervisors** and **techno-managerial**) were adopted for the groups as they replicated the core roles in CS and defined them as far as the software development process was concerned; in other words, they were either users or the client.

Other factors that needed careful planning were the timing, duration and location of the group meetings, all of which were determined at the initial stakeholder meeting with the PCT in Stage 1 (see Section 3.9) to ensure minimal disturbance to the organisation and facilitate maximum attendance. It was also necessary to be aware of other limiting dynamics, such as 'group think' (Jannis 1972, cited in Vecchio 1991), where a line of reasoning developed is followed to the exclusion of alternatives, despite it not being the optimal direction. Essentially, a group get locked into an idea and are unable or unwilling to challenge that particular course of action despite the obvious consequences. The design of each group activity was thus very influential on the amount as well as the quality of data generated. Each focus group meeting had a clear structure, aim and purpose in order to optimise time and effort of participants and minimise negative and dominant group dynamics occurring. In order to keep the process of knowledge generation flowing, a variety of techniques were used in the various activity phases such as questions and answers, the use of storyboards (pen sketches of the described features and functionality), discussion topics etc. Changing the type of activity also accommodated for individual's preferences and needs.

All participants in the *user* focus groups (**supervisees** and **supervisors**) had an existing knowledge of CS, whereas not all participants in the *client* focus group did (**techno-managerial**). All participants did have experience of using websites, though none had combined both these sets of knowledge in a purposeful way before, as none of them had been previously involved in constructing a virtual environment for CS. It was therefore necessary to structure an environment in which individual participants could generate new knowledge and meaning. This was achieved by providing structured activities for the focus groups; these activities are presented as activity phases and each stage of the research has them (see Chapters 3, 4 and 5).

Six key questions (Box 2.5) formed an overall framework for focus group activity. Questions 1 to 3 were designed to elicit knowledge and understanding from concrete experiences of CS, whereas Questions 4 to 6 were derived from an understanding of software development theory (Lengel 2001) and as a result of the stakeholder meeting with the PCT. A closer examination of the questions shows that they are the means (or set of rules) that allowed participants to construct and generate new knowledge. This required them to think about what CS was, and how it was undertaken.

**Box 2.5: Key questions addressed by the focus groups**

1. Clinical supervision - What is it?
2. Clinical supervision - Why do we need it?
3. Clinical supervision - Who benefits?
4. What should a website for CS look and feel like?
5. What features do you want it to have?
6. How do you need it to work?

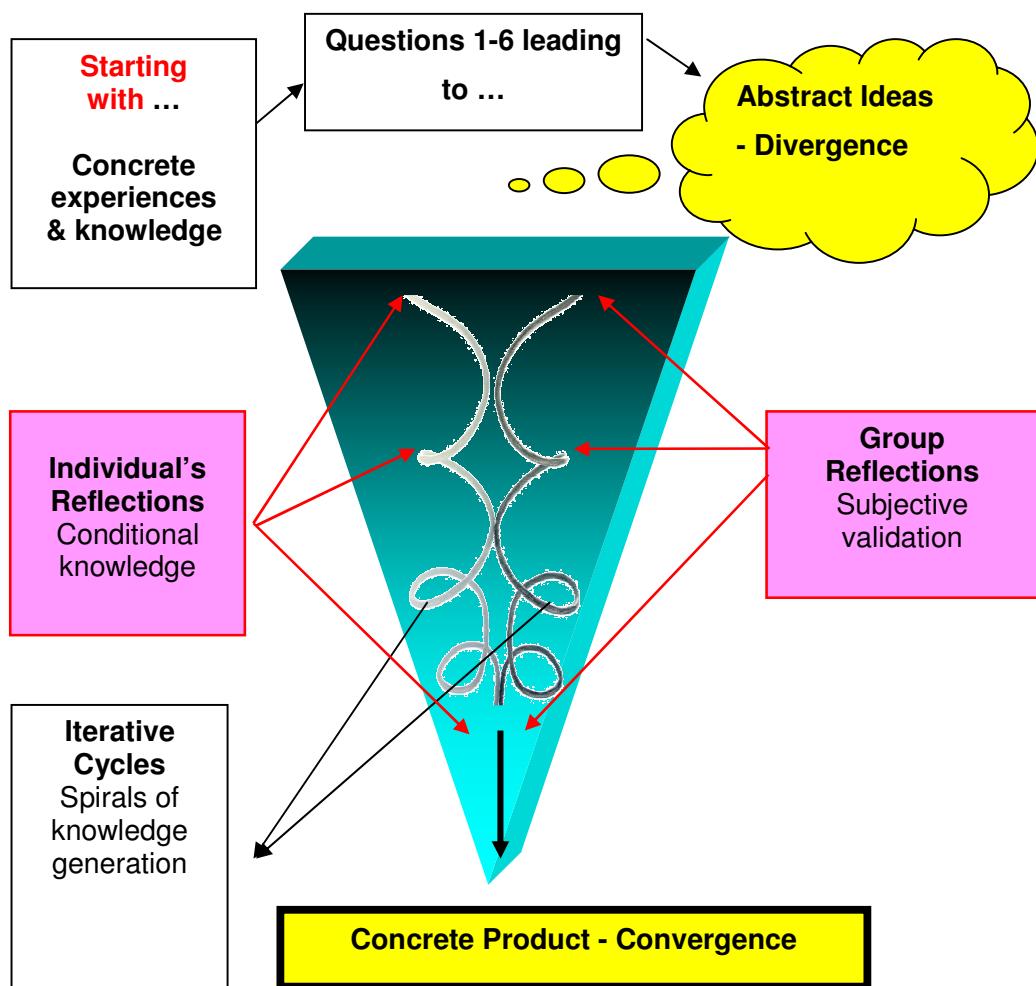
The next stage was to link their current understanding about CS with their experience and knowledge of how they interacted with websites or other online environments. Through this interdependent meta-cognitive process, new ideas and constructs were configured and an understanding of how to undertake CS online began to emerge. Their motivation came from the desire to resolve the problem that affected them and

from being involved in something new and creative. The activities detailed in Chapters 3, 4 and 5 acted as a catalyst for knowledge generation and analysis. The design of the site thus emerged and was then constructed out of and as a result of the participants' own ideas and knowledge of CS and web-based experiences.

## 2.17 Data analysis

The analysis of data was not a separate step in the research design; it was an internal, integral, iterative process (Figure 2.2). The analysis that occurred can be described as a process of checking by members, subjective validation and judicious use of conditional knowledge by participants, either as a group or as individuals, applied in order to determine the authenticity of the output reported.

**Figure 2.2: Illustration of the knowledge generation process**



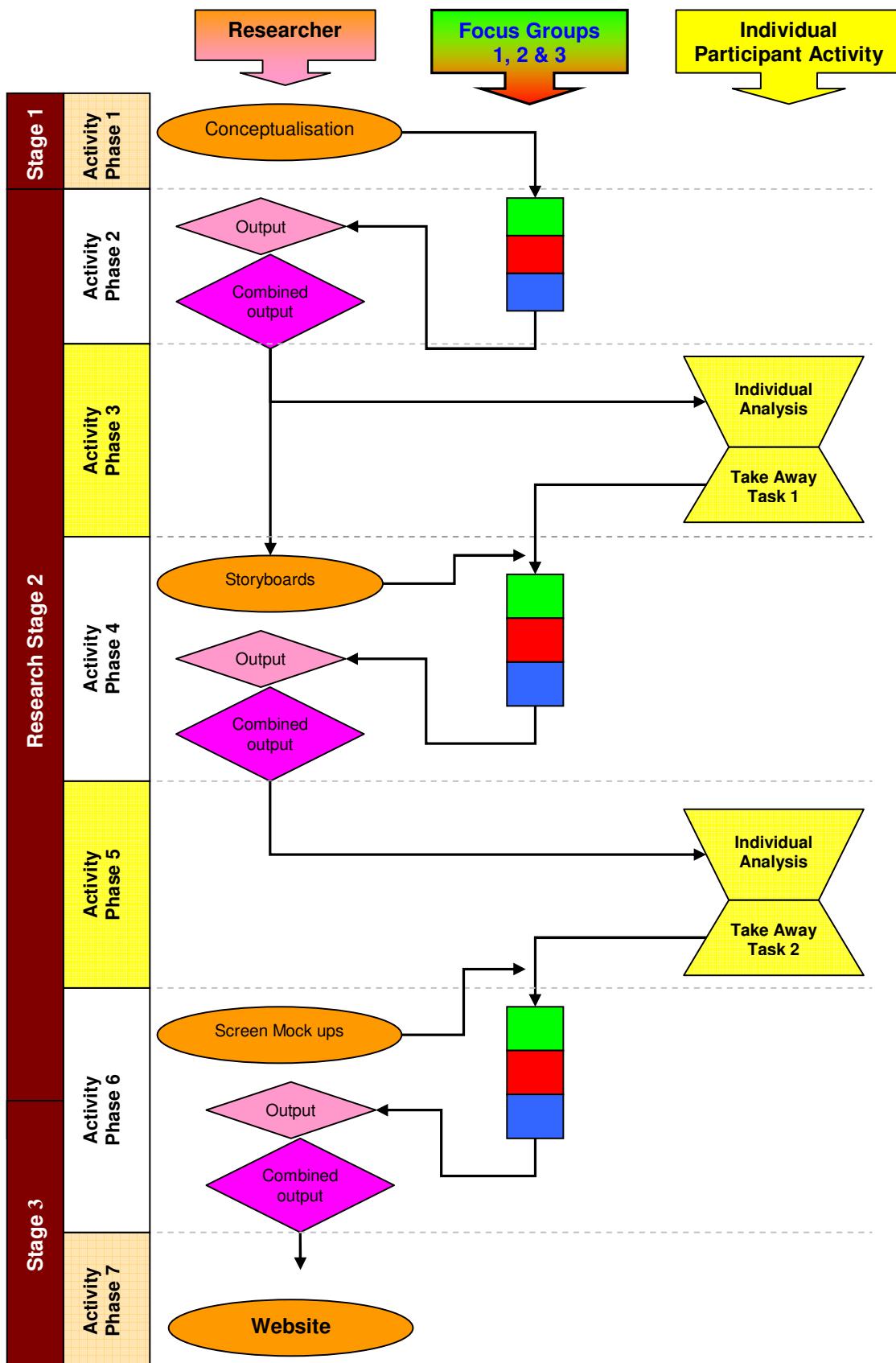
The decision not to externally construct meaning through a process of extrapolation was a deliberate one. An aim of the project was to determine what the user and client requirements were and not to analyse them *per se*. The participants either collectively or as individuals decided what the website should look and feel like and how it might function initially in response to the stimulus of Questions 1 to 6. I facilitated the process by providing the structure in which participants could collaborate (the focus groups). The adopted iterative, cyclical process of knowledge construction, then appraisal, then reconstruction and reappraisal and reflection (as illustrated in Figure 2.2) is representative of an action research cycle and simulates a data collection technique used by software developers when building a user-centred design (Hoffer *et al* 1996, Moggridge 2007). The validity of the decision to use the community (individuals connected in some way) as the means of development is based on the assumption that they were in an ideal position to make a legitimate contribution to determine what their solution should be to the problem. This position is supported by McCormack (2011) who maintains that co-production of knowledge (derived from practice experience with the researcher) is not only legitimate but desirable.

The final aspect of analysis undertaken by the focus groups was one of evaluation: the third stage of the research study (Chapter 5). Participants evaluated the product produced as a group (the conceptual representation of the proposed website) by considering what the strengths, weaknesses, opportunities and threats (SWOT) of the design might be. They also completed an individual questionnaire, which sought to ascertain their views on being involved in the research process.

## **2.18 Implementation of the research design**

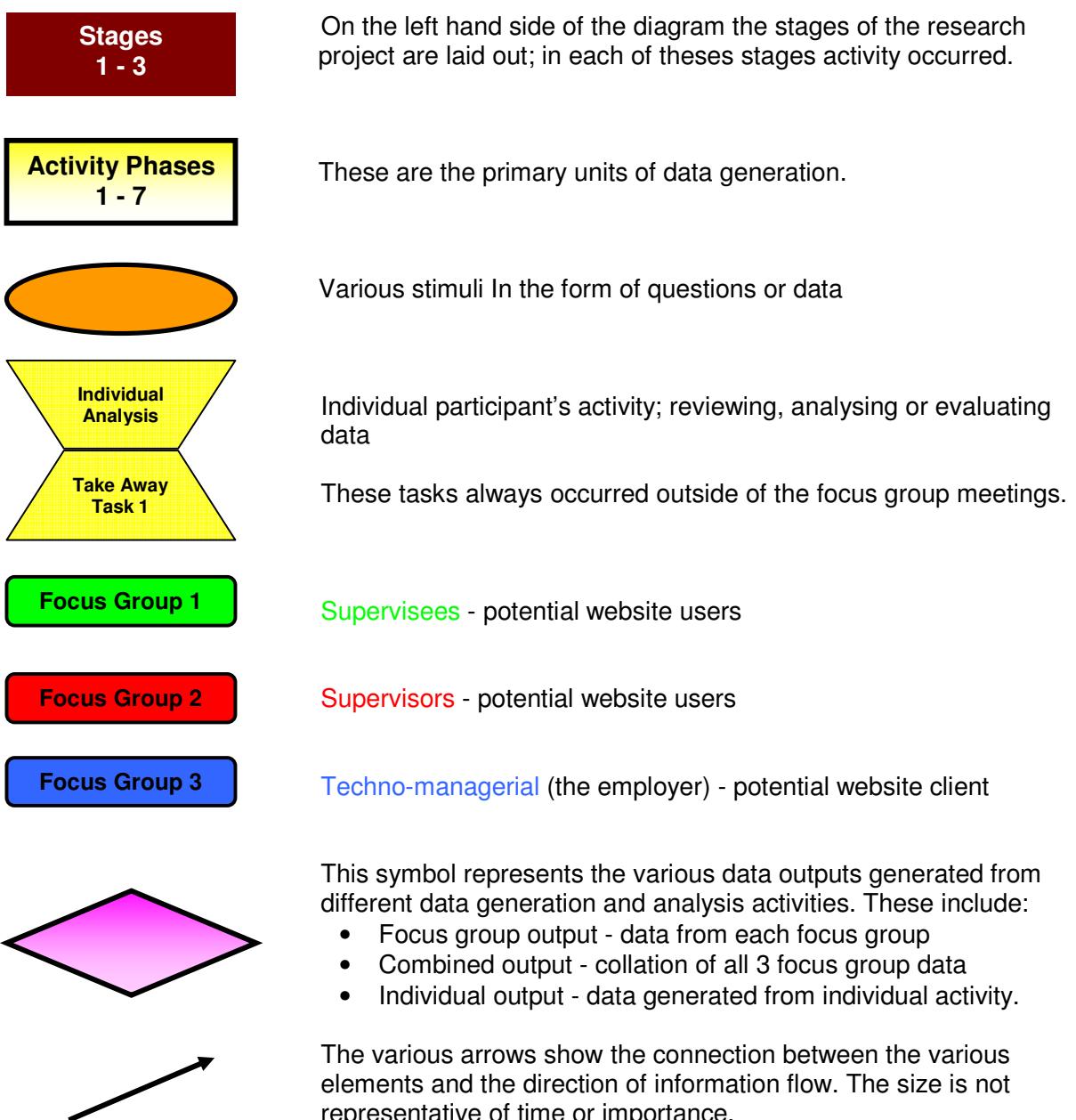
Figure 2.3 presents an illustration in the form of a flow diagram of all of the research stages. This is followed by an outline textual explanation of the various stages and associated activity phases undertaken between October 2004 and July 2009. Each of the stages is presented in more detail in subsequent chapters.

Figure 2.3: Implementation flow chart



## Explanation Implementation flow chart

Reading from left to right it is possible to view the process of data generation and then, following the arrows downwards it depicts the various elements of data generation and data analysis. The time period represented equates to five years from inception to completion including time taken for ethical approval.



## 2.19 Stage 1: Conceptualisation

This was the first stage of the research study and as a key structural element it is representative of Schach's (1999) first phase of the life cycle of software development. With regard to the research design and the preferred approach - Holter and Schwartz-Barcott's (1993) technical collaborative approach - this stage occurred before the conception of the focus groups. It comprised of several elements that were mainly undertaken independently by me as the researcher, in order to get a detailed understanding of the background to the problem and issues surrounding access to CS. The focus groups became active in Stage 2, the solution design stage of the study, and were tasked with developing a solution to the problem as identified from this stage of the research.

**Purpose:** Problem identification, description and construction

### **Activity Phase 1: Planning cycle**

This stage consisted of one phase of data activity and analysis, which had several elements to it (Chapter 3).

Data generated from this activity phase arose from the following processes:

- Background reports and reading to develop an understanding of context and rationale - initial stimuli for the study.
- A literature review, establishing and authenticating the problem.
- A documentary analysis, reviewing the organisation and management of CS in the host PCT.
- A stakeholder meeting at which a strategy for data collection and analysis was decided upon for Stages 2 and 3. The composition and role identity of each focus group was also agreed at this meeting:
  - **Focus Group 1** was made up of community nurses and operated in the identity of **supervisees** (potential *users* of the system).
  - **Focus Group 2** was made up of community nurses and operated in the identity of **supervisors** (potential *users* of the system)
  - **Focus Group 3** was made up of other PCT staff and operated in the identity of the **techno-managerial** employer (potential *client*).

Each of the above processes is described in detail in Chapter 3. Apart from the stakeholder meeting, the other processes were undertaken as assignments for various DClinP modules as preparation for the research project and this thesis. As such they are not presented in this thesis, except as key points of learning.

## **2.20 Stage 2: Solution design**

This is representative of the second phase of Schach's (1999) software life cycle Model and is where Lengel's (2001) principles of software design are actively engaged as an internal framework that guided the methods of data generation and collection in this stage (see Chapter 4 for a detailed account Stage 2). This stage involved the use of storyboards and screen mock ups as a method of data capture, but the main method to generate information was through focus groups. This stage had three activity phases (2-5).

### ***Purpose***

Elicitation and analysis of user and client needs

This occurred through the facilitation of three focus groups which each met on three, separate occasions, nine times in total, between November 2008 and March 2009. Data collecting methods varied as detailed below. The data generated from these activities was recorded on flip charts and digitally audio taped, then later transcribed.

### ***Activity Phase 2: Developing the solution***

This was the first meeting of the focus groups. Each group met independently of each other, on a separate day in the same week, for the same period of time, in the same venue. Each group attempted to answer the same six questions that had arisen from Stage 1 in their espoused identity (**supervisee**, **supervisor** or **techno-managerial**).

Initially, this phase of activity time was given over to making the participants feel at ease and introducing the research approach as well as checking that all were fully aware of their rights and understood what they had agreed to undertake as part of giving consent. At the end of each focus group meeting, all members were briefed on the first of two take away tasks (Activity Phase 3, Take Away Task 1) in preparation for the next meeting (Activity Phase 4). After the last focus group meeting of Activity

Phase 2, the output from each group was collated to become a representation of all focus groups' ideas. This task was undertaken by myself as the researcher. The collective information formed the first outlines for the website; at this point in time they were crude pen and paper sketches (storyboards) which acted as one of the stimuli for Activity Phase 4. Storyboards are a tried and tested method of data representation in software design, a predecessor of the screen mock ups and are used as a tool to aid understanding in the requirement analysis phase of design (Whiteley 2004).

### ***Activity Phase 3: First cycle of reflection and analysis***

This was an individual activity to be undertaken by all participants in their own time outside of their focus group. The task had two elements to it:

- To review and analyse the collective output of all the groups in the form of a summary of the data generated from the first meetings, emailed to all participants.
- To email me links to favourite websites and ones which they used frequently.

These websites would form a key part of the data generation in the next meeting.

### ***Activity Phase 4: Refining the solution***

The second set of focus group meetings. The content comprised of the following:

- Feedback and discussion from Activity Phases 2 and 3.
- A live review and discussion of websites that the participants had identified. Participants recorded views on a template that I had designed, based on Lengel's (2001) design principles (Section 2.13).
- Viewing and discussion of the initial storyboards.
- Information in relation to the second take away task (Activity Phase 5, Take Away Task 2)

After this set of focus group meetings, the output from each group was collated, again by myself as the researcher, to become another representation of all the focus groups' ideas. As a result of the focus groups, a series of questions emerged which were emailed to each focus group member. A second version of the purpose of the site, along with the site's objectives was also emailed to all group members for review,

analysis and comment. Finally, in the light of knowledge and understanding derived from previous activity phases, new storyboards were drawn as screen mock ups in preparation for the final set of focus group meetings.

#### ***Activity Phase 5: Second cycle of reflection and analysis***

This was an individual activity to be undertaken by all participants in their own time outside of the focus group. The task had two elements:

- To review and analyse the collective output (from all the groups) in the form of a summary of the data generated from the second meetings emailed to all participants.
- To think about potential answers to the emailed questions that had arisen as a result of the previous meeting; in particular to think of a potential name for the site.

#### **2.21 Stage 3: Evaluation**

This was the final set of activities which the focus groups undertook (Chapter 5). The content comprised two activities: a group SWOT (strengths, weaknesses, opportunities, threats) analysis was undertaken in order to evaluate the product (the virtual environment for CS) and an individual self-completion questionnaire, evaluating the participants' experiences of being involved in action research, was administered. This stage had two activity phases (6-7).

##### ***Purpose***

To evaluate the following:

- The product that was designed by the individual and collective efforts of all focus group members.
- The process of participation.

#### ***Activity Phase 6: Evaluation cycle***

The final set of focus group meetings. The meetings were structured in a similar way to those in Activity Phases 2 and 4. Activity Phase 6 had two distinct parts to it. The first half consisted of:

- Feedback and discussion from Activity Phases 4 and 5.
- Viewing and discussion of the screen mock ups derived from the storyboards and group discussions.
- A group activity to answer the questions emailed out in Activity Phase 5.

The second half was given over to evaluation and data were collected in two ways:

- Evaluation of the product via the completion of a group SWOT analysis (Appendix 2) was undertaken. This, according to Johnson and Scholes (2006) is a common management tool often used when appraising strategic options, but it is also used in research to analyse data. Although the data generated is subjective in nature, it is a legitimate process for capturing individual or group views. It is acknowledged that this is only the first stage of evaluation regarding the website and subsequent post-doctoral evaluation stages will occur when the design is built and then tested. The nature of any subsequent evaluation will, in part, be determined by the model commissioned to design and build the site.
- Evaluation of the process via an individual self-completion questionnaire (Appendix 3) requesting individuals to rank their experience of participating in this action research project against DePoy and Gitlin's (2005) principles of action research.

### ***Activity Phase 7: Writing the report***

This phase of activity was similar to that in Stage 1. It involved myself as the researcher working independently of the focus groups, which had now been disbanded.

The purpose of this phase is to bring together all outstanding data from the previous activity phases and redesign the screen mock ups accordingly. (Unfortunately, at this stage the participants did not see the redesigned screen mock ups; in hindsight this is something that would have been appropriate to do). In addition, this phase also involved distilling from the evaluation data an understanding of the experiences that individuals had had of being involved in the research project.

The final aspect, apart from writing up the thesis and completing the interim report (September 2009), was to identify what knowledge had been generated as a result of this research; in other words, what are the design and build criteria for an online environment for CS?

## **2.22 Summary**

This chapter has presented the research design in the light of underpinning theory relating to the research approach. According to Simmons and Lathlean (2010), triangulation is a strength that occurs when there is a convergence or coming together. In this project, there was a clear theoretical triangulation within the research approach (technical-collaborative action research) and the main methods for data collection, the software development frameworks of Schach (1999) and Lengel (2001). As a result the structural alignment between the various elements and processes in this study could be said to be very strong (Simmons and Lathlean 2010). This association of theory in action is a submerged intention underpinning action research, and thus is a legitimate dynamic of this research project.

The benefits of the various theoretical associations are aligned to the purpose of action research, which according to McNiff *et al* (1996, p13) “is to bring about an improvement in practice ... this is associated with an advancement in knowledge ... but it is the purpose of the action that is the key feature and this purposeful action must be demonstrably worthwhile”. Consequently, the research undertaken must, if it is to be considered worthwhile (or more fundamentally, as action research), attempt to produce an answer to the problem - access to CS. Although McNiff *et al* (1996) argue that the generation of knowledge is subordinate to action, I would say that this research challenges that position because the generation of knowledge in this study is what is going to drive the change (action) in practice. Without the identification of requirements, it would not be possible to build a user-centred design, a position supported by Avison *et al* (1999) who see a more equal relationship of action and knowledge generation, presenting them as mutually beneficial in their work on action research and information systems development.

The next three chapters present each stage of the research in detail and include findings relevant to that stage, resulting in some necessary repetition. The reporting is

highly structured, very factual and process-related, which is the style required in software development. Ironically this seemingly dry, linear data emerged through the open, creative and spontaneous activities of the focus groups.

# Chapter 3

## STAGE 1: CONCEPTUALISATION OF ISSUES

### 3.1 Introduction

The purpose of this chapter is to explain and justify the process of data generation and analysis that occurred in Stage 1 (conceptualisation) of the research study, which took place between 2004 and 2007. It begins by identifying the various stimuli that provided reasons for undertaking the study and discusses relevant background literature as to why access to CS is problematic for so many nurses and organisations. The chapter concludes by highlighting the relevant structures and processes that needed to be put in place to develop a solution to the problem. These are then discussed in Chapter 4.

Action research is a systematic, cyclical process that normally (but not exclusively) begins with the recognition of a problem or issue and interprets and explains a social situation in order to plan and/or implement change (Meyer 2010). This involves a discovery phase as a prerequisite for planning (Parkin 2009). However, exploring a problem as part of a social situation is not a linear activity as it is often chaotic and complex. It is, therefore, necessary to have a comprehensive appreciation of the problem under investigation. In this case it is about why access to CS is so problematic for the community nurses from the PCT involved in the study.

Understanding the problem in action research is also a cyclical process according to (Koshy *et al* 2011) and involves finding out (problem identification), returning to check and verify (problem clarification), and building to the next phase of activity (problem refinement). This often involves (as it did in this project) revisiting and combining different sets of information and following different lines of enquiry simultaneously, the key elements of which are detailed below.

- **Identifying the problem**

Recognising the stimulus for the study

Background work, reading, documentary analysis

- **Recognising and refining the problem**

Literature review

- **Planning**

Stakeholders meeting

### **3.2 Stimulus for the study**

The idea for this study (to improve access to CS) emerged from the synthesis of three separate sets of circumstances that I, the researcher, have been involved in over the past few years.

The initial motivation for embarking on the study arose from my professional background as a community nurse: previously as a District Nurse Team Leader and more recently through my work as a part-time Specialist Out-of-Hours District Nurse. As an employee of the PCT, I am in a position to appreciate and, to some extent, corroborate the locally reported difficulties and limitations relating to access to CS. Indeed the problem of access is one which I experience first hand because in this role I am remotely based and undertake care delivery during unsociable hours. The opportunity for me to have CS in work time currently does not exist. The position I find myself in (being involved as an insider) is not unusual for an action researcher and, in some ways, it is advantageous because it provides an authentic interpretation of not only the problem but of the situation in which it exists. Conversely, as already discussed, it also raises the issue of researcher bias and the challenge of how that might be managed.

The second stimulus for undertaking this study is as a result of my role as Community Link Tutor (in connection with my full-time role as a Lecturer in Higher Education) where I have specific responsibilities for community nurse education in the PCT. Initially problems with access to CS were highlighted through a series of pre-registration educational audits and contact meetings. The meetings took place between managers, practitioners and myself as the educationalist. When reviewing the support networks utilised by mentors, it was informally identified that community nurses had problems with access to CS. Initial discussions indicated that this was due to a number of reasons. The main one appeared to be staff release for CS. A common example cited was that, when faced with an unscheduled interruption to the

day's activities, the nurses who this affected had to make unplanned and often unwanted decisions. When alternative strategies were exhausted, they had to choose between engaging in delivering care or attending CS for themselves. Patient care demands generally took priority, resulting in the uptake and access to planned CS being adversely affected. This is a sentiment often repeated by attendees at study days I deliver, which are commissioned by the PCT to support staff with CS. Subsequently, through a review and analysis of the literature on CS, this local issue was identified and recognised as a national trait; access to CS was indeed problematic for many nurses, not just in this PCT. This will be discussed in more depth in Section 3.5.2. At this point, it is worth noting that the PCT did not have a policy for CS in place. It would appear that this apparent lack of strategic support for CS often resulted in operational problems: securing resources like time or a room in which to undertake CS, for example. On reflection the pressure on the nurses to deliver care was an overriding factor and this, alongside the lack of clear strategic endorsement by the PCT, may well have restricted the nurses' ability at the time to think around the problems of access.

These two insights into the problem of access to CS proved to be powerful stimuli in directing and shaping the design and focus of this stage of the study. Over a period of time and as a result of exposure to various forms of data and evidence, it occurred to me that there was a 'lived' knowledge and understanding (from within the PCT) of the obstacles and barriers that were preventing access to CS for them and if given the opportunity, individuals (community nurses and others) would be able to design a solution to this problem affecting them. The next step was for me to get a clearer and deeper understanding of the problem, both locally and nationally, which I did by revisiting my lecture materials on CS and expanding my reading to get a better understanding of the background to CS; it was also at about this time that I was starting the Clinical Doctorate. In order for me to be accepted on the programme I needed to have a reasonably firm idea for a research project. As CS is something that I have a substantial professional interest in and it is an area in which I have developed some degree of expertise, it seemed like something that was worth investigating further.

The third stimuli for the study came through my role as an educationalist and my involvement with technologies, in particular the role they can play in communication associated with learning. This is discussed in Section 3.7.

### **3.3 Background work**

Developing an understanding of the background to CS and of the problems encountered involved:

- Reading
- Undertaking investigations and writing reports (DClinP modules)
- Drawing on my experience as a community nurse and as a teacher
- Community nurses' informal disclosures

The United Kingdom Central Council (UKCC 1996) set out principles for CS in 1996, which are still endorsed by the present regulatory authority for nursing - the Nursing and Midwifery Council (NMC 2008a) - in the form of a declaration that Nurses have a right to participate in CS. However, as previously discussed, CS has never been made mandatory. It is clearly a governmental desire that nurses, amongst others, should be supported in the practice of CS by their employers. It has been made part of the NHS clinical governance agenda and has been set as an auditable target by the Healthcare Commission (DH 2007), a position endorsed by the NHS Litigation Authority (2008 / 2011). Yet it would seem that access, identified through personal experience and enquiry as well as through informal disclosure by community nurses, remains problematic. This presents a somewhat paradoxical position of it being so important that NHS healthcare providers are annually monitored on their ability to support CS, yet the nurses have no formal requirement within the PCT to undertake it. Thus CS remains an enigma for many, which is compounded by the concept lacking any universal definition perpetuating confusion for the individual as well as for the organisation.

#### ***Getting closer: starting to gain an understanding of local context***

As an outsider (the researcher) and an insider (a community nurse) becoming more familiar with the research environment - its culture, its priorities and the way it

operates - is very important, as you not only get a better understanding of the problem but also gain insights into how the organisation (the PCT) functions. Often action research is conducted from 'within a field of work', for example teachers and parents at a school tackling together the problem of safe access to school (Chenail *et al* 2007). This way of conducting research is similar in nature to that of the Practitioner Researcher (Reed 2010) where being submerged in the context is a legitimate way of being. Conducting the research from an insider stance, working with the experienced or lived understanding of the presenting problem or issue, is another way of developing an understanding of the problem. But if the community nurses' experiences were to be *the* focus of the study, insomuch as they were being studied, then it would not be action research. For an enquiry to be called action research it is normally situational, problem-orientated and involves working in partnership with a community (Koshy *et al* 2011). In this project the community was the PCT personnel and it was as a result of working through issues in the focus groups that a collaborative solution to the problem of access to CS began to take shape, as will be detailed in Chapter 4.

In order for me to get a better understanding of the problem of access to CS, both conceptually via the literature and locally in the PCT, I made the PCT the focus of several of my Clinical Doctorate modules (Box 3.1). Each module afforded me the opportunity to find out more about the PCT and how it was not only conducting CS but also how it was managing it. Although the reports generated are independent pieces of work, their result provided: insights into the knowledge and communication flows in the PCT about CS; an insight into the culture of the organisation with regards to conducting and implementing research; and information about access to CS for community nurses in the PCT.

The reports are cited as background information only and highlight key areas of learning that occurred as a result of undertaking them.

### **Box 3.1: DClinP modules and reports**

Rawlinson M (2006) *Clinical Supervision: Establishing a Knowledge Flow*, Project Report, NURS 8003: Knowledge Management & Evidence Based Practice, University of Southampton, Unpublished.

Rawlinson M (2007) *Clinical Supervision: Access for Community Nurses*, Project Report, NURS 8005: Open Module. University of Southampton, Unpublished.

Rawlinson M (2008) *Developing an On-Line System for Clinical Supervision*: Project Report, NURS 8004: Designing and Implementing Research, Case Study Report. University of Southampton, Unpublished.

The key findings from these reports were:

- Access to CS was problematic at an organisational level because of a lack of clear structure, policy and process for the organisation and management of CS.
- Access was problematic at individual practitioner level because CS is often seen as a luxury. Patient and caseload needs usually took priority over CS when under pressure.
- The PCT wanted to demonstrate a positive commitment to enabling the uptake of effective CS, but no data are available as to how many nurses are actually having CS.
- There is a need for robust data and information collection and dissemination systems to be put in place.
- CS is low priority when it comes to staff release.
- New approaches to capturing and sharing knowledge generated from CS need to be piloted. This includes establishing a culture that supports knowledge management.

As a result of my role as a part-time out-of-hours nurse and my teaching role, I was able to gain further insights relating to the problem of access to CS. I was aware of the modes for CS that are currently operating in the PCT and that they are representative of those referred to in the literature, namely one-to-one, team or network supervision (Sloan 2002). Each of these approaches requires community

nurses to be in face-to-face contact (or potentially audio contact) implying that the interaction has to occur in a synchronised fashion, a factor that is often identified as a barrier (Driscoll 2007). This is a particular problem for the community nurse who operates in a geographically dispersed fashion. Community nurses often work part-time and are normally managed at 'arms length'. Time, distance and work patterns can be isolating for the nurse who as a lone worker does not have someone to turn to and say: 'what do you think about this or that?' They have to wait until they meet up with others sometime later and not always in the same day. The support mechanisms available are not immediate and often require a lot of organising and, like CS, can be difficult to access at times.

The current practice of CS in the PCT also relies on practitioners being able to identify and find an appropriate supervisor. There is no data base of actual or potential supervisors, so it mainly depends on who you know. As a new member of staff, this practice is obviously discriminatory and due to the relatively closed nature of community nursing - most nurses work in set geographical teams with little or no planned interaction with other nursing teams - the potential for identifying a potential supervisor is somewhat limited.

Learning about CS is also problematic for many community nurses, despite having access to PCT commissioned training, but this again is dependent on release from practice. Attempts to deliver education in practice have had limited success, mainly due to having to arrange it over a lunch time when the majority of community nursing teams need to transfer patient information between team members, which will normally take priority.

Securing release from practice for supervisees and supervisors is one hurdle; finding a suitable location that does not incur a cost to the PCT is another, as in this healthcare economy the majority of accommodation is not owned by the PCT. This often means having to travel considerable distances to meet to have CS, which is a time-consuming and inhibiting factor.

## **3.4 Documentary analysis**

The purpose of the documentary analysis was to explore where and how CS was integrated into the PCT's administrative structures; a process that according to Koshy *et al* (2011) can be very useful in providing necessary background information and context.

### **3.4.1 Strategy adopted for the documentary analysis**

The initial search period, which is of primary interest as far as this research project is concerned, was from 2006 to 2007. (My work with the PCT in a consultancy capacity regarding CS, also afforded me the opportunity to identify and review new PCT documentation; subsequently, one further document, the PCT policy on CS (2009), was identified and reviewed.) All acquired documents that were initially available, were analysed for any direct reference to CS and are set out in Table 3.1. Indirect reference or inference was excluded on the grounds of potential ambiguity. Any references to CS were then organised into substantive categories: organisational responsibility or individual issue. These categories arose from the literature review (Section 3.5), which was conducted simultaneously. Triangulation with the literature review ensured consistency of data interpretation.

In my dual capacity as a researcher and as an employee, I was allowed to explore the PCT's intranet (at a general level) as this is where all key information and documents are located. However, I did not have full access rights to all parts of the intranet, so with the Lead for Community Nursing I was allowed to view extracts of relevant data. She explained that this degree of censorship was necessary as some of the intelligence was potentially commercially sensitive. Additionally, her database and file store contained personal and sensitive information about staff. In the interests of confidentiality and with due regard to privacy of information, I was only given relevant data extracts to read. I did not view any of the files which the information originated from. Although this was a form of censorship, I was assured that all relevant documents had been made available to me.

**Table 3.1: Documentary analysis**

Type of Document	Reference Made	
	Individual	Organisation
<b>X = Reference made</b> <b>■ = Document unavailable</b>		
<b>Section 1: Strategic Documents</b>		
1a. Draft PCT CS Strategy & Implementation Guide (replaced in 2009 with PCT Policy for CS, currently being reviewed 2011)	x	x
1b. Educational Audit	x	x
1c. Continuing Vocational Education, (CVE) Contract Reports 04/06 – 03/07 – 04/09/10 and 03-11	x	x
1d. District Nursing Strategy	■	■
<b>Section 2: Job Descriptions (currently being rewritten to include CS 2011)</b>		
2a. Clinical Lead	x	x
2b. District Nurse Team Leader (Band 7)	x	x
2c. (i) Community Nurse (Band 6)	x	
2c. (ii) Community Nurse (Band 5)	x	
2d. Auxiliary Nurse (Band 3)	x	
2e. (i) Continence Advisor	x	x
2e. (ii) Advisor to Nursing Homes	x	
2f. District Nurse Student	x	
2g. Secondments – Medicines Management Nurse	■	■
<b>Section 3: Internal Communications</b>		
3. Notes, Minutes, of departmental meeting etc.	■	■
<b>Section 4: External Reports into CS in the PCT (see Box 3.1)</b>		
4a. Rawlinson, M. (2006) Clinical Supervision: Establishing a Knowledge Flow	x	x
4b. Rawlinson, M. (2007) Clinical Supervision: Access for Community Nurses	x	x
<b>Note:</b> The Rawlinson (2006/07) reports were the only reports available into CS. They are regarded as data collection tools but as completed works; consequently they are not presented in detail in this study.		

### **3.4.2 Findings of the documentary analysis**

The documents in **Section 1** of Table 3.1 were strategic or operational in nature and, thus, mainly reflected the PCT's perceived structuring of CS. They did not, however, define any detail about what CS was (with the exception of Document 1a: Draft PCT CS Strategy and Implementation Guide), although information again was fairly nebulous in nature. In the absence of any approved policy (until 2009) these documents appeared to have a very limited influence when it came to promoting the uptake of CS or tackling any obstacles or barriers.

The documents in **Section 2**, on the whole, made reference to the individual responsibility as regards CS. For example, Section 1.3 of the Band 5 job description for Community Nurses states that the post holder should "access personal CS and ensure a record of supervision sessions is kept"; whereas Senior Community Nurse Band 6 and 7 job descriptions defined responsibilities that were about enabling others, but as regards CS, Section 1.3 essentially read the same as for Band 5 nurses. The only job description that required the post holder to act as a supervisor of CS was that of the Continence Advisor, a specialist nurse. This lack of presence and conviction regarding CS in the PCT's documentation serves to underline the low priority some staff and the organisation attach to CS, and if implemented as stated in the job descriptions, there would be only three supervisors for over 90 staff.

Documents in **Section 3** were requested but denied because they were considered sensitive and or confidential.

Documents in **Section 4** were the external reports discussed earlier and displayed in Box 3.1. The only external reports available were those compiled by myself, the researcher, between 2006 and 2007. I am, however, currently working with the PCT writing a report into the uptake of CS and how it can be improved.

### **3.5 Literature review**

The literature review undertaken was a strategic element of Stage 1 (conceptualisation) of this research project. It had a very clear and deliberate focus: to clarify the problem of access to CS by establishing the reported reasons for nurses

having difficulty accessing CS. Essentially, it was building on the other activities already cited in this stage of the research.

Establishing that the problem of access to CS was not just a local phenomenon and gaining an understanding of why nurses do not attend CS underpins the whole research project. A critical appraisal of the literature and the evidence base which underpins the practice of CS was conducted with a focus on reported obstacles, issues and barriers to accessing CS. The initial search date parameters applied were 1997 to 2007. This time period was chosen to draw on existing literature and represent the political climate of the NHS of the time; however, a significant amount of relevant literature was written prior to these dates so the search was extended to reflect this. Overall, 70 pieces of literature were produced of which 57 were identified as relevant and important to the study as they enabled a more comprehensive understanding of the presenting issues and problems associated with access to CS.

An explanation of the search strategies including the inclusion and exclusion criteria formulated for this phase of the study, an account of the themes and sub-themes that emerged from the literature and a report indicating the number of occurrences in the papers reviewed can be viewed in Appendix 4.

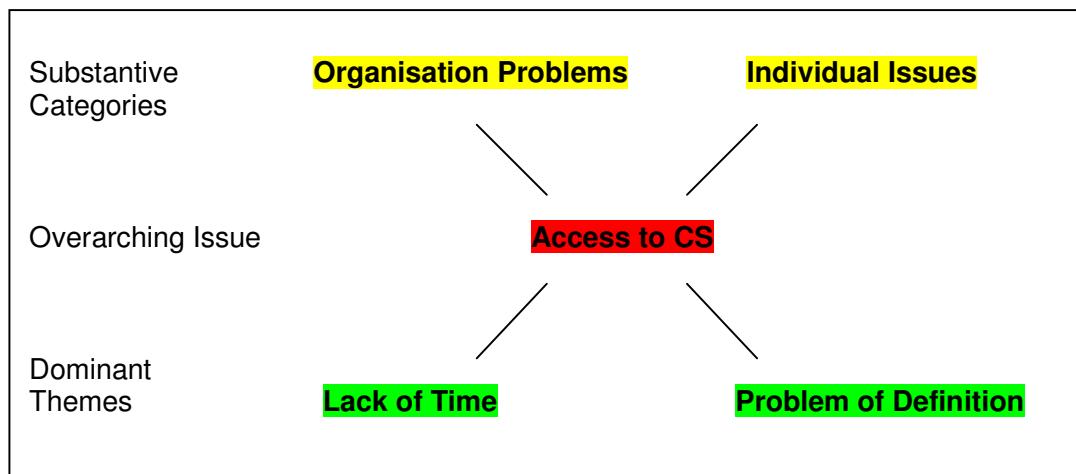
### **3.5.1 Reported obstacles, issues and barriers to access**

Bishop (1998a) undertook a national survey of NHS Trusts and reported that 92 per cent of NHS Trusts had implemented CS. However, a more recent study stated that only about a third of nurses 18-months post-qualifying were receiving CS (Davey *et al* 2006). This seems to suggest that despite NHS Trusts having previously implemented CS systems, newly qualified nurses are either not able or willing to undertake CS. Locally in the PCT, there was no accurate or reliable data to indicate how many community nurses were involved with CS.

From the content analysis and thematic analysis undertaken of the literature reviewed (Morse and Field 1996), it became apparent that the problems and issues associated with access to CS could be organised into two substantive categories (Figure 3.1), permitting the problem of access to be defined as either an 'organisational problem' or an 'individual, practitioner-orientated issue'. Furthermore, the two dominant and

compounding themes that emerged as a result of combining sub-themes in both categories were the lack of time to undertake CS and the problem of defining what CS was.

**Figure 3.1: Analysis of literature review**



An additional problem or limitation that needs to be highlighted from the literature at this stage is that access to CS is a multi-faceted issue and it was difficult to identify specific data defined by consistent terminology or explanation in relation to the reported obstacles, issues and barriers. Many papers often presented a combination of reasons interwoven with other aspects of CS, thus creating a degree of ambiguity when interpreting findings.

### **3.5.2 Two dominant themes**

The two dominant themes to emerge were lack of time and the problem of definition.

#### ***Lack of time***

Time was one of the major themes to emerge for individuals as well as the organisation (Gilmore 2001, Bush 2005). It has been reported as a stumbling block since the 1990s, according to Bishop (1998a), and appears to continue to be seen as such. Time is a complex issue. For some working patterns are the main constraint; for others it is a geographic issue, especially for community nurses or nurses who work in specialities (Wilson *et al* 2001). The issue of time also involves choice and decision-making, often presenting as the need to prioritise demand (Barriball *et al* 2004). If organisations do not resource time to accommodate CS, then undertaking it

will be dependent upon individuals making time despite competing priorities. When a lack of commitment to the process occurs at an organisational level, its value is potentially undermined (Bishop 1998a, Gilmore 2001).

One point of note is that the literature in the main refers to organised CS, whereas Titchen and Binnie's (1995) report into informal supervision, explores the idea behind informal supervision suggesting that it may be a way to overcome some of the problems of time, place, etc. This point is picked up by Driscoll (2007) who explains that supervision happens on a number of levels, from very informal to formal. Whichever approach is adopted - informal or formal CS - it is clear that it will cost practitioners and organisations time to undertake. This research concerns itself with formalised, planned CS.

### ***The problem of definition***

There is no agreed definition for CS despite over 20 years of discussion, debate and research from the early studies of Faugier and Butterworth (1994) to the more contemporary debate by Driscoll (2007). The issue of definition is a reoccurring theme, but why? From the literature reviewed, over 20 separate papers discussed the lack of definition or confusion over definition. Having no universal definition potentially leads to misunderstanding of what it is, why it needs to be undertaken and for whose benefit. Ironically, this ambiguity results in yet another paradoxical situation. On one hand, the lack of an agreed definition or model causes confusion; on the other hand, imposing a model would be limiting and as such could adversely affect the uptake and possibly the effectiveness of CS. As regards this point, I tend to agree with Cleary and Freeman (2005) who state that what is important is to have a model that is appropriate to the profession, its speciality and locality. On a more positive note, according to Winstanley and White (2003), definitions do appear to be becoming more generic. Whether this is because certain principles, such as Proctor's (1986) idea of balanced supervision, are now well established in the literature and practice or that the concept has reached a point of saturation is unclear. What is clear is that CS, however it is defined or organised, is thought to be beneficial for practitioners, patients and employers.

The issue of whether CS should be established as a mandatory aspect of practice is also much debated. Some authors, including Butterworth *et al* (1998), argue quite strongly that it should not be imposed by managers or academics as it is fundamentally a practice-orientated phenomenon and to do so would undermine its very nature. With due regard to the reported obstacles and barriers associated with access to CS, this point would seem to be upheld by the local PCT.

Another key issue often cited is confusion in definition between the idea of managerial supervision and CS and as such CS is often treated with suspicion or even resentment. A lot of the literature about CS is descriptive or conceptual in nature and whilst this serves a purpose, it does not always provide any clarity in relation to implementation (Winstanley 1999).

Over the last decade there has been a drive to evaluate CS, notably Butterworth *et al* (1996 / 1997), Palsson *et al* (1996), White *et al* (1998). These studies have provided a range of evidence that informs about CS and gives some reassurance that it is a worthwhile endeavour. Each study in its own way reaffirms that CS has the potential to meet the needs of practitioners. The *value* of conducting CS, other than to the practitioner if it is effective CS, is far more elusive. Presenting a robust defensible correlation between improvements in patient outcomes as a direct result of CS remains problematic as care is a multi-faceted dynamic with numerous dimensions and people involved over time.

Despite the lack of evidence to substantiate any one definition of CS, there appears to be an agreement with the early concepts espoused by Butterworth and Faugier (1992, p12) in their early definition: CS is 'an exchange between practising professionals to enable the development of professional skills'. The key themes in this definition have stood the test of time and are often replicated in some way in many other definitions, supporting Winstanley and White's (2003) reflections that current definitions demonstrate more convergence as opposed to becoming more divergent.

Another explanation of CS that seems to dominate contemporary literature and exert a sustained influence is Proctor's (1986) model, which comprises a balance of the following key elements:

- CS should have a *normative* component. In other words it is about the expected quality of practice, often meaning standards of practice, for example, guidelines adopted by the professional or organisation.
- CS should also be *formative* in some way. This could be about the development of skills and/or acquisition of knowledge; in other words it should be developmental.
- CS is also about a person's health and wellbeing, implying that it should be positive, caring and uplifting in some way - *restorative* - supporting personal wellbeing.

There has, however, been debate relating to Proctor's composite elements.

Butterworth (1997) points out that this is mainly due to terminology, not a fundamental disagreement with the ideals. Winstanley (1999), however, asserts that Proctor's (1986) model of CS, even though it is widely cited in nursing literature, had not been subject to a sustained process of formal validation, especially relating to how the elements relate to role or motivation. This raises a question over the reliability of Proctor's (1986) model, especially as it was not originally conceived as a process model for *nurses* to develop their practice on or around. Over the years, Proctor has developed the model further and addressed these issues by providing a detailed explanation about the model's origins and clarity on its application to nursing and other healthcare practitioners. The more comprehensive model is now known as the supervisory alliance model, which has a principally restorative function (Proctor 2001) upon which formative and normative elements can be build.

A common feature of many of the definitions or models of CS is that it is an interpersonal experience based on theory and humanistic values and this is expressed through the relationship between participants (Tveiten 2005). The relationship is key according to Winstanley (1999). A further point to consider is that Proctor's model highlights key functions, but it does not explain how this can be achieved or how the quality of exchanges can be measured or improved. Also no guidance seems to exist on what constitutes a balance of elements, except to say that both parties are responsible for maintaining a balance. Despite these criticisms, Proctors model is possibly the most widely discussed and cited model in healthcare literature to date.

### **3.5.3 The problem of access identified**

From the literature review undertaken (Appendix 4) and the points raised above, there is an identifiable line of reasoning evident that would suggest that access to CS is problematic and challenging on a number of levels, whether it be practical, technical, theoretical, or on an emotional level. The problem of access for some nurses is also one that has endured over time, despite investment in research and training. The idea of exploring a new way of undertaking CS would therefore seem like a reasonable idea to pursue. This could be particularly beneficial to community nurses if it overcame two of the main reported and known obstacles and barriers: having to be in the same place at the same time.

### **3.6 Parallel processes**

As previously stated, the decision to use Holter and Schwartz-Barcott's (1993) technical collaborative approach was a deliberate one and one which occurred very early on. Deciding on the research approach happened as a parallel process to understanding the problem. It did not neatly emerge at the end of the first stage. As I was independently exploring the problem of CS, tentative ideas about how the enquiry could be conducted and the type of solution started to emerge.

As part of the process of understanding the problem, I posed myself questions. It was widely documented and accepted that making the time for CS is often problematic, so how could the problem of time be resolved? I needed to identify an approach that would permit the development of a substantial and robust solution. Furthermore, any solution conceived, if it was going to be successful and adopted by the PCT, would need to operate within the constraints of the PCT. So working in partnership with the PCT and with an understanding of the local situation was going to be essential if the research project was going to get off the ground.

### **3.7 Identification of benefits of online reflective learning**

As previously mentioned, the third stimulus for this study came as a result of my work as a Lecturer in Higher Education. I was a project leader for an initiative to facilitate online reflective learning for post-qualifying undergraduate Public Health Degree nursing students. This work took the form of a small case study which provided an

insight into the potential benefits of a virtual environment for meaningful communication (Rawlinson and Morgan 2002). Primarily, it offered a means for effective communication for students who were spread over a large geographical area. The students' communication patterns were both synchronous and asynchronous demonstrating flexibility and user choice. Furthermore students had engaged in meaningful reflection, illustrating the fact that different levels of communication could be achieved in virtual environments (Morgan *et al* 2006). The idea of interactive discussion online is not a new phenomenon as can be demonstrated in the works of Salmon (2001), who presented a framework of e-moderating, and more recently Llaurellard (2005), who developed a conversational model for online discussions. Both these approaches to online communication describe how dialogue can be developed and managed. Both, however, rely on the fact that the discussion is mediated by someone in authority - the tutor or a more experienced practitioner. While this may form an element of CS, there is a danger that it may change the dynamic of the CS session from one where the supervisee is in control to a more directive approach where the supervisor controls the direction of the interaction by mediating the discussion. So on these grounds both these approaches were rejected, but they did act as a stimulus.

The combination of these previous activities and an awareness of the popularity and growth of social networking prompted me to contemplate the idea of conducting CS online. After all, if the key barriers were time (a set time) and space, then being able to bypass these constraints could be the conceptual platform from which a solution could be designed. But in order to do this, I would need to identify what the build and design criteria for such an environment might be (Stages 2 and 3). To do this I would need to work in collaboration with the PCT and actively engage those with this problem of access to CS to design the solution. This would also necessitate the approach used in Stage 2 of the research being underpinned by a process of software design.

Before this idea could be developed, it needed to be appraised. Table 3.2 presents the options appraisal, which I undertook with the Lead for Community Nursing. Option 5, to bypass time, was considered to have the most likelihood of success. The idea of an online environment was discussed further with the Lead for Community Nursing

and with the Chief Nurse and subsequently became the central aspect of the research proposal. In line with the preferred research approach, the problem was identified prior to and separately from the solution design and implementation stages of the research.

**Table 3.2: Options appraisal table: the problem of time**

OPTION	CONTINGENCY	ESTIMATED CHANCE OF SUCCESS		
		Low	Medium	High
<b>1. Employ more nurses</b>	Depressed fiscal climate in the NHS. Nurses were not being replaced and all jobs were being re evaluated.	X		
<b>2. Reduce nurses workload</b>	Demand led service. No means of control	X		
<b>3. Organise available resources differently</b>	Many variations could be tried, such as requesting cover from another team or rostering time on the off duty, where the nurse had no patients. This would take a considerable amount of time and effort to plan and organise and is still dependent on the number of staff available and the demand for the service on that day.		X	
<b>4. Change individuals' terms and conditions of employment</b>	Making CS compulsory, for example, part of the conditions of employment, would result in increased access to CS, but its implementation is conditional on time being protected. Time availability is conditional - Options 1 and 2.	X		
<b>5. Bypass time</b>	Creative application of technology allows for communication to be both synchronous and asynchronous, negating the need to be in the same place, at the same time			X

### **3.8 Improving access to clinical supervision by bypassing time**

The challenge is to 'open up' access, not only in terms of numbers of community nurses participating in CS but also on a conceptual level. At the simplest level, developing an online environment (a website) is a pragmatic solution to the problem of access. A website as an entity in itself is not constrained by time or opportunity but the design may be restricted by budget or resources. It is, however, at least possible to develop a comprehensive, up-to-date website that contains tools and features that will enable staff to undertake and facilitate CS at a time and place convenient to them, in a manner that promotes equality, sharing and the development of practice. A system that is designed by potential users and the client, based on expressed needs and preferences and that accounts for regulatory standards would have the capability not only to support and develop the exchange of ideas, but would also be able to monitor and track activity and quality. Any new initiative should be designed to be integrated into existing organisational structures and quality assurance processes. This was achieved by having key PCT personnel involved in the design and evaluation of the website.

The PCT in question recognises that CS has the potential to deliver benefits to patient care by facilitating an environment that challenges and stimulates the exploration of practice and is thus likely to improve standards of care; it also emphasises professional accountability (PCT 2009). Developing a system that has the potential to enable more nurses to undertake CS is a practical way of meeting the aspirations of the PCT and staff alike. Conducting CS online has the potential to address many of the reported barriers and obstacles, for example, negating the need for supervisees and supervisors to be in the same place, at the same time (Driscoll and Townsend 2007). However, it must not be overlooked that communicating online poses its own set of problems, such as the availability of terminals, the reliability of connection and competence level of individuals to communicate via this medium, alongside the impersonal nature of this mode of interaction, to name but a few.

So what benefit could an online approach to CS bring? There is a potential cost saving to be made by reducing travel and time factors. Other advantages include improving access through increased flexibility. When communication occurs in a virtual sense, it can happen in one of two ways: synchronously (at the same point in

time) or asynchronously (at different times). The fundamental difference is that supervisees and supervisors would not have to be in the same place to communicate. Utilising the technologies available also means that participants are not restricted to one type of media - sound, text or image - to communicate. Additionally, it could incorporate a facility to capture and revisit what was said and discussed. If, for example, participants chose to communicate asynchronously, a supervisee could send their supervisor a voice file and then agree to discuss it within an agreed timescale; communication could be ongoing, fluid and unplanned but a record of what was discussed and when could be created. This would be useful for future reflection, as portfolio evidence or as a record of having had supervision. The supervisor may think about the issues raised and spend time researching a response via online tools, then compose and send a typed question back to the supervisee. Though it would take time, it would be about effective use of that time. Synchronous communication requires participants to be active in the process at the same time; it does not necessarily mean being in the same place, which is a key issue for community nurses who often work over a large geographic area.

Advantages for group supervision online are similar to those for one-to-one CS except that economies of scale come into play. The effort and resources required to get, say, 10 community nurses together for CS is often prohibitive. If they could 'meet' online, it would potentially be considerably less onerous. It would also increase the opportunity for a wider connection with others as it is not restrictive or dependent on location or discipline.

From an organisational perspective, time costs money and very few studies have researched the actual cost of undertaking CS and its relation to actual or perceived benefits (Hyrkās *et al* 2001). The unit cost would be reasonably easy to calculate for individuals and a comparative cost analysis of online CS versus traditional modes could be undertaken in addition to a cost versus benefit analysis.

### **3.9 Stakeholder meeting**

A two hour stakeholder meeting took place in the Chief Nurse's office on 29 July 2008 with several key strategic personnel from the PCT. (No roles or titles are used to maintain confidentiality). This meeting essentially formed the last element of Stage 1

(conceptualisation) and took place after ethical approval for the study had been granted. All attendees were briefed in advance about the project and received an overview of the project (Appendix 5). They also had collaborated with the submission and supported the research proposal in order to gain ethical approval, championing the project at the local PCT Research and Development Approval committee early on in the year. The level of involvement and the amount of support by the PCT demonstrated the strength and depth of partnership working achieved at a strategic level within the project, a point Waterman *et al* (2001) make much about, stating that partnerships can occur on any level.

### **3.9.1 Aims of the stakeholder meeting**

- To clarify the purpose and scope of the research and operational definitions for this stage of the project, including a strategy that would precipitate maximum attendance.
- To determine the number and characteristics of the participants and agree how participants would be organised to design a potential solution in response to the identified problem.

### **3.9.2 Strategy of the stakeholder meeting**

Having presented an outline of the research proposal, the focus then became about logistics in the meeting. As the researcher, I led the meeting and facilitated the knowledge generation through the use of open questions and techniques such as brain storming. However, the importance of this meeting was not just about determining the logistics needed to implement the research design; it was also about giving the project a degree of legitimacy in the PCT. From an outsider's point of view, collaborating with senior personnel in the PCT was a form of endorsement and support from the PCT. The practical side of this position was that not only did it provide access to a much broader population from which to recruit, it also authorised the project and the subsequent release of staff to participate. The degree to which the PCT got involved with this research project (at all levels) demonstrated their commitment and desire to finding a solution to the problem affecting them. Given the amount of support from the PCT, it was incumbent on me as the researcher to ensure individuals did not feel pressurised or contractually obligated to contribute to the project. This position was discussed at the stakeholder meeting and fully understood.

To this end, any questions or enquiries about the research were always directed to me and not dealt with by the PCT. Additionally, awareness raising sessions were conducted in partnership with the PCT prior to recruitment to clarify the aims and outcomes of the project and to aid recruitment.

The identity of the individuals involved was subject to protection under the terms and conditions of the ethical approval granted for this study. The PCT senior management had no direct involvement in the recruitment process, other than to ensure that individual's rights regarding data protection were observed.

### **3.9.3 Outcomes of the stakeholder meeting**

- A working definition of CS was reviewed and agreed (Bishop 1998b) and is displayed in Box 3.2.

#### **Box 3.2: Definition of clinical supervision adopted for the study**

“Clinical supervision is a designated interaction between two or more practitioners within a safe/supportive environment, which enables a continuum of reflective, critical analysis of care to ensure quality patient service” (Bishop 1998b, p8).

- It was agreed that the participants should be organised into groups and that these groups would have a clear identity and focus. The composition of these focus groups should represent the core roles associated with CS (Proctor 2001); one group would, therefore, represent the role of **supervisee**; another, the role of **supervisor**; in addition a third group would represent the employer, the **techno-managerial** group.
- It was agreed that the Chief Nurse would make this project an agenda item on all relevant PCT committees and meetings in order to facilitate increased awareness of the research project across the PCT, especially in non-clinical departments.
- The Lead for Community Nursing would liaise with other relevant clinical leads in the PCT to champion the project as regards recruitment to Focus Groups 1 and 2.

Communication and recruitment were to be conducted with due regard to ethical approval granted.

- A time schedule was devised for the focus group meetings that would cause minimal disruption to the day-to-day working of the PCT.

### **3.10 Summary**

To formulate an idea or understanding is to conceptualise it. In order to do this in this study, it was necessary to define the problem - access to CS - and recognise that the problem was not disconnected from the context in which it presented; in other words, it was situational as well as theoretically-orientated. Working forward from this position involved recognising various stimuli and relevant influences, which resulted in me undertaking relevant background exploratory work as already detailed in this chapter.

Initially, it was necessary to identify and then examine theoretical material relating to CS. It also involved undertaking background work with the PCT in the form of reports generated through the various doctorate modules I studied as well as conducting a literature review into the reported obstacles and barriers to undertaking CS. An activity that helped me understand the local context was the documentary analysis. Amongst other things, it highlighted that strategically CS was a low priority in the PCT, despite the Trust investing in the delivery of CS.

Action research being problem-focused is also about bringing about change. If a study does not have its aim associated with change, then its credibility could be called into question. Needless to say, suggestions or solutions for potential or actual change will often emerge as a consequence of looking into and reflecting on the problem; thus the cyclical nature of this form of enquiry is demonstrated, although it is often difficult to precisely pinpoint when the process of conceptualising resulted in ideas that could be developed into a solution to a particular problem or issue. It is necessary to understand the proposed change (solution) within the context that the problem was recognised; action research is thus situational. Partnerships were established, on many different levels and for varying lengths of time and intensity,

from working with senior management on the ethical approval of the study to focus groups, who hammered out the nitty gritty detail of the solution.

The next logical step is to configure a strategy for addressing not only the problem but the solution. In this study, this was achieved through a fusion of existing knowledge about CS and the PCT, with a new or emerging understanding about the potential of virtual environments. The forum that endorsed this radical idea was the stakeholder meeting. The idea was then explored in more depth and developed into a solution through the various emergent partnerships. These are described in Stages 2 and 3.

How the idea for change became a solution and the underpinning theory that supported its development is the subject of the next two chapters, which look at designing the solution and then evaluating it.

My position as a researcher and the potential for bias is acknowledged and is discussed throughout the thesis. Needless to say, as a part-time employee of the PCT and as an external researcher, I was constantly mindful of the efficacy of this situation. The study has full ethical approval and has been scrutinised by the local PCT Research and Development Committee. Both committees did not perceive my position as unethical or untenable. From an action research point of view, it is in keeping with the underpinning philosophy of 'being involved' and not thought of as unusual.

# Chapter 4

## STAGE 2: DESIGNING A SOLUTION

### 4.1 Introduction

The purpose of this chapter is to provide an explanation to the process of data collection and analysis that occurred in the second stage of this action research project, which took place between November 2008 and March 2009. Additionally, the findings from the various activity phases will be discussed. The chapter is presented in two parts:

**Part A** is about the organisation of the participants into focus groups and the importance of their identity and role in the generation of knowledge.

**Part B** presents a detailed description of the activity phases, including findings from which the design and build criteria emerged as a result of the efforts of the participants.

### Part A: Focus Groups

The intention was to design a user-centred virtual environment for CS. This aim was achieved using Lengel's (2001) website design principles and the second (specification) phase of Schach's (1999) developmental design model, where a detailed understanding of the client or user's needs are identified and a specification document is subsequently produced as a result of undertaking a requirements analysis (previously discussed in Chapter 2).

Lengel (2001) suggests that you start designing a website from the perspective of the user and client. From this very simple starting point, it is possible to clarify what the purpose of the site might be. Once this is established, it is necessary to determine what the function should be and finally what the site needs to look and feel like.

Data were collected in a variety of ways, the main one being through focus groups (Schach 1999). The three focus groups set up for this project were also the

mechanism by which the analysis and the internal verification of data took place. The generation and subsequent review of data was an iterative process between individuals and groups. The output from the focus groups is presented as textual and graphical descriptions of the relationship between functions and the human interface, progressing from lists of words, to a simple sketch, to a screen mock up.

## 4.2 Objectives

- To maintain an inclusive approach to data collection and analysis.
- To identify the design and build criteria for an online environment for CS.
- To develop knowledge about this unconventional approach to CS.

## 4.3 Method of data collection and analysis

The facilitated focus group sessions were the main method for data collection and analysis that occurred in Stage 2 of the project.

## 4.4 Focus group model

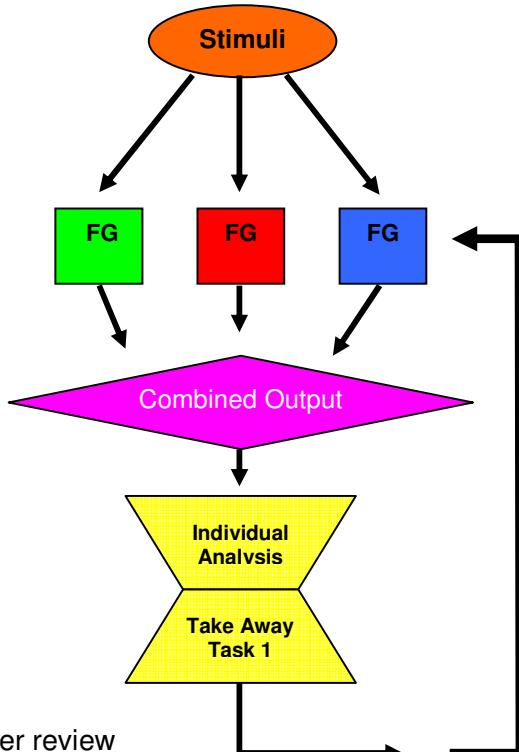
**Step 1** Focus groups (FG) respond to the same sets of stimuli: questions, activities, outputs.

**Step 2** Each group generates data.

**Step 3** The data is then combined (externally).

**Step 4** Individual's review and authenticate the data (independently of the FG)

**Step 5** This is then fed back to each group for further review



The model is representative of the cyclical iterative process of data generation and analysis that occurred in Stage 2 (Activity Phases 2-6) of the action research project.

Participants collaborated to generate data and ideas as a group in Steps 1 and 2 and as individuals in Step 4. As the researcher, I managed and combined the data outputs from all focus groups in Step 3 for dissemination and discussion at the next set of focus group meetings Step 5. This cycle of events was repeated throughout this stage of the research project resulting in a continuous process of knowledge generation, review and refinement of ideas.

The key dynamic of the focus group model is that participants, either as individuals or from the perspective of their assigned identity as a group ([supervisee](#), [supervisor](#) or [techno-managerial](#)), reviewed and refined ideas that they had created themselves. The questions considered and tasks and activities undertaken by the focus groups acted as a scaffold or framework alongside Lengel's (2001) website design principles, as a way of structuring the knowledge generation process. The data generated as a result of each activity phase was presented back to the focus groups for their approval and modification as either text (written statements or description) or image (storyboard sketches or graphical screen mock ups). Thus, a continuous iterative cycle of data generation and analysis occurred in all activity phases in Stage 2 of this research project.

According to Ruiz (2006, p58), "designing and writing content for an online environment requires a specific layout, easy to access style of writing and interactive features". This was achieved, with due regard to Lengel's (2001) principles of web design, through participative action of potential users and the client.

## **4.5 Recruitment strategy**

A two-pronged approach was used across the PCT to improve communication and aid potential recruitment to the research project:

- Internally, the Chief Nurse made it an agenda item on committees and meetings and the Lead for Community Nursing discussed it with other Clinical Leads and staff groups.
- Externally, I as the researcher was invited to talk to staff groups and meetings. I was also given permission to discuss the project informally with PCT employees on an opportunistic basis.

## 4.6 Focus group identity

Group identity and role was established in Stage 1 at the stakeholder meeting:

**Focus Group 1:** **supervisees** - a user group of community nurses

**Focus Group 2:** **supervisors** - a user group of community nurses

**Focus Group 3:** **techno-managerial** - the client, recruited from across the PCT

Defining the groups in terms of role was purposeful. If the website was to be user and client-centred then it needed to reflect those different perspectives (Moggridge 2007). By ensuring each group had a clear identity and focus, in-depth internal dialogue in each of the groups was promoted. If I had opted to run generic groups consisting of representatives of all the roles in CS, there would have not only been the potential for role confusion for the participants, but distinguishing between client and user needs would have been very problematic and unnecessarily complex. A generic group would have had to be representative of the organisation and the structure of its staffing complement. Clearly identified groups also reduced the potential for any normalising or 'dumbing down' of ideas generated from any given identity; for example, a group containing, say, first-line managers with more junior nurses, may well have restricted the generation of ideas, particularly if participants did not feel free to voice any criticisms of the existing system or were unwilling to share their scepticism of the current managements' ability to respond to change. As such, groups with identities relating to role and how they would use the website for CS were preferred.

## 4.7 Recruitment to focus groups

Recruitment took place over a three-month period. The aim was to recruit up to seven individuals per group. Twenty-one individuals volunteered overall, but only 17 attended. Of the four who did not attend, two withdrew on health grounds, one gave no reason for not attending and one informed me that they had changed their mind. The major difficulty I faced was that I did not know about the four non-attendees until the first focus group meeting. By that time it was too late to recruit more participants as dates, times and venues had been booked and I did not want to risk losing the volunteers that had committed to the project. Rescheduling and repeating the

recruitment process at such a late stage would have put the project back another two or three months. This would have then jeopardised the viability of the project with regards to staff release and the overall timeframe for completion of my doctoral studies; so the decision was taken to proceed.

In line with ethical approval and with due regard for data protection, recruitment was co-ordinated through the PCT. This involved two parallel processes: one for Focus Groups 1 and 2 and a separate approach for Focus Group 3.

#### **4.8 Focus Groups 1 and 2: *Supervisees and supervisors***

The personal assistant to the Head of Community Nursing Services acted as a third party and set up a contact and distribution email list; this virtual communication network was necessary to meet the terms and conditions of the ethical approval granted; no direct contact with potential participants was permitted (only with line-managers). This approach was put in place to minimise the risk of coercion or personal influence in order to protect the rights of individuals. I made available, via the virtual network, an overview of the research project and my contact details for managers to contact me for clarification if necessary. All other communication was through the third party agreement; this also applied to Focus Group 3.

The aim was to recruit up to 14 community nurses, divided into two groups of seven. These numbers were chosen to obtain a degree of representation of approximately 90 full and part-time community nurses in the PCT. Seven was also considered to be a workable group size.

For Focus Groups 1 and 2, two trawls were needed due to a large number of staff on sick leave or on annual leave resulting in 14 nurses being recruited overall. Participant preference was used to determine which group individuals were allocated to. Anyone who did not state a preference of *supervisee* or *supervisor* was randomly allocated to a group; individuals were aware of this as participants had the opportunity not to state a preference.

### ***Inclusion / exclusion criteria for Focus Groups 1 and 2***

- All community nurses were eligible to volunteer.
- Participants were only eligible to be a member of one group.
- It was preferable that participants had some experience of CS or training in the role of **supervisee** or **supervisor**, as this study was about obtaining the views of users from their experiences and knowledge of CS.
- No one was included or excluded on the grounds of their level of technical knowledge or ability to undertake CS.

This self-selection sample ensured that individuals who identified with the problem in a particular role were able to contribute to the design of the solution.

### **4.9 Focus Group 3: Techno-managerial**

Via the PCT Project Manager, the Chief Nurse's office set up a contact and distribution email list to all relevant Heads of Department. I made available via the virtual network an overview of the research project and my contact details for managers to contact me for clarification if necessary. All other communication was through the third party agreement.

### ***Inclusion / exclusion criteria for Focus Group 3***

The aim was to recruit a range of managers and technical staff.

- Experience of CS was preferable but not essential.
- Participants should be interested in the use of technology in the work place.
- No one was included or excluded on the grounds of their level of technical knowledge or understanding of CS.

Each Head of Department was requested to advertise the project and post an invitation for participants to respond. All information was to be co-ordinated through the PCT's Project Manager. (This was her job title in the PCT but she did not project manage this study; for this project only, she acted as the communication contact in the PCT.) I was then notified of the names of individuals who had responded and which department they were from.

I then met with the Project Manager to confirm details and provide the necessary follow on information so that participants knew they had been accepted to be involved and when and where the meetings would take place. Only one attempt at recruitment was necessary resulting in seven individuals volunteering from the following seven different departments:

- Chief Nurse's Office
- Training and Development
- PCT Nursing Bank
- Continuing Care
- Community Nursing Services
- Allied Health
- Information and Technology

The benefit of being able to recruit such a variety of personnel from across the PCT was that it ensured that this research, although focused on the needs of community nurses, was not developed in isolation from the rest of the PCT. What happens in the community nursing sector will have an impact on other services and departments across the PCT; it was therefore prudent to have them on board. This focus group was made up of clinical managers as well as technical and governance staff.

#### **4.10 Knowledge generation in focus groups**

Organising the focus groups in line with Proctor's (1986) roles in CS was deliberate. Providing each group with an identity that represented the key roles in CS provided focus and clarity as to what perspective they were engaging with as regards the generation of knowledge. Developing knowledge from within a group is also a way of mediating any researcher bias.

The main purpose of the focus groups was to generate knowledge. The construction of knowledge is generally accepted as an outcome of group activity. The term 'focus' when used with 'group' and when applied to research, denotes purposeful discussion (Markovà *et al* 2007). In this study, the purpose was to identify the design and build criteria for a CS website through recognising user and client requirements. The focus

of discussion was enabled through the stimuli in the activity phases. However, what is debated in the literature is the credibility of the knowledge that is generated as a result of group dialogue within forums such as focus groups. This raises the question of whether a group is a legitimate source of knowledge. In addition, Markovà *et al* (2007) raise the issue of group bias in the production of knowledge. It is understood that a group of people interacting can generate knowledge, but the authenticity of the *group* as opposed to the *individual* being the source of knowledge is contestable. The dialogue in a group is often cited as the source of knowledge creation and as a result it is sometimes classified as socially constructed, or as a result of interaction, or as communication (Markovà *et al* 2007). Whatever theory underpins the explanation of ideas (with reference to how it is constructed), it is important to acknowledge that bias exists, both internally (from within the group) and externally (from the facilitator).

As the researcher attempting to understand the construction and validity of knowledge generation in a group, it is important to be aware of the various influences on the construction of said knowledge. Typically this means being mindful of the propensity for the group or researcher to desire a majority view and the possibility of any coercion or manipulation which may be employed to achieve this. I believe that by adopting an iterative process of knowledge generation that recognises participants as an individual and as a member of a group, the knowledge generated in this stage of the research is legitimised. The process, however, does not prevent with certainty the influence of group processes and ensure that the minority view is fully represented. It does, however, try to mediate those elements by having differing points at which data is reviewed and authenticated by all concerned; thus, the relevance of divergent opinion is emphasised and acknowledged, to facilitate inclusively rather than exclusivity.

## Part B: Activity Phases

The next section of this chapter details, in report form, the various activity phases undertaken to generate knowledge and understanding about user and client preferences.

### 4.11 Activity Phase 2: Developing the solution

From Activity Phase 2, which occurred in November 2008, some of the design and build criteria were identified. It had a very close correlation to the conceptualisation stage of the research. By defining what CS is, why it is necessary and who benefits it was, in essence, the participants' problem, clarification and recognition process. Prior to the first meeting every member of each group was emailed the following:

- An overview of the project
- A timetable
- A welcome letter to their group
- A proposed schedule for each of the three planned meetings

The first focus group meeting was divided into two parts (as was the case for all of the focus group meetings). This was to allow for a review of the previous data generated and to provide a structure for subsequent data generation and analysis. Scheduling activities in each part also ensured that the data collection and analysis aspects of the second stage stayed on track so that the project could achieve its aims.

#### 4.11.1 Part 1 of the first set of focus group meetings

##### *Activity list*

- Introductions and welcomes
- Consent forms (Appendix 6)
- Icebreaker (detailed below)
- Presentation of the research project (Appendix 7)
- Ground rules
- Confirmation of timetable and venues

## **Aim**

To clarify what the project was about and establish a positive group environment in which individuals could feel safe and develop a sense of belonging and togetherness.

This positive environment was enabled through a series of group activities (listed above). Each activity had a purpose and structure. Providing the framework for each activity permitted a very clear focus to be communicated and gave participants a sense of organisation. This approach to group work is reflective of the philosophy of constructivism and provided an environment in which participants would feel free to contribute and be creative.

After the welcome, introductions and completion of consent forms, the first activity was an icebreaker, which was undertaken whilst having some refreshments. This was designed to distract from the awkwardness associated with new group formation and to provide a non-threatening activity to allow people to feel comfortable with each other and to develop some group cohesion and identity (Chlup and Collins 2010).

## ***Ice breaker***

Every participant was given a flat, brightly coloured box template (approximately 4cm<sup>2</sup>). After making the box, the task was to stick on pre-printed labels. The labels were the key questions that were to encourage ideas and underpin the subsequent knowledge generation or identification of relevant design and build criteria for a CS website (Table 4.1).

This activity proved to be very successful as it caused a lot of amusement and got people talking. No instructions were given about which label was to go on which side of the box or in what way; this was a deliberate ploy and achieved its objective of getting the group to work together to come up with their own answers and unique style. The boxes were to be taken away with a request for them to be put by the side of their computers or in a prominent position on their desks. The brightness of the boxes made them stand out and the questions on the box labels were a visual mental prompt to be thinking about CS and a possible website.

**Table 4.1: Box labels**

<b>Clinical Supervision</b>	<b>The Website</b>
Q1 What is it?	Q4 What should it look and feel like?
Q2 Why do we need it?	Q5 What features do you want?
Q3 Who benefits?	Q6 How do you need it to work?

Participants were also given a small notepad and pencil and on the front cover was a label with their group name, timetable and my contact details. This was to be used by them if they wished to jot down any thoughts they may have had regarding CS or the potential website.

### ***Presentation***

In order to change the focus and provide information to participants, the icebreaker was followed by a short presentation about the research project. This stimulated some debate and discussion, which was useful in clarifying expectations. Ground rules around which the group would function were next established.

### ***Ground rules***

Undertaking activities like ice breakers and the setting of ground rules promoted a sense of togetherness, openness and community. Each group determined their own ground rules by verbalising ideas which were recoded on a flip chart. Open declaration of ideas and boundaries was an affirming process, which demonstrated a strong accord with DePoy and Gitlin's (2005) principles of action research. An additional benefit of the activities undertaken in this initial meeting was to establish the basis for effective group working. It was very important at this stage of the project that the groups got up and running quickly and that an open and trusting relationship was established from the outset as a major source of data generation for the project was the focus groups; establishing a positive process and pattern of communication that enabled a sharing of ideas and opinions, bounded by mutual empathy and understanding, was important to developing good group dynamics.

#### **4.11.2 Part 2 of the first set of focus group meetings**

The aim was to facilitate the generation of ideas relating to the project. This involved each group attempting to answer the six key questions on the box labels. Each question was displayed on a separate flip chart page in a different position around the room. The group's ideas were recorded on flip chart paper and coded. Additionally an audio tape was used to capture ideas that were not recorded on flip charts.

In order to elicit information and provide a platform for individuals to feel free to contribute, I initiated an open discussion about CS (and later one entitled 'Websites - love them or hate them!'), which encouraged open sharing of views and experiences. As the facilitator, I recorded relevant points on the flip charts under the respective headings, taking time to confirm with individuals and the group that I had heard correctly and that they agreed with what I had written and where I had put it. This technique was used in all meetings as required to reduce interpretation bias.

After a break, I introduced information relating to building a website and one of the first tasks to do was to decide what the site's goals should be (Lengel 2001). I reminded the groups that they were to think about this from their group identity perspective, as **supervisee**, **supervisor** or **techno-managerial**. The group then had to decide which features were most and least important and to consider their reasons.

As a means of assisting the groups, I devised and introduced an activity sheet for them to fill in, which helped to keep them focused on the task in hand (Appendix 8). Additionally, this *aide memoir* gave them another way of understanding the task. The session ended with a review of progress at which point anyone could ask questions, add or remove anything written down or clarify anything said.

Before thanking all for their participation, I concluded the meeting on two points:

- A check that all were aware that in approximately one month's time they would be receiving a collective representation of the initial output from all groups, in the form of a summary of the data generated from the first set of meetings. They would be asked to review and comment on this initial output.

- An explanation of the take away task (Activity Phase 3) in preparation for the second meeting of focus groups. It involved each person emailing me the link to a favourite website and ones which they used frequently. These websites would form a key part to the data generation in the next meeting.

#### **4.11.3 The style of facilitation adopted**

Solicitation of the design and build criteria for a CS website was the overall objective of this second stage of the research. Guidance from software design literature is not very explicit about how this can be achieved although there is a considerable amount written about design itself. Design, according to Moggridge (2007, p650), “is about harnessing tacit knowledge rather than the explicit knowledge of logically expressed thoughts”. He explains that designers work in the complexity of constraint which is often more effective if learnt by doing “allowing the subconscious mind to inform intuitions that guide action” (Moggridge 2007, p650). To this end, design is somewhat of a synergy between need and want. The style of facilitation, therefore, needed to be one that promoted and encouraged individuals to express themselves and explore their ideas and thoughts in a way that was free from constraints; essentially it needed to be liberating (DePoy and Gitlin 2005). This was achieved by providing different stimuli for individuals and groups; for example a set of questions that promoted discussion and debate.

#### **4.11.4 Findings relating to clinical supervision**

The three questions considered relating to CS were:

Question 1 - What is it?

Question 2 - Why do we need it?

Question 3 - Who benefits?

These questions generated multiple diverse responses from each focus group. In order to understand and organise the data generated, the information was clustered, so that similar or related responses were grouped together. Appendix 9 displays the data tables produced.

### **Question 1: Clinical supervision - what is it?**

Each focus group clearly articulated their views of what CS was to them.

- For **supervisees**, the most important aspect was about it being a structured, safe and secure, confidential environment in which to establish a dialogue. The nature of the dialogue was to be supervisee-led, reflective, professional and, very importantly, non-judgemental. It also needed to be action or change-orientated.
- For **supervisors**, the focus was similar regarding the nature of the relationship. However, they described the relationship as being more equal; peer-to-peer and non-hierarchical as well as inclusive of non-nursing staff. There was also more of an emphasis on what it might achieve; for example, knowledge and skills alongside development.
- For the **techno-managerial** group, the focus was clearly more strategic. The emphasis was on care delivery and the importance of evidence-based practice.

In relationship to the literature, the views expressed fit very well with the core elements of most of the published definitions for CS, including the one adopted for the study (Bishop 1998b). Additionally the identified factors could be used as quality indicators for CS. After all, these are the attributes and characteristics desired and described by the practitioners associated with this study; they could, therefore, be used as benchmark statements to evaluate the CS website when built.

### **Question 2: Clinical supervision - why do we need it?**

As with the first question, the **supervisees** and the **supervisors** demonstrated a related understanding, with a matching of concepts, boundaries, aims, intentions and expectations. For **supervisees** and **supervisors**, the most important aspects were related to the quality of clinical practice being delivered to patients and carers. The need to change practice and the opportunity for personal and professional growth were identified. This, they saw could be achieved through critical analysis and the sharing of ideas, knowledge and experience. Again the **techno-managerial** group presented a strategic interpretation of the question, articulating what they thought CS could achieve relating to healthcare delivery as well as practitioners.

All groups demonstrated a view of CS that identified it as a form of support and a mechanism from which learning could be achieved.

***Question 3: Clinical supervision - who benefits?***

The data collected clearly demonstrates a very high correlation of agreement in the answers of the three groups. All indicated that CS was beneficial on a number of levels: for the nurse, the patient and family, for the employer and organisation. The only group to comment in a more negative or cautious nature was the **supervisees** who perceived a potential negative impact for some senior staff. The example cited was that first-line managers may have less control or opportunity to challenge custom and practice. Although in some ways it is difficult to quantify this type of statement, it does expose a potential hierarchy in existing CS practice. It also represents the application of what Proctor (1986) describes as the normative function of CS: framing practice in relationship to quality standards. Further probing revealed that for some their experience of CS was through group supervision in which the district nursing team leader, as self-appointed supervisor of the team, regularly and overtly monitored the quality of practice through the mechanism of CS. This, it would appear, was at the expense of the other elements of CS.

The statement made about their experience of having CS also demonstrates some of the expectations of the various participants. The challenge is to incorporate this notion of quality control into the design and build criteria, without it appearing as a form of management supervision. This then raises another issue about the overall purpose of CS. If the primary purpose is perceived as a management quality assurance tool relating to team function then the normative dynamic (Proctor 1986) may well be the dominant ideology. This position, however, is not representative of balanced CS where the composite dynamics are in equilibrium and the agenda is supervisee-focused. The reality may well be that that is what individuals perceive the purpose of CS to be.

The data collected also demonstrates a very high correlation with the definitions adopted for this study (Bishop 1998b). From this it could be assumed that all groups were knowledgeable and considered CS to be a worthwhile endeavour that had many characteristics to it. The collective data also demonstrated a strong accord with the

composite elements discussed earlier (Proctor 1986). The fact is that all groups were articulating views consistent with the roles that they represented. It is necessary to consider whether this was as a result of the stratification used to define the focus groups. If so, then the focus group identities were appropriate and participants were able to identify and articulate from that perspective, in which case the data could be considered to be authentic inasmuch as it was representative of the ascribed role. An issue for me, here, was whether all participants think the same way about CS. The limitation of this process, regarding validity of data, is not that the collective view is not representative, but it assumes that all roles are understood in the same way. This is an inherent weakness in the method of data collection used. However, a website needs to have clear components in order to function effectively; how individuals perceive their role may vary.

#### **4.11.5 Findings relating to the website**

The three questions considered relating to the website were:

Question 4 - What should a website for CS look and feel like?

Question 5 - What features do you want it to have?

Question 6 - How do you need it to work?

In order to facilitate more than a basic understanding of the answers to these questions I contextualised them in a discussion, the aim being to determine what the purpose of the website was. This pivotal question acted as a stimulus for all the questions relating to the design and build criteria of the CS website. From this emerged an early stage definition of online CS.

The data from all groups were collated and presented as a statement and series of requests or attributes required of the site. No suggestions were excluded; any duplication was not, however, repeated. The aim was to get as broad a view as possible but not to rank the features per se. At a later stage the groups prioritised their needs.

### ***Design and build detail***

Listed in Box 4.1 is a list of words and phrases generated from all focus groups in response to Questions 4 to 6. These responses form some of the content of the design and build criteria.

#### **Box 4.1: Collective responses to Questions 4, 5 and 6**

##### **An online environment for clinical supervision should look and feel:**

professional / crisp / clean / not fancy / text and images / friendly / fun / informative / useful / easy to use / titled / branded to PCT values and beliefs / personalised - your name appears on login / benefits the user / not scrappy / fun-work balance / does not appear to be a cost saving exercise / positive benefits ranked 1-4.

##### **It needs a range of features including:**

home page / front page / layers / reminder at login of ground rules (policing) / security / privacy / identification and disclosure / information / edit facilities / some open areas for sharing / some secure parts for one-to-one / logos / internal and external links - Department of Health, journals / calendar / action planner / RSS feeds / alerts / favourites / bookmarks / stories - current topic, topical issues / explanation of what has already been logged / discussion board / forums - wikki / search / help / site map / easy-use guide / different operating modes (levels of engagement) one-to-one, many-to-many / internet access / special interest pages (nursing discipline) e.g. community children's nursing, community nursing, school nursing / internal and external data transfer / conforms to data protection act and other PCT policies / bespoke set up / personalised log in 'Hello Karen', 'last time you were here' etc. / partners (social services) able to share and access as appropriate / quick links / icons / news page / FAQ / drop down boxes / log off 'we' had 'name' clinical supervision 'topic' – then exit/ report generator to manager, for monitoring, tracking activities, number and type of users, what they did, who / evaluation - easy use ranking system about the site.

##### **It needs to be able to function in the following ways:**

safely / quickly / be able to connect in and out, logically / easy to get around (user friendly) / drop down menus / using text, sound, video / be able to ask open questions / open forums / semi-organised / communication to be synchronous and asynchronous / different approaches / personal and private sections / netiquette / familiar user interface PCT e.g. ctrl alt del / security / login linked to ground rules accepted / meet user needs / friendly / voice option / influence everyone / be meaningful / user have ownership / joint home-work access / different sections / help identify data to meet NHS targets, Health Care Commission, NMC / be auditable.

Source: Focus Groups1-3, November 2008

### ***Goal setting***

The statement in Box 4.2 represents a synthesis of ideas put forward from all three focus groups and represents the initial goal statement for the virtual environment. It was created by putting together the responses made by participants in relation to the activities previously undertaken. The information was grouped in accordance with the nature of the content. It was presented as a statement that could be used to communicate what the site's aim or goal might be. It was then to be discussed by all focus groups as the next activity. This process was designed to see if what I had crafted from raw information was representative in some way of the thoughts and wishes of the participants. Although this is a very crude process, it was effective as it provided a tangible output from all, to all participants. Revisiting the statement also potentially limited any researcher bias introduced in the crafting phase.

#### **Box 4.2: Goal statement (version 1)**

The goal is to have a safe, positive, confidential, professional, structured environment to support interaction in a meaningful way that enables the education and practice development of the individual. This environment would need to be easy to use for all stakeholders. Key features would include: multiple access, safe data transfer, the production of a record or action plan, a discussion forum as well as meta-activity data tracking for monitoring purposes.

(Focus Groups 1, 2 and 3, Jan 2009)

### ***Stimulating knowledge generation through active facilitation***

From the information that emerged from the focus group activities and discussions, enough data were generated to create a visual representation of participants' requirements. This was presented as a series of storyboards or sketches outlining key features and potential functions of a potential site (Appendix 10). The storyboards were used in a subsequent activity phase to provide a visual focus - a concrete representation of an abstract construct - and to generate discussion about the potential site. Storyboards are a commonly used method of gathering data and are used to develop a deeper understanding of requirements after the initial meetings. A more contemporary term is 'prototyping'; commercial web designers use software mock ups, whereas I used pen and paper. This stage of fact finding is described by Skidmore and Eva (2004, p91) as one that assists in finding out what a system must

do. It is a visual model that mimics the stated requirements and is particularly useful for depicting requirements that are less clear. Also, according to Skidmore and Eva (2004, p91), it often prompts users to re-evaluate what functions they have already defined and to stimulate new ideas that they may not have considered before. This proved to be the case and it became more about managing expectations. The process of presenting information in this way highlighted the functional nature of the potential website. What I found myself doing was articulating the processes and data flows that might occur: for example, a response to a question about how someone would find a supervisor resulted in the group exploring the profile creation element, and then the home page, and then back to the log on page. What we were trying to establish was the relationship between a function and how the site might work.

#### **4.11.6 Summary of Activity Phase 2**

It is clear from the amount of data generated and the expectations of the participants that the site needs to be a dynamic site that is capable of complex interactions. It also needs to be hosted in such a way that it is accessible from a number of platforms including home-based personal computers and mobile devices. This is potentially very complex (but not impossible) as it would need to conform to national and local information technology (IT) specification. It needs to be secure, confidential and personal as well as professional and capable of supporting multiple dialogues in a variety of forms.

The attributes and features requested of the website demonstrate a direct correlation to the attributes and features of CS as described by participants. The significance of this relationship is two-fold:

- The expanded identities of the focus groups are appropriate as they are providing a user perspective in role.
- The requirements of all three groups are representative of CS as defined in the literature, as well as determined through the peer review process adopted as the main form of analysis for this stage of the study.

The textual information and the storyboards together represented some basic design and build criteria for the website. This still needed further refinement and clarification which was the purpose of the following activity phases.

#### **4.12 Activity Phase 3: First cycle of reflection and analysis**

The purpose of this phase was to individually review the data generated from Activity Phase 2 and feed back comments and ideas at the start of Activity Phase 4 (the next focus group meeting). In addition, participants were asked to supply me with the address of their regularly used or favourite websites (the first take away task). This phase occurred between November 2008 and January 2009.

These websites became the focus of discussion in Activity Phase 4, Part 2. The intention was to generate information based on participants' experiences and preferences of current websites. In total, 25 web addresses were sent to me, which can be seen in Appendix 11.

##### **4.12.1 Data generated from Activity Phase 3**

The web addresses were grouped by type as follows:

- Commercial: products, auction, buy or sell, banking, search facilities (13)
- News: information (2)
- Health: local and national information (4)
- Social networks (2)
- Organisations (2)
- Education (2)

As can be seen, a wide selection of sites were sent in to be reviewed. The largest group were the commercial products and finance group. This is not surprising as the worldwide web has become the market place of the 21<sup>st</sup> century. According to Mini Watts Marketing Group (2011), there is an estimated 2 billion internet users world wide, of which 51.4 million live in the UK. That equates to 82 per cent of the UK population being able to access the internet and this figure is set to grow.

According to the goal statement in Box 4.2, the CS site could be described as a cross between a professional information-orientated site like an NHS site, and a social network site where access to a range of people and relationships is a dominant attribute.

The usefulness of critically reviewing a range of sites that are already successfully up and running is that it provides an opportunity to discuss why some aspect or function is appealing or of interest. Different sites also have different purposes and, therefore, contain design features that help achieve maximum impact in relationship to that site's goal. Viewing the various live sites also enabled engagement in the design process in other senses, in particular visual and aesthetics; how do sites look and differ in feel and appearance. Commercial product sites, for example, will often have a special offer section that makes particular use of graphics and colour (visually bold, eye-catching, centrally-positioned, with minimal written detail) communicating instant basic information: the product, price and availability. Getting to the technical specification of a product often requires the customer to go further into the site. Whereas, information sites like the news or the weather will use images to support the message being communicated in the textual account presented. What is being 'said' is the important feature of this type of communication; this is not to say the site should not also be aesthetically pleasing. Both types of website discussed here also have similar features. For example, the commercial product site will often have a feature that tries to predict your need and offer choice, often resulting in similar products being displayed at the same time as the one you specified. The news site will also attempt to anticipate your need by not only telling you what is current, nationally or internationally, it will give you the option of localised information. Website features are not there by accident; they relate back to the site's purpose and are intentional, identified through the analysis of requirements as well as through experience and feedback surveys of existing sites. (Lengel 2001)

#### **4.13 Activity Phase 4: Refining the solution**

The aim of this set of focus group meetings, which took place in January 2009, was to build on the knowledge generated from the first set of meetings in order to develop a more comprehensive and relevant website.

#### **4.13.1 Part 1 of the second set of focus group meetings**

- The ideas from the first set of meetings were revisited and refined.
- Revisions were noted, discussed and recorded.
- Storyboards were introduced.

In order to create discussion and provide an alternative way of understanding the output from the first set of meetings, I created a series of storyboards from the data generated in Activity Phase 2. The storyboards were pencil sketches of screen mock-ups of a potential site, demonstrating the features and functions as well as depicting the processes involved when navigating the site. For examples, see Appendix 10.

Understanding how to get around a website, for many, is as important as the content on the site, although it is difficult sometimes to see where this aspect has been considered by designers.

Comments and suggestions on all of the above were noted and recorded.

#### **4.13.2 Part 2 of the second set of focus group meetings**

The take away task from the first set of focus group meetings was to email me the web addresses of favourite or frequently used websites. From the collective list, each group decided independently which websites they would review. A discussion of the selected sites took place, where the comments and suggestions generated from this activity were recorded on a review template supplied by me (Appendix 12). The data generated from this activity informed the design and build criteria for the CS website. Participants' either recorded or described what they thought was attractive or useful about a particular site, providing an insight into individual preferences when using online resources.

#### **4.13.3 Review of storyboards**

At this meeting the first task was to review the goal statement generated previously. The changes requested mainly related to the language used in the goal statement. The request from all groups was to make it simpler; in other words, use plain English wherever possible, for example replace 'meta-activity' with a more understandable term. Box 4.3 contains the revised goal statement (version 2).

**Box 4.3: Goal statement (version 2)**

The main purpose of the clinical supervision website is to improve access to quality clinical supervision for community nurses who work for the \*\*\*\*\* Primary Care Trust. This goal will be achieved by creating multiple virtual communities and relationships that engage in learning, reflection, discussion and debate. A subsidiary goal is to provide a range of services for the users that enable them and their employer to meet regulatory and quality assurance standards required by the Nursing and Midwifery Council and the NHS.

(Focus Groups 1, 2 and 3, March 2009)

It is also worthwhile spending a bit of time here exploring not only the changes made but also their significance. This second attempt at a goal statement differs and is more informative than the first goal statement in a number of ways. A key development is that it specifies the site's intended purpose and the potential client and users: to provide improved access to CS for community nurses in a particular NHS PCT. A certain degree of ambiguity still exists in some aspects of the language used; for example, what is meant by quality supervision? This point is returned to in the evaluation stage of this project (Stage 3). Additionally, by describing attributes and functions into primary or subsidiary requirements, a much more sophisticated and refined view of the end product is presented. Importantly, it defines certain parameters, which gives the site a clearer focus and points of reference as well as specifying the required functionality. These changes to content and language were presented by me but arose out of the discussions around the first goal statement. All groups endorsed the new statement.

This second goal statement would not have been possible if the first statement had not been reviewed by the participants. This, I believe, demonstrates that the process of data generation was not only active and incremental; it was also able to mediate researcher and group bias. The incremental nature of data generation began to be more evident as each activity was undertaken. (This I believe was equally true for myself as I became more knowledgeable and questioning of my own understanding.) This was evidenced in the discussions, which moved from just identifying features that would be useful, to exploring how they might interconnect or pose a threat to the

integrity of the site. The main focus of discussion was often site security and policing. I also believe that participants grew closer to the problem and, more importantly, the solution, as they defined and refined what the site might actually be like, though I cannot prove it other than through the quality and comprehensive nature of the specification document as well as participants' requests to be involved with the pilot site if it was ever built. This, I believe, demonstrates the importance and relevance of action research as an approach to addressing real life problems.

**Table 4.2: Key design and build criteria for the website**

To provide an easy to use, safe, confidential, secure, professional environment.
To promote intelligent and meaningful conversation and discussion between users in multiple presentations: one-to-one dedicated areas and multiple forums.
To be able to search and access the most up-to-date information and research relating to healthcare.
To provide a permanent (and printable) record of key elements and interactions.
To be able to track and monitor site usage for audit purposes.
To generate data sets to act as a resource within the site.
To be accessible from multiple platforms, such as the worldwide web, the NHS intranet and portable devices.
To support multimedia and interactive capabilities: text, sound, video and white boards.
To provide a range of tools and software that promotes collaboration and sharing.

#### **4.13.4 Emergent design and build criteria**

Table 4.2 specifies the key design and build criteria for the site. An expanded list of objectives alongside demographic and contextual data can be seen in Appendix 15. The objectives are derived directly from the site's purpose and expressed needs; the answers to Questions 1 to 6 are further developed into specific objectives for the website or objectives related to technology as suggested by Lengel (2001). The next task was to explore the storyboards created as a result of Activity 2, which became an ongoing process. The storyboards were reviewed in detail and displayed in the room.

Participants were encouraged to look at them and make comment whenever they wanted to, including during other activities.

#### **4.13.5 Websites: the good, the bad and the ugly!**

The third task was the participant appraisal of selected websites (Activity Phase 3). Data collection involved identifying attributes of sites which participants found useful and attractive as well as distracting or annoying. Asking the groups to review existing websites from the perspective of a general web user or consumer was initiated for various reasons. Adopting the perspective of the consumer facilitated the unlocking of personal preferences in the form of detailed information about ease of use, navigation, layout etc. It was necessary to view non-CS websites because no current site existed which could be reviewed. The data generated by this activity were used as a form of rapid appraisal of the storyboards and specification document information ascertained so far. This technique is used by website design teams to test the validity of presented ideas and assumptions. It also provided new or expanded data for inclusion into the proposed website with regards to, for example, lay out and the importance of personalisation. The activity was also designed to encourage discussion and debate. Consequently, it aided group dynamics and cohesion through the collective efforts of the group. For the members of each group who were less confident to present their views in public, it allowed them to contribute as they felt able without having to be put on the spot. The feedback I received was positive and it seemed that participants were enjoying the focus group activities and they felt that they had a legitimate voice in this process. Some even commented on how nice it was to be asked to say what they thought about things, as in their job they were not normally asked their opinion.

Table 4.3 represents the key messages to emerge from participants' views of the websites reviewed. These points expanded the design and build criteria already identified by providing more detail in relation to set criteria.

**Table 4.3: Website feedback**

<b>Lengel's (2001) Criterion</b>	<b>Key Messages</b> (Source: Focus Groups 1-3, Jan 2009)
<b>Access</b>	Websites that are easy to access are ones that are simple, fast and have useful, relevant links.
<b>Navigation</b>	The best navigation was when a site was simple, clear, crisp and clean. A combination of visual as well as textual information or highlighting was perceived to be a very useful way of navigating; drop down information boxes were also considered beneficial. A cluttered site was not perceived to aid navigation.
<b>Structure</b>	A familiar structure was preferred, simple, with a mix of graphics and text, but importantly it should fit on one page. Contact details were also considered beneficial.
<b>Presentation</b>	The quality of any graphics was important, although a clear and simple layout was still preferred. Dull or brash colours were seen to be best avoided, as well as a mix of fonts.
<b>Interaction</b>	Interactability was seen as a positive. Ability to personalise or customise the site was seen as desirable. Having a variety of options was seen as beneficial.
<b>Positives Why?</b>	Positives mostly related to the purpose of the site: If it was a health related site, did it have up-to-date relevant information, contacts or links? If it was a commercial site, was it easy to navigate and did the features assist you, e.g. for book sales could you view a contents page? If it was an information site, could you localise the information? Was the site fit for purpose?
<b>Negatives Why?</b>	Appearance was important; it needed to be neutral in colour, but interesting. Sites that appeared too busy or cluttered were also often considered difficult to navigate. Clarity was important.

#### **4.13.6 Summary of Activity Phase 4**

Interpretation and data generation was a simultaneous real time activity, which required me as researcher to offer explanations when discussing the storyboards and to ask questions when looking at websites. From a methodological perspective, as data was generated it underwent a validating process, a form of member checking of interpretation and clarification, until it was considered representative and accurate; an internal, iterative, reflective, cyclical dynamic occurred. The constant cycle of thought, comment, sharing, clarification, adjustment, verification and concluding is representative of the conversational analysis framework described by Lauillard (2005) and, to some extent, Salmon's (2001) descriptions of the process often adopted in e-

moderating. Although these frameworks are not normally associated with data generation in a research approach, they are models that demonstrate a process of understanding communication. Key features are the cyclical nature of interaction and resulting analysis through iteration and reflection. The process also demonstrates the depth of analysis active throughout the groups. They were not just generating data; they were progressively designing a solution to the problem, through critical analysis of their own ideas and beliefs - a key feature of action research according to Kember (2001).

As the researcher, the whole process of knowledge generation and website design was a steep learning curve. Not only was I learning about how to do action research and how to do it well (ethically, positively and fairly), I was also learning a lot more about CS. I had not really appreciated just how personal a process it was for many individuals. In addition, I felt as if I was learning a new language (technical speak), very badly at times as I would often have to contact an expert (Dr Craig Saunders) to help me decipher and then reinterpret what things might mean.

#### **4.14 Managing bias and empowering participants**

As a result of planning the various activity phases I became aware of my potential to unwittingly introduce bias. An example was in the preparation for Activity Phase 4. Initially, prior to the meetings, I had selected a range of sites from those supplied by the various participants and developed feedback sheets, but I decided not to follow this approach in the meetings. Instead, I put up the completed list of hyperlinked website addresses sent in; I, then, asked the groups to choose which sites they wanted to visit. The reason I changed tack was that I became acutely aware that my selection of sites to view would only be representative of my preferred choices. This could have introduced an unintentional bias and potentially skewed data generated; something that I did not wish to do. Additionally, by opting to let participants choose, the ideals of democracy, equity and ownership were promoted, which are important constructs within the action research approach (DePoy and Gitlin 2005).

A key objective of this approach to understanding user requirements was to be focused on the challenges and issues integral to website design, like navigation, interaction etc. The stimulus of reviewing familiar websites encouraged a relaxed

approach to data collection. Being given a free choice of sites to review ensured that any data generated represented a more authentic and, to some extent, representative viewpoint of the participants. In order to help collate the data generated the groups used a feedback sheet (Appendix 13). A series of headings were used as suggested by Lengel (2001). The overall process was systematic and demonstrated openness and transparency. No time limit on how long each site was viewed or any restriction on how many sites were reviewed was imposed other than the time designated for the whole task. This resulted in not all sites being reviewed or those that were reviewed not being given equal time. However, it did ensure that the participants exercised their right to choose. Additionally, adopting this open, empowering approach to data collection and analysis encouraged negotiation and discussion in the groups, which allowed data to emerge from participants' own choices.

Large amounts of 'rich' data were generated in this activity phase and as a result any obvious duplication was not included in the final presentation. Any additional attributes and features suggested at this point in time were incorporated into the emerging understanding of the website, which now included information about how it might look and feel as well as how it might function. This incremental process allowed the design and build criteria to be progressed from storyboards and textual descriptions into some basic flowcharts and eventually to screen mock ups. Despite having a schedule for each meeting, the emergent data often arose in a haphazard, unplanned fashion, contained in discussions and points made in humour. The data generated by each focus group as a result of reviewing the storyboards was presented as a series of questions for consideration at the final focus group in Box 4.4. Answering these questions became the last take away task, in Activity Phase 5. The order of the questions presented is as they arose from the data.

**Box 4.4: Outstanding issues for the final set focus group meetings**

- What suggestions do you have for a title of the site?
- Should the message board be editable or read-only when not logged in?
- Should there be a restriction on the number of people being supervised at any one time? If so how many?
- Does the site need separate features: tools, blogs, messages or notice boards?
- Should people be able to access CS online in work time?
- How often should feedback information be collected from users?
- When using the site, is user preference for a screen name acceptable or should it be the same as logon?
- Should the blog be editable without login or read-only until logged in?
- Should ground rules for the forum be pre-set?
- If you are a non-local PCT employee, then your application to be a supervisor or supervisee needs to be authorised by the local PCT. Who should do this and what criteria needs to be set?
- What reports need to be generated?
- Who needs access to reports?
- Should reports be a set template?
- What data should be made available to whom and why?
- How will data regarding the benefits of CS be collected?
- What data should be made available to whom and why?
- What needs to be printable and who can authorise this?
- How will training needs be identified and accessed?
- Should templates, like a reflective cycle, be visible during a one-to-one CS session?
- Would a scrolling banner on the home page be a useful feature that said: 'Current topic being discussed in Forum A is ... Why not join the discussion?'
- Should forum topics be structured using mind map ideas? This would enable a newcomer to see how the discussion had progressed and areas for further exploration.

(Focus Groups 1, 2 and 3, Jan 2009)

The process of recapping on previous activities was led by me, as the researcher. This was mainly in the form of the presentation of the storyboards as a form of cognitive mapping. Adopting a far more directed form of facilitation acted as the bridge between thoughts, words and pictures. This, I considered as my responsibility because I had crafted the storyboards from my interpretation of the data generated from the first set of focus group meetings. This approach had the desired effect and stimulated a discussion about why things were the way they were, who had access and potential ways of navigating the site.

As an action researcher you are never completely neutral and are often involved with the data generation, whether through questioning or, in this case, making a sketch of what I understood to have been stated. What is important though is that the involvement with the data is made explicit and the process of external verification is transparent and robust.

#### **4.15 Activity Phase 5: Second cycle of reflection and analysis**

This comprised of the final take away task and individual review of data from the previous activity phase. Participants were asked to critically review the outputs from previous activities and to share any changes they wished to be made at the final meeting in Activity Phase 6. Additionally, they were asked to think about the answers to the outstanding issues regarding the website design in Box 4.4. This phase occurred between January 2009 and March 2009.

##### **4.15.1 Data generated from Activity Phase 5**

Exploring Questions 4 to 6 again, for me as the researcher was a fundamental step in continuing to establish the design and build criteria for the website. This cyclical process of revisiting and refining is a defining characteristic of action research and as Waterman *et al* (2001) established is active at any level.

This was a slow process of first reviewing the data, spending time listening to the audio tapes over-and-over again looking at what had been written, cross-checking and re-reading as a process of progressive interpretation. Areas of commonality were noted and grouped; specific items were not ignored but incorporated. An understanding of what the website should look and feel like emerged; how it needed

to function was also evident. From two dimensional drawings, it is not possible to adequately show how individuals might navigate the site, how elements are connected or what data they might need to operate it, so descriptions of user journeys were created (Appendix 15). The descriptions set out how different users of the website would need to navigate between the various pages or features of the site; the log on process, for example. The descriptions are not exhaustive but are representative of the key processes individuals would need to follow. The purpose of the user journeys, the connections needed for the various users and how they may be similar or differ are described to inform a potential website builder.

## **4.16 Activity Phase 6: Evaluation cycle**

This was the final set of focus group meetings, which took place in March 2009. Each meeting had two distinct parts: the first part completed Stage 2 (designing the solution) of the research; the second part took place at the beginning of Stage 3 (evaluation) and will be discussed in the next chapter.

### **4.16.1 Part 1 of the third set of focus group meetings**

#### ***Purpose***

- To review data generated from Activity Phases 4 and 5.
- To answer questions arising from Activity Phase 5.

The first part of the meeting was spent going over questions that had been circulated prior to the meeting. This was done alongside the generated screen mocks up and data abstracts from the outline design specification document.

### **4.16.2 Findings**

A new interpretation, or cognitive landscape, of what the website should look and feel like, as well as how it could function, was presented at this meeting in the form of screen mock ups, which are presented as Figures 4.1 to 4.5. The mock ups are a representation of what the website could actually look and feel like. The images convey a professional feel; the layout is formal and structured. An interpretation and the relevance of these findings are presented in Chapters 6 and 7.

Figure 4.1: Home page

The screenshot shows the homepage of the Clinical Supervision website. At the top, there is a header with the text "A PCT", the "NHS" logo, "Clinical Supervision", and "UNIVERSITY OF Southampton School of Health Sciences". Below the header, the date "July 16th 2009 18:35" is displayed. The main content area features a sidebar on the left with links to "Clinical Supervision", "Being a Supervisee", "Being a Supervisor", "1:1Supervision", "Forums", "Resources", and "Links". The main content area contains several text blocks: "Nurses Need Clinical Supervision", "Who benefits from using this site?", "You will – Professionally & Personally", "Your Patients / Clients / Carers", and "Your Employer". A "Commercial Sponsor" banner with several small images is positioned above the main content. On the right, there is a "Login" form with fields for "E mail" and "Pass word", and buttons for "Sign up New Members", "Remember", "Message Board", "Find a Supervisor", "Join a Forum", and "Feed Back Survey". At the bottom, there are links for "FAQ", "Privacy Policy", "Site Map", and "Contact us".

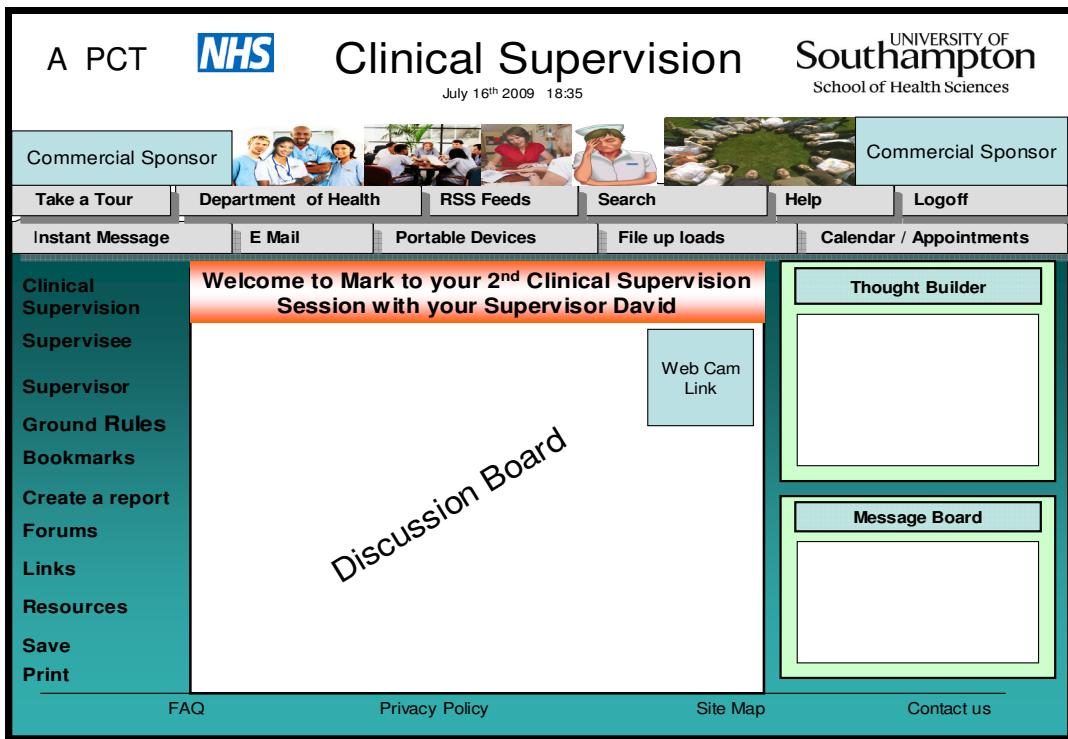
Figure 4.2: Sign up page

The screenshot shows the sign up page of the Clinical Supervision website. The layout is similar to the home page, with the "A PCT", "NHS", "Clinical Supervision", and "UNIVERSITY OF Southampton School of Health Sciences" header. The date "July 16th 2009 18:35" is also present. The main content area is a large green box containing the text "Welcome" and "Do you work for The\*\*\*\*\* NHS PCT and wish to become a member of this Clinical Supervision Website then Click here". Below this is a button labeled "Yes I would like to join". Further down, the text "If you don't but wish to have Clinical supervision with an employee of this PCT or become a member of one of the forums then Click Here" is followed by a button labeled "Join as a guest".

Figure 4.3: Log on page

Figure 4.4: Individual clinical supervision page

Figure 4.5: Forum page(s)



The screen mock ups were discussed with each group to gain clarity and ascertain accuracy of representation.

#### ***Answers to the questions that arose from Activity Phase 5***

The list of questions generated (Box 4.4) were considered and answers obtained.

Appendix 14 is a series of tables which represents the combined responses to these outstanding questions. There was often unity in response across the focus groups. A consensus of opinion existed despite the differing roles represented; the notable exception was the lack of agreement over the name of the site, although all agreed it should have CS somewhere in the title. The output from this session was similar to all previous phases in that it promoted a deeper understanding of the purpose of the site and a more detailed view of how the site needed to function for various users and the client.

The final version of the website will not be available until the site is actually built. The purpose of this research project was to undertake a requirements analysis; not to build the actual site but to identify relevant design and build criteria.

# Chapter 5

## STAGE 3: EVALUATION

### 5.1 Introduction

The purpose of this chapter is to provide an explanation as to the process of data collection and analysis that occurred in the third and final stage of this action research project, which took place in March 2009. This represents the second part of Activity Phase 6.

The evaluation data were collected in two ways which are discussed in this chapter as Parts A and B: Part A discusses the descriptive evaluation tool - a SWOT analysis (strengths, weaknesses, opportunities and threats) - used to evaluate the product (the website); Part B discusses the self-completion questionnaire, incorporating a five-point Likert score, used to evaluate participants' perceptions of taking part in this action research project. According to Brink and Wood (1988), collecting behavioural indicators using this type of ordinal scale is appropriate, though limited, but common place in qualitative research.

### 5.2 The relevance of evaluation

But first, by way of introducing this very fundamental and important stage of the action research cycle, a discussion about the role and nature of evaluation is presented.

According to Robson (2010), the purpose of evaluation is to provide a view on the worth or value of something. The idea of attributing value or defining worth in action research is both complex and subjective and some might even say superfluous. The process of action research is cyclical (identifying, refining, reflecting and redefining): "it is self-evaluative - modifications are continuously evaluated within the ongoing situation" (Cohen and Manion 1994, p186). So the need to attribute worth or establish value separately is somewhat questionable. Paradoxically, unless we have an identified point for evaluation, how will we know to what extent the outcomes are relevant and if they represent an appropriate solution (Meyer 2010)? Consequently, action research normally has a formal stage of evaluation. In fact it is not only

considered to be fundamental but a critical aspect of the research design (Hart and Bond 1995).

However, evaluation is a broader concept than just establishing the quality or strength of the research outcomes. Action research, being situational (Elliott 1991), is also about the value of the research approach and its usefulness in society. The findings and subsequent worth of the research also need to be presented in an accessible way if it is to have any meaningful impact. Ultimately, for action research usefulness is about improving practice. The purpose of this chapter is not to debate the merits of the action research approach *per se*, but it is appropriate to clarify or identify the association of its 'worth' or 'use'.

In action research, as in software development, the evaluation stage is more often than not outcome-focused (Parahoo 1997); however, it is also appropriate to assess whether participants thought their views were represented, as this can be an indicator of authenticity (Meyer 2010). Authors such as DePoy and Gitlin (2005) place a great deal of emphasis on the importance of the involvement of participants in action research. This is particularly pertinent as participation is a distinguishing feature of this research approach.

The formal evaluation stage reported in this chapter will focus on two aspects that are equally relevant to the research approach and to the software design processes underpinning this study: firstly, the outcome (the design and build criteria) and secondly, the experience of those involved in the process of developing the product. 'Value' will be determined by considering the following two questions:

- To what extent will the design and build criteria identified address the problem of access to CS?
- How did individuals rate their experience of action research? This is not in the form of a satisfaction survey but an examination of DePoy and Gitlin's (2005) underpinning ideals, exposing the nature of involvement that occurred in the focus groups and the related activities.

## Part A: Evaluation of the Product

### 5.3 Group SWOT analysis

Each focus group separately conducted a group evaluation of the potential product, identifying strengths and weaknesses of the proposed design. The opportunities and threats highlighted potential obstacles, barriers and threats to the implementation and adoption of the proposed design. These elements reflect, to some extent, the challenges within the organisation in which the research was conducted.

Theoretically using this approach to product evaluation demonstrates a synergy between the stage of action research and product development. It is acknowledged, however, that this is only the first stage of evaluation regarding the design and build criteria and subsequent post-doctoral evaluation stages will occur when the design is built and then tested.

Although all the data collected are reported in Tables 5.1 to 5.4, for a number of reasons only certain aspects are discussed in this chapter. One reason is that the aim of this action research is to identify the design and build criteria for an online virtual environment for CS. This is presented in the form of an outline design specification document (Appendix 15). Anything else is beyond the scope of this research project. What is, however, relevant to discuss from the findings attributed to the product is how they address some of the reported obstacles and barriers to undertaking CS (Chapter 3).

### 5.4 Process of data collection and analysis: SWOT analysis

Data were collected from each group independently in a written format. Each group's input was then reviewed under each criterion of the SWOT analysis. It is important to note that the evaluation data was the subjective views of the participants at the point of data collection. These are the views of the individuals who had stated and articulated their preferences as to what an online environment for CS might be like and as such all data is relevant. The data being presented was organised into themes that arose from the content. The purpose was to demonstrate the breath and depth of responses, not to 'drill' down into them to extract out submerged meaning. Inevitably, this did involve grouping responses. The process of linking similar data is a form of

reductionism, but only in the sense that it is a means of avoiding repetition; it is not a process of exclusion or ranking. Linking data (content) resulted in emergent themes; these themes are interpretations of what is indicated in the data (Morse and Field 1996). Adopting this inclusive approach to data analysis was a deliberate strategy as it was philosophically aligned to the research design and was consistent with strategies adopted in previous stages of the research project; it proved to be an effective and efficient way of capturing participants' views of the product which they had designed by expressing their preferences.

## **5.5 Findings of the SWOT analysis**

The findings of the SWOT analysis are presented in Tables 5.1 to 5.4. Each table is discussed in turn. Fifteen main themes emerged overall; these were identified from 95 statements. Out of those 15 main themes, nine were identified as, or associated with, access. Access as an issue featured in every one of the four evaluative SWOT criteria, either negatively or positively. The majority of positive statements were about how access could be improved if CS was online; whereas the majority of the negative themes related to suspicion and fears over the safety of the proposed website, the IT competence of community nurses or the current availability of resources. The difficulty with interpreting statements and classifying them is that they are often ambiguous; they can be interpreted in different ways or they can be articulated in such a way that meaning is not always clear. This is an acknowledged weakness of this method. In reality there were very few instances where it was not clear which category statements should go under. If it was not clear, then I put them under more than one heading. Presenting the responses in this way reduced the risk of interpretation bias and a fuller understanding of the whole is promoted.

### 5.5.1 Strengths

#### Box 5.1: Strengths of the clinical supervision website

##### **Improved access / effective use of time**

- Ease of access to CS for community staff
- Access to CS that is personal and timely to them
- CS accessible to more individuals
- More accessible through a wider range of media
- Constantly availability at home or work
- Immediate access to skills and knowledge / choice
- Broadening knowledge-base beyond local area
- Raising the profile of CS, widening access
- Widens choice of supervisors and supervisees

##### **Added value**

- IT skills and knowledge increased / CPD
- Time enhancing, NMC Portfolio
- Provides interactive framework for CS
- Not tied to work, access various times
- Don't need to travel away from place of work
- Peer support and discussion from experience
- Ticks NHS litigation authority box

##### **User-centred design**

- Clear specification
- Designed by users / MTD

(Source: Focus Groups 1-3, March 2009)

Box 5.1 presents the views of participants concerning the strengths of the proposed website design. It was encouraging to see that improved access emerged as the key strength of the product, as the very nature of online communication is about improved access to other people and information. It is also a frequently reported obstacle and barrier to undertaking CS. For the participants, this indicates that they believe that a website as well as their design for one should be able to improve access to CS. This is not just about increased capability or provision but it is also about approach. Acknowledging that access is a multifaceted problem and that *time* is a central issue reflects the reality of undertaking CS in practice; it is situationally relevant and thus very important.

Due to the interrelated nature of many of the themes to emerge from the SWOT analysis, only some of the overarching areas will be discussed in this chapter as many of the themes are to some extent more self-explanatory than others. For example, improved access to reputable resources through embedded links on the website would clearly have the potential to improve access to reliable knowledge.

### ***Improved access / effective use of time***

Responses focused not just on the time CS would consume but that conducting it online would make different and possibly better use of available time. Time was very much perceived as a measurable resource; it was also linked to location and activity especially getting to places and saving time. The most common relationship that was mentioned was about work and time. This is particularly relevant as a management issue; if all CS was undertaken in *work* time and all staff undertook it on a regular, planned basis, then the cost of CS would be considerable. For example, 100 nurses undertaking one-to-one CS, once-a-month, for one hour each would equate to 200 nursing hours, plus administrative and transport costs, plus staff replacement costs for 200 hours of nursing care. This may explain why, in their first policy on CS, the PCT stated that the minimum time that should be spent on CS was 1.5 hours, four times-a-year (PCT Policy 2009). It would seem they were reluctant to fully commit to the concept. Conducting CS online would have many of the existing costs associated with traditional modes of CS and some new ones, but it would also have the potential to make savings. *When* CS is undertaken, thus, becomes a more relevant issue. If it is only conducted in work time then the unit cost would be as suggested above; if CS was being conducted in non-work time then the unit cost may be less.

This raises yet another issue over time as the trend, it would seem, is to undertake work-related activities in personal time. This assumption can be verified in a number of ways and is already evident in the way this PCT operates. The PCT has an established system for online learning; the majority of the compulsory training is being delivered this way and it would seem that these activities are often undertaken in personal time. Although no factual data were available to ascertain to what extent this was occurring, there is evidence that individuals often attend study days in their own time. When asked about this, replies confirmed that it was the only way they could attend as they were finding it increasingly difficult to be released from the work

environment during working hours and that there is an increasing expectation that you should do things in your own time. It is pertinent at this point to consider whether staff should undertake such activities as CS as a legitimate aspect of work in *work* time or is it acceptable to undertake CS in personal time? It would seem that no clear steer exists for staff and thus the thorny issue of in whose time should CS occur continues. Undertaking CS online allows practitioners to choose a time convenient to them or causing minimal disruption to the care delivery environment; it does not however resolve the issue of whether CS should be undertaken within or outside official 'work' time.

An additional dimension relating to access, and consequently time, relates to the employment status of nurses. It was stated by the Lead for Community Nursing that about 40 percent of the PCT community nursing workforce were on minimal hours contracts. This group of nurses have even less work time than full-time nurses in which to undertake CS. They are often paid by the hour to deliver care; if they do not have substantive posts there is no obligation as regards to their ongoing education and development. The responsibility falls to the nurse. The PCT does, however, make available to all staff a large selection of non-credit rated study days free of charge; even so, this raises the issue of equity and need for support. It does not necessarily follow that if you only work 12 hours-a-week, you need less CS. In fact it might actually be that you need more support as you do not have access to alternative support structures.

An even more controversial issue is that for some groups of employees in the PCT, time for CS is mandatory, a protected, built-in feature of their paid workload. In Psychology, for example, individuals would be considered potentially unsafe if they did not have this aspect of support and learning. There is very little research attention to do with why this may be and whether different staff groups need different levels and types of CS. Differentiating the value or importance of CS in this way could potentially create a hierarchy regarding CS in an organisation. The PCT currently say that it is the practitioner's choice as to when they undertake CS; they provide the access through policy and the resources in the form of training. This is an interesting position and one that might be explored in more depth when the website is built, but for now it is not the focus of this research. The use of time and what constitutes work

and whether learning through CS constitutes work is an ongoing issue not just for this PCT but for most employers.

Informal discussion with individuals in the PCT and evidence of investment in training and development indicate that a common sense, yet open, culture to learning exists in the PCT. There appears to be recognition in the PCT of more informal types of learning being supported, commissioning activities, such as journal clubs for example. The PCT also acts as a satellite site for joint curriculum projects with an Higher Education Institute. As more and more modes of learning are recognised and engaged, especially e-learning, the PCT will need to reappraise the cost and impact of staff support and development. Supporting and maintaining a robust information technology structure that is capable of supporting a dynamic website for CS could be one of those challenges. It would be prudent for the PCT to undertake a cost benefit analysis as part of a service review.

#### ***Added value***

This is a term I have used to describe an eclectic mix of the identified strengths pertaining to indirect but attributable benefits of undertaking CS online. Examples are improved ICT skills and knowledge and an increased sharing at a local and national level as a means of addressing national regulatory requirements. It is evident that the product is able to address deficits at an individual as well as an organisational level. Also implied as a strength is access to resources resulting in better care provision. However access to information and people alone, even when instantaneous, is no guarantee of improved quality in care provision.

#### ***User-centred design***

A reported strength by the participants was that it was a user centred design. This strength is a clear endorsement of the process adopted and recognition of the importance of the requirement analysis undertaken, endorsing the position that it would be fit for purpose as it has been designed by potential users.

## 5.5.2 Weaknesses

### Box 5.2: Weaknesses of the clinical supervision website

#### **Questionable effectiveness**

- Time wasted if not made 'idiot proof' with clear links and instructions and functions and guidelines
- Questionable IT competency level of staff in the PCT
- No body language, so difficult to get a flowing discussion
- Rather impersonal

#### **Limited access points and time restrictions**

- Not all community nurses have computer access
- The IT system was said to be unreliable by some participants
- Takes time to use it
- Need time and access to computer resources
- Could be more time-consuming than face-to-face contact

#### **Anxiety regarding safety and control**

- PCT controlled
- Lack of privacy in a busy office
- Needs a quick and robust verification process
- Will not be able to access as a pilot for sometime

#### **Culturally challenging**

- Challenging for people who do not like change

#### **Selective membership**

- Focus groups could have had a wider mix of members

(Source: Focus Groups 1-3, March 2009)

Five overarching perceived weaknesses emerged from the data (Box 5.2). No one was significantly more prominent than another; they are therefore presented in no particular order.

#### ***Questionable effectiveness***

The main statements that created this theme were about what needed to change or be put in place. The message was that online CS had to be better in some way than the current system. The need for clarity and adequate preparation of individuals in

using the site were the dominant discourses; 'if it was not effective, then it would be a waste of time' was the main sentiment.

Associated weaknesses that presented at an individual level related to the level of knowledge and skills required to use the site and competence and confidence relating to ICT usage. At an organisational level the lack of investment by the PCT in dependable ICT resources as well as the availability of them was evident throughout.

The level of skill and expertise required to use the site is beyond basic and a separate programme of training would need to be devised. This is in line with the PCT aspirations to raise the standard of computer literacy across the PCT. Currently, basic ICT skills are mandatory for all employees; the level of competence is currently determined by an online quiz. This, ironically, assumes a basic level of competence in order to access and undertake the test. Working jointly with the PCT's training and development department will be a way forward to developing an appropriate training programme for using this interactive website. This feature could also be built into the website as a standard resource.

Additionally, the idea of conducting CS online was cited as a potential weakness. The main reason was the lack of body language as it was seen as rather impersonal. This is interesting because there was a wish to have a webcam facility on the site.

Although this does not replace human face-to-face contact, it does raise a question as to what it is that individuals value about CS: is it the 'being with another' in the Rogerian sense (Rogers 1983), or is it about the need to have physical as well as social proximity during CS? Unfortunately what 'impersonal' might mean was not elaborated on in the evaluation data. This is a dynamic of the website that could be evaluated once the site was up and running.

### ***Limited access points and time restrictions***

As well as being a strength, time and access were also identified as weaknesses. The main point being made here is not about the website itself, but about the ability of community practitioners to use it. There would seem to be a perceived problem of a lack of actual and reliable terminals capable of supporting a dynamic website, with streamed video capabilities or access to a webcam, for example. The subsequent

shortage of time that terminals may be available is also a potential problem, the norm being that a whole community team has access to one terminal only. A team could comprise five to 15 nurses; also many community nurses are not attached to one team and work in a dispersed manner. The working patterns of the nurses often result in all team members being in the office at the same time, thus compounding the difficulty of access and privacy. A separate point made related to the amount of time it would take to use the system, not that it was considered excessive but it was recognised as a time-consuming process.

### ***Anxiety regarding safety and control***

This weakness related to the anxieties of individuals, being frightened off from using an online approach to CS if they thought they were being covertly monitored. What is clear is that positive awareness-raising will need to be undertaken in order to reduce potential concerns and robust processes put in place to maintain confidentiality and privacy of users. The need for the site to be a safe and confidential environment was an overarching concern to all focus groups and often came up in discussions.

### ***Culturally challenging***

An online environment may be challenging for people who do not like change. The points made here are very valid as the NHS seems to be in a constant state of change and people appear to be becoming change-weary. Although it needs to be made clear that any site that is developed post-doctorally will be an additional resource for individuals; it is not intended to replace face-to-face CS. Change in the practice of CS would thus be optional.

### ***Selective membership***

A point was raised by one member of one focus group who questioned why the focus groups were not multidisciplinary; for them this was a weakness in design. In defence, membership of the focus groups was purposeful and determined by the stakeholder meeting. It was not that other professional groups were not considered; it was more about identifying an appropriate range of people, with expertise and skills, who would be able to contribute to the development of a website for community nurses. The research project is about identifying the user's (community nurses) and the client's (their employer) requirements. If the website was intended for multidisciplinary CS,

then the involvement of medics and many other professional groups would have been essential.

### **5.5.3 Opportunities**

Box 5.3 contains the majority of responses. Overall, this demonstrates that participants thought that their design had a lot of potential. Many of these responses were similar in nature to those reported in the strengths criteria. Discussion here will thus be limited to highlighting the opportunities to improve access.

It was suggested that improved access to CS had the potential to improve the quality of CS. Further examination revealed that this was associated with the opportunity to have access to a wider group of people and to reliable evidence. Widening access and the ability to link directly to sites such as Diabetes UK, for example, or local policy would provide practitioners with immediate, up-to-date research and information, potentially improving the quality of the CS session.

#### ***Addresses current obstacles to access***

The range of statements made reflects the belief that participants had in the potential of conducting CS online. The opportunities are not limited to the user and the client but were also perceived as being transferable to patient and client care.

There is a clear articulation of the value of CS and the role it can play in care delivery. The potential gains stated were diverse and complementary; for example having increased choice of when and where to engage with CS was seen as empowering. Other positives reflected the potential to achieve in-depth understanding of issues and meaningful discussions. Access was once again seen as a multidimensional issue which could be tackled by having the option of online CS. The potential opportunities available to change or improve practice were numerous.

#### ***Potential organisational benefits***

Some very practical as well as fiscal benefits were identified as opportunities for the organisation as well as the individual; reducing mileage, for example, would save money and also potentially reduce consumption of fossil fuels and cut carbon emissions. Raising the profile of the PCT as a beacon site was also noted as a

potential opportunity. The identification of this type of opportunity was reflective of the site being seen not only as a process that would support CS, but one that showed that context was relational to CS.

### **Box 5.3: Opportunities of the clinical supervision website**

#### **Access**

- Potential to improve the quality of CS
- Discuss pertinent issues with rapid response
- A chance to really share and reflect, discuss and move forward with issues within clinical practice
- Access extra knowledge and people at (the) touch of a button

#### **Wider access**

- More choice, supervisors, support
- Share different skills and knowledge
- Widening access: internal, external, one-to-one and different groups
- Improved uptake of CS
- Easier than trying to get a one-to-one with some managers

#### **Choice and access**

- Empowers you
- Freedom to access when suitable, convenient for you
- Exciting new way ability to 'log' CS / IPR / portfolio

#### **Benefits of access**

- May be easier to access in or out of work place
- Less time consuming re not in - the same place for CS
- Gets over the need to find or book a suitable venue
- Opportunity for individual development and empowerment
- Development of skills and knowledge
- Confidence building, group participation
- Enhance performance and support individual training and development.
- Website in itself will be a potential learning resource for the community nurse as well as the PCT
- Save on mileage payments
- To raise the profile of the organisation/ innovative idea
- It could be a beacon site of excellence in producing CS
- Marketing and income potential

(Source: Focus Groups 1-3, March 2009)

#### 5.5.4 Threats

Box 5.4 demonstrates that several threats emerged. These related to the individual, the organisation or the website. Again, the issue of access was raised; this time it was mainly about how access could be restricted due to the low number and the poor quality of IT resources in the PCT, as previously discussed under weaknesses.

#### **Box 5.4: Threats of the clinical supervision website**

##### **Organisation level**

- Not enough users due to lack of computer access
- PCT computer connections very slow
- Uptake by staff, 40% of the organisation do not have access protected time or IT access
- Restricted due to the number and quality of resources in the PCT

##### **Individual level**

- CS may not be perceived as a priority within teams
- Concerns regarding misuse by supervisees and supervisors
- Some individuals spending a long time on computer
- System abused by users, e.g. used as a chat room rather than for CS, users do not adhere to site rules
- Some people are not computer literate
- IT phobic staff
- Staff not buying into the new system and way of working

##### **Website**

- Concerns regarding confidentiality, protected & secure site
- Fears about hacking, viruses
- Maybe some distrust of system in a 'big brother' way or leaks of information
- No formal monitoring process
- Becoming too large, losing focus if CS becomes global
- Could lose 'personal touch' of face-to-face CS
- Expectations of system may not live up to reality
- Face-to-face CS maybe used less; in this techno age this can be a problem for some staff

(Source: Focus Groups 1-3, March 2009)

Many of the perceived threats cross over between individuals, the organisation and the website itself; therefore, issues will be discussed as generic themes.

### ***Lack of interest, low priority***

A significant threat was that despite it being a new mode for CS, it would not solve or remove some of the existing barriers: CS is still being considered as a luxury or a low priority by some, for example. The online system might fail due to lack of time and interest in CS. It would seem that no matter how useful, beneficial or good the potential product may be, its success could be undermined by the continued existence of problems inherent with the very concept of CS, such as individual perceptions of what CS is. This threat will need to be addressed on several fronts, working with individuals and groups through awareness raising sessions and the educational contracts in place to promote the importance and value of CS. The PCT must also endorse this process of staff development and support by making it a priority within the organisation.

### ***Concerns regarding safety and security***

Concerns relating to safety and security were raised again here; this is a genuine issue for the website. Certain elements can be protected through the quality of the build specification; for example the encryption and encoding that will be required as well as the PCT's own access policy for users. Other aspects, though, are more difficult to protect against; for example potential abuse by users or the amount of time spent by users on the system. Time on the system has been raised as an issue; what constitutes an appropriate amount of time is a contentious point. If someone has had a particularly harrowing incident they wish to discuss, this may well require a large amount of time; on the other hand, a less complex issue may be discussed in tremendous detail, unnecessarily consuming a lot of time. The amount of time spent is a dependent variable; considerate use of the website would be necessary and the depth to which something can be discussed in any one session should be at the discretion of the supervisee and the supervisor. This should normally be set out in the ground rules.

### ***Low levels of confidence and competency***

If users are not confident or competent in using interactive dynamic websites, then they may well wish to use the website, but feel unable. This would pose a potential threat to a site's viability and have a negative effect on the individual. Rather than

using the site being a positive experience; it may well be a negative one. For those individuals, additional support and assistance would be necessary.

The success of the site may in time also become a weakness. If the site becomes very popular then the amount of information, for example in the group forums could become unmanageable and adversely affect the speed of the site, thus becoming a threat to its usability.

## **5.6 Summary of the SWOT analysis**

The SWOT analysis has been a very useful tool in evaluating the website as a product. The outcome has been a balanced evaluation demonstrating that participants have been objective about the website's potential. The quality of this type of data should be extremely useful, not only in the building of the site but also in managing its introduction into the PCT, as it identifies areas that need to be addressed in order to achieve a high degree of concordance.

## **Part B: Evaluation of the Research Process**

### **5.7 Self-completion questionnaires**

An ordinal scale was utilised as a way of measuring individual participants' perceptions of their involvement in the research process. Although a relatively simplistic tool, as it does not examine *why* something was considered correct or favourable, it was still deemed appropriate because it provided insight into the experience of participation. The degree and nature of involvement is a very crucial element of the evaluation process according to Elliot (1991).

Establishing the value of involvement is, however, a complex and somewhat awkward challenge. One way is to devise a process of classifying involvement as numerical data, as in this research. The questionnaire asked participants to rank their experience of participating in the research project. Scores were then presented in graphical format. Presenting numerical data in this way suggests that the higher the score, the more significant the result. For this research, the implication is that the stronger the alignment of agreement concerning a given principle, the higher the score will be.

Objectively classifying subjective experience could be considered as a flawed endeavour, being that it is inherently theoretically contradictory. And, how do you accurately determine that all participants had an equal or legitimate voice, all of the time, on every aspect? An underpinning principle of action research is to be inclusive and value-free; in other words the contribution of the minority position is of equal importance to the majority position. With due regard to the limitations of the approach adopted for reporting participation, it is still incumbent on me to present data describing participation in the study. In hindsight, it may have been better to just ask them about their experiences. In an attempt to provide meaningful insight into the nature of participation, a five point Likert scale was used in conjunction with DePoy and Gitlin's (2005) principles of action research. Combining these two approaches established a context to the scores recorded. Reading the scores requires the use of a lens of relativity and an appreciation of convergence and diversity, not just quantification.

There are many elements of the process that could be evaluated in this study, such as did the stages and phases of activity undertaken have an accord with the research design, or were the communication patterns adopted effective and efficient etc. But the focus is on the experiences of the participants who undertook the research and whether they judged their involvement to demonstrate an accord with the principles of the action research approach adopted. In order for something to be considered as action research it needs to demonstrate internal and external validity to the approach. This will indicate to what extent the findings are trustworthy, authentic and grounded in partnership.

Action research has been described in many differing ways by many different authors and theorists. Theoretical discourse mainly relates to the application of ascribed principles that underpin the practice of action research. No one set of defined principles appears to have universality, however DePoy and Gitlin's (2005) principles of action research do appear to be ideologically representative of the underpinning values associated with action research. Consequently, they have been used to judge, through a self-completion questionnaire, participants' views about participating in this research.

The limitation of adopting strategic principles, such as DePoy's and Gitlin's, is that it is sometimes difficult to reconcile detailed descriptions of the structures used to enact the content of the principles. For example, the cyclical component of the iterative design does not easily associate to any one principle.

## **5.8 Principles of action research**

**“Democracy** - this means it is participatory, all stakeholders or individuals involved in the issues or problem should be involved in its resolution and in the research process.

**Equity** - this means that all participants involved are equally valued in the research process.

**Liberation** - suggests that action research is a design that is aimed at decreasing oppression, exclusion and/or discrimination.

**Life enhancement** - positions action research as a systematic strategy that promotes growth, development and fulfilment (DePoy and Gitlin 2005, p114”.

## **5.9 Process of data collection and analysis: questionnaire**

The self-completion questionnaires (Appendix 4) were administered separately to each member of each focus group and, where possible, collected in immediately after completion. As part of the administration process a verbal and written explanation of the questionnaire was given out with an opportunity for questions. Participants also had a written information sheet explaining the questionnaire. The only question to arise was about how to mark the sheet, with a cross or a tick.

### 5.9.1 Questionnaire extract

#### *Principle: Democracy*

1. Were you invited to take part in all aspects of the group work?

Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
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As can be seen from the example cited, each statement invited a behavioural response to a strategic principle on a sliding scale from each participant.

### 5.9.2 Responses

Only 13 of the 17 participants attended the last set of focus group meetings and of these, 12 completed the questionnaire. There was an even distribution of response rate across the focus groups - four from each. The number of attendees varied from 13 to 15 at each set of meetings. Although this was below the expected level from the target recruitment of 21 as discussed in Chapter 4, the contributions of a total of 17 different people provided valuable data. Whether the response rate is statistically significantly is not a major factor in this study as it has never claimed to need a representative sample or desired to make generalisable results. What it has tried to achieve is a situational relevance, in line with the espoused ideological principles of action research. A crucial marker is to what extent those participants that responded considered their experience to be representative of the underlining approach.

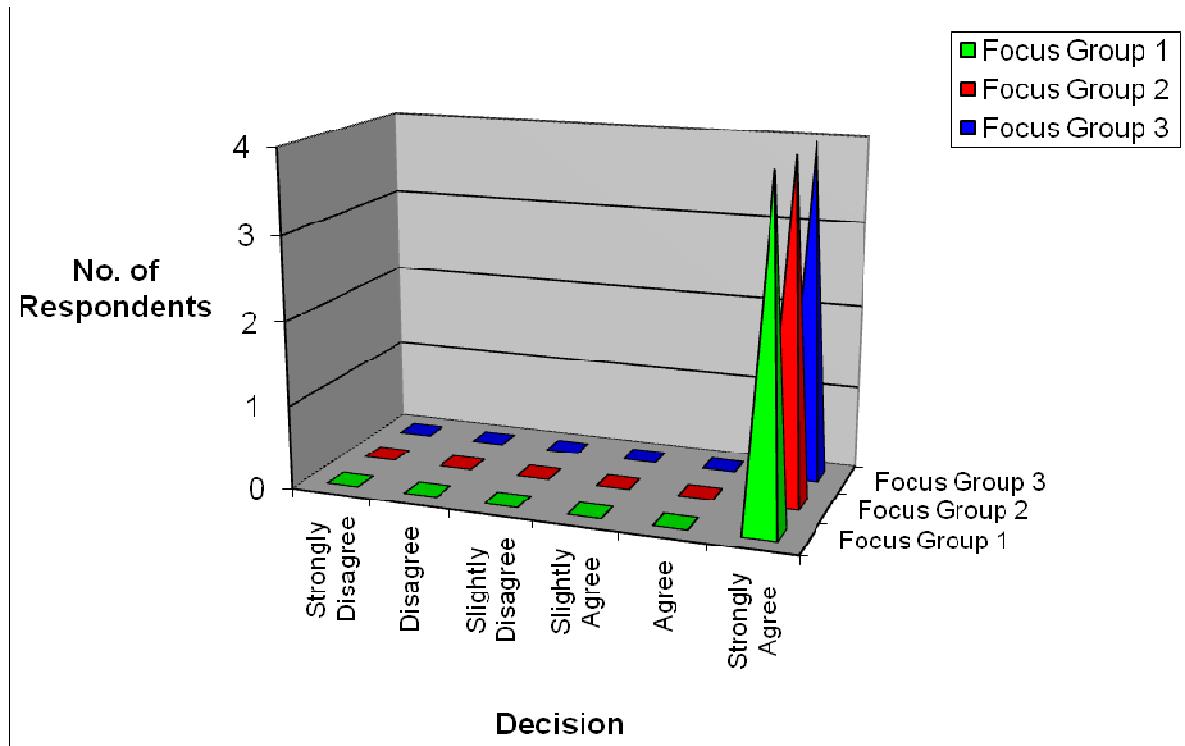
### 5.9.3 Findings from the questionnaire

Data generated from the questionnaire is presented as individual responses and by focus groups for direct comparison. The format of presentation, chart images followed by written explanation, was chosen partly due to the small numbers involved, but more importantly to provide a clear visual representation of data. Any significant differences in perception would be easily identified at an individual level as well as at a group level. A short discussion of each principle highlights the relevance of the information presented.

### **Principle: Democracy**

Question 1: Were you invited to take part in all aspects of the group work?

**Figure 5.1: Democracy**



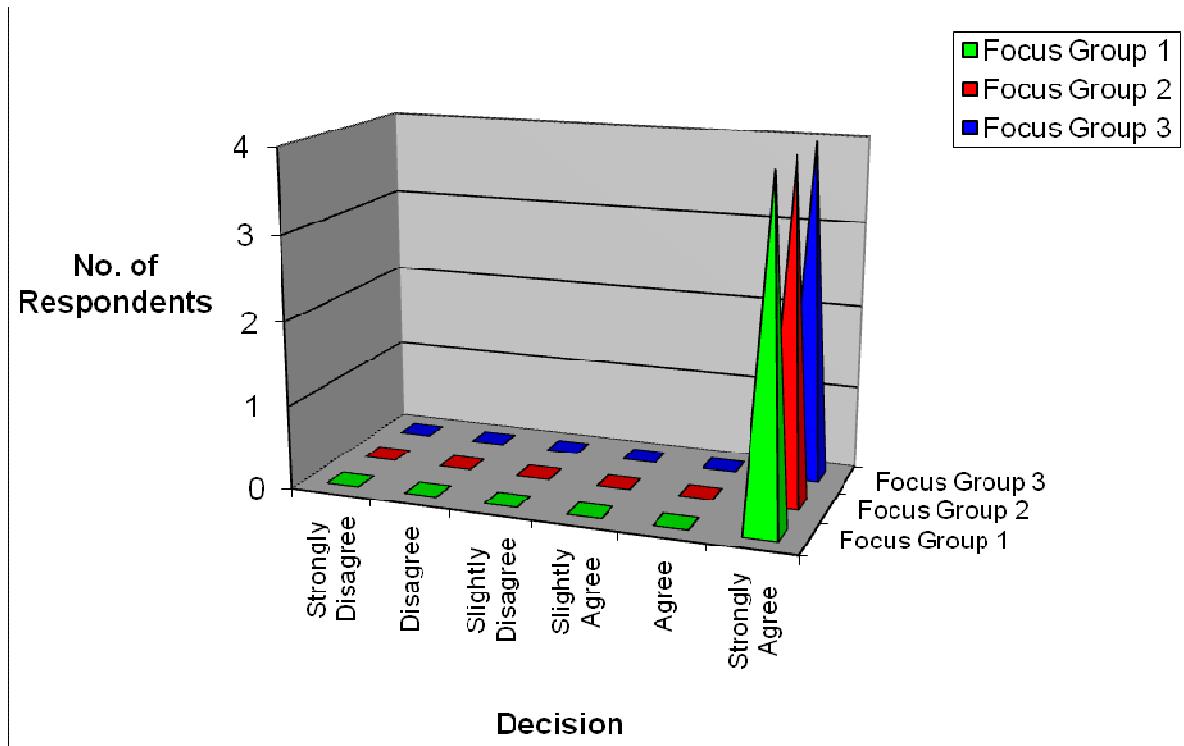
All 12 participants (four from each focus group) strongly agreed that they had been subject to a democratic process.

As can be seen from the data, there was a very strong sense of agreement across all groups that their individual experience had been democratic. No individual or group felt they had been excluded or not involved. From a methodological point of view, this is very important as it affirms that the processes put in place were appropriate and more importantly the way the groups were conducted was in line with the aspiration of the espoused principle. Democracy may mean different things to different people but whatever that is was accommodated for. Respect for the individual and the right to participate are underlying concepts of democracy; to achieve such a resounding endorsement of process suggests that data was generated in a fair and open manner, which adds to its reliability and trustworthiness.

### **Principle: Equity**

Question 2: Were you able to participate as an equal in your group?

**Figure 5.2: Equity**



All 12 participants (four from each focus group) strongly agreed that they had opportunity to participate as an equal in their group.

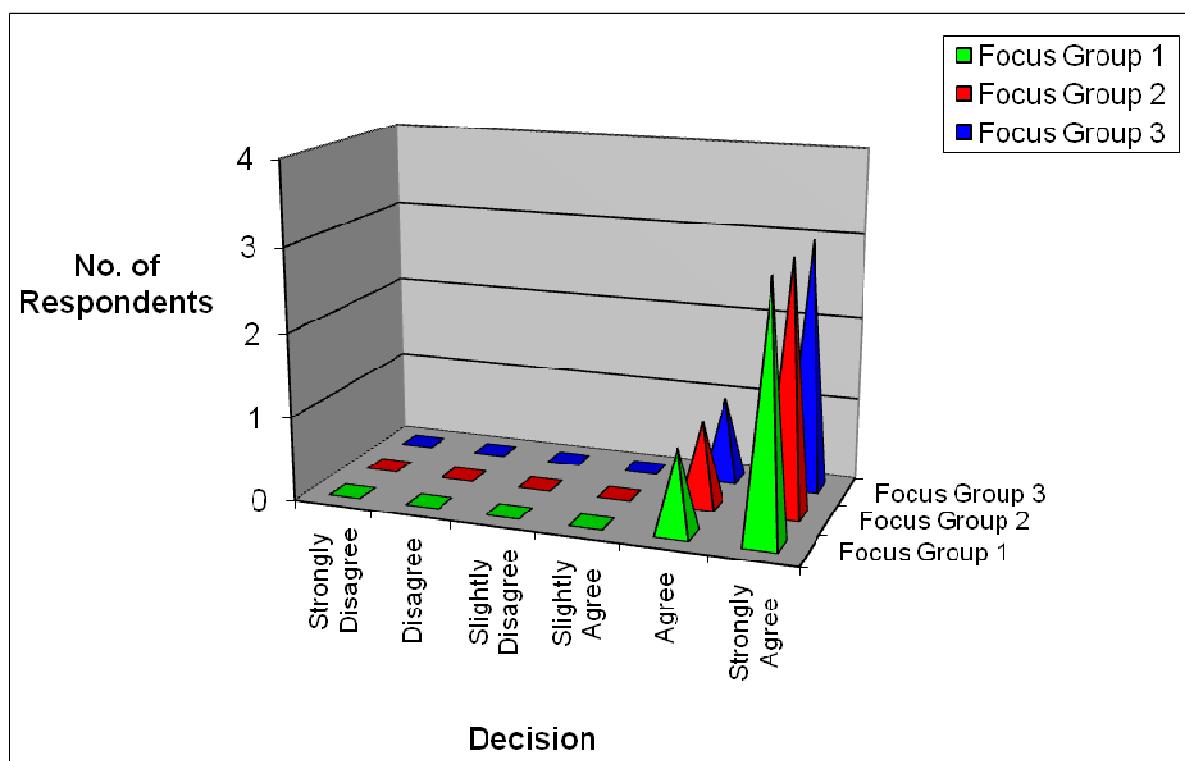
The data demonstrates that each individual participant considered that they had an equal opportunity to contribute to the work of the focus group.

Being equal (as equal as everyone else) is fundamental when it comes to identifying if something is representative and an authentic insight. If a divergence of opinion had been recorded, then questions could be asked about the legitimacy of the claimed outcomes. The fact that all individuals in all groups had the opportunity to voice their views about the website design indicates a trustworthiness of the data. This claim is borne out as each person had the same opportunity to comment and respond and make suggestions on changes to the design at each step of its construction.

### **Principle: Liberation**

Question 3: Did this approach to research allow you to have a legitimate voice in the organisation?

**Figure 5.3: Liberation**



Three participants agreed (one from each focus group) and nine (three from each focus group) strongly agreed that being involved in this research had provided them with an opportunity to have a legitimate voice in their organisation.

The majority of participants stated that they strongly agreed that this approach to research gave them a legitimate voice in the organisation. The further three individuals also agreed that it gave them a legitimate voice. Participants must have considered they were free and empowered to speak. This is very important when it comes to implementation of change.

The level of participation and collaboration is critical, according to Orgland (1997), when it comes to managing resistance; when people and communities feel that they

have a legitimate voice then a sense of ownership often coexists, which should assist with removing barriers. These empowered individuals may well become champions for the cause. Developing a positive momentum from within an organisation is far more powerful than dictating from the outside. The internal voice for change can be extremely effective. Participants in this research came from across the PCT and represented many different staff groups and grades but not all. One participant in Focus Group 3 did, however, raise the issue of diversity. Discussion with the participant revealed that he thought there could have been other disciplines represented in this focus group, such as medics. Though this was a valid point, Focus Group 3 was made up of managers and technical staff; it was not intended to be a representative of all disciplines in the PCT. If a doctor or another professional had responded to the invitation to participate, they would have been welcomed.

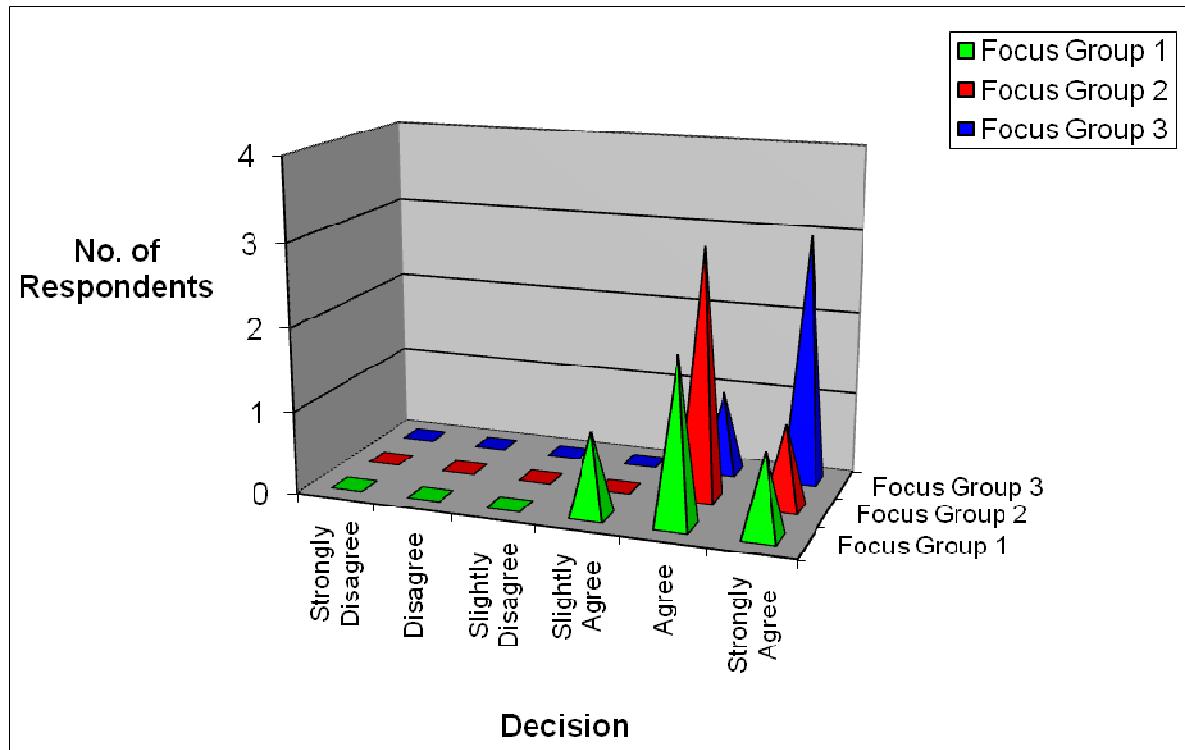
The eclectic mix of participants allows for change to be introduced on many levels. It also demonstrates that the website is applicable to a wide range of people. Implementing change on multiple levels, from multiple positions, with the positive political endorsement of the Chief Nurse's Office is likely to mean that the initiative will have a greater chance of success and move to what Lewin (1951) describes as the critical mass, which is necessary if change is to be successfully implemented.

From an action research point of view, having a legitimate voice is equally as significant, as the nature of engagement should be one of partnership and collaboration; it is about actively involving people in a problem and potential solution relating to them. The affirmation that this existed reconfirms the validity of the research approach both internally and externally.

### **Principle: Life enhancement**

Question 4: Has being involved in this research project had a positive impact on you?

**Figure 5.4: Life enhancement**



One participant, from Focus Group 1, slightly agreed, six agreed and five strongly agreed that being involved in this research had had a positive impact on them as an individual.

This question created the most variation in response. No-one disagreed that being involved in the research had had a positive impact on them. All responses were positive. The responses indicated to what degree being involved had positively impacted them as an individual. The split between agree and strongly agree was almost equal. The majority of responses that agreed came from Focus Group 2 (three **supervisors**); two responses were from Focus Group 1 (**supervisees**) and the final response was from an individual in Focus Group 3 (**techno-managerial**). As the groups are small and the number of returned questionnaires was low, it is not possible to draw any statistical significance from the data. The overall message was that the research process had a positive impact on them as individuals; this, from an ethical

perspective, is very important. Being involved in research especially as a participant should not be detrimental to your mental, physical or social wellbeing.

### **5.10 Summary of questionnaire**

The questionnaire administered sought to elicit participants' views about being involved in this action research project. Four key principles as proffered by DePoy and Gitlin (2005) formed the content of the questionnaire. Individuals were invited to rank their opinion of being involved with this action research project in respect to the four principles. Judgements were scored using a standard ordinal Likert Scale. This method of data collection is very widely used in nursing research (Brink and Wood 1988), especially when there is a need or wish to gain a quantifiable understanding of individual experiences. The limitations are that it does not allow for further comment or expansion of views: for example, *why* something is positive, only that it was and to what degree. If open-ended questions were used to collect data, then a more personal answer may well be given. Despite this shortcoming, it is a very common means of collecting data about attitudes. Advantages of using a Likert scale are that the data is easily identifiable; it does not need to be subject to statistical manipulation and provides a standard answer format. A crude understanding about a groups' view is presented, often indicating what the majority thought. Sometimes, though, it will demonstrate the diversity of opinion: for example, in Question 4 about life enhancement. This diversity is equally as important as it shows a range within a group or cohort. Data of this nature can be presented in a number of ways, as in this evaluation; the data is presented in chart and written form. Charts presented with labels and headings are quick, simple ways of displaying this type of data. What is important and requires a more informed understanding is the interpretation of what that data represents.

The data collected about participants' views of their experience of being involved in this action research project indicated a very strong accord with DePoy's and Gitlin's principles. This suggests that the process and structures used throughout the project were attuned and appropriate to the research design; methods of data collection and analysis were also appropriate. These findings, to some extent, ascribe both internal and external validity to the product as the process was validated by those who experienced it.

## 5.11 Summary

The evidence presented throughout the evaluation stage of the project has consistently affirmed the findings to have had a high degree of authenticity and to have been developed in partnership with the participants and other key informants connected with this study.

The evaluation has reviewed the product (the design and build criteria for a CS website) and the process (action research). The credibility or confidence in the truthfulness of the data was established (Polit and Hungler 1993) and the influences that shaped the project, both internally and externally, were highlighted.

The product was established through a repeated process of iteration (Bowling 1997), which became a representation of the client's and users' requirements.

The cyclical nature of the evaluation stage of this research demonstrated a degree of internal validity: the tools used to report and to some extent measure did collect evaluative data. The key themes identified showed a positive accord with the obstacles and barriers identified in the literature review and through local intelligence. The people who had the problem were facilitated to find a solution. To some extent this justifies the approach to the inquiry and legitimatised the findings.

It is possible to conclude that the processes adopted were judged by the participants to be congruent with the principles of action research espoused by DePoy and Gitlin (2005).

# Chapter 6

## UNDERSTANDING THE SOLUTION AS A VIRTUAL ENVIRONMENT

### 6.1 Introduction

The aim of this chapter is to determine the degree of strategic alignment achieved in the website design, whether there is a good fit between the site's purpose, its content and the way it is organised. This is important not only because it will provide an indication of the potential success of the design as a virtual environment, it also highlights whether the process of data collection and analysis were appropriate. As previously explained, however, the scope of this research is to *identify* user and client requirements only, and as such the design is a theoretical construction, or cognitive representation, of potential user and clients' preferences. Consequently, the tools to scrutinize the design and build criteria are used from the perspective that the potential virtual environment for CS is a cognitive landscape of ideas. Principally Kaplan and Kaplan's (1989) user preference matrix will be utilised to examine the site's content, purpose and organisation followed by a discussion of the influence of multimedia technologies (MT) on cognitive load. Examining the findings from these differing perspectives should provide the evidence to determine if the website design demonstrates a clear strategic alignment and is fit for purpose.

### 6.2 The design and build criteria as a cognitive landscape

Viewing the website design from the perspective of a potential user or client involves being able to see it as they see it. Whilst this is not actually possible, it is possible to comprehend the website design as a cognitive landscape. In doing so individuals express preferences for content and how the site might be organised (Rosen and Purinton 2004). Analysing those preferences through a theoretical framework - Kaplan and Kaplan's (1989) user preference matrix - provides an insight into the potential success of the design.

Content, according to Rosen and Purinton (2004), is one of the main factors contributing to people revisiting a website (a measure of its success). Content and organisation for the purpose of explanation includes text, graphics, images, sound, layout and motion (Rosen and Purinton 2004). It is equally as important to consider

whether the strategic alignment of the intended web strategy and the actual website presence are consistent (Chiou *et al* 2006); in other words, does the site deliver what it intended to? Although this is not a website evaluation study or a completed product, it is logical to explore whether there is a strategic fit between the content of the site and its intended purpose: online CS.

### 6.3 The key design and build criteria

Information is presented as a descriptive narrative of some of the site's salient features and tools. Twenty-one design and build criteria were generated (see Box 6.1) from the answers to three of the six key questions that guided the requirements analysis in the solution design stage:

- What should the website look and feel like?
- What features should it have?
- How do you need it to work and function?

#### Box 6.1: Design and build criteria

1	Direct links to other sites
2	Graphical images, home page
3	Title bar
4	Sponsorship opportunities
5	Log on area
6	Central panel
7	Access to user guidelines
8	Access to evidence, practice guidelines
9	Link to site rules
10	Reporting site abuse
11	Identity - profile information
12	Membership - information
13	Role identity
14	Relationship information
15	Choices, user preferences
16	Resources
17	About me, personalisation of the site
18	Communication tools; webcam, discussion board
19	Ground rules to be completed by participants
20	Recordable, save data facility
21	Attributes, forum page, e.g. hot topic, create a forum

The tools and features presented were not identified in any particular order. Also the examples cited are not an exhaustive list (the quantity of data collected is vast); merely illustrative of the findings.

Graphical representations of the site web pages, in the form of screen mock ups are presented to aid understanding of the content and organisation of the site and show the various locations of the features and tools. They demonstrate what the site might actually look like. Five different web pages are presented and discussed in turn - Figures 6.1 Home page; 6.2 Log on page; 6.3 Profile page; 6.4 Individual CS page; 6.5 Forum page. The numbered callout boxes on the web page illustrations are used to draw the reader's attention to an example of a particular embedded feature or tool. They also serve as an identification tag, which is replicated in the text (Box 6.1).

The observations made about the site's content and organisation will be discussed with due regard to the idea that a website is a cognitive landscape; in other words, it is a representation of the reasoning and perception drawn from knowledge, experience and preference. Kaplan and Kaplan's (1989) preference matrix (Table 6.1) will be used as a theoretical framework to guide this examination. The reason for choosing this approach is that it is compatible with the underpinning action research design; the preference matrix is a tool used to construct patterns for environmental designs that incorporate the end user's perspective (Rosen and Purinton 2004).

#### **6.4 The preference matrix**

The preference matrix is a construct of Rachael and Stephen Kaplan. It is based on the idea that human beings need to recognise objects in their environment in order to survive; they need to make predictions and evaluate the consequences (Paxton 2007). This is achieved by the creation of cognitive maps.

Interaction with a virtual environment is an intensely cognitive activity, which involves perception and preference. If the design resonates well and motivates the user to learn then it might be considered as a successful design; equally if it does not engage the user then it may not motivate the user to promote or return to the site.

**Table 6.1: Preference matrix**

	<b>Makes Sense / Understanding</b>	<b>Involvement / Exploration</b>
<b>Present</b> (2 dimensional)	*Coherence	*Complexity
<b>Future</b> (3 dimensional)	*Legibility	*Mystery

**Key**

\***Coherence** refers to how the environment hangs together e.g. the use of colour.

\***Complexity** refers to the richness of the elements in the setting e.g. forum.

\***Legibility** is defined by distinctiveness e.g. this could be the ease of navigation by having a consistent menu bar on each web page.

\***Mystery** is about inviting a visitor to explore more e.g. follow this link to find out the latest on this or that.

**Present** is the construct of now and past or relativity of information.

**Future** is the potential dynamic, which is about depth and an expanded view.

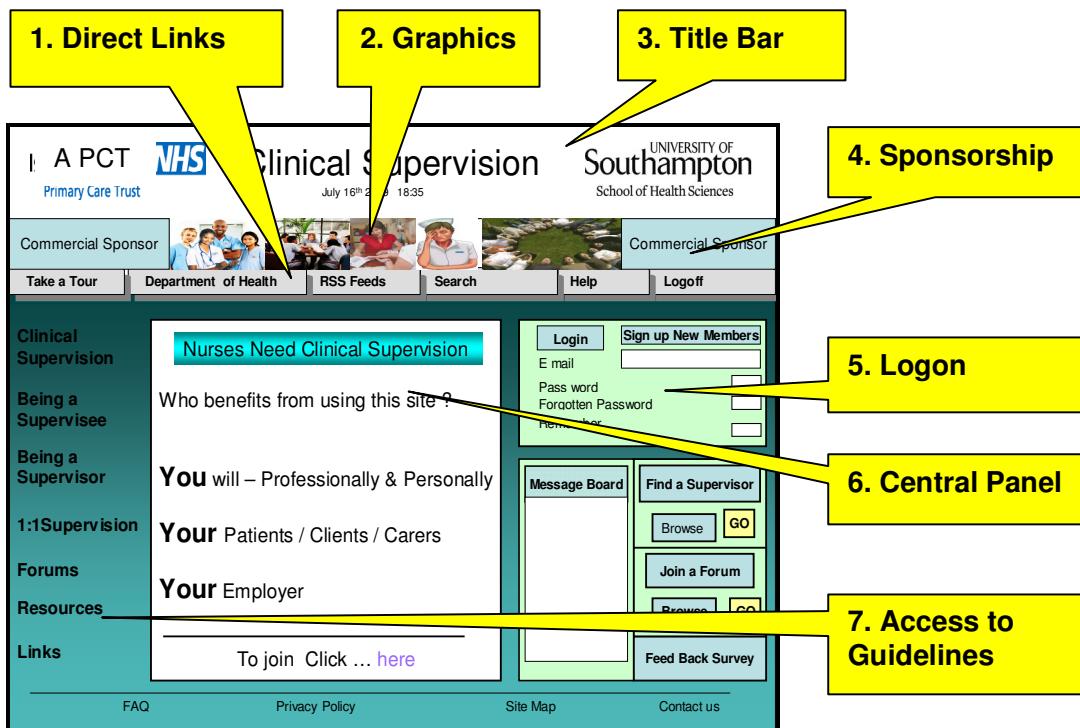
\* Source Kaplan and Kaplan (1989)

#### 6.4.1 The home page

This is the first visible page of the site and will be accessible via the worldwide web.

As such, it needs to capture the individual's interest and clearly convey the purpose of the site and the potential benefits of becoming a member of the site. How to join also needs to be clear and unambiguous.

**Figure 6.1: Home page**



### ***Coherence***

As can be seen from the responses in Box 6.2 participants were clear about what they wanted the site to look and feel like. Essentially, they described an environment that looked and felt professional. Figure 6.1 shows the screen mock up of the home page, which was presented to all focus groups for approval and comment in the third set of focus group meetings. It was created from the pen sketches in the second set of focus group meetings. It typifies what participants portrayed as being professional and business-like.

Requesting that the home page should look like an official site (like their employer's website, which they are familiar with) represents to some extent the present for participants; their articulations are drawn from their current cognitive maps of professional sites. The coherence is evident in the development of the CS website in that it builds on old knowledge to create new understanding, for example, the title bar **3**. Participants requested that the site be branded - NHS style alongside a co-organisation like the University of Southampton. The connection and implied association by use of the logos was an important aspect of the look of the site. It was

perceived to convey a professional, official site, rather than a social networking site or chat room.

### ***Complexity***

The appearance of the home page was complex in the sense that it had many of the key tools and features visible (for example 1 5 6 and 7) but on a more sophisticated level its complexity was demonstrated through the page's multi-layered interaction capability with links to other pages in the site and indeed to other websites. The logos were to be hyperlinks, enabling access to more information and other reputable sites. Direct links were also available to other websites, such as the professional body of nursing and central government sites 1. The graphics 2 on the home page were symbolic of the site's potential users - healthcare professionals. According to Thompson (2006), the key to building a successful site is to get a balance between graphics and text, though formal sites like the University of Southampton's is dominated by textual information.

Appearing and feeling official was also associated with a sense of purpose and legitimacy, a point expressed by the client and users alike throughout the focus group activities. This is clearly reflected in the statement defining the site's purpose and function (Box 6.2), demonstrating a strong strategic alignment with site content and appearance to its intended purpose. At the centre of the home page, creating a very strong visual message, the reason for the site's relevance to its intended audience is simply stated 6. The overall appearance looks crisp, clean and organised. Visually you are not bombarded with quirky gimmicks, games or over-the-top advertising. If this site were to be adopted by the NHS, it is unlikely that commercial sponsorship 4 would be allowed unless approved by the NHS.

**Box 6.2: Goal statement (version 2)**

The main purpose of the clinical supervision website is to improve access to quality clinical supervision for community nurses who work for the \*\*\* Primary Care Trust.

This goal will be achieved by creating multiple virtual communities and relationships that engage in learning, reflection, discussion and debate.

A subsidiary goal is to provide a range of services for the users that enable them and their employer to meet regulatory and quality assurance standards required by the Nursing and Midwifery Council and the NHS.

(Focus Groups 1, 2 and 3, March 2009)

**Legibility**

The clear and definite association of this website being endorsed or supported by the PCT sends a very strong message that CS is an important aspect of nursing practice and is thus a very distinctive feature of the site, as it clearly differentiates it from other sites available on the worldwide web. The idea is that CS is a work-related activity that should, where possible, be undertaken at work (PCT CS Policy 2009), although for some this was seen as potentially problematic. Various reasons were given including the inadequate number of computer terminals available and their position in a busy office, as well as the speed of connection and reliability of the system (Chapter 5). If this is deemed a professional site, then arguably it needs to look and feel like one, whatever that might be.

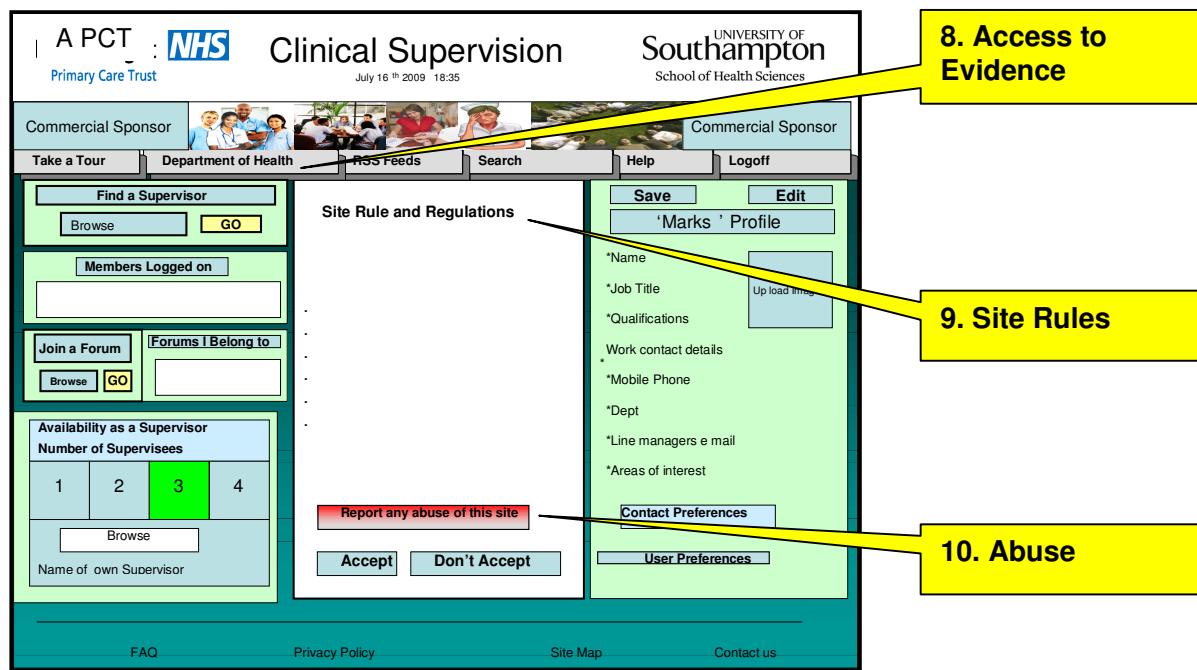
**Mystery**

To some extent this element is cognitively symbolic of the whole site, insomuch as its purpose is to provide an opportunity to learn by undertaking CS and this can only happen if you interact with the site. Certain features on the site also demonstrate this dynamic in a more obvious way. The menu bar on the left will reveal information under certain headings. For example, when the cursor is placed over the statement *Being a Supervisor* 7, additional information is given to the casual browser indicating that more detail is revealed by becoming a member of the site, thus creating a sense of mystery and intrigue in a way that might encourage individual to join the site and become involved with CS online.

#### 6.4.2 The log on page

The logon page is only accessible to registered members and is accessible from the home page. It will be used every time a member logs on. As can be seen, it provides a quick edit facility to the profile page. Access to this page is only after a one-off verification process has been completed.

**Figure 6.2: Log on page**



#### Coherence

Communicating the importance of developing an understanding of responsibility associated with using the site was a feeling desired by all participants. This was demonstrated to some extent by internal access to the site being associated and linked to the employer's log on protocol and verification; for example, at the beginning of every session having to read and accept site rules **9** associated with conduct and disclosure as well as reminders of individual accountability. For **supervisees** and **supervisors**, this was important as it set the tone of the site and it was hoped that making this type of expectation explicit and building in features such as reporting abuse **10** would promote a sense that the site was a safe and secure place in which to undertake CS.

For the client (the PCT) providing a site for CS that was unambiguous in terms of responsibility and accountability was paramount as it is mindful of the litigation culture that exists in society today. Diamond (1998) picks up on the point of written accounts of CS and access to data. It appears that in future Courts could have the right to use CS records. For some this may well be defence evidence, for others it could be used as evidence to the contrary. The advice from the PCT at the time was that all data needed to comply with the Data Protection Act (1998). This also covered what was discussed in CS, whether it be online or through other media. With this in mind, online CS is no different except that there will be evidence as to what was written. If the site progresses and goes live, then a current legal position would be clarified and incorporated into the site's infrastructure.

### ***Complexity***

As can be seen in Figure 6.2, there are many tools and features on this page, each requiring the site user to get more and more involved with the site. Actually becoming a member allows the user access to more on a different level of complexity and sophistication.

### ***Legibility***

An attribute that improves the navigation of the content is the linkage of features between the site's pages. Being able to update your profile when you log on, without having to then move to the profile page, saves time and is an effective way of capturing small individual changes at minimal effort. The continuity of use of colour and position of tools should reduce cognitive load on the user, thus improving user's experience of the site.

### ***Mystery***

This construct does not really apply to this type of web page as the log on page is a very pragmatic and administrative aspect of the website. Once logged on then full access rights would be given.

#### **6.4.3 The profile page**

Again the profile page is only accessible to registered members who have logged on. This page is always available to the individual member it pertains to.

**Figure 6.3: Profile page**

### **Coherence**

There is a coherent link between the profile page, the log on page and the home page. Coherence here is also represented in that it is a familiar type layout to many other websites that require you to sign up as a member, representing a connection with the present. The site requires certain demographics and personal data to be entered in to its database. This includes the option of loading an image of yourself on your profile page. The colour themes also continue on this page, providing a visual continuity not only of tools and features but between the various site pages.

Again the level of complexity is designed to stimulate the user's interest in the site. Being able to generate your own profile with options **11** **12** **13** **14** **15** will help personalise the site adding to the experience of using the site.

### **Legibility**

Developing a personal and professional identity is a distinctive feature of this web page. Creating a sense of belonging and personalisation on the website was considered an important feature for participants **11**. CS can be described in many ways and remains a difficult concept to define as nursing practice varies (Berggren and Severinsson 2011), but what is clear is that it is about individuals and their practice. There is also a visible professional identity **13**. On this CS website, that means defining your identity as a supervisee, supervisor or member of a forum **12**. In doing so you are making public a relationship **14** that had been formed on the site by prior agreement. This idea of a professional identity also relates to the need to feel safe and secure. An additional feature of this page relates to your availability in a supervisory role. The traffic light and numerical system **13** indicates to other site users if you are available as a supervisor, a feature controlled by yourself through editing your own profile.

This control is a very distinctive aspect of the website and builds on the idea that the site is user-friendly and orientated around an understanding of CS. Potentially, it should act as a way to effectively managing supply and demand of supervisors in an organisation in the present and for the future.

Making choices regarding access **15** in the form of personal preferences was also described as an important feature when it came to the site being personalised. This feature could also be considered to be future orientated (three dimensional) in the sense that it provides an expanded interaction with the site that is changeable (Rosen and Purinton 2004) as more than one preference could be requested. Again, it demonstrates that individuals should have choice, not only in the way they use the site but also where they are when they access it. Having the option to access from a mobile device may well prove to be an efficient way of dealing with the resource issues in cash-strapped organisations but it may also ensure a greater degree of flexibility to access and ensure a realistic degree of privacy as the individual chooses in what way they are going to access the site.

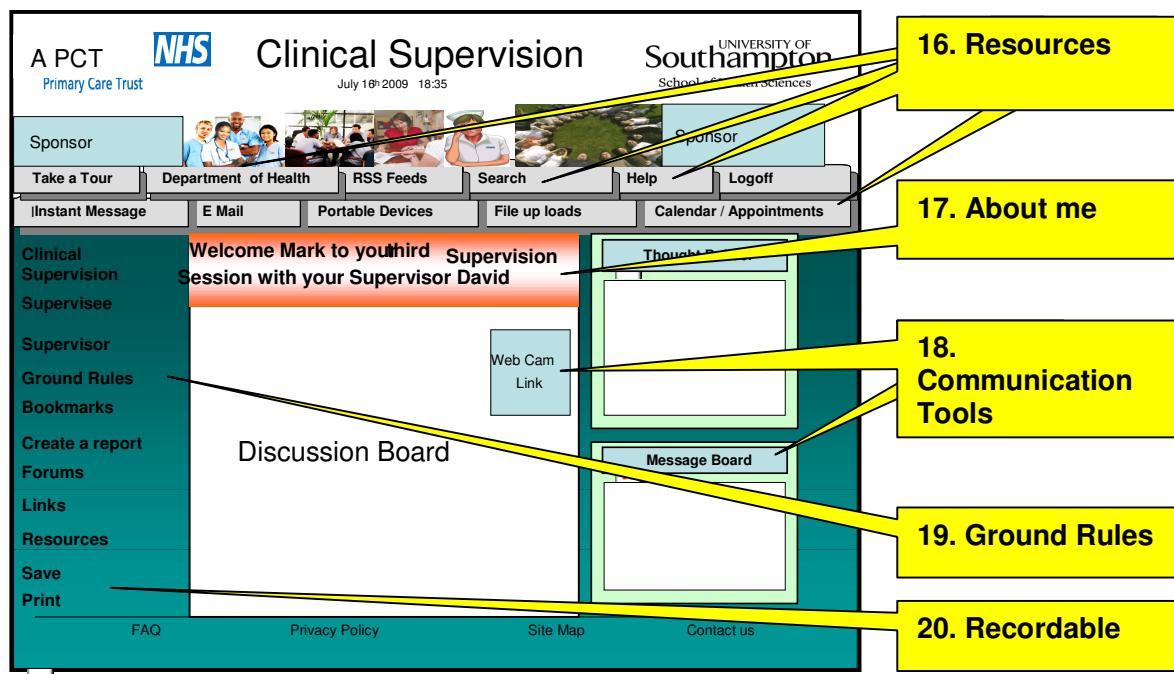
### ***Mystery***

This construct does not really apply to this type of web page as the profile page is a very pragmatic and administrative aspect of the website.

#### 6.4.4 The individual clinical supervision page

This page is for one-to-one supervision and is only accessible to approved members who have a defined relationship, a supervisee and a supervisor.

**Figure 6.4: Individual clinical supervision page**



#### **Coherence**

One-to-one CS, with a supervisee and a supervisor communicating in a personal, private exchange, represents one of the two identified modes of undertaking CS online. As stated previously, participants wanted to replicate all of the present elements of established ways of undertaking CS, especially confidentiality, which according to Epling and Cassedy (2011) is at the heart of any supervisory relationship. A strong confidential ethic is seen as important to encourage trust and a feeling of safety in which sharing can take place. The need for the site to feel safe, private and confidential was pervasive throughout all focus groups, most of the time. The need to feel safe as a requirement is expressed on this web page by having to agree ground rules [19] for CS and having to review them regularly; this supports the idea of agreement by making explicit expectations relating to accountability and responsibility

between parties. This also replicates the existing behavioural framework associated with traditional approaches to CS, thus providing coherence and familiarity of process, to support the site's credibility for potential users professionally and cognitively.

Personalisation was also an expressed requirement. Providing a sense of belonging, being part of the site not just visiting it, is a feature that will provide coherence and connection for users. This would be a visible feature of this page, for example, at the top of this page **17**.

### ***Complexity***

This web page typifies the complexity of the website. The environment, specified by participants, in which CS would be undertaken is presented. CS online will challenge some practitioner's communication and IT skills by having to adapt established patterns of communication to an input dependent environment. The style of communication (synchronously or asynchronously) will need to be agreed in advance as part of the ground rules **19**, as will the use of media such as webcams and discussion boards **18**, otherwise it might adversely affect the supervisory relationship.

The range of communication features **18** on the site could initially pose other complications: for example, if the supervisee has not got a webcam or does not feel comfortable using one. For many practitioners this may be the first time they have engaged in an online discussion and it will take time to build confidence in their abilities as well as trust in the site. The range of features requested by participants will ensure that the site has adequate support materials and resources available, especially to the novice user, but the number may well be overwhelming to start with.

Having the ability to make a record **20** of any discussion **18** on the site emphasises further the importance of conduct on the site as well as the need to adhere to NMC guidelines on confidentiality (NMC 2008b). Although record keeping is an aspect of CS practice (Kelly *et al* 2001b), there is very little evidence to support how often or how well this activity is being achieved. Having a permanent record of exchanges and being able to revisit previous sessions and action plans would ensure that this aspect of CS could be achieved. For the PCT, being able to track and monitor activity levels

provides important data which they find difficult to obtain. For the practitioners, being able to generate a report of ones own CS activity is an additional benefit and a useful tool to support activities like appraisals and to provide evidence for regulatory bodies.

### ***Legibility***

Access was a major theme in the findings that the functionality of the site needed to address. As previously discussed, actually being able to undertake CS is a major issue (Chapters 1 and 2). Having a website does not alter the pattern of the workload or change the demand in practice. It does not necessarily mean there are more resources available to deliver patient care, although it might change the availability of evidence-based resources. Currently, practitioners need to pre-arrange their CS with no reliable predictor of workload or resource demand on that particular day, say, six weeks ahead. Often, this results in CS being postponed, shortened or cancelled.

Being able to plan access **16** to CS in a virtual timeframe, without the need to travel or book a room (other than being able to access a computer terminal) should reduce the resource impact and create some freedom through increased flexibility. If CS is being conducted asynchronously, then fluidity increases as you are not fixed to a certain time or have to be online at the same time. This concept is particularly true if CS is available 24 hours-a-day, seven-days-a-week via the internet. With the growth and improvement of mobile technology, CS could take place from a car or the living room. In the event of an online CS having to be cancelled, then it is arguably easier to rearrange as this can be done via the site using the site's planning and other communication tools **16** **17** **18**.

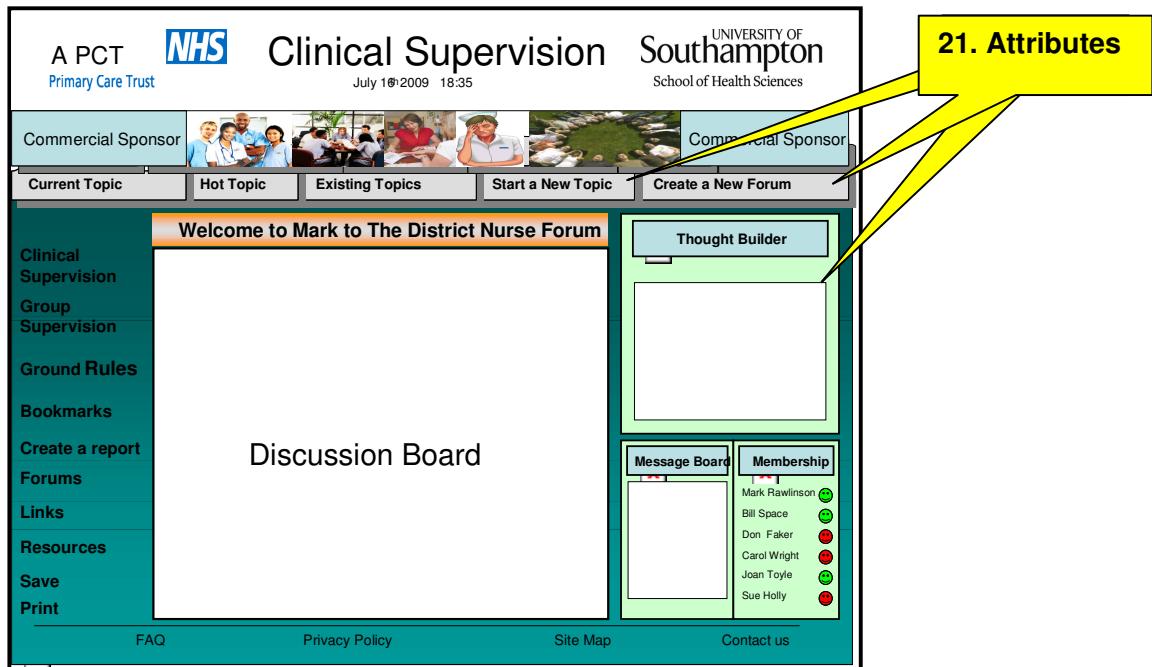
### ***Mystery***

Access to a wide range of resources **16** will ensure that there is a continuous variety of data or avenues available to pursue a particular point of interest or area of uncertainty. Exploiting this type of feature should ensure not only that debate is based on contemporary evidence, it should be a stimulus for learning and reflection.

#### **6.4.5 The forum page**

This page is for group supervision and is only accessible to approved members who are logged on. No restriction to the number of forums or size of membership exists.

**Figure 6.5: Forum page**



### ***Coherence***

Replicating many of the features and tools found on the other web pages on the site, including colour schemes, type of text and language, will provide continuity for site users. The positioning and navigation elements of this page will be the same as other pages reducing the need to learn new processes and operating dynamics.

### ***Complexity***

The idea of a forum representing group (or many-to-many) CS is complex and will need to develop over time. The notion of a group discussion is appealing, especially if a variety of practitioners contribute, as a far wider experience base would be available to be accessed. What will be potentially difficult to maintain, however, is the depth and quality of the discussions.

Group dynamics will play an important factor in the success of this type of communication. The forums will rely heavily on the honesty and confidence skills and expertise of practitioners when contributing. Both user focus groups (**supervisees** and **supervisors**) thought that the open nature of the forums might, to start with, be at quite a basic level: for example, asking a question about an aspect of care as

opposed to establishing an in-depth dialogue with a group of people about how they dealt with a situation. Policing the forums was an issue for all focus groups. (Each mode - one-to-one and forums - would have the ability to report abuse.) This was one of the reasons for having the PCT involved with the log on procedure via existing employer databases. If an individual was considered to have broken any site rules or boundaries, then their employer would have the ability to intervene. No decision was reached at this stage to determine what sanctions would be taken against an individual, other than to say that normal procedures would be followed, the same as if something was reported when not online. It was thought that peer pressure would be very influential on the forums and that individuals would behave in a professional manner, especially in such a public arena.

### ***Legibility***

This option for undertaking CS was envisaged to be less structured and more informal than for the one-to-one CS sessions, although forums would be still subject to all the site's protocols, codes of conduct and ground rules **19**. The relationships of participants would be as equals with no appointed mediator or supervisor. Each forum would be self-governing and any member could start a new forum or thread to a discussion **21**. Discourse in this media would require practice and expertise. Initially this may mean a limited uptake of the use of forums. Having the data structured through collaborative mind maps **21** may well help the flow of a discussion as individuals would be able to see the whole discussion all of the time. Unlike conventional discussion boards that require you to scroll through rows and rows of text to understand what has previously been said. It was agreed that no record of the group discussions would be available other than basic data. For example, the District Nurse Forum discussed the use of honey in wound management between 23<sup>rd</sup> January and 2<sup>nd</sup> February; twenty-five people took part. The reason for this rather vague data was that it would be difficult to isolate individual contributions and you might not always agree with what is said or missed part of the discussion. Additionally, it was thought that a report would be too unwieldy and not accurate enough. Basic data would provide managers with evidence that an individual had logged on to a CS session, which one, for how long and how often.

## ***Mystery***

This particular page could generate a lot of intrigue. Having rolling discussions and a very varied membership should provide a wide range of opinions and positions from which to look at any particular issue or aspect of practice. Being able to generate your own discussion forums will also generate a different level of interaction with the site as whole.

### **6.4.6 Conclusion to preference matrix**

A strong sense of coherence was evident in the website and between the various pages, tools and features. This is not surprising as the design of the online environment is based on participant's current knowledge, understanding and experiences of CS (articulations of their cognitive maps). This is not problematic; in fact it is quite the contrary. The website design was achieved through a collaborative partnership affording it a high degree of legitimacy.

What is revealing is that participants have been able to describe the complexity of what their ideal environment for CS should look and feel like and this goes beyond process. Normally many features associated with CS are difficult to see or are subject to change. Rooms, for example, are in short supply and the ones generally available are often unsuitable, either too big or small, cluttered, lacking privacy, involving considerable travel and may be different every time. While the attributes described are explanations of the physical environment, they are significant and can impact on the quality and motivation of nurses to continue with CS. An online environment would provide a stable and consistent environment, capable of revisiting previous sessions and allowing an individual to provide evidence of the time they had connection to the internet.

The website design would, therefore, be an improvement on existing modes of CS by virtue of its omnipresent capability and inbuilt memory. Being available 24 hours-a-day, seven days-a-week with the facility to revisit and reflect on previous session constitutes improved access on its own. However, CS is a highly complex cognitive activity, which requires practitioners to be able to work conceptually with the past and the present and to project meaning toward the future so the other features of the site need to be able facilitate this level and type of activity. The coherent organisation of

content and straight forwardness of navigation, which is symmetrical and colour co-ordinated, belies the complexity of the design. The appearance of the web pages was thought to look crisp and professional, yet simple, resulting in a design that could potentially achieve the design goal “the simpler the better” (Thompson 2006). That said, a range of complex features and tools underpins the visual simplicity of the site, which will allow not only personalisation but the opportunity to expand one’s understanding. This could be achieved through the direct access to credible sources of information and evidence and/or discussions with peers or others. The opportunity to learn and improve practice through undertaking CS online is a very attractive and inviting feature of this site.

The application of Kaplan and Kaplan’s (1989) user preference matrix has shown that the proposed site demonstrates a clear strategic alignment of content and purpose of the site with the organisation of the site. This is evidenced on a number of levels in Section 6.4. The need for the site to be professional, safe and secure, for example, is a dominant aspect that occurs in all the elements of the preference matrix. The goal of achieving learning and a positive influence on practice could well be achieved through informed use of the resources, although as with the traditional mode of CS, this will be dependent on the quality of the contributions made by site users. At this stage, all claims of success or coherence are somewhat academic as the site is not yet up and running. The positive data, though, does indicate that the site could improve access to CS.

## **6.5 Multimedia technologies and the website design**

This section considers the influence of multimedia on cognitive load, which according Bunch and Lloyd (2006, p210) “is the amount of work needed to acquire and use information” as an alternative way of determining the strengths of the website design. It is suggested that this is not only a credible point of discussion, but it is potentially an illuminative one as CS and using websites are essentially complex cognitive activities and thus understanding the impact of the technology on potential users is beneficial.

Hypothetically, the CS website will have the capability of supporting multimedia technologies for the enhancement of the experience of undertaking CS online. The aim is to explore from a theoretical perspective - the outcomes of which could be

tested once the site is up and running - the extent to which those multimedia technologies might improve or detract from the experience of the potential users through the manipulation of cognitive load. For the purpose of this thesis the term 'multimedia technologies' (MT) is taken to mean "systems that support the interactive use of text, audio, still images, video or graphics" (JISC 2006, p77).

## **6.6 Multimedia technologies and cognitive load**

MT according to Looi and Ang (2000) are able to create multimedia enhanced collaborative learning environments where people can come together to share and construct knowledge and negotiate meaning. This is enabled through resource-rich environments that are accessible through the internet, in particular environments that are multi-user dimensional (MUD) and multi-object orientated (MOO). Although the CS website is not a MOO, it does have the capacity to be used by participants as a multimedia rich environment in a collaborative way. The notion of user experience or activity involves problem solving, searching, collaborating or reflecting, which are fundamental aspects of CS. Hence, a website that can bring those technologies together at a single point is regarded as a positive strength as they could potentially improve CS by acknowledging and accommodating it as a multi-faceted process. Conversely, a website that is complex or multimedia rich could adversely affect the experience of the user as it directly increases the cognitive load on the individual. The challenge for all designers of multimedia environments, according to Stoney and Wild (1998), is to maximise the experience for the user and create an interface that is intrinsically motivating, interactive, intuitive and correspondingly imposes a minimal cognitive load.

Undertaking CS online will require substantial cognitive processing, so minimising the load should improve performance and the experience; conversely, the more complex the information or requirement to process it, the higher the cognitive load on the individual and thus the potential to reduce performance. Paradoxically, presenting information in a multimedia way, though likely to increase cognitive load (as there is more to process), under certain conditions has been demonstrated to enhance performance (Dubois and Vial 2000).

Cognitive load theories are underpinned by two major assumptions: the brain has a limited working memory and this is connected to an unlimited long-term memory (Baddeley 1986). For the purpose of explanation I will draw on the work of Bunch and Lloyd (2006). These two authors use the field of cartography and geographic information and the relationship with multimedia to explain why dealing with a higher cognitive load as a result of MT may actually enhance learning and, thus, performance. Cognitive load can be divided into three types: intrinsic, extraneous and germane according to Paas *et al* (2003 / 2004).

### ***Intrinsic cognitive load***

This is “based on the demand made on the working memory by the interaction of elements present in learning materials” (Bunch and Lloyd 2006, p212). Essentially the long-term memory can organise complex data into ‘schemata’. Schemata can then be processed as a single unit in the working memory. If the schemata can be processed in this way, then it will in effect reduce the load on the working memory (Paas *et al* 2003).

### ***Extraneous cognitive load***

This is about how things are presented or organised. The more ambiguous the activity or explanation, the higher the extraneous cognitive load resulting in reduced learning and performance. In other words, the reader has to search harder for the necessary information (Paas *et al* 2003). The research undertaken by Dubois and Vial (2000) supports this idea. They reported on how combining different media types and technologies could reduce learning by creating too high a cognitive load. However, if the information was presented and organised in such a way that reduced cognitive load (particularly appropriate use of audio in their studies), then the impact of such information could have the reverse effect and enhance learning. This is explained, in part, by dual processing theory. It is suggested that the information is dealt with more effectively because the brain processes visual and auditory information separately (Paivio 1986, Baddeley *et al* 2009). Having the opportunity for both types of media on the CS website maximises the potential to enhance performance and be a positive experience.

### ***Germane cognitive load***

According to Paas *et al* (2003) increased germane cognitive load can enhance learning; this is related to working memory resources being used for schemata acquisition and automation. It is also linked to a person's emotional drivers. Given that CS is not just about factual knowledge but about the practitioner and their feelings about practice and how they dealt with a particular issue or problem, the formation of schemata will be enhanced as a result of reflecting on past events. The website provides the space to reflect and discuss real issues. If engaging in one-to-one CS, then opportunity to discuss personal or issues on an emotional level is there as the exchange is private and confidential. For some people, not being face-to-face with another when discussing things on an emotional level will be challenging but for others it will be a better option.

### **6.7 Summary of the solution as a virtual environment**

Technologies allow information to be organised and presented in such a way that can reduce and manipulate cognitive load, increase user participation and potentially widen and improve access. The reverse is also true when it comes to the use of MT as regards cognitive load. Increasing the load, either by volume of data or a poorly constructed site, has the potential to negatively impact on the experience of undertaking CS online.

It is essential that potential site users are adequately trained and supported by the employer's information communication technology (ICT) team, which will allow them to understand the benefits and drawbacks of ICT and CS using multimedia, although the reality of this happening is somewhat debateable given the current economic climate. To be effective, the design of multimedia environments needs to be sensitive to the preferences of the users otherwise they can be ineffective, confusing and hinder performance. All developments like the CS website need to be based on principles that are congruent with theoretical positions that are considered to enhance CS and not just utilise the features of the technology.

It would therefore seem that the case in defence of the website design is both robust and defensible. The success of the site when built, however, will be determined to large extent by the support offered and training given. Other factors that will also

affect the use and uptake of the site will be the ability to access the website and the reliability and speed of the connection.

# Chapter 7

## UNDERSTANDING THE SOLUTION IN RELATION TO CLINICAL SUPERVISION

### 7.1 Introduction

Having identified the problem of access to CS for community nurses; established the relevance of the research design to address that problem (Chapters 1 and 2); developed a potential solution to the problem (Chapters 3 and 4); evaluated the proposed design (Chapter 5); and then examined the potential success of the solution as a virtual environment (Chapter 6), it is appropriate to discuss whether this research adds anything new to the body of knowledge associated with CS.

It is, however, important to note that at this moment in time any suggestions or discussions about online CS can only be theoretical in nature as there is a paucity of experience or research to draw on for the use of websites in the practice of CS.

The value of this thesis is that it does possibly present some of the very first research into online CS. So, in essence, all the findings could be considered as new information, thus adding to the body of knowledge regarding CS. As with a lot of research, this project is about building on or expanding current knowledge and understanding of CS. However, this research uses a new dynamic, the knowledge and experience of potential users, to develop a new mode of delivery for CS in the form of a virtual environment. I believe it is worth restating at this point that no claims about universal principles or generalisable results are being made here. The findings from this research are situational and specific. That is not to say that they may not be of use to others; they may well be.

The remainder of this chapter is given over to a series of discussions about CS and virtual environments with particular focus on how an online environment addresses the problem of access to CS.

## 7.2 Clinical supervision framed in a virtual environment

As previously stated the overall aim of this research project is to improve access to CS for community nurses in one PCT in the South of England. It was conceived that a virtual environment for CS was potentially a solution to this enduring problem.

The findings from this research have demonstrated that it is theoretically possible to build a virtual environment for CS based on the requirements of users and a client. However, articulating these findings is to some extent as complex as CS itself, given the multi-dimensional and multi-faceted attributes of the proposed virtual environment. Consequently, not all findings will be discussed in this chapter, especially as many have been already discussed in the previous chapters.

Bond and Holland (2010) discuss in some detail the idea of a picture frame as a metaphor to articulate the relationship and relevance of the various elements and influences relating to the practice of CS: “the supervisory dyad, the team and the managerial and organisational structure” (p49). The metaphor, I think, is very apt as it suggests that CS has or needs supportive boundaries. These form a structure or space in which something can be seen or appreciated. Bond and Holland (2010) go on to point out that frames around pictures can vary; some may even be a negative influence, if the frame in some way detracts or causes the observer not to see or appreciate the content within by being too plain or over ornate. They also suggest that CS could be viewed in a number of ways and they expand the picture metaphor further, explaining that there is a surface picture and a hidden picture to CS: the surface picture is the suggestion that CS is a positive endeavour underpinning practice and practitioner development: the hidden picture is that it can be negative and barriers and issues are often encountered. The literature review and findings of this research project support Bond and Holland’s position. The value of this research is that it goes on to offer some suggestions as to how many of these issues might be addressed.

For many, a virtual environment does not instantaneously conjure up an image of a safe and structured set of surroundings for the purpose of support and development. But closer examination of the potential website for CS as laid out in Chapter 6, constructed from the findings outlined in Chapters 3, 4 and 5, does infer an

appropriately supportive environment, which promotes development. On a very simple level, just having a designated, separate, purposeful environment for CS represents a concrete structure in which to ‘frame’ CS. A virtual environment, to some extent, for the first time presents a visible ‘picture’ of what CS might be; in other words, it presents an abstract concept as concrete reality.

This paradoxical association of ‘virtual’ now being considered as ‘reality’ can be understood, in part, through the application of convergence theory, a coming together of ideas, realities or concepts (Jenkins 2008). This line of reasoning is often used to explain the changing relationship of the mass media with the consumer. According to Jenkins (2008) the mega-conglomerates are trying to establish convergence of old and the new media types, through the use of technology. For example, news channels and newspapers are not just transmitters of one type of knowledge, traditionally only reflecting the corporate view as they were say seven years ago; now they often have an alternative interactive web arm which generates additional collective knowledge through participation, although this is still editorially controlled according to Jenkins (2008). Conducting CS in a virtual environment is new, but CS is not new. The design of this website mirrors, to a large extent, traditional face-to-face CS in purpose, structure and even in the relationships, but undertaking CS online is different. I believe it represents a convergence or coming together of the traditional and the futuristic; this convergence of perspectives is achievable through the use of technology.

Technology also has the capability to widen access and be the platform for the generation of a collective intelligence through participation. If more and different people become connected via the website in discussion of a given topic, then the potential to generate new knowledge and understanding exists. Technology can thus facilitate convergence, not just of people but of ideas and understanding in the minds of individuals. Whether convergence should be the aim is, however, up to others to decide.

Conducting CS in a virtual environment provides an answer to some of the known obstacles and barriers to conducting CS. It also generates some new challenges associated with access as discussed in previous chapters.

### **7.3 Exposing some potential benefits of online clinical supervision**

The various design and build criteria identified by the focus groups (Appendix 15) provide a comprehensive picture of what a website for CS could be like; the inclusion and discussion of screen mock ups in Chapters 4, 5 and 6 expands this further.

Listed below are statements that reflect how the proposed site might positively influence access to CS. This is followed by a discussion that attempts to contextualise the key messages in these statements.

- Conducting CS online via the website provides a clear, safe, secure and tangible infrastructure for the practice of CS.
- A variety of approaches is available, one-to-one or group CS, at the same point of access.
- The need for participants to be in the same place, at the same time is superfluous.
- The need to organise a venue is eliminated.
- Staff release can be planned and managed.
- CS could be conducted at a time and in a way that suits an individual: for example, online, in the evening, from a home PC or on a mobile device.
- Access to a greater number of practitioners and expertise is possible locally, nationally and potentially internationally.
- The availability of supervisors is not reliant on who knows who as there will be a database, which can be quality monitored by the PCT.
- Administrative resources, such as templates for ground rules, PCT policies and national body guidelines, are readily available and updateable.
- Access to the most up-to-date national clinical guidelines and protocols, such as care pathways, are immediately accessible.
- A variety of resources to aid reflection can be made visible during CS.
- A record of activity can be made, which can be used as a point of reflection or provide proof that CS has been undertaken.
- Templates for extracting the learning via action plans are available.
- The potential to audit CS activity to meet NHS regulatory requirements is possible. This could also be used to contribute to any learning need analysis systems in use by the PCT to inform educational contracting.

- Practitioner IT skills and capabilities would be enhanced.
- Targeted training and skills development could be achieved through in-built feedback, surveys etc.
- Educational support for CS via multiple online resources is a feature of the site.

This list is not exhaustive, only illustrative of the diverse ways in which conducting CS online might improve access. Many improvements in access are pragmatic in nature and concerned with infrastructure as well as time and place; others are about access to appropriate resources including people and information.

Taking a common sense approach to addressing obstacles that impede access - such as having to be in the same place at the same time - resulted in simple, yet pragmatic solutions. Conducting CS in a virtual world means that you do not have to be constrained by time or necessarily place. Consequently, this research has begun to generate new knowledge and understanding about how CS could be practised.

If the CS website only replicates existing approaches through a different media and nothing more, then maybe the impact and associated value of this research should be considered as minimal. If, however, this research does result in improved access through a deeper understanding of the issues and by re-conceptualising the practice of CS, then maybe its value and potential impact is considerably more. The emergent description of CS in Box 7.1, when read in conjunction with the purpose of the website in Box 7.2, illustrates the practice of online CS in detail and promotes it as both an external and internal facing activity.

Traditional approaches to CS in the UK describe the practice of CS very much as an internal facing activity where what happens in CS stays in CS; little is written about it as an external facing activity where the outcomes are made public and the organisation has the potential to grow and learn from this intelligence. Having a system that is able to continuously capture the value of CS, by user-questionnaires and surveys would prove to be a very powerful planning and resource tool. (The proposed website could also have a feature that automatically captures data and information, thus building a repository of knowledge.)

As an organisation, the PCT will for the first time have a means of accurately tracking CS activity levels. This data will assist them in meeting NHS regularity requirements (DH 2007 / NHS Litigation Authority 2011).

The challenge to employers will be to ethically manage the knowledge generated and capitalise on the learning identified.

The comprehensive description of CS in Box 7.1 arose from the extrapolation of the identified themes from the first series of focus group meetings (Chapter 4), which addressed three key questions relating to CS: what is it? why do we need it? who benefits? As far as I can ascertain, the definition is the first conceptualisation that has emerged through the process of designing a virtual environment for CS as an attempt to improve access, although it is noted that it is not dissimilar to many existing definitions of CS. Nevertheless, this still represents new knowledge.

#### **Box 7.1: Emergent definition of clinical supervision**

Clinical supervision is an important aspect of practice, which requires all parties to be willing to critically reflect.

It is a planned interaction (dialogue) authorised by the employer, which normally takes place between two or more individuals.

It involves exploring clinical practice in a confidential, non-judgemental way that is empowering and promotes personal as well as professional growth.

It is centred on an understanding and application of evidence-based practice.

The aim should be to bring about positive change, by improving the quality of care delivery.

This facilitated process is centred on the needs of the supervisee, who has a responsibility to record and action changes identified.

**Box 7.2: Website goal statement (version 2)**

The main purpose of the clinical supervision website is to improve access to quality clinical supervision for community nurses who work for the \*\*\* Primary Care Trust.

This goal will be achieved by creating multiple virtual communities and relationships that engage in learning, reflection, discussion and debate.

A subsidiary goal is to provide a range of services for the users that enable them and their employer to meet regulatory and quality assurance standards required by the Nursing and Midwifery Council and the NHS.

(Focus Groups 1, 2 and 3, March 2009)

Underpinning the concept of online CS is the belief that CS is centred on the idea of learning, which enables experience and reflection to interact (Fowler 2011). This is augmented through the provision of a constant environment, the sole purpose of which is to enable CS to be undertaken at a time and a place convenient to the parties involved. The environment is resource-rich, dynamic and most importantly safe and professional.

The creation of an environment purposefully designed to support the practice of CS not only raises the profile of CS by giving it a location, but it also affords CS an identity as a process of learning, sharing and support. If this were to become a reality, then one of the reported barriers to CS that it is being seen as a luxury, may well become a thing of the past (Jones and Anderson 2004). As mentioned earlier, for many nurses CS is becoming a need and not a want; it is seen not only as a way of improving care, but at times as a way of surviving.

CS is situational by nature, often focusing on clinical practice and, more often than not, on the practice of the nurse (Rafferty *et al* 2007). Traditionally, this discussion of practice takes place as a face-to-face verbal exchange, either one-to-one or sometimes as a team or group. Whilst the opinions of those involved in CS are acknowledged as a legitimate source of knowledge, very limited opportunity for verification of information given at this time exists; advice is often subjective and can be based on the past experience of those involved through recall alone. Undertaking CS online allows instant access to other legitimate sources of knowledge, such as

peer-reviewed nursing journals and evidence-based guidelines as well as hundreds, if not thousands, of web links. Accessing a range of reliable data and information during CS, assures that the level of debate is not merely based on opinion. In fact it may well legitimise the articulation of practice as a credible and important source of learning (Benner 1984, Knowles 1990, Kolb 1984). Furthermore, as the capability to store this type of knowledge is an in-built feature, the site not only supports the idea of experiential learning (Atherton 2011, Fowler 2011) through collaboration for those involved, it also becomes a source for knowledge generation in its own right. The site, as well as being a tool to improve access in a physical sense, also becomes a resource for CS; in other words, it promotes the idea that CS online is multi-faceted and multi-dimensional, having the potential to positively influence patient care.

Actually being able to look back on what was discussed in a CS session is an additional benefit of online CS. For the supervisee (and the supervisor) having the ability to reflect on key suggestions or points of debate at a time and place of their choosing should assist in challenging clinical practice (if required) and it would not be dependent on the individual's ability to remember what was said and why. Having a record of CS and being able to revisit the resources used will promote a process of continuous learning through reflection and exploration. Additionally, for a supervisor in particular, having the ability to review and reflect on the discussion will provide a platform of evidence from which to evaluate their own performance and ability to supervise. It will also be a source of personal learning about CS itself.

Conducting CS online will change the practice of CS in so much as access will be improved on a number of levels (discussed in Chapters 5, 6 and 7). Additionally, the value of undertaking CS will be more explicit, both for those undertaking CS and those involved in supporting it.

#### **7.4 Potential drawbacks to online clinical supervision**

##### ***Fear of failure and lack of familiarity***

It is generally accepted that effective CS is predicated on a successful relationship between supervisor and supervisee (Bond and Holland 2010) in which meaningful dialogue is established. Traditionally this relationship and the ensuing dialogue has

been synchronous, face-to-face communication using established communication processes - an actual verbal discussion, occasionally via telephone (Driscoll 2007). Undertaking CS online will often mean that communication will be a textual exchange (via a discussion board) as opposed to a verbal one. This change in communication techniques may well prove to be a potential obstacle, and thus negatively influence access, for some.

Requiring nurses to engage in a familiar set of processes (group discussion and one-to-one reflection), when using a less familiar medium (a discussion board) constitutes what Andreson *et al* (1995) regard as new learning. This is an issue associated with all forms of new learning, often presenting as the fear of failure and lack of familiarity. This highlights the need to adequately prepare potential users, so that functioning in the environment does not become the only identifiable learning. This point was made by all focus groups who requested that it be simple to use and familiar; using processes similar to those when logging on at work was cited as an example.

### ***Issues associated with text-based, asynchronous communication***

Participating in a discussion that is not synchronised is a slightly alien phenomenon for many people. Transposing this concept into a CS environment as a process from which learning can occur could seem even more obscure; however this is exactly what could happen when participants participate in ongoing online discussions on an ad hoc basis, a process similar to email communication. Hiltz (1994) claims that active learning is a prerequisite for collaboration, as suggested by the constructivist paradigm. The activity is the physical and intellectual interactions, including meta-cognition, that occur as a result of active participation, in this case, via the keyboard and a monitor. The asynchronous dimension of the communication could, alternatively, be of benefit to participants who find immediate response to questions and comments in a one-to-one meeting difficult, those who prefer to have time to reflect before responding or who are shy in face-to-face group encounters. Having a virtual time dimension means that participants can create their reflection offline in their own time before going online for one-to-one or group CS. This could well be an effective way of working. The process, which is a feature of computer-based learning and training (CBLT), could be regarded as a way of establishing equality of participation. Kinner and Coombes (1995) suggest that the focus is then on the

content and not the person. The participant does not need to wait to find a gap to contribute; they have a voice in the group. Sharing your thoughts via text also highlights the need for clear expression and good articulation to avoid confusion and misinterpretations.

Participation through a medium that is not reliant on verbal clues or bias, however, does not necessarily mean equality of participation. According to McCabe (1998), studies by Kerr and Hiltz (1982) and Phillips and Pease (1987) found that online groups had active cliques, so weaker participants found it harder to converse at the same intellectual level. This is a potential weakness of the design, which would need to be addressed. As well as having explicit ground rules about inclusion and exclusion, it may be that a tool like a thesaurus could be available. The thesaurus, if used independently yet simultaneously in a discussion, would encourage the user to expand their vocabulary and possibly enable them to see themselves as interacting in a similar way to their peers. Others in the group would be able to see an informed point of view being made. However, it would not stop people either consciously or unconsciously excluding others by level of language used and may present a rather disjointed conversation.

### ***Unreliable connections and insufficient terminals***

It would seem that a significant and persistent issue, for community nurses in this PCT when using ICT, is the reliability of the connection and access to terminals in practice (as discussed in Chapter 5). This type of problem is further compounded by the limited ability to link computers to other networks due to restricted access in the PCT; interconnectability to mobile devices, for example, is extremely limited.

Ironically, increased access and flexibility were features that were supposed to be improved as a result of developing CS online. It is anticipated that the participants would be able to take part in CS at a time and place that is convenient to them, these parameters being set in the ground rules. It is anticipated that access to forums will mainly be in an asynchronous mode and, so, will potentially be less affected by these issues; although if people cannot get onto a forum, then their usefulness as a collaborative experience will be greatly diminished.

Effectiveness and reliability of a system will impact on users' motivation to participate and a poor experience has the potential to limit a user's enthusiasm for continuing with online CS. The expectation from the focus groups was that the technology would enhance and make the CS experience easier, not harder. The challenge for organisations like the NHS will not only be the setting up and training cost, but the ongoing technical support and maintenance of an online environment. Additionally, for the organisation and the user, the security of such a site will also be an issue, especially if users opt to undertake CS online from the comfort of their own home or the convenience of a mobile device. These and similar issues are discussed in Chapter 8 under the heading 'What next?' as they go beyond the scope of this research project.

### ***Lack of visual cues to affirm understanding***

Central to any discussion on CS should be an exploration of the relationship of the participants (supervisee and supervisor) and how the nature of the interaction might be influenced as a result of undertaking CS online. Although many aspects could be explored, the focus here will be on the dynamic of discussions.

For one-to-one online CS, the supervisor would to some extent mediate the discussion as they would if conducting CS in a traditional way. Mediation here means to interact, challenge and provoke responses. Through this process of guiding, the supervisee would be able to explore their issue in more depth and possibly in a more critical way, supporting both Salmon (2001) and Laurillard's (2005) position that mediated discussion has the potential to deliver meaningful learning. The role of the supervisor here is predominantly as a facilitator of learning and not as a teacher; although when talking about teaching Biggs (2003, p11) makes a relevant transferable point stating that "the key to reflecting on the way we teach (supervise) is to base our thinking on what we know about how people learn. Learning is constructed as a result of the learner's experiences". Supervisors, when mediating online, need to be conscious of the fact that the focus of the learning that is occurring in CS should be orientated around the needs of the supervisee (Rafferty *et al* 2007), (Bond and Holland 2010). These needs will often originate from the supervisee's experience of practice. The weakness here relates to both party's ability to articulate on a deeper level. If text is the only form of communication being used, great care will

need to be taken by the supervisor to facilitate understanding in the absence of visual clues.

Group supervision via online forums anticipates that the secure discussion boards would not be externally mediated. This idea departs from the work of Salmon (2001) and Laurillard (2005) who advocate that in educational settings the teacher plays a key role in the students' learning by mediating online discussions. The decision not to undertake mediated discussion in groups is based on a number of factors. One reason is that if group CS is considered to be a form of collaborative learning, then a key philosophical principle, according to Wellar (2002), is that learning is a social process. If the discussion was mediated, then it would be a product of the style and influence of the mediation and not a result of the collective contributions of the participants. But the success of this approach will hinge on whether the groups are able to self-mediate; if so, then the generation of knowledge belongs to them as it was constructed through the social, personal and professional experience of the participants. The danger is that the level of discussion could be detrimental to learning, either too high or too low, or maybe confused and ambiguous. If the groups are not able to self-mediate, then irritation and conflict may potentially arise, destabilising any learning that is happening.

Another reason for not having externally mediated group discussions at this point in time is more a pragmatic one. If discussions were to be externally mediated then this process would have to be adequately resourced with knowledge-credible personnel and the reality might be that it would only occur when appropriate support was available. All discussion groups would have to be resourced, which might then restrict the number and frequency of group discussions and adversely influence access.

### ***Issues regarding the effectiveness of group learning***

Underpinning the view that collaborative learning is a dynamic of CS is the idea that collaboration should promote reflection, the development of communication skills, deeper understanding, broader scope and exposure to different ideas. Wellar (2002) contends that this can be achieved through group tasks. The idea of nurses having CS as a group, working through issues together, provides a rationale for collaboration. In principle, this would seem logical and draws on the basic principles of team working: the collective effort of working on shared goals will lead to a synergy, and

the aggregate of the individual performances will exceed that of the group (West and Poulton 1997). However, achieving effective collaboration is often dependent on other factors, not merely the social proximity of others (be it virtual or not). Online CS in a group will be influenced by individuals' IT skills, the group dynamics as well as external drivers such as time pressures and access to computers. Participating in a forum is no guarantee that collaboration will be achieved. Additionally, there is historical evidence to suggest that sometimes group functioning can be less effective than the aggregate of the individual (Ringelmann 1913, cited in West and Poulton 1997); the term 'process losses' is used to refer to the various group processes that hinder effective group functioning (Steiner 1972, cited in West and Poulton 1997). Another common term used to identify the masking of reduced contribution of an individual to a group is 'social loafing' (Latané *et al* 1979). Salmon (2001) discusses the concept of 'lurking' and states that this is where individuals will enter the discussion board, browse for a while and then leave without actively contributing to any discussion. This, however, is not considered as negative or detrimental but as a legitimate way of learning. Being passive in this way is similar to someone listening to a face-to-face discussion in a group and learning from it. Whether this could be regarded as CS, though, is a debateable point and one that would need to be explored when the site is up and running.

Determining the effectiveness of collaboration is often stated in terms of output: did the group achieve the task? Did the discussion address the question? This in itself is a limited measure; success might just be the process of collaborating or the enabling of an individual as a result of collaboration. CS like other forms of support and learning is complicated and success in part will depend not on the activity or the knowledge of the individuals, but on a combination of factors, most of which are often incidental to the focus of the discussion.

## 7.5 Summary

In healthcare, the recognition of the need to embrace ICT is an ever imposing situation and one that will continue to evolve. One relevant example is that of learning or e-learning. In 2006 a national strategy for e-learning in the NHS was published: "modernising healthcare training: e-learning in healthcare services" (DH 2006). This document sets out a route map for e-learning across healthcare settings and

recommendations for policy development, resource allocation and the adoption of virtual learning environments (VLEs) including the need for interoperability and the requirement for developments to meet instructional management standards (IMS) (DH 2006). It remains to be seen, however, whether the funding is adequate and if a unified e-learning system in the NHS is a viable and workable option.

This research project is an example of yet another process or activity that could be conducted online and would need to conform to the same standards and regulatory frameworks as laid out in the above mentioned DH publication, if it were to be hosted by the NHS. This point is discussed further in Chapter 8.

Nursing requires nurses not only to be competent and caring (NMC 2010); they need to be able to work as part of a team, whilst being responsible for their own actions (NMC 2004 / 2008b). Functioning at this level means that they need to be self-aware, able to think critically and communicate effectively. The online environment for CS is one way of developing these attributes. Communication through web-based technologies effectively addresses the problem of sharing different experiences, in a meaningful way that is cost and time efficient for the nurses and their employer.

The aim of this chapter was to consider whether this research adds anything to the body of knowledge regarding CS. I believe a balanced discussion has been presented and the outcome is that it does make a significant contribution. There are many unanswered and unexplored issues relating to conducting CS online, but it was not the aim of this research project to address all issues. The aim was to determine what the design and build criteria for an online virtual environment for clinical supervision might be. Undertaking an action research approach has ensured that potential user and client preferences have been the source of the data used to construct an outline design specification document (Appendix 15). This document represents the main findings of this research. The thesis, however, presents a wider view of the contribution of this research to the body of knowledge regarding CS.

# Chapter 8

## THE END OF A CYCLE AND THE START OF THE NEXT

### 8.1 Introduction

The cyclical nature of action research normally involves returning to and revisiting the problem to ascertain whether the solution is appropriate in order to complete a cycle of activity. This is an active process that involves reflection (Clouder and Sellars 2004, Driscoll 2007). Ultimately, for this study it is about reflecting on whether community nurses will have improved access to CS as a result of the development of the virtual online environment. In order to arrive at an informed judgement about improved access to CS, it is prudent to consider some of the emerging issues (associated with undertaking CS online) as well as attempting to conceptualise CS in the wider context. In doing so this chapter will attempt to complete the action research cycle through reflection and discussion and finally it will consider possibilities for the future.

### 8.2 Generisability

It has been argued in chapter 2 that action research is situational research, and the findings that emerge are context dependent. It was also stated that the purpose of action research is to generate knowledge (Section 2.3) and according to Lewis and Ritchie (2003) the generation of knowledge may well be transferable and useful to others i.e. 'Theoretically Generalisable' - this could be product and / or process. All the findings (the design and build criteria as detailed in Appendix 15) from this research are a combination of the perceived wishes and needs of the participants and do not necessarily represent the views and ideas of other people. However theoretically they have generated sufficient knowledge from which a website (or multiple websites) for CS could be built i.e. the findings could become a comprehensive transferable solution to a universal problem / access to CS. After all it is possible that one person's solution is also the answer to another person's problem – as established in the literature review, access to CS is not a localised problem.

## **8.3 Emerging issues and tensions**

There are several overarching issues that have emerged about conducting CS online, as highlighted in chapters 5 - 7. The most dominant of these (for participants) were associated with safety, privacy and security. Another is the potential to develop communities and co-communities of common interest. Each of these is addressed below.

### **8.3.1. Safety, privacy and security**

It was clear from the data and findings in chapters 3 – 5 that safety, privacy and security (as discussed in chapter 7) were extremely high on the participants' agenda, with privacy being a dominant need. Privacy was presented as a conditional characteristic (for supervisees and supervisors) that underpins CS. However, the need for (and desire of) the employer to monitor site usage creates an inherent tension between the desire for privacy (on the part of the supervisees and supervisors) and the employer's requirements, access. Firstly in their capacity as Data Controller, who according to the Information Commissioner's Office (ICO 2010) is the nominated department/body responsible for data security on the site and secondly, in their desire to learn more about how the site is used.

Understanding and addressing the tension that exists between the purpose of the site (to undertake confidential dialogue) and the employer wanting staff to make use of the site, and indeed to use it themselves to oversee what happens on it, will be necessary when developing the site and when recruiting and training potential users. As far as the legal / ethical position is concerned safety, privacy and security issues are addressed within the UK Data Protection Act (1998). The act requires all users of the site to be informed about what data are stored on the site, for what purpose, for how long and where and who has access to it and what happens to it after a user deletes it. So, on a pragmatic level, the site's terms and conditions of use and the service level agreement will need to declare (to the users) the requirements under the act. Ensuring that user's rights are recognised and protected highlights the importance given to safety and security on the site and consequently provides assurances about privacy. It is also anticipated that when the site is up and running, users will be encouraged to comment on this element of undertaking CS online, thus creating an open informed transparent culture based on honesty and respect.

For both employer and employees there are already some existing safeguards in place. As registered nurses all site users will be bound by the NMC Code of Professional Conduct (2008) as well as the Information Governance policies of the employer. The local PCT policy on CS (PCT 2009) also addresses the issue of confidentiality and disclosure and the Website would be subject to that policy.

### **8.3.2 Development of communities and co-communities of common interest**

The potential of the site to overcome barriers and obstacles to CS as well as to provide added value has already been discussed (chapters 5 - 7). One area in particular, that all participants were keen to see realised was the opportunity to belong to, and develop, networks or communities, be it of learning, support or co-communities of common interest.

The configuration of any community that develops on the site will not be predetermined i.e. it is anticipated that users will create their own communities and each will have its own purpose and reason for existing. It is further anticipated that many different types and size of community would exist and users may belong to multiple communities; some may be nurses with a common identity (like Parkinson's Nurses) who may form a reflective network across the UK for example. Another type of community may be nurses from differing disciplines but who are geographically isolated but have a common interest they wish discuss in order to improve their practice; for example, tissue viability. Whatever communities are formed (supportive, educational, managerial) users will need to be conscious that their discussions are visible to all members of that community and will not only be subject to the same security protocols as 1:1 supervision but also peer supervision. It is also not known at this point whether just providing the architecture (the site facilities with instructions) will be enough to encourage communities to develop and grow and become an effective mode of CS, this is something that will need to be evaluated and possibly developed further. What however is understood is that developing a website for CS has the potential to enable nurses to develop practice through CS. The connecting up of practitioners also has the potential to create extended communities and networks for CS across the UK and potentially internationally. How they influence or change the practise of CS at this stage is purely speculative, except to say that undertaking CS

online has the potential to expand sharing, reflection and generate knowledge beyond traditional modes of CS.

## **8.4 The wider context**

It is important also to consider the wider context surrounding CS. Discussing this wider context is not a move away from the ideals of the research design or a projection of the findings beyond the aims of this research; it is about grounding the research project in the current knowledge base and political climate surrounding CS. Globally, the political climate in healthcare is very diverse and no claims in relation to transferability are being made here. The focus remains mainly UK-orientated with a strong emphasis on the local healthcare economy in which the research was conducted. The key question to be addressed is a strategic one and is about the future: where does CS go next?

### **8.4.1 Clinical supervision today**

Driscoll (2007), when discussing in the broadest sense what is happening with CS, puts forward three options in relation to the future direction for CS: What these options do however is only discuss the future of CS from an existing understanding of how CS is undertaken. Developing an alternative approach (like Online CS) creates another possibility which has the potential to overcome many of the existing barriers and obstacles that have negatively impacted on the uptake of CS. But, at present this research has only identified the design and build criteria for a CS website, after it has been built, tested and evaluated the options put forward by Driscoll (2007) about the future of CS may be less relevant.

Option 1: Do nothing, continue as we are, persevering with the slow uptake, increase the amount of training and wait and see.

Option 2: Abandon the idea of CS and dismantle the existing infrastructure.

Option 3: Make CS compulsory; insist that CS is so good that it should be made mandatory.

The options offered are logical but are they fully representative, taking into account future developments?

### **Option 1: Do nothing**

How long do you wait and see? CS was introduced into mainstream nursing more than 20 years ago and there is a substantial body of literature in nursing which not only identifies the obstacles and barriers, but also extols the benefits of CS. Yet CS is clearly not an established part of the culture of nursing at an individual practitioner or organisational level. If it were, then maybe there would not be the need to find ways of improving access (although it is always important to look for ways of doing things better). CS is still, for many, an aspiration. If it were common place practice, then it might not be seen as a luxury or a choice (Sams 1996, Cairns 1998, Cole 2002, Kell and McSherry 2002, Jones and Anderson 2004). Back in 1996, Butterworth et al highlighted what was needed to be done in order to introduce CS successfully into an organisation. They stated that employers needed to commit to the process at every level to enable staff to participate in CS and attend training sessions; they needed to allocate resources including a budget, personnel and time, and develop evaluation mechanisms that could be used to influence practice (Butterworth et al 1996). All these commitments are equally necessary today but, unlike in 1996, CS today has the opportunity to be on any boardroom agenda as part of the clinical governance framework (Bishop 2011). Organisations have a responsibility to provide access to CS (DH 2007 / 2011), yet often for many, not enough resources are made available to enable a strategic aim to be fully realised, as is the case with the PCT involved in this research. So, I believe the first option to wait and see achieves very little and this has been the position for too long. CS needs to be championed once again as it was in the 1990s and embraced by those with the authority, resources and power as well as by the practitioners themselves, so that a sustained understanding can be established for all.

### **Option 2: Abandon the idea of clinical supervision**

Deciding not to continue with CS is an understandable position. Why continue to invest in something that is so difficult to achieve when there are alternatives available? Caseload management, counselling, mentorship, preceptorship and informal support mechanisms - peer-to-peer support, having a chat, off-the-cuff corridor discussions - all occur anyway. However, evaluation studies have demonstrated that CS can be beneficial to some extent, not only to those giving and receiving it, but also to

recipients of care as well as to the employer (Butterworth et al 1997, Winstanley 2000, Sellars 2004, White and Roche 2006). It would seem, however, that the perceived 'holy grail' of evidence demonstrating a generalisable set of causal relationships between CS, the quality of service provision and patient outcomes, still remains elusive. The findings from possibly one of the most impressive studies in recent times, though, have demonstrated that CS can be efficacious, if it valued, supported and resourced appropriately (White and Winstanley 2010). So, on balance, it would seem illogical to give up on CS just because there are many obstacles and barriers, especially now as the body of evidence on CS is becoming established and a better understanding of how to address some of the issues and problems is becoming available.

### **Option 3: Make clinical supervision compulsory**

Making CS compulsory would signal the organisation's commitment to the process, but without the necessary supporting resources, it could be seen as divisive or just a tick box exercise. If mandatory enforcement resulted in a prescriptive, management-orientated model of CS, it would be in danger of becoming a bureaucratic system of administration and audit. For many this would also undermine the concept (Stevenson 2010). Alternatively, legitimising CS as a statutory aspect of practice in policy might give staff a legitimate voice to argue for adequate resources, although given the current and perceived reduction in resources, this argument seems somewhat idealistic.

The counter position is that in other disciplines, for example Psychology, where CS or its equivalent is mandatory, this personal time of reflection and development is highly regarded and protected. It would seem that this type of personal support is an expected part of the way some disciplines function; in nursing it would seem that for many it is still being added into practice!

In response to Driscoll's (2007) three positions cited above, I suggest that there is a fourth option: to continue developing and disseminating research about CS and use the findings to address some of the fundamental problems - access being one. When this is supported in practice by quality assurance frameworks - in other words, when it

becomes fully part of the clinical governance framework as advocated by Bishop (2011) - then it will have the political muscle it lacks at present and will be better positioned to achieve its purpose.

### **8.5 Looking back at the journey**

How have my personal theories of practise changed as a result of undertaking this journey of discovery? This I consider more pertinent a question than just have my theories changed? As a community nurse, undertaking this research has allowed me to develop a more informed understanding of CS. Listening to other peoples' views has enabled me to appreciate that CS is a very personal experience that is valued and yet is very fragile and as such, if it is to go online, needs a robust infrastructure to support it. Furthermore, I have come to appreciate that CS means different things to different people and as such a universal definition may not be required as this could inhibit and constrain access. I think over the period of this project I have become a better supervisor by having a far deeper understanding of the role of both the supervisor and supervisee, especially when it comes to appreciating the significance of planned protected time for undertaking CS.

As an educationalist, I once again consider that as a result of undertaking this project my teaching is significantly more informed. Not so much about the principles of CS but because I have renewed optimism about the role I can play in assisting individuals to engage in CS. The resources I can now utilise and share as a result of the wider reading and discussions about CS will hopefully empower others to campaign for CS to become an established part of their practice.

As a researcher, this experience has affirmed my belief that inquiries into healthcare need not always be about proving the existence of something or about control of variables. Connecting with people and being involved with them in developing a solution to a problem affecting them, through systematic and robust processes, is significant and meaningful in its own right.

### **8.5.1 Access to clinical supervision**

Deciding to investigate how access to CS could be improved for community nurses in this PCT was a very large and complex task and one that this research study has attempted to do. CS has been the subject of many previous studies, notably Butterworth et al (1992), Butterworth et al (1997) in the 1990s, which achieved considerable success in raising the profile of CS and developing the body of knowledge both nationally and internationally. Other key authors who have explained and expanded the debate around CS in nursing include Proctor (1986), Fowler (1996), Bond and Holland (1998), Bishop (1998a/b), Yegdich (1999), Ooijen (2000), Jenkins et al (2000), Teasedale (2000), Hyrkās et al (2001), Gilmore (2001), Teasedale et al (2001), Winstanley and White (2003), Jones and Anderson (2004), Driscoll (2007), Miline (2009) to name but a few. However, it is also noticeable that the theoretical development of CS in nursing has taken place amidst the push and pull of internal and external political drivers, particularly from the Department of Health. Successive government policy initiatives have caused NHS employers to look at the support processes in place to maintain patient safety and focus on improving quality (DH 1998a/b / 1999 / 2000 / 2006). Ultimately for any government, one would have thought the aim would be to provide healthcare fit for the 21st century delivered by a dedicated professional workforce. CS has clearly been part of the agenda to improve standards and reduce litigation in the NHS with it being identified as a required quality indicator by the Healthcare Commission for several successive years (DH 2007) and by the NHS LA (2011). As yet there is no reason to suspect that this will not be the same for the new coalition government, although there is a clear drive to reduce costs (DH 2010). So, despite the current political uncertainty about what will be regarded as beneficial and what as an unnecessary cost, the fact remains that access to credible and sustainable support mechanisms for staff, such as CS, will continue to be a pressing need. With the likelihood of service fragmentation of the NHS as a result of local commissioning coupled with the move towards social enterprises and increased competition (BMA 2011), it is possible that the need for accessible CS will be even greater.

An initial challenge at the start of this research was to understand whether the locally reported picture (Stimuli 1-3, Chapters 1 and 3) was representative of the national picture, given the potential application of the research. Not surprisingly, the outcome

of the literature review confirmed the situation that access to CS is a general problem and not just a local phenomenon. The widespread and enduring obstacles and barriers, proved to be a relevant platform to support the idea of exploring and developing an alternative solution to the entrenched problem of access. No claims of a universal solution are being made, but the findings - an understanding of user requirements for an online system of CS - could be useful to many others. It is not possible at present to determine how useful the system would be as it has not yet been built or proof of concept established, other than theoretically in this thesis.

In the PCT which collaborated with the research, the issue of access for community nurses is an enduring one, but one which the PCT say they wish to try to resolve. As described in the early chapters, the PCT has been keen to support this investigation and has been open to the idea of tackling their problem utilising their own expertise and resources where possible. Developing a website for CS is a reasonably radical idea (yet extremely pragmatic) that departs from the normal suggestions to improve access as discussed in the options appraisal in Chapter 3. It is radical in the sense that it takes such a confidential, interpersonal process, which is normally conducted face-to face, and suggests that access could be improved by conducting CS in a virtual environment. Recent discussions with the PCT have resulted in an agreement to resource the building of a prototype website, subject to agreeing terms and conditions. In the words of the Associate Director for Organisational Development: "it's a bit of a no brainer really. Given the organisational constraints, the use of technology this way has to be the way forward". The PCT also wish to explore the possibility of applying the principle of online support to two alternative support strategies, preceptorship and a management support system.

The journey to improve access to CS in this thesis has involved two other major elements: the underpinning action research approach adopted and the theoretical frameworks adopted to guide the software development.

### **8.5.2 Action research**

A steep learning curve for me has been the need to gain an in-depth understanding of the research process and the method of organisation. The presentation of this thesis reflects the nature of action research where the approach itself can be as individual

as the problem under investigation or the style of report writing adopted (McNiff and Whitehead 2009).

Possibly the most challenging, yet rewarding, experience for me has been the freedom to think and act, which accompanies this level of endeavour. This is especially true of working through the action research process, from designing the overall framework of the project (the three stages) as well as the inner framework (the activity phases) to developing a continuous iterative, cyclical process of data collection and analysis.

As regards writing up the research, the key challenge has been deciding what order to do things in and how to present them. This problem has been made more difficult as some activities occurred simultaneously. A decision taken early on was to write the research up in the stages as they occurred. Adopting this approach mirrored more closely the order in which data were collected and analysed, with each stage producing its own set of findings, which in the main were discussed in that chapter. However, choosing to present the research in such a way has resulted in there being no overall findings or discussion chapter. The advantage of this is that hopefully the reader gets a more coherent impression of not only the theoretical structuring inherent in the research design, but also an appreciation of the pace and dynamic nature of this approach to research. The disadvantage is that the reader is required to remember what was covered in each stage or section. In order to overcome this, the overall findings are presented in Appendix 15 as the outline design specification document; this contextualises them in relation to functionality and appearance. In addition, some basic user journeys are presented to aid understanding.

Adopting Holter and Schwartz-Barcott's (1993) technical-collaborative approach was again a departure from the mainstream approach to action research, where normally the problem emerges from within the community it affects. Bringing a problem to a community to solve was both logical, because the problem was one that affected them, and purposeful, because it fitted the approach adopted for the requirements analysis to determine user preferences as discussed in Chapters 1, 2 and 3.

### **8.5.3 In the thick of it**

Working with the PCT personnel and the focus groups was possibly the most enjoyable part of the research. Listening to people debating and discussing ideas, being enthusiastic about making suggestions and being with them as their efforts transformed - abstract to the concrete - into a possible solution, was at times humbling and a privilege. Working with the groups was also, possibly, one of the most complex and tiring aspects of the research. Repeating the activities sometimes three times in a week whilst maintaining objectivity was very challenging and exhausting at times, as I knew I only had one shot at it. So to assist me I devised a set plan for each session, not so much to control the focus groups or inhibit them, but as a means of ensuring consistency. During the weeks that I facilitated the focus groups, I also reduced my workload as a way of dealing with fatigue.

Personally, I was always conscious of my ethical responsibility as a researcher and I was keen to do my best, knowing I was a novice in the field. The pressure of dealing with the responsibility was made easier by having a supervisor who was supportive yet challenging. I had times of doubt, mainly about whether I had enough experience and knowledge to see the project through. I had never undertaken action research before, let alone designed an online environment, but I have many years of experience of being a community nurse and I am passionate about CS. Having to articulate my thoughts and translate them into a doable project was very challenging as well as rewarding. But I suppose this is what action research is all about: enabling others, being involved, taking responsibility, encouraging creativity, being brave enough to stand back and see where it goes, allowing the solution to emerge from the efforts of others - scary but exciting!

### **8.5.4 Software development**

Up until this project my involvement in the use of technology was as an end-user or enabler; most definitely not as a first-stage designer. Recognising that I had a significant deficit in my knowledge, I undertook two modules in the School of Education as part of the taught doctoral programme: 'the use of multimedia and technology in teaching and learning' and 'computer-based teaching and learning'. Together, these two modules gave me a valuable insight into the potential use of technology and application for CS. They did not, however, teach me how to design a

website. For this I sought the council of expert opinion (Dr Craig Saunders) and undertook a great deal of self-directed experiential learning.

The theoretical frameworks adopted and discussed in Chapter 4, proved to be very reliable tools. They may have been simplistic but they are tried and tested approaches to software design. Being a complete novice in the field, they also proved to be very effective. Since I started this research project, the knowledge base concerning website design has moved on considerably and considering the speed of change it is an area of computer science that you need to be constantly immersed in to keep up with. But it was never an intention that an outcome of this research would be that I would become a website designer. My role was to be able to facilitate the potential users and clients of the system to be able to express their preferences for an online environment for CS. This did require me to be able to understand the principles of website design and the various stages of the design and build process, but not at the level of a professional web designer. It was critical, however, that I had an in-depth understanding of the research process and that I could relate to the situational nature or community nursing context of the research. Furthermore, it was crucial that I had an in-depth knowledge of the subject of CS and experience in undertaking it so that I could guide the process and demonstrate credibility to the participants. This was a constant learning curve and challenge, but one which I enjoyed.

#### **8.5.5 Coming to the end of the cycle**

With hindsight I would possibly have done some things differently. In the beginning I would have liked to have had the confidence to have a more open framework in which participants could have exercised more choice about what should have been discussed in the focus groups. I also would have spent more time on appraising options, as to why undertaking CS online might be a feasible idea. Due to my inexperience as a researcher and my lack of familiarity with the process of software development, this might have been counterproductive, though. Instead, participants were just asked to address questions which were needed to formulate the design and build criteria.

On reflection, as discussed in Chapter 3, I would have also liked to have had a fourth set of focus group meetings to assess the finished product. Even better would have been to mock up a prototype for the participants to test.

One of the low points on this long journey was having to undertake a second trawl to recruit enough participants for the focus groups. The thought that not enough people out there shared the vision was a sobering thought. In the end though, I believe there was a shared sense of achievement at the last set of focus group meetings, with many participants expressing their excitement about the possibility of the future development of the online environment for CS.

## **8.6 What next?**

With reference to Schach's (1999) software development life cycle, the next stage is to actually build the product, then test it and finally commission it. This will involve working closely with the findings presented in the specification document (Appendix 15) and consulting with the client's Information Technology department to ensure that safety and security issues are addressed and that the virtual environment does not represent any interoperability issues.

Since I started this project, the accessibility and sourcing of software has significantly advanced with the current drive being towards what is commonly referred to as 'cloud technology'. Cloud technology is a complex technical term relating to the structuring and organisation of software, but here the term is used to explain how consumers can access software products remotely. The computing world is rapidly changing towards this large scale delivery of technology for millions to consume as if it were as a service like gas or electricity. According to Rajkumar Buyya et al (2009), computing is being considered by some as the fifth utility where users access services based on their requirements without regard to where the services are hosted or how they are delivered. An example of this is Microsoft Office 365 (2011), which allows small and medium organisations to access a totally integrated multimedia and business platform (a remotely operated intranet) in any way, from anywhere, whenever they want for a per-user monthly subscription. The platform can be configured in many different ways, depending on what its purpose is. This degree of customisation combined with assured compatibility and money back guarantees regarding reliability and uptime,

makes it an ideal platform from which to build a virtual environment in which CS could be undertaken. Alternatively a more traditional approach of writing and developing the software could be pursued, which would also require additional hardware such as a server to be purchased, housed and maintained. Regardless of whichever approach is adopted to build the virtual environment, it will be necessary to interpret the research finding and translate them into a product.

The reporting of the research process of this project and the findings has been in the form of detailed factual and functional information. Ironically, these sterile knowledge composites, when combined and used for a purpose, are anything but inert. Developing a highly structured environment is intended to facilitate a fluid and open forum for CS, support and development.

Over the last six months I have been in discussions with a local PCT who wish to support the next stage of development of this research: establishing proof of concept by piloting a virtual environment for CS. They have allocated a budget of £10,000 and identified key personnel and IT expertise to assist with building the CS environment. Additionally, I have presented the concept to the Wessex Health Innovation Educational Cluster (WHIEC) who recognise the potential of this innovation and have identified a project manager to work with the PCT and the University to assist with the pilot work necessary to achieve proof of concept.

The last piece of the jigsaw is to agree the terms and conditions of a formal partnership agreement through the University's research and innovation service with the PCT and the WHIEC. No fixed timeframe has been established yet, but it is anticipated that a virtual environment could be up and running within a year. Establishing if access to CS has been improved, through the development of a virtual environment could then be determined.

# **Appendix 1**

## **LETTER OF ETHICAL APPROVAL**



## National Research Ethics Service

STA

### SOUTHAMPTON & SOUTH WEST HAMPSHIRE RESEARCH ETHICS COMMITTEE (A)

1<sup>ST</sup> Floor, Regents Park Surgery  
Park Street, Shirley  
Southampton  
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SO16 4RJ

Tel: 023 8036 2466  
023 8036 3462  
Fax: 023 8036 4110

Email: scsha.SWHRECA@nhs.net

**Full title of study:** Developing an On-Line System for Clinical Supervision:

What are the Requirements?

**REC reference number:** 08/H0502/31

Thank you for your letter of 06 June 2008, responding to the Committee's request for further information on the above research and submitting revised documentation, subject to the conditions specified below.

The further information has been considered on behalf of the Committee by the Chair.

#### Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

#### Ethical review of research sites

The Committee has designated this study as exempt from site-specific assessment (SSA). There is no requirement for other Local Research Ethics Committees to be informed or for site-specific assessment to be carried out at each site.

#### Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission at NHS sites ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission is available in the Integrated Research Application System or at <http://www.rforum.nhs.uk>.

This Research Ethics Committee is an advisory committee to South Central Strategic Health Authority

*The National Research Ethics Service (NRES) represents the NRES Directorate within  
the National Patient Safety Agency and Research Ethics Committees in England*

### Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
Application		31 January 2008
Investigator CV		05 February 2008
Protocol	3	10 April 2008
Covering Letter		
Summary/Synopsis	2	01 December 2007
Letter from Sponsor		11 February 2008
Peer Review		07 January 2008
Compensation Arrangements		07 February 2008
Questionnaire: Short Evaluation	2	01 December 2007
Participant Information Sheet	3	10 April 2008
Participant Consent Form	4	06 June 2008
Response to Request for Further Information		10 April 2008
Response to Request for Further Information		06 June 2008
		16 January 2007
Follow-up E-mail	4	06 June 2008
Group SWOT Analysis	2	04 February 2008
Attachment to e-mail: Participant Form 1	2	23 February 2008
Sample e-mail to PCT staff Group 3	2	
Sample e-mail to Community Nursing Staff	2	03 February 2008
Brief overview of the study	2	03 February 2008
E-mail attachment	3	10 April 2008

### Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

### After ethical review

Now that you have completed the application process please visit the National Research Ethics Website > After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments

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the National Patient Safety Agency and Research Ethics Committees in England*

- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

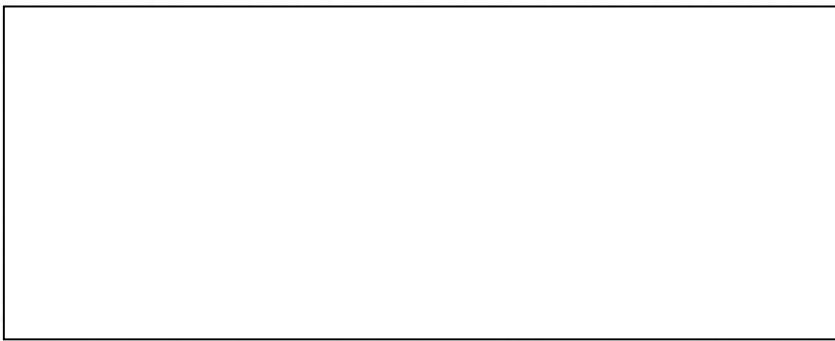
We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email [referencegroup@nres.npsa.nhs.uk](mailto:referencegroup@nres.npsa.nhs.uk).

08/H0502/31

**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project

Yours sincerely



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## **Appendix 2**

### **GROUP SWOT ANALYSIS**

*(Original document)*

**Group SWOT Analysis**  
**04/02/2008**

**Strengths**

As a group, please record what you consider to be the strengths of the specification generated for the online system for clinical supervision.

**Weaknesses**

As a group, please record what you consider to be the weaknesses of the specification generated for the online system for clinical supervision.

**Opportunities**

As a group, please state what opportunities you consider the online system for clinical supervision presents.

**Threats**

As a group, please state what threats in your opinion are posed by the online system for clinical supervision.

## **Appendix 3**

### **SELF COMPLETION QUESTIONNAIRE**

*(Original document)*

**A Self Evaluation**  
**01/12/2007**

**Introduction**

Please complete the following questionnaire about your experiences of participating in this research project. You will be asked about the process of the study and your opportunity to contribute. Please answer them as honestly as you can.

Thank you, once again, for all your hard work and commitment to the group work.

**Principles of Action Research**

“Democracy – this means it is participatory; all stakeholders or individuals involved in the issues or problem should be involved in its resolution and in the research process.

Equity – this means that all participants involved are equally valued in the research process.

Liberation – suggests that action research is a design that is aimed at decreasing oppression, exclusion and/or discrimination.

Life enhancement - positions action research as a systematic strategy that promotes growth, development and fulfilment.”

(Depoy and Gitlin 2005, p114)

**Evaluation Questionnaire****Group Number**

Please answer all of the following questions. Thank you.

**Democracy**

1. Were you invited to take part in all aspects of the group work?

Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree

**Equity**

2. Were you able to participate as an equal in your group

Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree

**Liberation**

3. Did this approach to research allow you to have a legitimate voice in the organisation?

Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree

**Life Enhancement**

4. Has being involved in this research project had a positive impact on you?

Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree



## **Appendix 4**

### **LITERATURE REVIEW**

## **Literature Review**

The words 'clinical supervision' and the author Tony Butterworth are synonymous. Out of the hundreds of papers in the nursing literature written on or in some way connected with CS, a significant number refer to Butterworth or Butterworth *et al.*

In the early 1990s the main writers were Butterworth T and Faugier J. By the mid 1990s until today, there were numerous writers on the subject, notably Bishop V, Carson J, Jecock J, Clements A, White A and Edwards C. Other significant authors include Winstanley J, Teasdale K, Proctor S, Palsson M, Hyrkās K, Bond M, Holland S, Cutcliffe R, Kohner N J, Driscoll J, Gilmore A as well as Rafferty M, Sloan G and Yegdich T. All these authors have written a considerable amount about CS and for many different audiences. From general reading what became apparent was the importance of the literature that focused on evaluating CS.

At this stage, I adopted an incremental discover approach, following leads, identifying authors, themes, issues etc. The evaluative studies and reports provided insights necessary to identify problems associated with access to CS. Adopting a discovery approach allowed me to start to identify content that would inform my understanding of the nature of the problem as well as its scope and impact.

When looking for articles or following leads on CS, the main problem was the vast quantities of data available. In addition was the problem of confusion of overlapping and interchangeable use of terminology. (The problem of definition, incidentally, is an access issue.)

CS attracted a lot of attention in the 1990s and continues to do so today. I scanned the literature to get a broad sense of who the main authors were and what other research had been conducted. In addition to journal articles and reports, I identified books and videos either from recommendations or previous knowledge of the subject.

After reaching a point of saturation - when the same authors, reports and articles kept emerging with nothing much new of note - I decided to cross reference my discoveries with some specific searches using databases such as CINHAL, MEDLINE, BNI, PUM MED and the Kings Fund.

The purpose was to identify any significant additional literature. Search terms included CS with evaluation studies, research, obstacles and barriers, implementation, benefits, outcomes and access. In order to get a comprehensive understanding of the literature, no specific exclusion criteria, except initially by date 1997 to 2007, were applied to the searches.

## **Processing the literature**

After identifying duplication from the various databases, 70 papers were identified as being significant. All abstracts were read. 57 papers were selected on the basis of the relevance of the theme and the standing of the author. Subsequently, papers were then categorised, according to broad content areas which emerged from the papers, into the following four groups:

- A. Negative issues associated with access to CS
- B. Positive issues associated with access to CS
- C. Evaluation studies or papers relating to CS
- D. Implementation issues associated with CS

Papers from category B have been used in a broader way to inform the study. They were not put through the process of deduction and further categorisation as they were not considered to represent problems associated with access to CS.

The next stage of reduction involved the content of each paper being read. This deductive strategy resulted in more detailed themes being identified; in total some 18 different themes were noted. It became apparent that the themes could be re-categorised into two broader levels: organisational or individual. This distinction was to prove to be significant for the website development as the focus groups were configured to represent the organisation (client) and individual supervisees and supervisors (users). The following tables show that many of the themes that emerged were relevant on both levels.

## Organisational Responsibilities

Themes	A: Negative	C: Evaluation D: Implementation
Viewed as a luxury	A7 A8, A9, A10, A19, A20	C6, C9, C10, D1
Misunderstanding - management control, performance measure	A1,A2, A5, A8, A12, A15, A19	C3, C4, C7, C9, C12, D1, D3, D4, D8
Lack of endorsement - culture, policy, emphasis	A1, A2, A3, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A16, A19	C2, C3, C9, C17, D3, D8
Lack of choice - mandatory schemes, mode, time, supervisor, environment	A1, A3, A5, A8, A15, A16, A17, A20	C6, C7, C9, C17
Lack of resources & funding - accommodation, supervisors (quantity & quality), voluntary, networks, geography	A1, A3, A5, A6 ,A7, A8, A9, A10, A12, A13, A14, A15, A16, A17, A19, A20	C2, C3, C6 ,C7, C9, C12, C17, D4
Lack of time - competing priorities, workload	A1,A2, , A3, A5, A6, A7, A8, A9, A12, A13, A16, A17, A19	C3,C4 ,C5, C6, C9, D1, D9
Issues of knowledge & training	A1, A3, A5, A7, A8, A12, A13 , A14, A15, A16, A19, A20	C2, C3, C4, C5, C7, C9, C12, C17, D3,D4
The problem of definition	A1, A3, A5, A6, A7, A8, A12, A15 , A16, A18, A19	C3, C4, C9, C12, D4, D8
Lack of evidence to effectiveness	A5, A6, A7, A9, A19, A20	C3, C9, C12
Undertaking CS in own time	A1, A8, A11, A12	C9
Negativity spread via grapevine-ineffective CS, inadequate supervisor skills	A8	

## Individual Issues

Themes	A: Negative	C: Evaluation D: Implementation
Viewed as a luxury or optional extra	A1, A6, A8	C9
Misunderstanding - management control, performance measure, mistrust	A1, A5, A8 ,A9, A12, A14, A15, A19	C3, C4, C7, C9, C12, D4, D8
Undertaking CS in own time	A1, A8, A11, A12	C9
Negativity spread via grapevine ineffective CS, inadequate supervisor skills	A8	
Ineffective supervisory relationship	A8, A3, A12, A13, A15, A16, A18	C3, C4, C7
Lack of time competing priorities, workload	A1, A2, A3, A6, A7,A8, A9,A11, A12, A13, A16, A19	C3, C4, C6, C9 , D9
Lack of knowledge	A1, A5,A8, A14, A15 ,A16 , A19	C2, C3, C6, C7, C9, C17, D3,D4
Lack of perceived value	A1, A2, A3, A5, A6, A7 A8 .A9	C2, C3, C4, C9, C12, D4, D8
Lack of trust - regarded with suspicion	A1, A3, A5, A12 A13, A14, A16 ,A18	C4, C7, C9, C12, D8
Lack of interest or commitment	A1, A9, A12 , A13, A14, A15	C3, C7, C9, C12, D5, D8
Need not recognised - consider it is already happening	A2, A3, A5, A9	C4, C9, D5
Consequences of disclosure	A1, A3, A5, A12, A13, A14, A15, A18, A19	C3, C7, C12
A way of attributing blame	A1, A3, A13, A14	
The problem of definition	A1, A3, A5, A6 ,A8, A12, A14, A15, A16, A19	C3, C4 ,C9, C12, D4, D8

A6	Barriball, L., While, A., & Munch, U. (2004) An audit of CS in primary care, British Journal of Community Nursing, vol. 9, no. 9, pp. 389-397.
D2	Bartle, J. (2000) CS it's place within the quality agenda, Nursing Management, vol. 7, no. 5, pp. 30-33.
A2	Brearley, K. (2005) Appreciating the benefits of effective CS, Nursing Times, vol. 101, no. 10, p. 39.
A1	Bush, T. (2005) Overcoming the barriers to effective CS, Nursing Times, vol. 101, no. 2, pp. 38-41.
A19	Cairns, J. (1998) CS and the practice nurse, Journal of Community Nursing, vol. 12, no. 9, pp. 20-25.
C2	Carney, S. (2005) CS in a challenging behaviour unit, Nursing times Research, vol. 101, no. 47, pp. 32-34.
C9	Cheater, F. M. & Hale, C. (2001) An evaluation of a local CS scheme for practice nurses, Journal of Clinical Nursing, vol. 10, pp. 119-131.
A3	Cleary, M. & Freeman, A. (2005) The cultural realities of CS in an acute inpatient mental health setting, Issues in Mental Health Nursing, vol. 26, pp. 489-505.
D4	Clifton, E. (2002) Implementing CS, Nursing Times, vol. 98, no. 9, pp. 36-37.
A9	Cole, A. (2002) Someone to watch over you, Nursing Times, vol. 98, no. 23, pp. 22-32.
A18	Cutcliffe, J. R., Epling, M., Cassedy, P., McGregor, J., Plant, N., & Butterworth, T. (1998) Ethical dilemmas in CS, British Journal Of Nursing, vol. 7, no. 15, pp. 920-923.
A14	Dixion, A. & Bramwell, R. (2001) Neonatal nurses' attitudes to CS, Journal of Neonatal Nursing, vol. 7, no. 1, pp. 20-24.
C17	Draper, B., Koukos, C., Flectcher, P., Whitehead, A., Reynolds, F., Coleman, M., & Rafferty, M. (1999) Evaluating an initiative: CS in a community health trust, British Journal of Community Nursing, vol. 4, no. 10, pp. 525-530.
C18	Dudley, M. & Butterworth, T. (1994) The cost and some benefits of CS: An Initial Exploration, The International Journal of Psychiatric Nursing Research, vol. 1, no. 2, pp. 34-40.

A5	Edwards, D., Cooper, L., Burnard, P., Hanningan, B., Adams, J., Forthergill, A. & Coyle, D. (2005) Factors influencing the effectiveness of CS, <i>Journal of Psychiatric and Mental Health Nursing</i> , 12, pp. 405-414.
C8	Hyrkās, K. & Paunonen - Ilmonen, M. (2001) Cost - benefit analysis of team supervision: the development of an innovative model and its application as a case study in one Finish university hospital, <i>Journal of Nursing Management</i> , vol. 9, pp. 259-268.
C13	Hyrkās, K. & Paunonen - Ilmonen, M. (2001) The effect of CS on the quality of care: examining the results of team supervision, <i>Nursing and Health Care Management</i> , vol. 33, no. 4, pp. 492-502.
A16	Jenkins, E., Rafferty, M., & Parke, S. (2000) CS: What is Going on in West Wales? Results of a telephone survey, <i>Nursing times Research</i> , vol. 5, no. 1, pp. 21-36.
A15	Jones, A. (2001) Possible influences on CS, <i>Nursing Standard</i> , vol. 16, no. 1, pp. 38-42.
C7	Jones, A. (2001) The Influence of professional roles on CS, <i>Nursing Standard</i> , vol. 15, no. 33, pp. 42-45.
A7	Jones, D. B. & Anderson, L. S. (2004) The Status of CS in Therapeutic Recreation: A National Study, <i>Therapeutic Recreation Journal</i> , vol. 38, no. 4, pp. 329-347.
A10	Kell, J. & McSherry R. (2002) Editorial Clinical Supervision, <i>Nursing Times</i> , vol. 98, no. 23.
C5	Landmark, B. T. H., Hansen, G. T., Bjones, I., & Bohler, A. (2003) CS - factors defined by nurses as influential upon the development of competence and skills in supervision, <i>Journal of Clinical Nursing</i> , vol. 12, pp. 834-841.
C15	Lees, C. (1999) CS an initial evaluation, <i>Journal of community Nursing</i> , vol. 13, no. 16, pp. 14-16.
A13	Lucas, S. (2000) Implementation Problems, <i>Nursing Times</i> , vol. 96, no. 11, pp. 49-52.
D2	May, L. (2003) Support Systems, <i>Nursing Management</i> , vol. 9, no. 10, p. 34.
D9	McKeown, C. & Thompson, J. (2001) Implementing CS, <i>Nursing Management</i> , vol. 8, no. 6, pp. 10-13.

A11	McSherry, R., Kelly, J., & Pearce, P. (2002) CS and clinical governance, <i>Nursing Times</i> , vol. 98, no. 23, pp. 30-32.
C14	Milne, D. & Oliver, V. (2000) Flexible formats of CS: Description, evaluation, and implementation, <i>Journal of Mental Health</i> , vol. 9, no. 3, pp. 291-303.
A12	O'Riordan, B. (2002) Why nurses choose not to undertake CS the findings from one ICU, <i>Nursing in Critical Care</i> , vol. 7, no. 2, pp. 59-66.
A20	Sams, D. (1996) CS: an oasis for practice, <i>British Journal of Community Nursing</i> , vol. 1, no. 2, pp. 87-91.
C3	Sellars, J. (2004) Learning from contemporary practice :an exploration of CS in physiotherapy, <i>Learning in Health and Social Care</i> , vol. 3, no. 2, pp. 64-82.
D6	Sloan, G. (2002) CS models for nursing: structure, research and limitations, <i>Nursing Standard</i> , vol. 17, no. 4, pp. 41-46.
C7	Sloan, G. (2005) CS: beginning the supervisory relationship, <i>British Journal Of Nursing</i> , vol. 14, no. 17, pp. 918-923.
D1	Sloan, G. & Watson, H. (2002) CS models for nursing: structure, research and limitations, <i>Nursing Standard</i> , vol. 17, no. 4, pp. 41-45.
D5	Spence, C., Cantrell, J., Christie, I. & Samet, W. (2002) A collaborative approach to the implementation of CS, <i>Journal of Nursing Management</i> , vol. 10, pp. 65-74.
A17	Teasdale, K. (2000) Practical approaches to CS, <i>Professional Nurse</i> , vol. 15, no. 9, pp. 579-582.
C10	Teasdale, K., Brocklehurst, N., & Thom, N. (2001) CS and support for nurses: an evaluation study, <i>Nursing and Health Care Management</i> , vol. 33, no. 2, pp. 216-224.
C1	Tveiten, S. (2005) Evaluation of the concept of supervision related to public health nurses in Norway), <i>Journal of Nursing Management</i> , vol. 13, pp. 13-21.
D8	Weaver, M. (2001) Introducing CS, <i>British Journal of Podiatry</i> , vol. 4, no. 4, pp. 134-143.
C6	Willson, L., Fawcett, N. T., & Whyte, D. (2000) An evaluation of a CS programme, <i>British Journal of Community Nursing</i> , vol. 6, no. 12, pp. 614-623.
C12	Winstanley, J. & White, E. (2003) CS: models, measures and best practice, <i>Nurse Researcher</i> , vol. 10, no. 4, pp. 7-38.

## Emergent Themes from Literature Review: Organisational Responsibilities

Total number of papers reviewed: 57

**Associated with the problem of definition**

**Associated with the problem of time**

Emergent Themes - Organisational Responsibilities	No. of occurrences in literature
1. Viewed as a luxury	10
2. Misunderstanding management control, performance measure	16
3. Lack of organisational endorsement culture, policy, emphasis	21
4. Lack of choice mandatory schemes, mode, time, supervisor, environment	12
5. Lack of resources & funding accommodation, supervisors, voluntary, networks, geography	24
6. Lack of time competing priorities, workload	20
7. Issues of knowledge & training	23
8. The problem of definition	17
9. Lack of evidence to effectiveness	9
10. Undertaking CS in own time	5
11. Negativity spread via grapevine ineffective CS, inadequate supervisor skills	1

## Emergent Themes from Literature Review: Individual Issues

Total number of papers reviewed: 57

**Associated with the problem of definition**

**Associated with the problem of time**

Emergent Themes - Individual Issues	No. of occurrences in literature
1. Viewed as a luxury or optional extra	4
2. Misunderstanding management control, performance measure, mistrust	15
3. Undertaking CS in own time	5
4. Negativity spread via grapevine ineffective CS, inadequate supervisor skills	1
5. Ineffective supervisory relationship	10
6. Lack of time competing priorities, workload	16
7. Lack of knowledge	15
8. Lack of perceived value	9
9. Lack of trust regarded with suspicion	13
10. Lack of interest or commitment	12
11. Need not recognised consider it to be already happening	7
12. Consequences of disclosure	12
13. A way of attributing blame	4
14. The problem of definition	16

## **Appendix 5**

### **OVERVIEW OF THE STUDY: ETHICAL APPROVAL DOCUMENT**

*(Original document)*

An Action Research Project Proposal  
Online Clinical Supervision  
University of Southampton

**Brief overview of the study**  
**03/02/2008**

**Developing an Online System for Clinical Supervision:  
What are the Requirements?**

Mark Rawlinson  
Doctorate in Clinical Practice Programme  
Faculty Graduate School (Health Sciences)  
Research Training Programme  
HE5

# Brief Overview

## Research Proposal

This is an action research project that uses a requirements analysis to determine the design specification for an online system of clinical supervision for community nurses.

## Definition

“Clinical supervision is a designated interaction between two or more practitioners within a safe/supportive environment, which enables a continuum of reflective, critical analysis of care to ensure quality patient service” (Bishop 1998, p8).

## Summary

This research study will be conducted with community nurses and other NHS staff from one Primary Healthcare Trust (PCT) in the South of England using action research to identify their requirements for an online system for clinical supervision. The design specification will be generated through the application of principles of software systems development and design, notably phase 1: conceptualisation and phase 2: specification generation, of the software life cycle model proffered by Schach (1999).

According to the UKCC (1996) and NMC (2004), all nurses have a right to participate in clinical supervision. More recently, the Healthcare Commission (DOH 2005) has stated that health care staff should be supported through clinical supervision. However, the literature review and local intelligence suggests that nurses continue to face many obstacles and barriers when it comes to undertaking and facilitating clinical supervision despite previous investment by the PCT. This indicates that existing systems are inadequate and an alternative approach is needed. This proposal is about the development of one such alternative: an online system for clinical supervision.

The proposed action research will focus on the needs of community nurses as a discreet, identifiable group, although it is anticipated that the findings may well be applicable to many other staff groups. The dispersed model of care delivery adopted in community nursing often means that community nurses not only deliver care in an isolated fashion as lone workers but are also managed and supported remotely. Combined with an establishment pattern that relies heavily on part-time and fractional working, the opportunities to undertake and facilitate clinical supervision can be significantly limited.

Clinical supervision being conducted online has the potential to address many of the reported barriers and obstacles; for example, negating the need for supervisees and supervisors having to be in the same place at the same time in order to undertake clinical supervision. Other benefits:

#### **For patient and client care**

Facilitating an environment that challenges and stimulates the exploration of practice has the potential to improve standards of care.

#### **For the nurse**

Having the opportunity to critically reflect on their practice would emphasise the importance of professional accountability.

#### **For the employer**

Improving access will enable them to progress to meeting Healthcare Commission Standards (2005) relating to the clinical supervision of staff.

Action research using focus groups has been chosen because it is an approach that means that the participants (supervisees, supervisors and other key PCT staff) can be the designers of the system that they could use. This inclusive approach, based on user and client requirements, has the potential to avoid the old cliché that strikes dread into the heart of software developers: "I know this is what I asked for, but it isn't really what I wanted" (Schach 1999, p69).

### **References**

Bishop, V. (1998) *Clinical Supervision in Practice: Some questions, answers and guidelines*. Basingstoke, MacMillan Press Ltd.

Department of Health (2005) *Standards for Better Health: The Health Care Commission*. The Stationery Office, London.

NMC (2004) *Clinical supervision*. Available at: [www.nmc.org/nmc/main/advice/clinicalsupervision.html](http://www.nmc.org/nmc/main/advice/clinicalsupervision.html) (Accessed: 3 May 2007).

Schach, S.R. (1999) *Classical and Objective Object Oriented Software Engineering with UML and C++*, 4<sup>th</sup> edn. Singapore, WCB/McGraw-Hill.

UKCC (1996) *Position Statement on Clinical Supervision for Nursing and Health Visiting*. London, UKCC.

# **Appendix 6**

## **CONSENT FORM**

*(Original document)*

**Consent Form**

1/2

**Title of study :**

*Developing Online System for Clinical Supervision: What are the requirements?*

If you agree please initial box

Name .....

I consent to participate in the above titled study as a member of a focus group and understand any information I share or ideas I generate can be freely used if required in the development of an online system for clinical supervision. I waive my rights to intellectual or other property rights relating to any commercial development of a system that will support clinical supervision online.

I consent to an audio tape recording being made of the content of the focus group meetings and transcribed for the purposes of research.

I consent to my e mail address to be used for communication purposes.

I understand that I may withdraw at anytime without fear of prejudice or judgement and that my withdrawal will not result in any loss of privilege or affect my terms and conditions of employment in any way.

Participant

Signature ..... Date .....

Email address .....

Consent obtained by Mark Rawlinson

Signature ..... Date .....

As a member of a focus group your contribution will be treated confidentially and your anonymity is assured. Furthermore all data generated will be subject to the Data Protection Act (1998).

In case you wish to make a complaint about any aspect of this research study please contact in confidence either / or:

University of Southampton  
Southampton  
SO17 1BJ

Tel: E-mail

University of Southampton  
Room, Building  
Highfield, Southampton  
SO17 1BJ

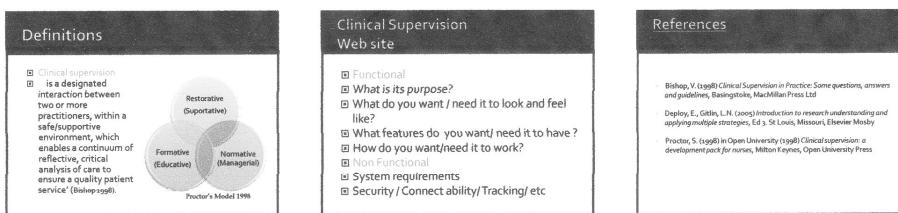
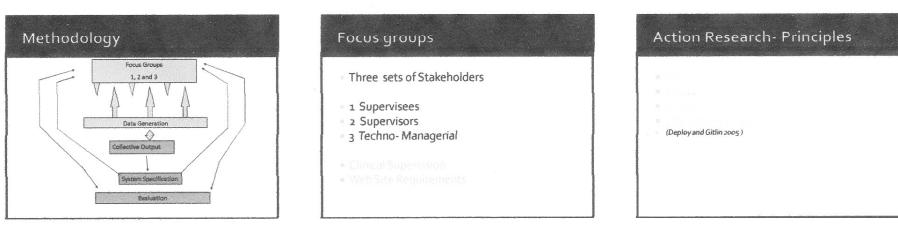
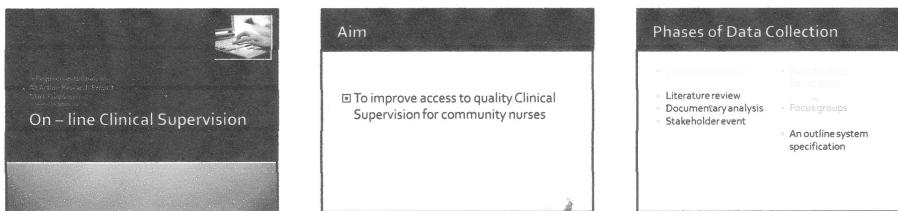
Tel:  
Fax  
Email:



# **Appendix 7**

## **PRESENTATION OF THE PROJECT**

*(Original document)*



## **Appendix 8**

### **EXAMPLE OF ACTIVITY SHEET**

*(Original document)*

## Focus Group 1 - Supervisees

As a nurse in the role of 'supervisee', what is your goal(s) regarding clinical supervision?

What do you see as its purpose? What do you need it to do? Why?



If you were a *customer* on an online store you would have certain wants and needs, e.g. what are this week's special offers?

If you were the *owner* of the online store you may have different wants and needs, e.g. can the manufacturer deliver the right quantity on time?

### Goals

- 
- 
- 
- 
- 

Which is the most important to you and why?

Which is the least important and why?

## **Appendix 9**

### **COLLATED RESPONSES TO QUESTIONS 1-3**

*(From all focus groups)*

## Focus Group Meeting 1 Group Responses

### Question 1: CS - What is it?

Themes Constructed From Responses		
Supervisees	Supervisors	Techno / Managerial
Description of the nature of exchange and interaction within CS		
<p>Safe environment that supports interaction / discussion and dialogue / learning / reflection / support / guidance and not counselling / should be non-judgemental / it's about building relationships / and being change focused</p> <p><u>Confidentiality</u> able to disclose/ ground rules. Supervisee &amp; supervisor/ must adhere to MNC code/ confidentiality</p>	<p><u>Supportive</u> / peer to peer or someone you feel comfortable with MTD</p> <p><u>Equitable</u> / fair / power relationship boundaries to be professional not something else</p> <p><u>Best practice</u> application of skill sets / share good ideas / non-judgmental It's about practice / being knowledgeable / facilitation / educative</p>	<p>No attributable responses made by this group related to the above theme.</p>
Accountability and responsibility regarding care delivery		
No attributable responses made by this group related to the above theme.	No attributable responses made by this group related to the above theme.	Independent nurse managed care / nobody looking at them / a way of knowing
Ambiguous nature of CS		
No attributable responses made by this group related to the above theme.	No attributable responses made by this group related to the above theme.	It's difficult to define multiple views, understandings, definitions, approaches
Who and what it involves		
<u>Supervisee focused</u> / need to be able to off load / verbal / interaction	Peer to peer or someone you feel comfortable with MTD	Staff and/or nurses
How it should occur or happen and its purpose		
<p><u>Structured process</u> / time for it / ground rules / action plans records / multi modal</p>	<p><u>Planned</u> /structured / boundaries / professional - not something else</p> <p><u>Helping people do things differently</u> developmental</p>	<p>Help with evidence-based practice. It is about supporting / empowering staff / encouraging change / helping nurses deliver better care</p>

## Question 2: CS - Why do we need it?

A way to monitor quality of practice and foster change		
No attributable responses made by this group related to the above theme.	No attributable responses made by this group related to the above theme.	<p>Not just about transferring a problem to another media, but a better way of doing things.</p> <p>How do we know if people are using evidence-based practice / standards</p> <p>To improve processes and get better care without pressure or judgement. A way of generating ideas / best practice.</p> <p>About working smarter / understanding how / why people behave as they do.</p> <p>Possibly a way to identify skills / should help generate change / associated with risk taking, in a safe environment.</p> <p>To work with remote staff those not at the centre.</p>
An opportunity for personal and professional development		
To grow as a practitioner through sharing of ideas / choice of different views / knowledge / experiences / guidance/ confirm / affirm understanding / to get different perspectives / builds confidence / to feel good / belief self and others / a forum where you can be listened to.	To stimulate thoughts for self.	No attributable responses made by this group related to the above theme.
A forum for critical analysis of practice		
No attributable responses made by this group related to the above theme.	<p>A place to examine and unpick decision making and develop and explore intellect / knowledge / skills / attitudes (evidence-based practice / facilitate reflection.</p> <p>A place to unpick individual or team issues / helps supervisors understand own practice better.</p>	No attributable responses made by this group related to the above theme.

Practical benefits that could be realised from CS		
Save money / manage time better / provide reports / documentation / could be used as a audit tool / a way of identifying training and development needs / helps with minority groups - small numbers, e.g. specialist nurses / improved access.	No attributable responses made by this group related to the above theme	No attributable responses made by this group related to the above theme

### Question 3: CS - Who benefits?

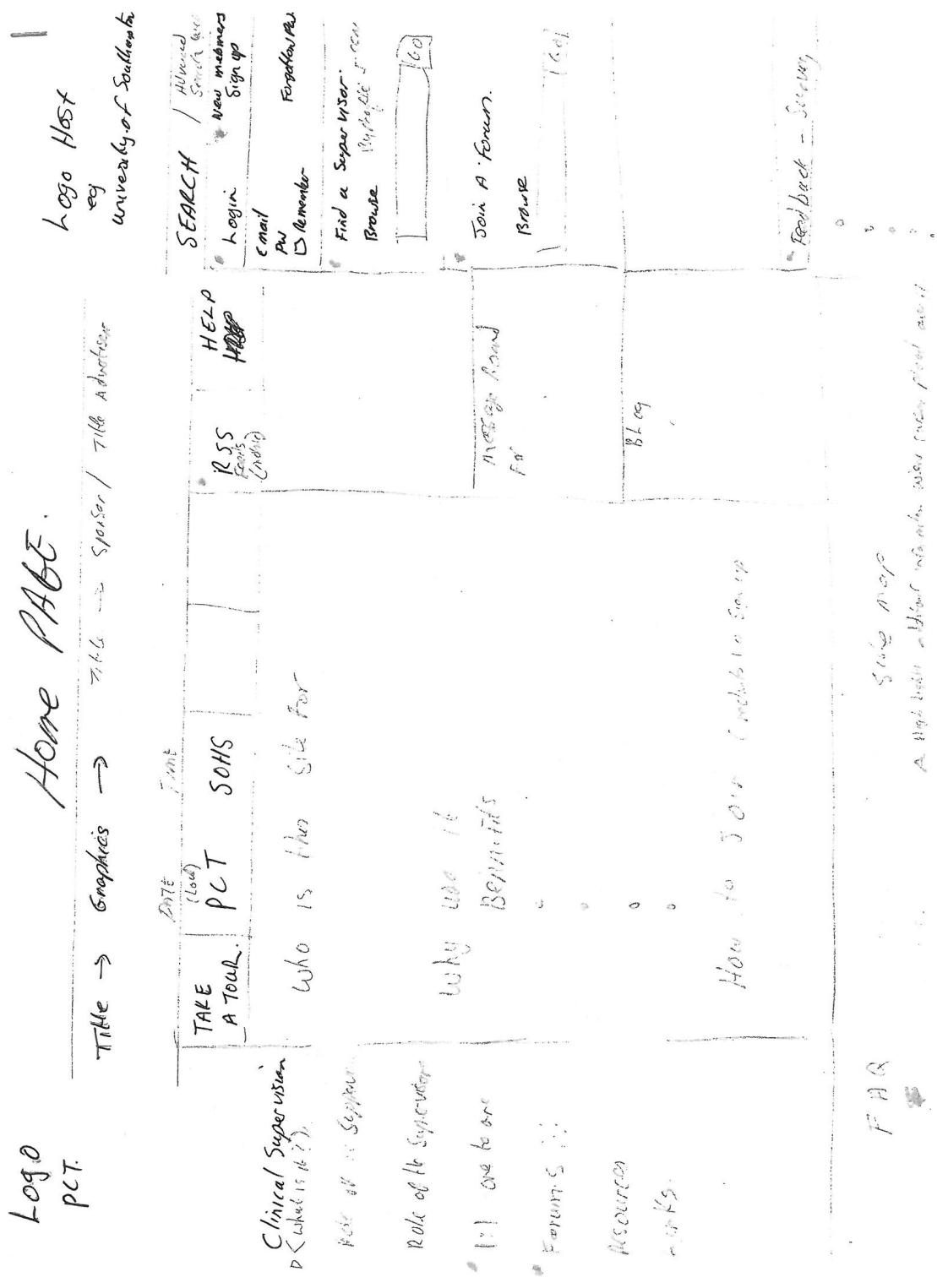
Stakeholders involved with CS		
Everyone - practitioner / manager / team / patient	The nurse / practitioner having supervision / the team / patients / the organisation / self.	Patient / nurse / PCT
How do the stakeholders benefit?		
Patient indirectly - knock on effects / supporting increased confidence in practitioners / the potential for dissemination and implementation of best practice / unified approach / maintenance of standards	No attributable responses made by this group related to the above theme.	Potential monitoring and education about standards. A way of knowing what's going on and why in order to improve practice and the sharing of good practice. A decrease in the number of untoward incidents and complaints.
Potential losses or perceived costs to stakeholders		
Managers - loss of control Individuals and participants - potential conflict / info overload. A challenge to custom and practice. CS needs to be kept positive.	No attributable responses made by this group related to the above theme.	No attributable responses made by this group related to the above theme.

## **Appendix 10**

## **STORYBOARDS**

## First Generation Sketches

(developed from Focus Group Meeting 1, November 2008)



## Log in Page

Log in

e-mail  forgotten password

password

Text / Audio

### 1:1 - Clinical Supervisor

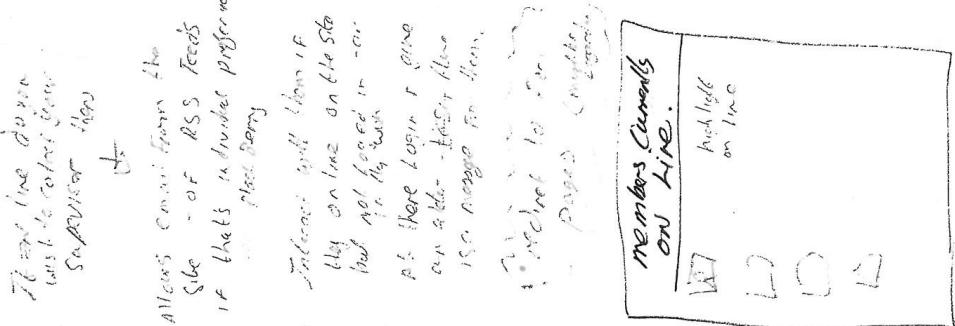
Your supervisor is based around the  
region  
Do you want to contact them   
Leave them a message on the site   
Forms   
Join or leave a forum

### Edit Your Profile

Would you like to edit your profile?  
Profile  
Basic Information  
Name   
Job title   
Areas of interest  background  or  
needs of which person   
available as a supervisor   
Year  initially   
Contact details

SAVE  No you want to cancel  Yes, I want to cancel

By what method would you prefer to receive  
feedback  Email  Post  telephone

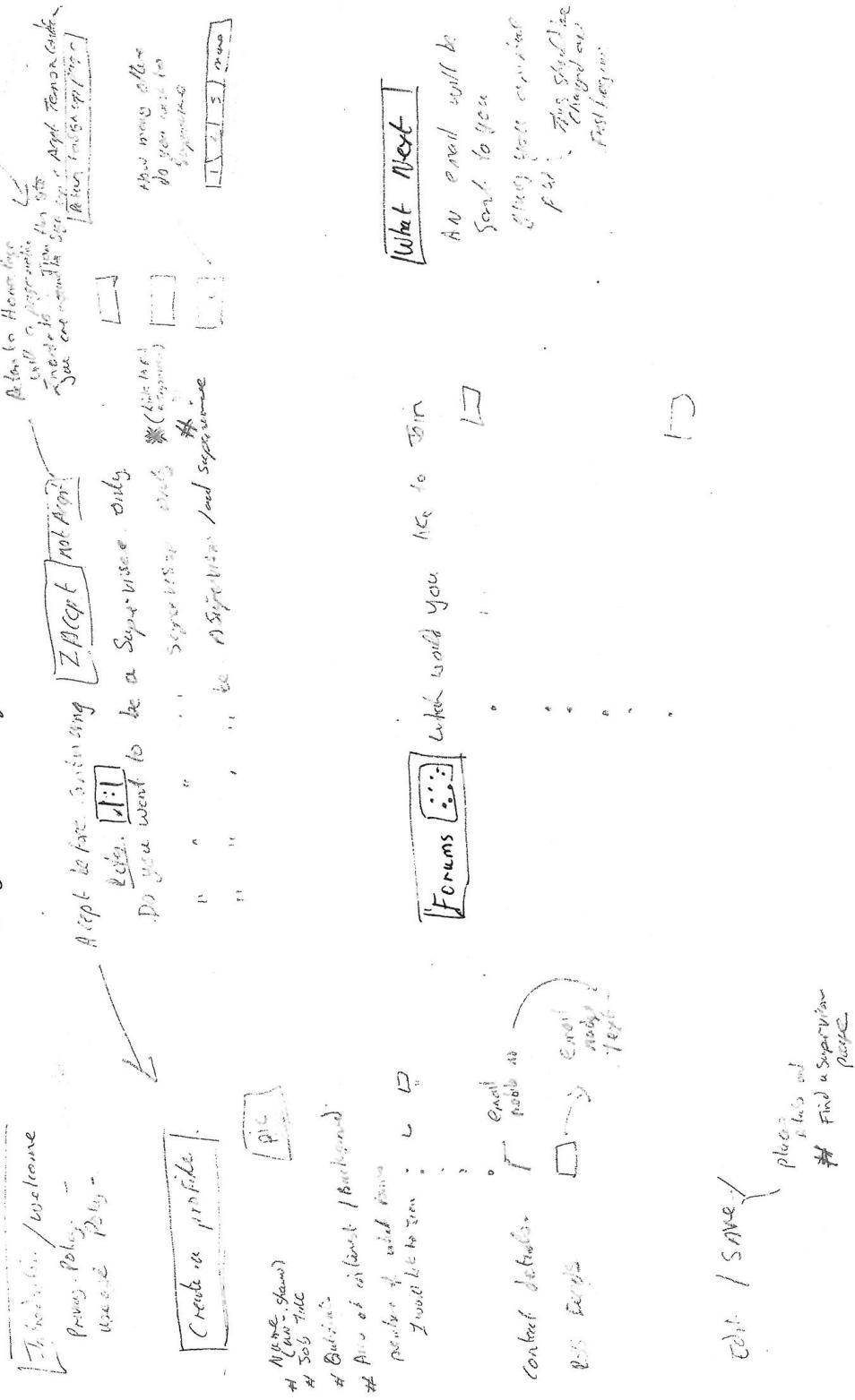


Members Comments  
on line.

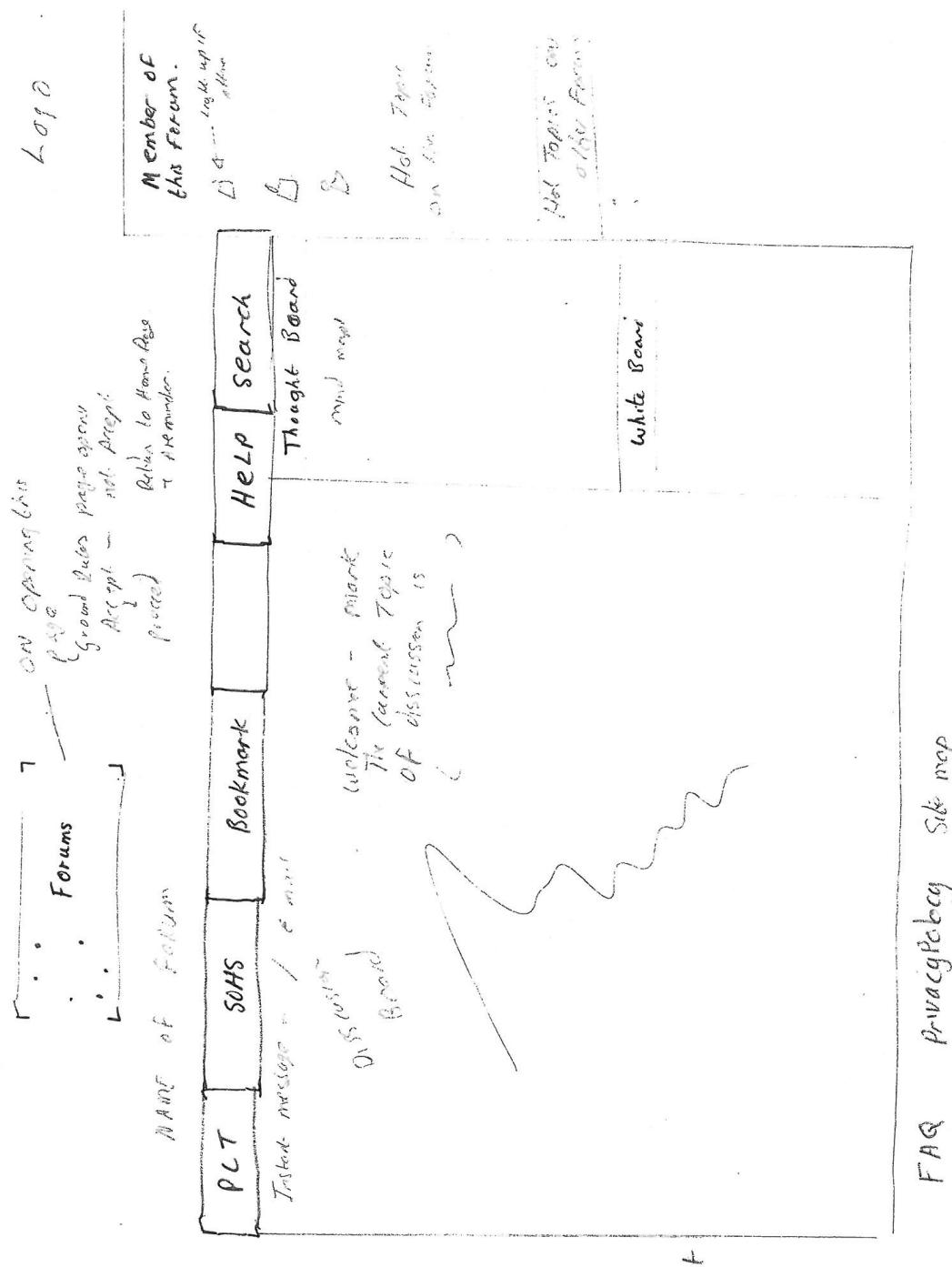
Leave a comment   
My online profile  
has been updated in  
the last hour  
Please login to view  
an older version.   
My message from you  
will be sent to me  
when I log in  
Archive this post  
- pages

8

## Sign up page



\* only accessible after first terms condition done.



log off.

## Create A Report

## Links

## Bookmarks

## Lessons.

Supervisor

Supervisee

5

~~7/16/16~~

216

卷之三

卷之三

卷之三

book mark  
(cross lines).

216

Case 6 Appendix

2000 J. Neurosci., Vol. 20, pp. 1999–2006, March 2000

Digitized by Google

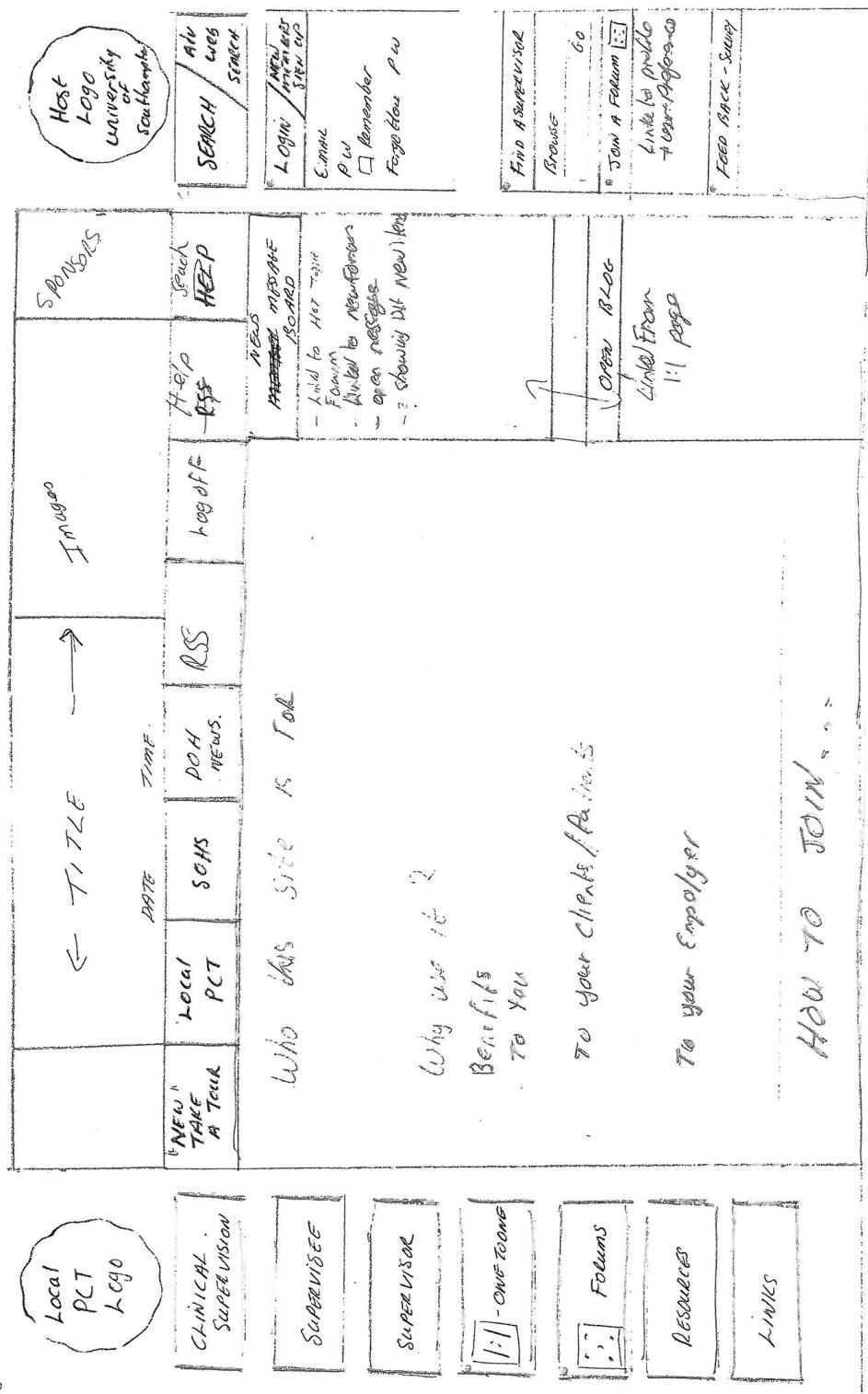
100

File primary Platley 5th May 1960

<p>1.1.1. - one for one clinical session</p> <p>(one page)</p>	<p>PC7      SOS      Bookmarks      History      Help      SEARCH</p> <p>Visited message / contact</p> <p>Welcome to your first supervision session.</p> <p>note &amp; progress</p>	<p>Date time etc Report on line marked <u>Next session</u></p>	<p>Aug 14th for the Blog - of course</p> <p><u>Blog</u></p>	<p>note pages</p> <p>(first two pages)</p>
<p>note pages</p>	<p>Aug 14th for the Blog - of course</p> <p><u>Blog</u></p>	<p>note pages</p>	<p>note pages</p>	<p>note pages</p>

**Second Generation Sketches**  
 (presented at Focus Group Meeting 2, January 2009)

Home Page



# Log in place

<p><b>Welcome Admin</b> Your sign in is just based on contact list / a user who is connected to an admin. If you want to use </p>				
<p><b>MEMBER LOGGED IN</b></p>				
<p><b>Site Rules &amp; Regulations</b></p>				
<p><b>Profile</b></p>				
<p>"<b>MARK'S PROFILE</b></p>				
<table border="1"> <tr> <td><b>EDIT</b></td> <td><b>SAVE</b></td> <td><b>REMOVE</b></td> </tr> </table>		<b>EDIT</b>	<b>SAVE</b>	<b>REMOVE</b>
<b>EDIT</b>	<b>SAVE</b>	<b>REMOVE</b>		
<p><b>Name</b> SCOTT MORSE <b>Image</b></p>				
<p><b>Job Title</b> Qualifications Dept./Unit/Group Areas of Official Interest</p>				
<p><b>Background</b></p>				
<p><b>Employment History</b></p>				
<p><b>Contact Details</b></p>				
<p><b>Address</b> Email Mobile phone Message Board</p>				
<p><b>Availability As A Supervisor</b></p>				
<p><b>FOR</b></p>				
<p><b>I Accept</b> <input type="checkbox"/> <b>I don't Accept</b> <input type="checkbox"/></p>				
<p><b>Name of Supervisor</b></p>				
<p><b>URL</b> <input type="text"/> <b>Browse</b></p>				

Sign and Page

Small business review  
10/1/02

Introduction → welcome → Step by Step Guide

Step One Sign up	Read & Accept rules Complete Log in box	Accept rules Complete Log in box
Step Two Create Profile	Create a profile	Create a profile
Step Three Set Preferences	Set user preferences	Set user preferences
Step Four Next	What happens next	I wish to become a member

→ Kognitiv-Box 12.6  
Same as Home Page!  
Exapt - first step login  
Suggerierte  
E-mail address

## ④ User preferences.

- 1. I only want to be a supervisor
- 2. I only want to be a supervisor
- 3. I would like to be a supervisor

Forums  
List

FAQ

① Site Rules & Regulations Same as Legal  
CREATE A PROFILE  
"See info as login!"  
"See profile"

		F15	
		Accept	don't Accept
Accept	Accept	1	0
	don't Accept	0	1

FAQ

## FORUMS

live come "mark" to be distinct reuse film.

DD 76

PL7	SOTHS	BOH NEWS	LESS FEEDS	H.P.	SEARCH
CURRENT RELICS	Existing Topics			SEARCH	Hot topic

like discussion board

Group Exploration

~~Ask a Librarian.~~

~~National Lib. Rock  
Heads~~

卷之三

book mall

## CREATE REPORT

SAVET.

Plein air.

FAG 1 ~ 1

529 off 3  
replaced  
by fire wags

Chairman Board	Members of Board
B	B
B	B
B	B
<del>Chairman Board not to do</del>	Not topic on the agenda Other agenda members of council not topic
no load files / play	Chairman Board message board in New for in check.

226

C.R.P.

1:1 - one to one Clinical Supervision session

(X)

Welcome 'WORK' [Supervisee]

WORK

Clinical Supervision	Supervisee	Ground rules	Resources	Limits	Book marks	Client report	Save	Print
Supervisee	Supervisee	Supervisee	Supervisee	Supervisee	Supervisee	Supervisee	Supervisee	Supervisee

Welcome 'WORK' [Supervisee] and 'Kontrol [supervisor]' to your 10<sup>th</sup> Supervision Session

(X)

Print	Print	PCT	SOHS	DOHs	RE	Logout	HELP	SEARCH
Instant message								
DISCUSSION Board								
Supervisee								
Supervisee								
Thought bubble								
Next session								
Logout								
Block								

F# Q



## **Appendix 11**

### **WEBSITE ADDRESSES**

## Stratified List of Websites for Review

Type of site	Site addresses
Commercial Products / Auction Buy and Sell / Banking/ Search Facilities	<a href="http://www.ebay.co.uk">http://www.ebay.co.uk</a> <a href="http://www.amazon.co.uk">http://www.amazon.co.uk</a> <a href="http://www.boots.co.uk">http://www.boots.co.uk</a> <a href="http://www.play.com/">http://www.play.com/</a> <a href="http://www.virginvieathome.com/public/index.asp">http://www.virginvieathome.com/public/index.asp</a> <a href="http://www.verbaudet.co.uk/">http://www.verbaudet.co.uk/</a> <a href="http://www.alliance-leicester.co.uk/home/index.aspx">http://www.alliance-leicester.co.uk/home/index.aspx</a> <a href="http://www.essentialnails.com/pages/eng/cmsl/training_dreamaspire.html">http://www.essentialnails.com/pages/eng/cmsl/training_dreamaspire.html</a> <a href="http://www.bakerross.co.uk/?src=ADWORDS">http://www.bakerross.co.uk/?src=ADWORDS</a> <a href="http://www.kodakgallery.com/Welcome.jsp">http://www.kodakgallery.com/Welcome.jsp</a> <a href="http://www.google.co.uk/">http://www.google.co.uk/</a> <a href="http://www.tesco.com">http://www.tesco.com</a> <a href="http://www.saintsfc.co.uk/">http://www.saintsfc.co.uk/</a>
News / Information	<a href="http://www.bbc.co.uk/">http://www.bbc.co.uk/</a> <a href="http://www.wave105.com">http://www.wave105.com</a>
Health / Information / Local & National	<a href="http://www.iwight.com/knowyourlimits/http://www.poodwaddle.com/clocks2.htm">http://www.iwight.com/knowyourlimits/http://www.poodwaddle.com/clocks2.htm</a> <a href="http://www.dh.gov.uk">http://www.dh.gov.uk</a> <a href="http://www.iow.nhs.uk/">http://www.iow.nhs.uk/</a> <a href="http://www.barelyborn.co.uk/">http://www.barelyborn.co.uk/</a>
Social Networks	<a href="http://www.hotmail.com">http://www.hotmail.com</a> <a href="http://www.arrse.co.uk/">http://www.arrse.co.uk/</a>
Organisations	<a href="http://www.outdoorsmagic.com/">http://www.outdoorsmagic.com/</a> <a href="http://www.rvyc.org.uk/08/home.htm">http://www.rvyc.org.uk/08/home.htm</a>
Education	<a href="http://www.soton.ac.uk/">http://www.soton.ac.uk/</a> <a href="http://www.southampton.ac.uk/healthsciences/">http://www.southampton.ac.uk/healthsciences/</a>

## **Appendix 12**

### **WEBSITE REVIEW TEMPLATE**

*(Original document)*

**Name of Website:**

Please comment on the following relating to this website:

**Access**

**Navigation**

**Structure**

**Presentation**

**Interaction**

What else do you like about this site and why?

What don't you like about this site and why?

## **Appendix 13**

### **FEEDBACK OF WEBSITES REVIEWED**

CRITERION	COMMENTS	
<b>Name of Website</b>	<b>BBC</b>	All three groups reviewed this site
Access	Easy / quick / fast Uploads all pages overloaded home page	
Navigation	Easy(quite) /straight forward/ lots crammed in on one page Difficult to visually navigate / able to customise, e.g. local weather / meets individual needs of the user Very comprehensive / not confusing Can tailor make it – but not clear how to do it	
Structure	Not good – doesn't all fit on one page Good balance of text and graphics Clear structure adaptable to personal requirements	
Presentation	Dull colours / greys Too much information on one page Stayed / boring / too serious Does not fit on one page Clear and can be personalised Individual / subjects easy to find	
Interaction	Very / lots of interactive features Good to be able to alter graphics Local to you Able to be adaptive to personal preferences Only able to navigate been one page at a time Good options for connectability	
Positives Why?	Good quality photos / navigation easier once past home page Lots of information but with opt out option for individual user Able to amend the look	
Negatives Why?	Boring colours No variation in font Everything very still Very cooperate and masculine Annoying instant news needs to be scrolled across	

<b>Name of Website</b>	<b>Play.com</b>	Only reviewed by one group
<b>Access</b>	Very quick between links / Visually simple / two colours / sub-sections easy to find stuff Familiar / easy	
<b>Navigation</b>	Quick /very visual so you can go straight to next section Very simple to navigate click on picture gets you what you want	
<b>Structure</b>	Simple but current things highlighted etc. Similar to many other sites so easy to use Fits on the page	
<b>Presentation</b>	Eye catching graphics / well laid out / easy on the eye Simple / visual / good graphics	
<b>Interaction</b>	Good variation of choices for interaction Limited with books	
<b>Positives Why?</b>	Good choice of fonts and colours Fits the page / eye catching	

<b>Negatives Why?</b>	Can't see inside a book to view contents layout/	
<b>Name of Website</b>	<b>Essential Nails</b>	Only reviewed by one group
<b>Access</b>	Easy	
<b>Navigation</b>	A bit complicated to navigate / difficult to navigate/ time consuming / lengthy / too much information in a small space	
<b>Structure</b>	Not all the info is visible on the page Framework is distracting / too busy Good contact details Poor	
<b>Presentation</b>	Very complicated and uses too much text Too busy – stripes colours and far too many words Doesn't fit all into one page Colours awful	
<b>Interaction</b>	Fair attempt Various languages which is good Free call back useful	
<b>Positives Why?</b>	Different languages are good Telephone numbers for sales	
<b>Negatives Why?</b>	Complex and busy Not all information on one page	

<b>Name of Website</b>	<b>Boots</b>	Only reviewed by one group
<b>Access</b>	Easy	
<b>Navigation</b>	Very easy / drop down boxes and short cuts	
<b>Structure</b>	Very good balance between text and graphics Clear structure with a familiar feel Login in available to take to other areas	
<b>Presentation</b>	Corporate look Clear / crisp simple graphics Bold / interesting	
<b>Interaction</b>	Contact details Store locator Very good	
<b>Positives Why?</b>	Familiar and easy to use Drop down information very good Other links Topical information e.g. about illnesses / medication- useful	
<b>Negatives Why?</b>	I like all of this site	

<b>Name of Website</b>	<b>Virgin Vie at Home</b>	Only reviewed by one group
<b>Criterion</b>	<b>Comments</b>	
<b>Access</b>	Very easy to use / simple / fast	
<b>Navigation</b>	Easy and clear / simple to follow	
<b>Structure</b>	Whole page display / easily visible and can scroll down on a	

	continuous page Simple Very good
<b>Presentation</b>	Graphics of good quality Not cluttered Design good
<b>Interaction</b>	Blog and personal comments Good customer interaction Reviews good
<b>Positives Why?</b>	Colour / length of pages
<b>Negatives Why?</b>	I like all of this site

<b>Name of Website</b>	<b>Tesco</b>	Only reviewed by one group
<b>Access</b>	Easy	
<b>Navigation</b>	Clear links / quick don't need to click on something just hover over a box and it gives you some content	
<b>Structure</b>	Well structured	
<b>Presentation</b>	Colourful visuals Up and downness and width Cannot see whole of home page / cannot see things I think as important / they put links at the bottom	
<b>Interaction</b>	Appears very interactive	
<b>Positives Why?</b>	Fit for purpose Pictures not just words Looks appealing	
<b>Negatives Why?</b>	Could be off putting if you don't want to register or login	

<b>Name of Website</b>	<b>IW NHS Trust</b>	Only reviewed by one group
<b>Access</b>		
<b>Navigation</b>		
<b>Structure</b>	Fits the page Traditional format	
<b>Presentation</b>	Uses different fonts - ? would be better using one font	
<b>Interaction</b>	Not interactive really	
<b>Positives Why?</b>	Gives phone numbers on screen, e.g. dentist / GP/ out of hours	
<b>Negatives Why?</b>	Pages a bit busy Not up to date Not easy to access It does not meet the patient requirements	

## **Appendix 14**

### **RESPONSES TO OUTSTANDING QUESTIONS**

**Raw Data Responses  
to questions raised from the second focus group meeting  
Focus Group 1 Meeting 3**

**KEY:** Recorded on paper  
Noted from audio recording  
Where data are the same, it will be as audio recording \*

**Please consider these questions for the final Focus Group Meeting in March:**

What suggestions do you have for a title of the site?

\*Let's Talk! - \*Let's Talk CS

Talk and Share –Talk and Share CS

Let's talk and share knowledge and skills – CS

Online CS

Should the message board be editable or read only when not logged in?

\* Read only

Should there be a restriction on the number of people are supervising at any one time; if so how many?

\* A few, 3-5

\*Needs a review option at 2 months

Need opt out for both parties

Should be indicated at ground rule stage

Supervisors need to focus on 1 person at a time if lots (20 +) then confusion possible and lack of focus.

3 - 4

Does the site need separate features / tools /blog / message/ notice board?

Only one

Needs to be available on different pages, but read only on home page

Message board / notice board

Should people be able to access CS online in work time?

\*Yes

Preferably / definitely

And most definitely on home computers

How often should feedback information be collected from users?

\*2 monthly

\*3-6monthly

Every 4 sessions

Calendar prompt or as specified contact, e.g. default email

Monthly

When using the site, are user preferences for a screen name acceptable or should they be same as log on?

Employer log in – more outward accountability or traceability – self policing

Same as log on – that way people will be more responsible for what they post. This is a professional site

Should the blog be editable without log in or be read only until logged in?

\*read only

Must log on to protect others

Ground rules for the forum should be preset?

Yes

Pre set by employer - same for all forums – need to tick to say read and accepted.

Of course

If you are a non local PCT employee should your application to be a supervisor or supervisee be authorised by the local PCT?

Who should do this and what criteria needs to be set?

CRB via employer who authenticates – reg no NMC

Timeframe, e.g. confirmation of acceptance (set standard, e.g. 10 days)

For everyone outside (PCT)

The island is unique; do we want non locals, other than private nursing homes, etc?

What reports need to be generated?

\*Action plans

\*Activity data – number of log ons, how long

\*Reports that can be used in professional portfolio (not the content of 1:1 discussions but key word summary + activity data.

Be able to save key themes from forum discussion for personal reflection – linked to action plans

Who needs access to reports?

\*Key personnel

\* First line managers

\*individuals

Should reports be a set template?

\* Partially – admin data + free text for 1:1 need to be printable and saveable (off site on home or other PC)

What data should be made available to who and why?

\*Same as reports

How will data regarding the benefit of CS be collected?

Via feedback forum, e.g. rate usefulness of session to patient care, nurses confidence etc – content yet to be determined

What data should be made available to who and why?

\*Same as reports

Need to have a private area and a more public one for discussion

What needs to be printable and who can authorise this?

\*Same as reports

Guidelines

How will training needs be identified and accessed?

\*Action plans – CS

Education on how to use the site needs to be commission by PCT

Site needs guidelines

Through the University? Should CS supervisors have the mentorship qualification because that will provide a recognisable qualification

Should templates like a reflective cycle be visible during a CS session 1:1?

\*Yes

A selection needed. Could be uploaded by site users. A short explanation of how to use each aims etc would also be helpful

Would a scrolling banner on the home page that said 'Current topics being discussed in Forum 'A' is .... Why not join the discussion?' be useful feature?

\*Yes

Forum topic live or previous if non active

DOH news updates

? Some advertising

Home page only otherwise too distracting

Should forum topics be structured using mind map ideas? This would enable a new comer to see how the discussion had progressed and areas for further exploration.

\*Yes - would need training in how to use it. Stop you having to scroll through

**Raw Data Responses**  
**to questions raised from the second focus group meeting**  
**Focus Group 2 Meeting 3**

**KEY:** Recorded on paper  
Noted from audio recording  
Where data are the same, it will be as audio recording \*

**Please consider these questions for the final Focus Group Meeting in March:**

What suggestions do you have for a title of the site?

'Getting more out of your job' as a tag line / Supervision Network

Supporting Supervision

No clear idea

Should the message board be editable or read only when not logged in?

Read only

Notification system linked to contact preferences eg e mail when a new message or when a message for you was left.

Editable

Should there be a restriction on the number of people are supervising at any one time; if so how many?

Individual to choose within a choice - ? up to 5

If it is 1:1, no limitation

Does the site need separate features / tools / blog / message board / notice board?

Should people be able to access CS online in work time?

One

Be available at work or home

Yes

How often should feedback information be collected from users? (on the site)

Possibly after first 4 log ons - default survey on log off, then maybe at the 20<sup>th</sup> log in

Quarterly

When using the site, are user preferences for a screen name acceptable or should they be same as log on?

Same as log on

Same as log on

Should the blog be editable without log in or read only until logged in?

Read only until logged on

Read only until logged on

Ground rules for the forum should be preset?

Preset for forums by employer or host

From an editable template 1:1

Yes

If you are a non local PCT employee should your application to be a supervisor or supervisee be authorised by the local PCT?

Need for specialist nurses, good to get a wider perspective and bring new ideas in, it would improve the sharing – CS

Share with in the NHS and wider UK family

Not keen on world concept, would feel unable to supervise them

No this would stop Practice Nurses asking DNs to be their supervisor

Who should do this and what criteria needs to be set?

Authenticated by a system or a person or via line manager address. Contact us first, then screening in reply to host questions, e.g. qualification etc.

It should be a practitioner to practitioner arrangement

What reports need to be generated?

PCT to have tracking data and site usage

Who, when, set template + free text area

Ok to link back to patient, nurse and organisation

How many people being supervised, contact and tracking data for their line manager.

The number of users, satisfaction of use of site, change and development of practice

Who needs access to reports?

Trust, managers, practitioners

Trust, managers, practitioners

Should reports be a set template?

Some set, some exploratory data when new questions arise

Partially and free text areas

What data should be made available to who and why?

Trust, managers, practitioners contact and tracking data

Trust, managers, practitioners as they are the supporters and users

How will data regarding the benefit of CS be collected?

Logon survey, ? need to have a PC wide survey? 'News 2 You'

Computer problem - access and reliability of PCT computers

Separate log on for first line managers to have read only access to PCTwide data base relating to CS and then be able to ask if they are not using online CS, are they using another mode.

Questionnaire

What data should be made available to whom and why?

Trust, managers, practitioners contact and tracking data

How many people you are supervising, who's accessing, who's their line manager

Qualitative questionnaire online for participants as a survey

The data should be part of the data collected on appraisals as this will demonstrate the practitioners own input to their reflection on their practice and professionalism

What needs to be printable and who can authorise this?

A record of supervision, be exportable save as – for your own records on your computer – not on the site. Could be a ground rule - tick box option

Other printable example. Guidelines importable and printable, e.g. have on screen map of medicine to be used during supervision and printable afterwards. Reflective frameworks, download policy, highlight cut and paste from links. Needs to be clean and coordinated and not unwieldy

Agreement between parties to what is printed off

First line manages basic report – tracking data.

All data should be printable and the 'co-ordinator' of the site and the user of the site can print their own information. That is, if practitioners wishes to demonstrate what they are doing in support of their own practice

How will training needs be identified and accessed?

Teaching on how to use the site

? Part of mandatory training for site use + take a tour

Training needs outside of CS

At appraisal, as it is now

Should templates like a reflective cycle be visible during a CS session 1:1?

Yes, ? split screen

Be able to build resources from other users experiences, links bookmarks and tags

Yes but choice should be available

Would a scrolling banner on the home page that said 'Current topic being discussed in Forum 'A' is.... Why not join the discussion?' be useful feature?

NHS top ten subjects on the banner, ? news feeds from the notice board but keep to home page.

Good idea – might encourage people to log on

Great

Should forum topics be structured using mind map ideas? This would enable a new comer to see how the discussion had progressed and areas for further exploration.

Yes, it would be very frustrating if it went back to the beginning with every new joiner to the discussion

Yes good idea

Anything needs excluding or including?

Ask a librarian asynchronous like can't find in at the time of supervision

Explain what is disclosed to whom, e.g. line manager.

Timer reminder on screen after except ground rules set timer going

## Raw Data Responses to questions raised from the second focus group meeting Focus Group 3 Meeting 3

KEY: Recorded on paper  
Noted from audio recording  
Where data are the same, it will be as audio recording \*

### Please consider these questions for the final Focus Group Meeting in March:

What suggestions do you have for a title of the site?

Super - vision! Reflective Practice. Clinical supervision in the first page

Should the message board be editable or read only when not logged in?

Read only

Should there be a restriction on the number of people are supervising at any one time  
if so how many?

Most definitely - no statement in policy

Needs to be discretionary, ability to exercise choice up to 5

Link to contract link to profile

Does the site need separate features / tools / blog / message / notice board?

A request to say has someone found a methodology – but a sharing environment.

Post advanced notice on topics for forums

One feature for simplicity and ease of use single point of access and information

A place to put an unanswered question

Should people be able to access CS on line in works time?

Yes

No provision for recapturing time if in home time.

How often should feedback information be collected from users?

? Monthly data capture, ? sent to T D department

When using the site are user preference for a screen name acceptable or should they be same as logon?

Same as log on, keep to one ease of use NHS username. Professional tool for a professional reason

Should the Blog be editable without login or just be read only until logged in?

Read only

Ground rules for the forum should be preset?

Yes

Issues re. Confidentiality, code of conduct, etc. professional site. PCT set ground rules for forums. Access policy. Reiteration to accept rules. ? need to look at bank staff contracts.

If you are a non local PCT employee should your application to be a supervisor or supervisee be authorised by the local PCT?

Who should do this and what criteria needs to be set?

Professional registration, governing body, HCA ? by other clinical staff.

Exclude unqualified nurses from other employers

Local PCT to set their own limitations and boundaries – in house first

What reports need to be generated?

Who needs access to reports?

Managers, access monthly reports eg 25 DN's had ex an mount of supervision.

? Link to Training needs analysis.

Reports can be set by the PCT

Supervisee / supervisor

Similar to e learning

Should reports be a set template?

As per user group needs

What data should be made available to who and why?

Managers, access monthly reports, e.g. 25 DNs had an X amount of supervision

? Link to training needs analysis

Reports can be set by the PCT

Supervisee / supervisor

Similar to e learning

How will data regarding the benefit of CS be collected?

Default in relation to users and PCT

What data should be made available to who and why?

PCT – date - time- topic- action points – learning need anonomised

What needs to be printable and who can authorise this?

For CPD

Different users have differing report depending on need

Set specific for evidence for individual use

How will training needs be identified and accessed?

Identify own learning needs

Link to training department

Assist with training needs but not replace existing process.

Should templates like a reflective cycle be visible during a CS session 1:1?

As a prompt, good idea, available on screen assist with action planning

Would a scrolling banner on the home page that said 'Current topic being discussed in Forum 'A' is ... Why not join the discussion?' be useful feature?

Yes very good

Should forum topics be structured using mind map ideas? This would enable a new comer to see how the discussion had progressed and areas for further exploration.

Examples good idea

? Need to limit number of people on the forum

Will the system show who is on line and or who is active in form.

If an issue is identified from forum or 1:1, then a new thread can be generated in a forum

Local verification - could limit access

Clinical supervisors across all groups from within the PCT

The need for objectivity and provide choice

# **Appendix 15**

## **Outline Specification Document**

# **User Centred: Requirements Analysis**

## **Clinical Supervision Website Version 1**

Developed for DClin P Thesis  
Author Mark Rawlinson  
Version 1  
Category Systems Development  
Data Owner(s) Users and Client

# Index

## 1. Change History

## 2. Terminology

## 3. Background

- 3.1 Summary
- 3.2 Roles and responsibilities involved to date

## 4. User Requirements

- 4.1 Introduction
- 4.2 User (1 and 2) profiles
- 4.3 Client profile
- 4.4 Objectives
- 4.5 Scope
- 4.6 Website goals
- 4.7 Site objective

## 5. Process Flows

- 5.1 A potential user
- 5.2 First time user as a supervisee or supervisor
- 5.3 First time user as an employee of the client
- 5.4 User 1: supervisee
- 5.5 User 2: supervisor
- 5.6 The client

## 6. Mock Up of Web Pages

- 6:1 Home page
- 6.2 Sign up page
- 6.3 Log in page
- 6.4 Forum page(s)
- 6:5 One-to-one supervision page

## 7. Flow Chart of Website Structure

- 7.1 Home page structure
- 7.2 Home page: tools
- 7.3 Home page: links to host
- 7.4 Home page: title bar
- 7.5 Home page: features
- 7.6 Log on page
- 7.7 Sign up page
- 7.8 One-to-one supervision page
- 7.9 Group supervision page
- 7.10 Web page mock ups

## 1. Change History

Date	Version Number	Reason for Change	Initials	Project Number
28/06/2009	1	Clarification on certain aspects	M.R.R	DClinP 01

## 2. Terminology

The following terminology will be used to describe users and the client:

- User 1: The primary user of the site - a supervisee (Community Nurse).
- User 2: The secondary user of the site - a supervisor (Community Nurse).
- Client: The employer - NHS Primary Care Trust (PCT) and potential host / administrator of the site.

The following abbreviation will be used to refer to the purpose of the website:

- Clinical supervision (CS)  
A formal process of professional support and learning which enables individual practitioners to develop knowledge and competence, assume responsibility for their own practice and enhance consumer protection and safety of care in complex situations (NHS Management Executive 2004)\*.  
\* NHS Management Executive (2004) *A case for clinical supervision*. London: TSO.
- Primary Care Trust (PCT)

## 3. Background

### 3.1 Summary

The main purpose of the CS website is to improve access to CS for community nurses who work for the Isle of Wight PCT. This goal will be achieved by creating multiple virtual communities and relationships that engage in learning, reflection, discussion and debate. A subsidiary goal is to provide a range of services for the users that enable them and their employer (the client) to meet local governance requirements and the regulatory and quality assurance standards required by the Nursing and Midwifery Council and the NHS.

Access to CS has traditionally been via established communication methods, usually face-to-face meetings, sometimes via telephone or very occasionally via text. Normally these take place at set times, in set places as pre-arranged meetings between parties known to each other in a pre-designated mode. Apart from the telephone and text methods, both of which are very rare, all contact is synchronous and dependent on staff release from the work environment. Access, thus, is often problematic resulting in the limited ability to engage and sustain CS.

### **3.2 Roles and responsibilities involved to date**

Mark Rawlinson	Principle Investigator and Project Manager
<b>Users</b>	
Community nurses	Focus Group 1 - Supervisee
Community nurses	Focus Group 2 - Supervisors
<b>Client</b>	
Key PCT Personnel	Focus Group 3 - Techno Managerial

## **4. User Requirements**

### **4.1 Introduction**

This website has been designed to improve access to CS. The primary and secondary users of this professionally-orientated website (users 1 and 2) and the client will require a secure, confidential logon, in addition to any www browser, who would have restricted access.

The client, as host and administrators of the site, will require set privileges. The site needs to be active 24 hours-a-day, seven days-a-week. The site needs to be accessible and available via a range of platforms: for example, the client's intranet, the internet as well as portable devices.

This website needs to have all the normal feature of a dynamic website in addition to specific specification – sections 4.6 - 4.7.

The three main user's cases are detailed in section 5.

### **4.2 User Profiles**

#### ***4.2.1 Demographic characteristics***

- Able to be expanded to accommodate additional health care professionals after testing and refinement - up to 300
- Aged between 21 and 65
- Mainly working for the NHS, either full or part time
- Initially, IOW Primary Care Trust based, plus guest nurses from other employers
- Grades from 5 to 8.
- Minimum of State Registration, majority being educated to diploma level or above
- From a variety of race and ethnic backgrounds; all need to be English speaking.
- Some will have learning differences.

#### **4.2.2 Interest characteristics**

- To undertake CS for PCT employees as a requirement
- Either, one-to-one or by forum
- Some will be supervisors
- The majority will be supervisees
- Some will be both
- Due to the need to discuss issues with a peer, links with non-IOW PCT employed staff will be required (verified as legitimate via NMC by the client).

#### **4.3 Client Profile**

- The PCT / an NHS employer - host and administrator of the site with specific branding requirements (NHS).
- Responsible for ensuring staff have access to CS.
- Will be audited by the Department of Health to check that clinical staff are undertaking CS.
- The client will need to generate certain reports in addition to tracking and monitoring data.
- The PCT has existing data bases that will need to be accessed.
- The design will, therefore, will be a user-centred design that incorporates organisational and technology needs.

#### **4.4 Objectives**

- To provide an easy-to-use, safe, confidential, secure, professional environment.
- To promote intelligent and meaningful conversation and discussion between users in multiple presentations, secure and confidential one-to-one dedicated areas and multiple forums.
- To be able to search (internally and externally) and access the most up-to-date information and research relating to health care via links.
- To provide a permanent (and printable) record of key elements and interactions.
- To be able to track and monitor site usage for audit purposes.
- To generate data sets to act as a resource within the site.
- To be accessible from multiple platforms: for example, the internet, the NHS intranet, home PCs and portable devices, such as Blackberrys.
- To support multi-media and interactive capabilities, such as text, sound and streamed video.
- To provide a range of software tools which promote collaboration and sharing: for example, mind mapping software, discussion boards.
- To be contemporary in appearance and comply with NHS branding and IT standards.

## 4.5 Scope

The purpose of this website is to enable community nurses and verified guests to undertake CS. This will be achieved by providing a dynamic, safe, confidential environment that supports discussion and collaboration. The site will also be a resource for CS in itself. It needs to be able to contribute evidence, in the form of usage monitoring, to national and local professional NHS governance targets and standards. It needs to be available from different access points. Data needs to be safe and secure with limited access to certain webpages. Live links to other websites need to be available from the home page as well as internal pages. The ability to upload and download, save, generate and print data and reports also needs to be available to users in a variety of formats.

## 4.6. Website Goals

### 4.6.1 *Goals for the organisation*

- To enable more staff to undertake CS via a range of interfaces (one-to-one and forums).
- To allow safe, confidential, secure data transfer.
- To be a professional site that reflects current organisational and NHS branding.
- To track and monitor activity and some aspects of the data generated.
- To have the capability to generate data on demand as evidence for external audit by the Healthcare Commission or other national or government organisations.
- To demonstrate compliance with local and national policy guidelines and directives relating to CS.
- To be able to respond to reported abuse of the site.
- To be able to link to the PCT's intranet via hyperlinks and interact without the need for reprogramming, for example confidentiality and governance policies.
- To have the ability to generate individual reports by user.
- To generate overall site activity data, reported monthly.
- To generate quarterly reports relating to:
  - Training needs of users
  - Benefits of CS to designated groups: client, patient, family or carers, nurse.
- To have the ability to respond to site survey data.
- To have the ability to expand the number and type of users.
- To have the ability to request data from guests (someone not employed by the client) and allow them access after verification.
- To have the ability to separate out and identify guest activity as required.
- To track and monitor activity to the website's commercial sponsors.
- To have a data base of users, their role and availability.
- To provide an independent website that is available 24 hours-a-day, seven days-a-week.

#### **4.6.2 Goals of User 1**

For the user receiving CS - the supervisee - to be able to:

- Undertake one-to-one CS in a safe, secure, private environment on the site with a set secondary user of their choice: a designated supervisor selected by them and mutually agreed, for example, by email prior to commencing and agreeing a contact of supervision.
- Have privacy. When active in a one-to-one CS session, access to forums will not be allowed, but all other site facilities and tools will be accessible, for example, calendars and external links.
- Maintain confidentiality. The content of the CS must not be accessible to anyone else except the designated supervisor. This means restricted access and report generation for the client.
- Have automatic awareness of site usage when logged on: for example, there are currently three forums (names) active, there are currently 30 users logged on to the site.
- Have available personal activity data: for example, how often you have visited and the site in the past 3 months; what resources you have used - topic headings only for one-to-one sessions, or title of forums accessed.
- Be personally welcomed to the site on logon.
- Activate predetermined site choices: for example to notify supervisor that you are online and waiting to start supervision.
- Have access to the most up-to-date information, including research and news of topical issues relating to health, in the form of live data feeds (including video streaming) from the Department of Health as to the top ten health topics.
- Generate data sets from site activity. These will then become site resources for all logon verified users.
- Communicate in a variety of ways: for example, by text, sound, video, images and interactively.
- Have easy, unrestricted access from a range of platforms: for example, mobile technologies and PCs.
- Save, revisit and edit interactions including ground rules - CS contract.
- Print off records, activity logs and reports.
- Collaborate with other users and designated supervisor via the communication tool, for example email or message board.
- Make and edit appointments and diary activities with your supervisor.
- Have a timed supervision session as per contract and ground rules.
- Be kept up-to-date with site activity and changes.
- Have specific identities, roles and related functions; to be able to be a supervisee and a supervisor and a forum member.
- Report abuse of the site.
- Create and edit a profile.
- Set availability (within role).
- Choose and edit a contact profile.
- Have an onscreen reflective prompt or the template being used for CS.
- Communicate asynchronously or synchronously with your designated supervisor.
- Join or leave forums but not be active in forums when having one-to-one supervision.

- Create and add forums and threads
- Comment and provide feedback on the site (via home page feed back survey tool).
- Leave messages on the notice board.
- Use the site and not undertake one-to-one CS or be active in a forum: for example, to logon and edit personal data or user preferences, generate reports, browse the site and use site links and features.

#### **4.6.3. Goals of User 2**

This user, essentially, has the same goals as User 1; the only difference being that, acting in the role of supervisor, this user will be the one facilitating rather than receiving CS.

Some site users will need to have multiple roles. It is important that the different roles are recognizable as different reports will need to be generated at the request of the user dependent on role at that point in time. They need to be able to synchronize activities and be active with their designated supervisee, whilst undertaking a pre-determined CS session. When active in a one-to-one session, this needs to be private and confidential; this will also mean that they cannot be active in a forum, although the remaining site facilities and tools need to be active and available for them.

Additional goals to those of User 1 are identified below:

- Limited availability via profile within client's predetermined maximums, being a supervisor to no more than five supervisees at any one point in time.
- The ability to withdraw from being a supervisor on the site.
- The ability not to renew a supervisory relationship at the predetermined point as per onsite contract.
- The ability to extract individual reports relating to the user's activity as a supervisor, the number of supervisees currently being supervised and the time spent being a supervisor.
- The ability to identify learning needs as a supervisor.

### **4.7 Site Objective**

To have the features, tools and artefacts necessary to realise site goals.

#### **4.7.1 Objectives for display**

To have the following capabilities, functions or attributes:

- User-centred; the requirements of the users take priority over the client's
- Corporate (NHS branded)
- Multimedia friendly
- Animated
- Professional, crisp, clean and attractive
- Link to sponsors
- Easy to navigate

- Able to be customized
- Link to host organisation's own website.
- Linked media (NHS *You Tube* health clips)
- Good use of communication tools
- Able to be displayed on portable devices

#### ***4.7.2 Objectives for interactivity***

To have the following capabilities, functions or attributes:

- Editable collaborative tools and facilities
- Synchronies diaries and appointments
- Leave messages
- Receive updates and feeds
- Internal and external connectivity
- Control availability: to be private and or public
- Ability to be contacted, notified, personalized: for example, "Hello Mark" on login
- Provide feedback and evaluative data
- Mark and store data as a resource for self and other users
- Clock-timer linked to the CS session as set in the CS ground rules / contract

#### ***4.7.3 Objectives for communication***

To have the following capabilities, functions or attributes:

- Asynchronously and synchronously communication
- Variety of media: text, image, sound, stream video, web camera
- Fast and simple to use
- Manipulate, store, edit, save and display data

#### ***4.7.4 Objectives for technology***

To have the following capabilities, functions or attributes:

- Search ability
- Utilise collaborate technologies (discussion boards, wikki's, corporate mind maps)
- Stream video
- Upload images, sound and text
- Link to other sites
- Interact with other sites e.g. Ask a librarian
- Internal link to the host (client website)
- Diary and appointment facilities that connect to other aspects, such as the CS contract
- Free text area (message board)
- Utilise RSS feeds

- Interactive software, such as mind maps
- Generation of different types of report
- Standard template for contracts
- Login and sign up facilities and editable, per user, profiles page
- Screen prompts, such as 'Your supervisor is online'
- User recognition capabilities, such as 'Welcome Mark' on logon
- Data saving and data set generating capabilities
- Rating system (site evaluation, user login related)
- External guest logins (verified) by invitation - permissions etc.
- Access restrictions within the host organisation
- Search data bank linked to user profiles
- Create new forums and display them as a list
- Secure private interactions, internally linked to security features
- Join, leave and start forums
- Home page that has restrict functions unless a logged in member
- Password capabilities (change / renew)
- Email facilities
- Functional buttons that internally support the educative functions
- Accessible templates, such as reflective cycles, complete with prompts
- Save a discussion and return to it and/or print it
- Interchangeability for users, linked to profile or role functions, for example, one-to-one or forum participation
- Potential to data mine activities to improve site effectiveness and to become a resource

## 5. Process Flows

### 5.1 Potential User

A potential user will be able to view the website from the internet as well as from the client's intranet. Any individual will be able to view the website, but information will be restricted. Joining data will be displayed and live feeds will be visible. Anyone wishing to join the site will need to follow the set processes.

### 5.2 First Time User as a Supervisee or Supervisor

A first time user (or guest) will be able to access the website from the home page either via the central information panel with the hyperlinked button 'join' or via the 'log on / sign up' tool. This will not be instantaneous as the user credentials will need to be verified by the client before full access is granted.

A welcome and introductory form will be generated with mandatory fields, the content of which will be PCT specific. This will be completed by the prospective user and emailed to the client via the website. An instant response will be generated indicating the estimated time for full membership access to be granted. Contact details of the nominated office of the client will also be supplied. The client will then undertake the necessary enquiries to verify the user's credentials (which will be stored on the site's

data base). This may involve checking with an existing employer and or professional body. Once accepted, confirmation will be emailed to the new user with the necessary joining instructions. The user can then activate sign up for the website and commence clinical supervision providing they fill in all mandatory fields and accept terms and condition of use. A default setting will be to offer any first time user a tour of the site. A request for a supervisor should be made at this stage if the user intends to undertake one-to-one clinical supervision. This will involve reviewing outline profiles of available supervisors and forwarding a request. Access to forums and the governing ground rules will be available to the new users, subject to terms and conditions (as specified by the client). All other site facilities will be available.

### **5.3 First Time User as an Employee of the Client**

On request to join the site, a welcome and introductory form will be generated that has mandatory fields. The same verification process will be activated (as for a first time user from outside the organisation) but a fast track process will be activated. The trigger will be the user's PCT email account and logon details. The client's website should recognise the user's personal logon data and fast track the application with no need to check out the individual. Preset exclusions by the client should prevent unauthorised personnel trying to sign up.

### **5.4 User 1: Supervisee**

Once signed up and logged on, this user has a full access rights to all tool and features of the site. The log on needs to trigger a personal response, for example, 'Welcome Mark to the Clinical Supervision Website', and a screen shot displaying acceptance of the site's rules and terms and conditions of use. If not accepted, entry to the site will not be permitted.

The option to request a supervisor will be available if not previously undertaken. Undertaking one-to-one CS is dependent on an agreement being entered on the website's data base by both supervisee and supervisor; this will be linked to the ground rules document needed to undertake CS.

The user has various options after logging on:

- To undertake one-to-one supervision as set via a calendar appointment (advanced notification reminders of session and topic to be discussed at the next session) or choose to set flexible sessions by mutual agreement.
- To browse the site to find and extract data as required: for example, use site links, generate reports etc.
- To edit profile and personal preferences
- To take part in a forum or add a forum or thread to a debate.

### **5.5 User 2: Supervisor**

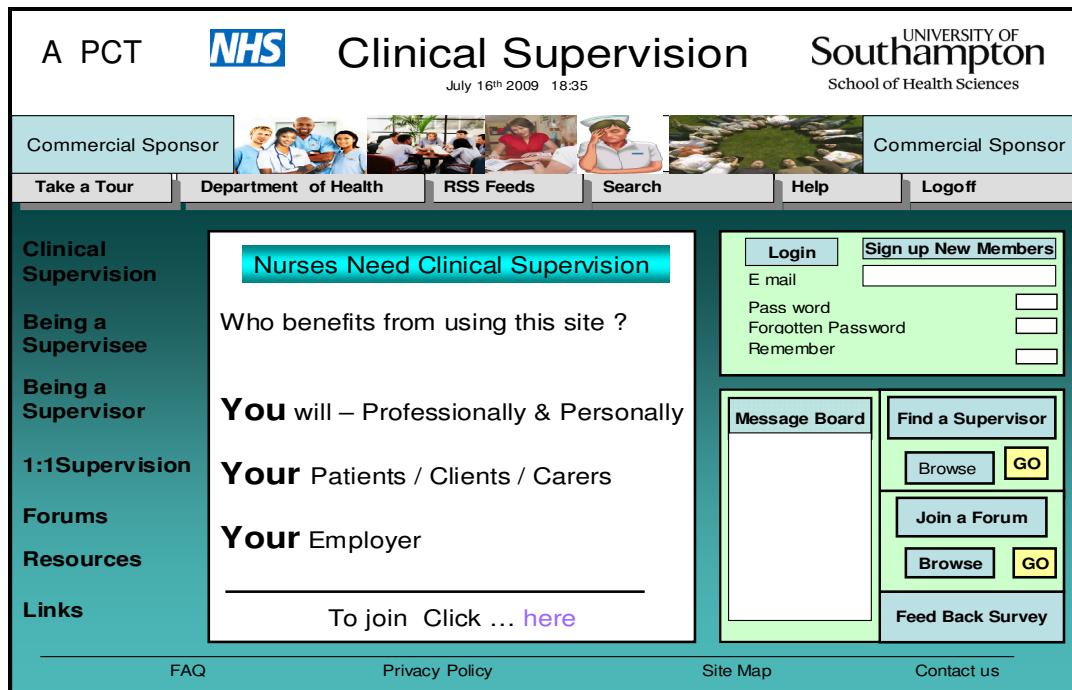
As User 1 above

## 5.6 The Client

- The client will have the option to veto who and how many site users can log onto the site and to temporarily restrict an individual's ability to use the site, such as in the case of suspected, reported abuse. An automated response will need to occur at the next attempt to log on directing the user to the office of the client.
- The client will have the ability to monitor the site's activity and generate a variety of reports but will not be allowed to access one-to-one session or forums routinely. Access to the content of any discussion would, however, be accessible by the client in the case of reported abuse or misuse of the site, as stated in the site rules and conditions of use.
- The client needs full administrator rights to the site.
- Any functional changes, maintenance or upgrades that the client requests that were not included in the initial set up and commissioning of the site will be subject to an additional charge.
- An agreed schedule of review of the site's functionality and capability will be undertaken at the client's request and will be subject to a charge.
- The site's hosts will be responsible for the reliability, security and confidentiality of the site and its data.
- The client will be subject to the terms and conditions of the contract agreed between the site's knowledge partner (the University of Southampton) and the host of the website.

## 6.0 Proposed Website Pages (screen mock ups for illustrative purposes only)

### Home page



The screenshot shows the homepage of the Clinical Supervision website. The header includes the NHS logo, the text 'Clinical Supervision', the date 'July 16th 2009 18:35', and the 'UNIVERSITY OF Southampton School of Health Sciences'. The navigation bar features links for 'Commercial Sponsor', 'Take a Tour', 'Department of Health', 'RSS Feeds', 'Search', 'Help', and 'Logoff'. On the left, a sidebar lists 'Clinical Supervision', 'Being a Supervisee', 'Being a Supervisor', '1:1Supervision', 'Forums', 'Resources', and 'Links'. The main content area features a large image of a group of people in a meeting. Text on the page includes 'Nurses Need Clinical Supervision', 'Who benefits from using this site ?', 'YOU will – Professionally & Personally', 'YOUR Patients / Clients / Carers', 'YOUR Employer', and 'To join Click ... [here](#)'. The right side contains a 'Login' and 'Sign up New Members' form, a 'Message Board', a 'Find a Supervisor' section with 'Browse' and 'GO' buttons, a 'Join a Forum' section with 'Browse' and 'GO' buttons, and a 'Feed Back Survey' section.

## Sign up page

A PCT **NHS** Clinical Supervision UNIVERSITY OF Southampton  
July 16<sup>th</sup> 2009 18:35 School of Health Sciences

Commercial Sponsor  Commercial Sponsor

Welcome

Do you work for The IOW NHS PCT and wish to become a member of this Clinical Supervision Website then [Click here](#)

[Yes I would like to join](#)

If you don't but wish to have Clinical supervision with an employee of this PCT or become a member of one of the forums then [Click Here](#)

[Join as a guest](#)

## Log on page

A PCT **NHS** Clinical Supervision UNIVERSITY OF Southampton  
July 16<sup>th</sup> 2009 18:35 School of Health Sciences

Commercial Sponsor  Commercial Sponsor

Take a Tour Department of Health RSS Feeds Search Help Logoff

**Find a Supervisor**  
Browse GO

**Members Logged on**

**Join a Forum Forums I Belong to**  
Browse GO

**Availability as a Supervisor**  
**Number of Supervisees**  

1	2	3	4
---	---	---	---

Name of own Supervisor  
Browse

**Site Rules and Regulations**

Report any abuse of this site  
Accept Don't Accept

**'Marks' Profile**

Save Edit  
Name  
Job Title  
Qualifications  
Work contact details  
Mobile Phone  
Dept  
Line managers e mail  
Areas of interest  
Contact Preferences  
User Preferences

Up load Image

FAQ Privacy Policy Site Map Contact us

## Individual clinical supervision page

The screenshot shows a clinical supervision interface. At the top, there are navigation links for 'Commercial Sponsor', 'Take a Tour', 'Department of Health', 'RSS Feeds', 'Search', 'Help', and 'Logoff'. Below these are links for 'Instant Message', 'E Mail', 'Portable Devices', 'File up loads', and 'Calendar / Appointments'. The main content area features a 'Welcome to Mark to your 2<sup>nd</sup> Clinical Supervision Session with your Supervisor David' message. A large, diagonal 'Discussion Board' text is overlaid on the main content area. To the right, there are two sections: 'Thought Builder' (with a 'Web Cam Link' button) and 'Message Board'. At the bottom, there are links for 'FAQ', 'Privacy Policy', 'Site Map', and 'Contact us'.

## Forum page(s)

The screenshot shows a clinical supervision interface, identical to the individual supervision page but with a different layout. The main content area features a 'Welcome to Mark to your 2<sup>nd</sup> Clinical Supervision Session with your Supervisor David' message. A large, diagonal 'Discussion Board' text is overlaid on the main content area. To the right, there are two sections: 'Thought Builder' (with a 'Web Cam Link' button) and 'Message Board'. At the bottom, there are links for 'FAQ', 'Privacy Policy', 'Site Map', and 'Contact us'.

## 7. Website Flow Charts

### 7.1 Home Page Structure (Flow Charts 1-9)

The home page has five main sections, all of which have their own unique purpose and provides its own functionality. The home page is dynamic and provides helpful but limited information to a casual browser, but also acts as the gateway to the site as a whole for verified users and the client. The home page will be NHS branded in all aspects: logos, colours, fonts. The layout and content will be user-centred. The impression the site needs to give from the appearance of all pages is that it is a professional site for professional activities.

#### Link to Client

On all pages, the site needs a link back to PCT's home page (via their logo) as the employer and client. If more than one organisation is involved, then reciprocal links need to exist - for knowledge partners or associated approved organisations, like the University of Southampton. If the site is externally hosted, the client may wish a link, for example to Microsoft as the company supplying the virtual platform, to be part of the home page. This element of the site will be dependent on the business model adopted. The home page needs to be able to be customised for different clients with different internal and external links. It will also potentially mean different levels of access for different users.

#### Title Bar

Home page only; this needs to be divided into four columns (as per Flow Chart 1). It will need to be able to have links to multiple sponsors changing at regular intervals. It needs to support the date and time as well as state the name of the site. The image panel needs to reflect the characteristics of the range of users; therefore different images need to be display continuously.

#### Navigation / Information Buttons

These seven buttons will be located on the left hand side of the home page. They are information buttons, which display information when a cursor is placed over the button (a pop out). This information will need to be generated in collaboration with the client during the build phase.

Not all navigation / information buttons are available on all pages.

#### POP OUT Brief Explanation

A pop out will display data relating to the button, for example, a definition, or explanation.  This needs to be available all the time.

#### Tools

The home page has 14 tools. Seven of the tool buttons are replicated with the same purpose and functions on the home page, the one-to-one supervision pages and the forum pages. These are located directly under the title bar (**Local PCT / SOHS / DOH / RSS / Log off / Help / Search**). The remaining tools and buttons are positioned as per home page layout.

**The message board** is a read only feature on the home page if not logged on. It also appears on the one-to-one and forum web pages. This feature is for members to leave messages.

**The feedback survey tool** is located at the bottom right hand corner of the home page. It will be a compulsory aspect of the site. It will appear as a default after X amount of logins (determined by the client). Data about the site will be collected that is not collected by internal tracking and monitoring. It will comprise a rating system relating to, for example, how reliable the site is etc. (exact questions yet to be determined). An open text aspect will also be available for members to make additional comments. This will only be available to logged on site members. It will generate a report to the client every 4 months (exact format TBC).

**Log on / sign up** - this tool will only appear on the home page and will form the security point of access to the rest of the website. After successful logon, all site pages, tools and features are available to that member. The default will be the log on web page for existing users and the sign up page for new users (with a default to taking a tour and explanation of mandatory fields). As a member, after agreeing to website rules (at each logon), it will default to the home page. A security protected recovery password feature will need to be in place. This will need to be linked to the client's data base as log on will be as a 'PCT or employer' logon. New individuals to the site will only be allowed access if the client grants this privilege. Two separate forms will need to be generated. One for an employee of the client and one for another who wishes to establish a guest access. The guest access will have the same privileges and rights as the employee member. Correspondence will be via e mail.

**Join a forum** - this is a shared tool with the sign up page, only actionable if a logged on member. This needs to link to a data base of forums and membership details as well as forum web page and log on and sign up page.

**Find a supervisor** - this tool only appears on the home page. It has a browser link to the log on page and user preference on the sign up page. The availability of supervisors is controlled via stated preference (user preferences and profile mandatory fields).

**Information central panel** - this is the largest singular area on the site. On the home page, it will be read only (but editable by the client). It will help an interested individual gain a snap shot of the benefits of the site (exact text TBC). It will have a link on how to join. (The word 'join' will be an active button.) This will default to the sign up page. This central panel will be the discussion board communication tool on the one-to-one and forum pages.

**Data bases** - although listed as a tool, this will be a background tool and not appear as part of the home page.

### Features

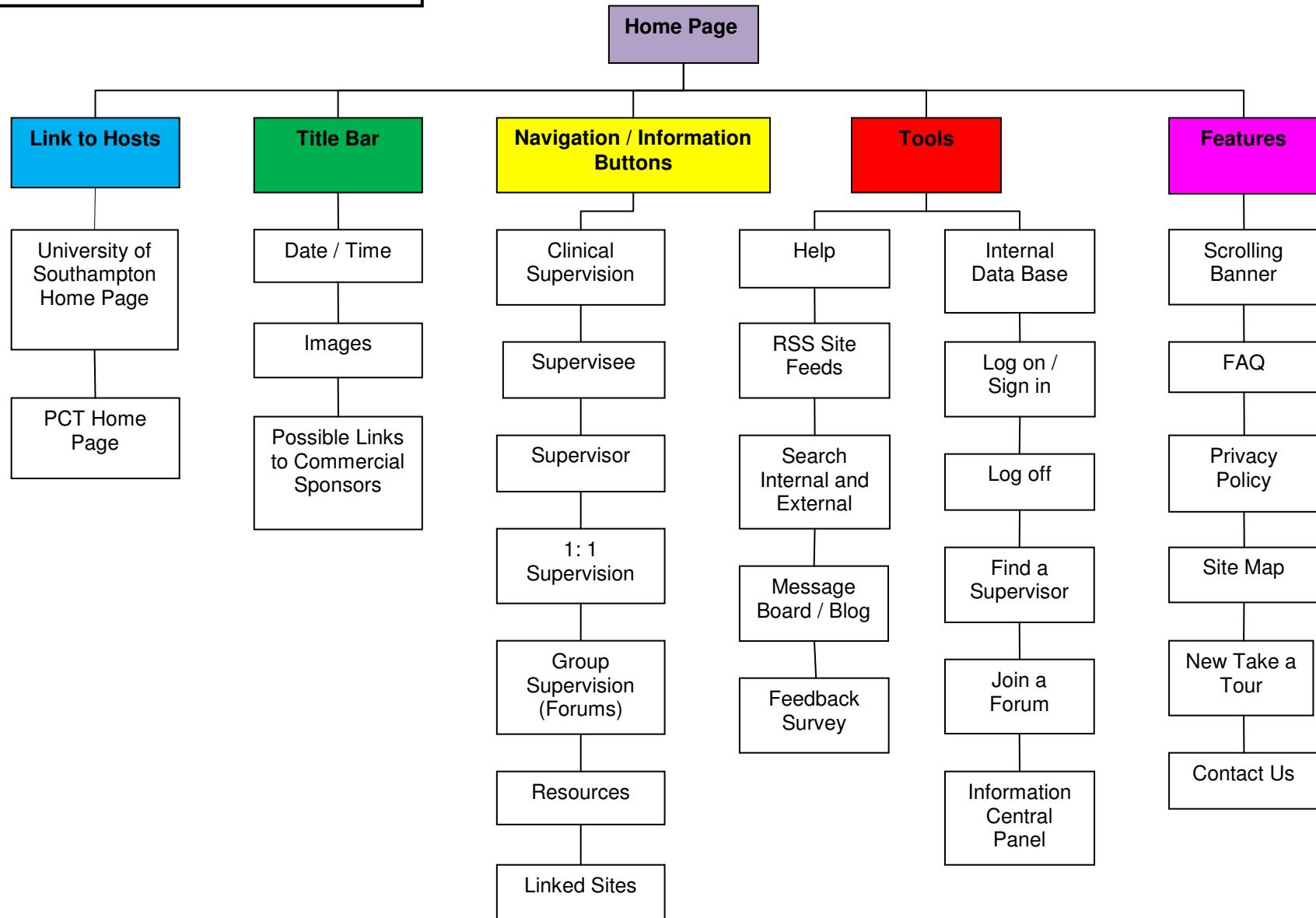
The home page has seven features.

**New take a tour** - this is only located on the home page, on the tool bar below the title bar. This feature will be read only and provide information about how the site works with screen shots and written information. The user needs to be able to navigate around and not have to follow a set linear information flow.

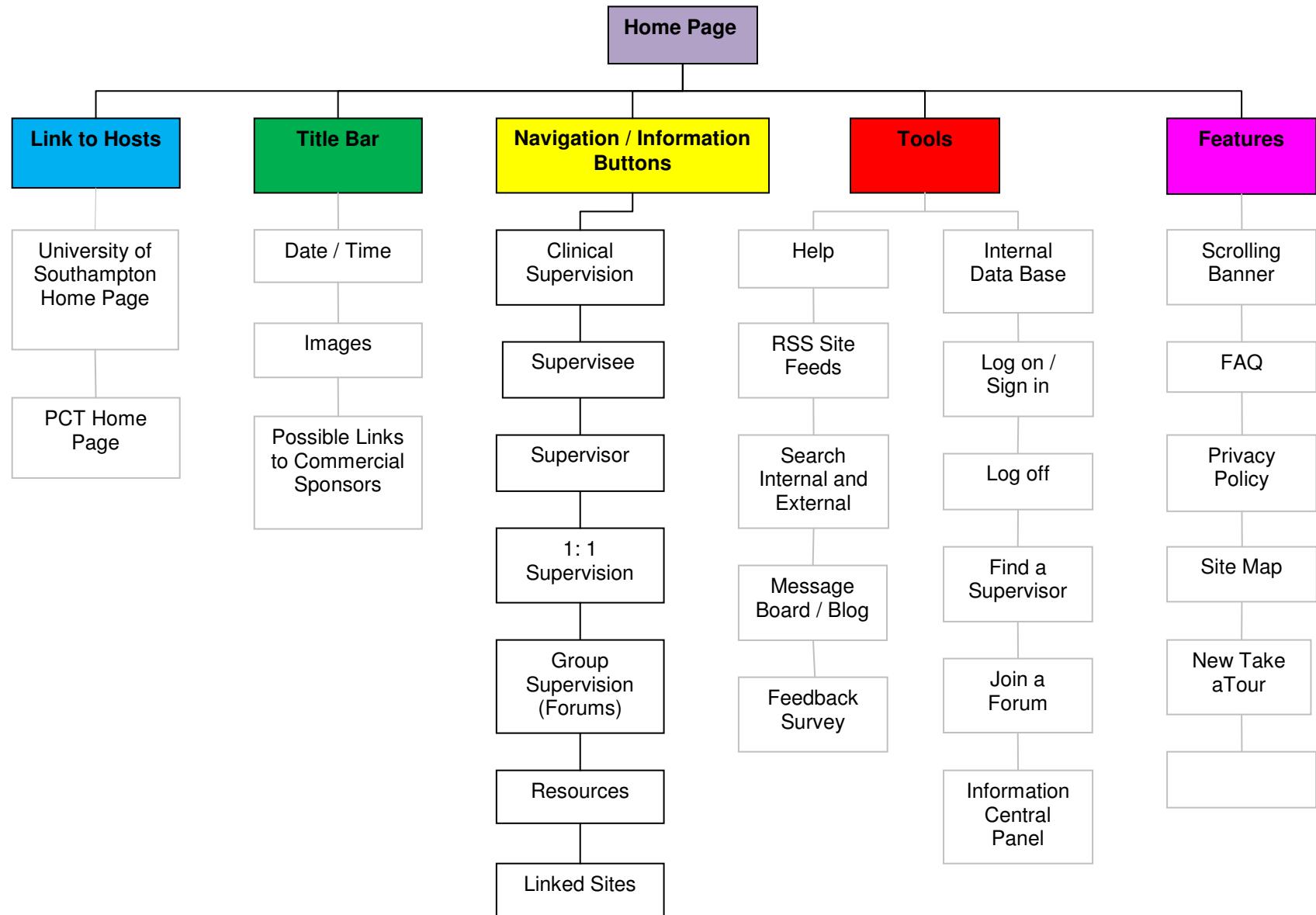
**Site map / FAQ / privacy policy and contact us** - all appear on all web pages at the foot of each page (content TBC).

**The scrolling banner** is only visible on the home page, under the above tool. Buttons will display information pertaining to the activity on the site, such as the number of clinical supervision session that are active, for example, there are currently 10 supervision sessions taking place and or there are 3 forms active they are .... The topics being discussed are ... There will be a live news feed from the DOH. This needs to be generated from the website data base and live links.

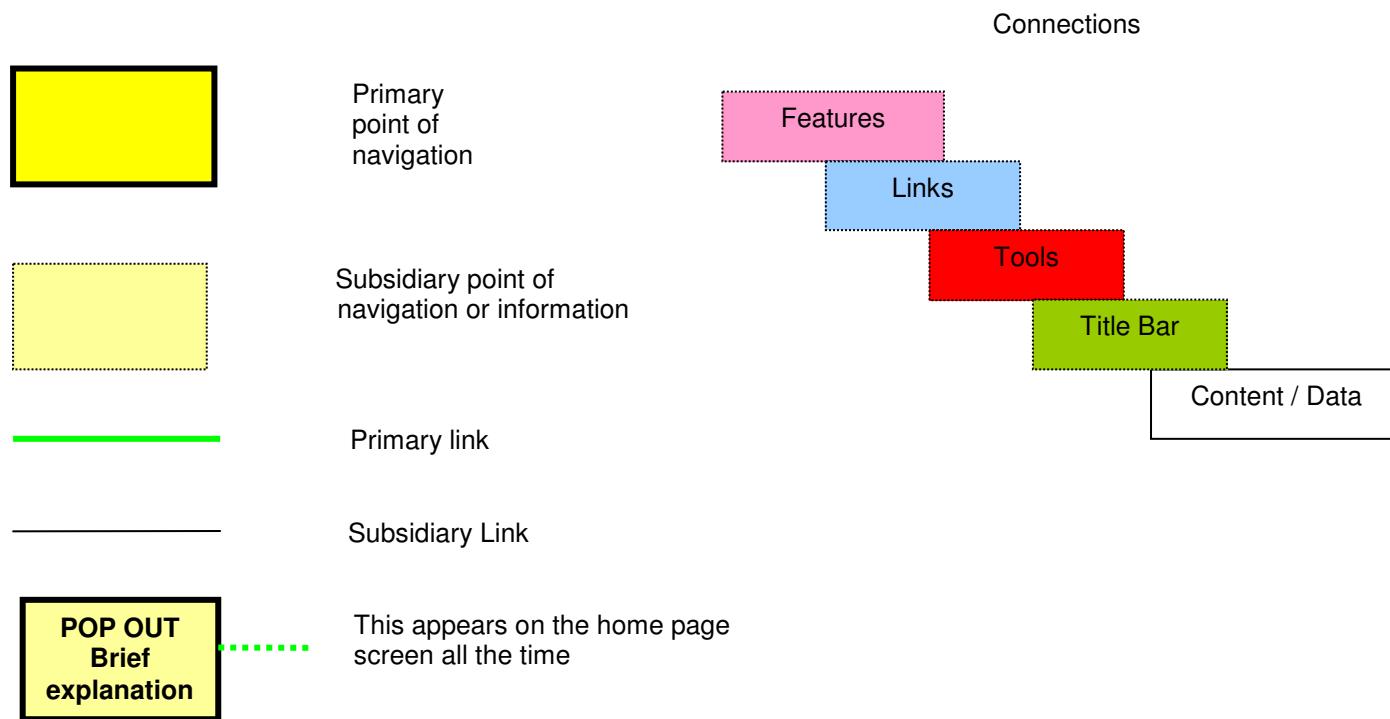
**Flow Chart 1: Home Page**



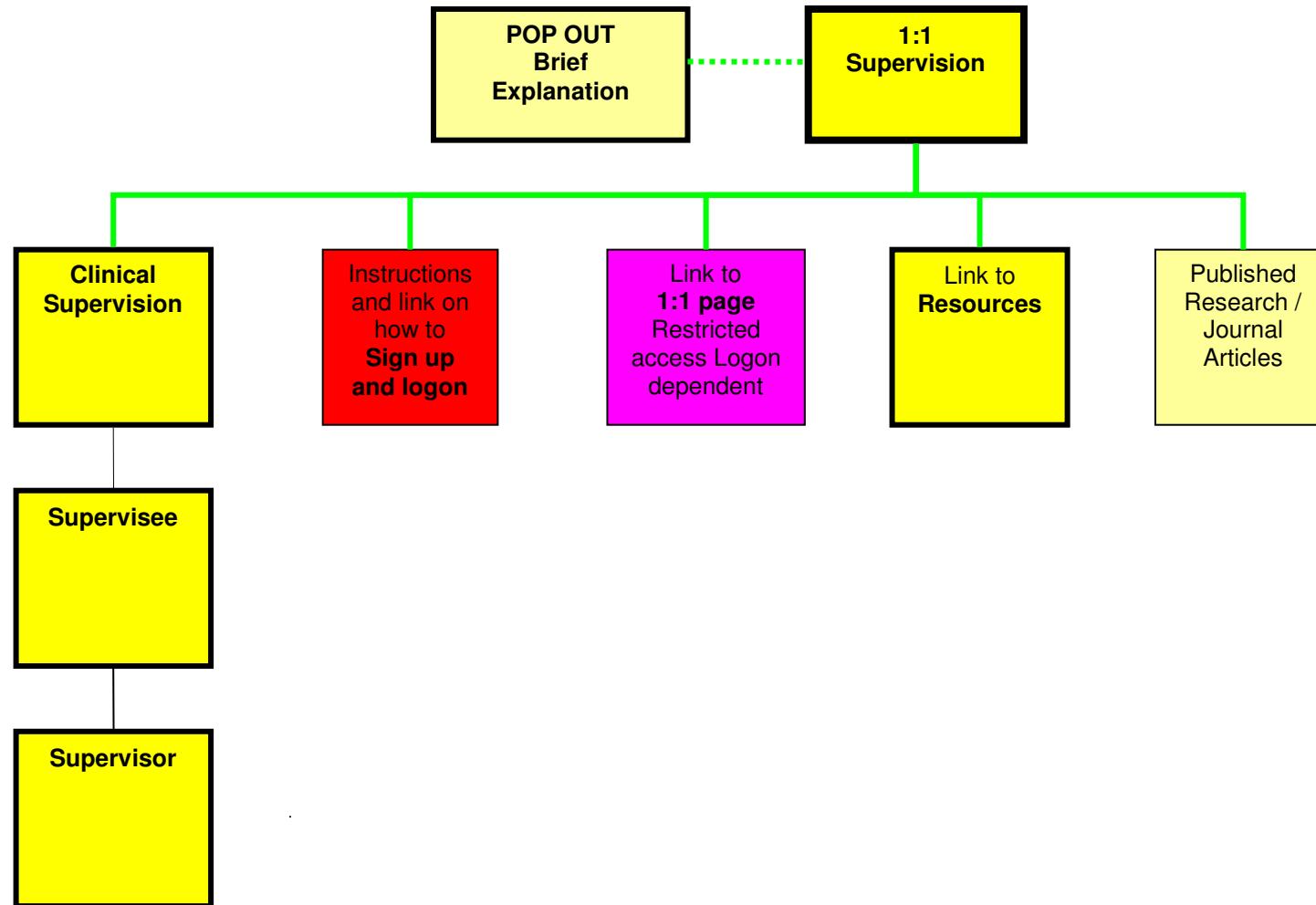
## Flow Chart 2: Home Page Navigation / Information Buttons



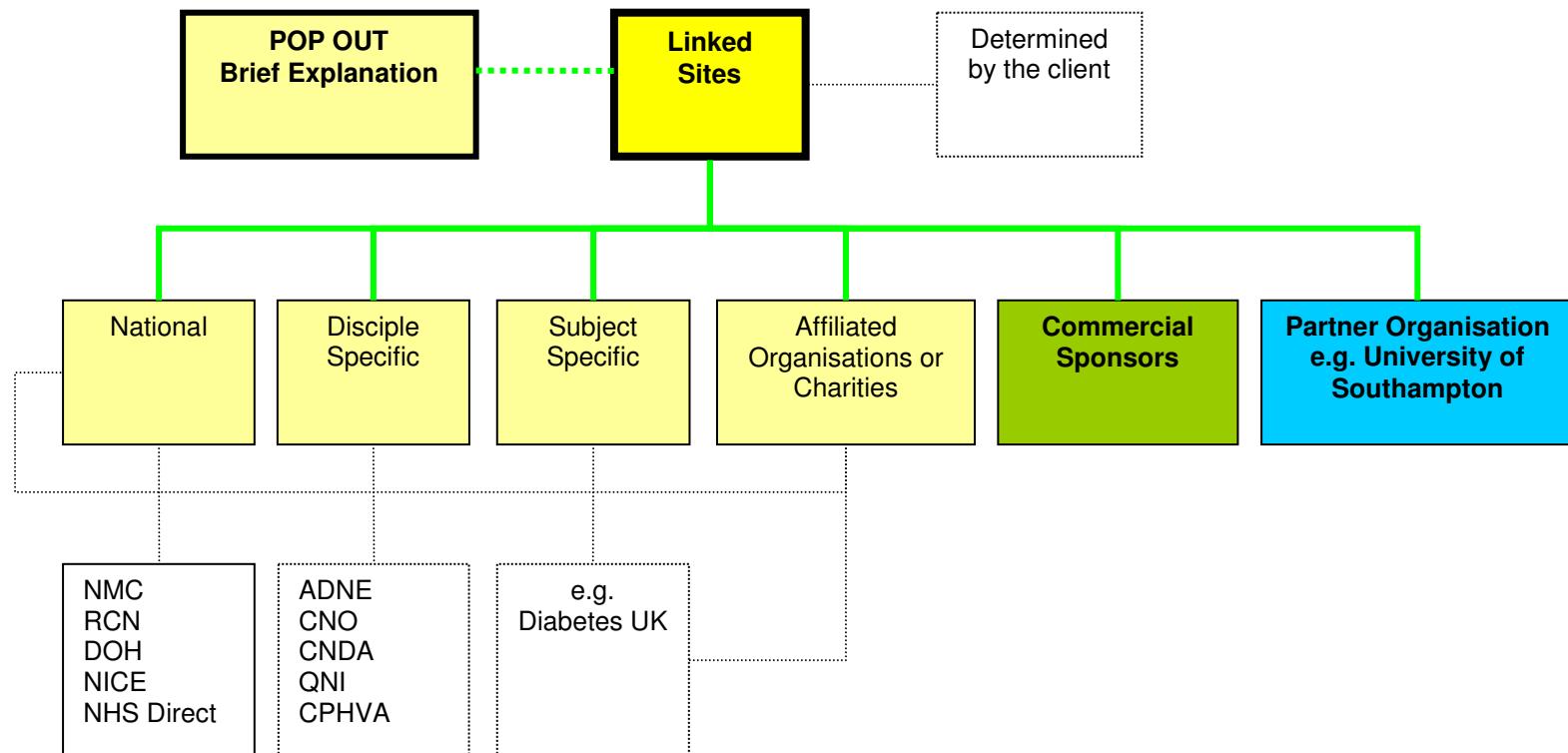
### Flow Chart 3: Home Page Navigation / Information Buttons - Key



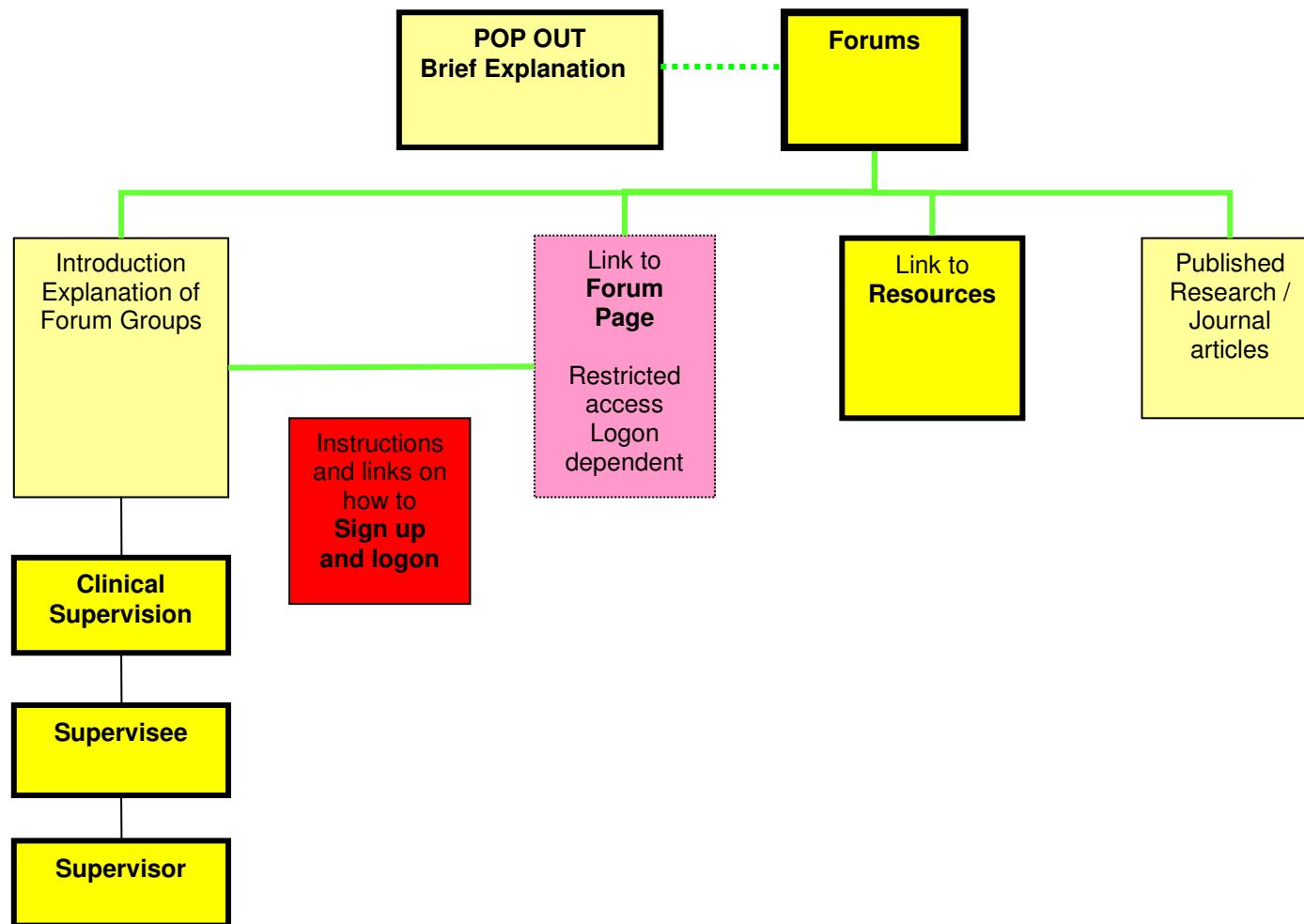
#### Flow Chart 4: Home Page Navigation / Information Buttons - One-to-One



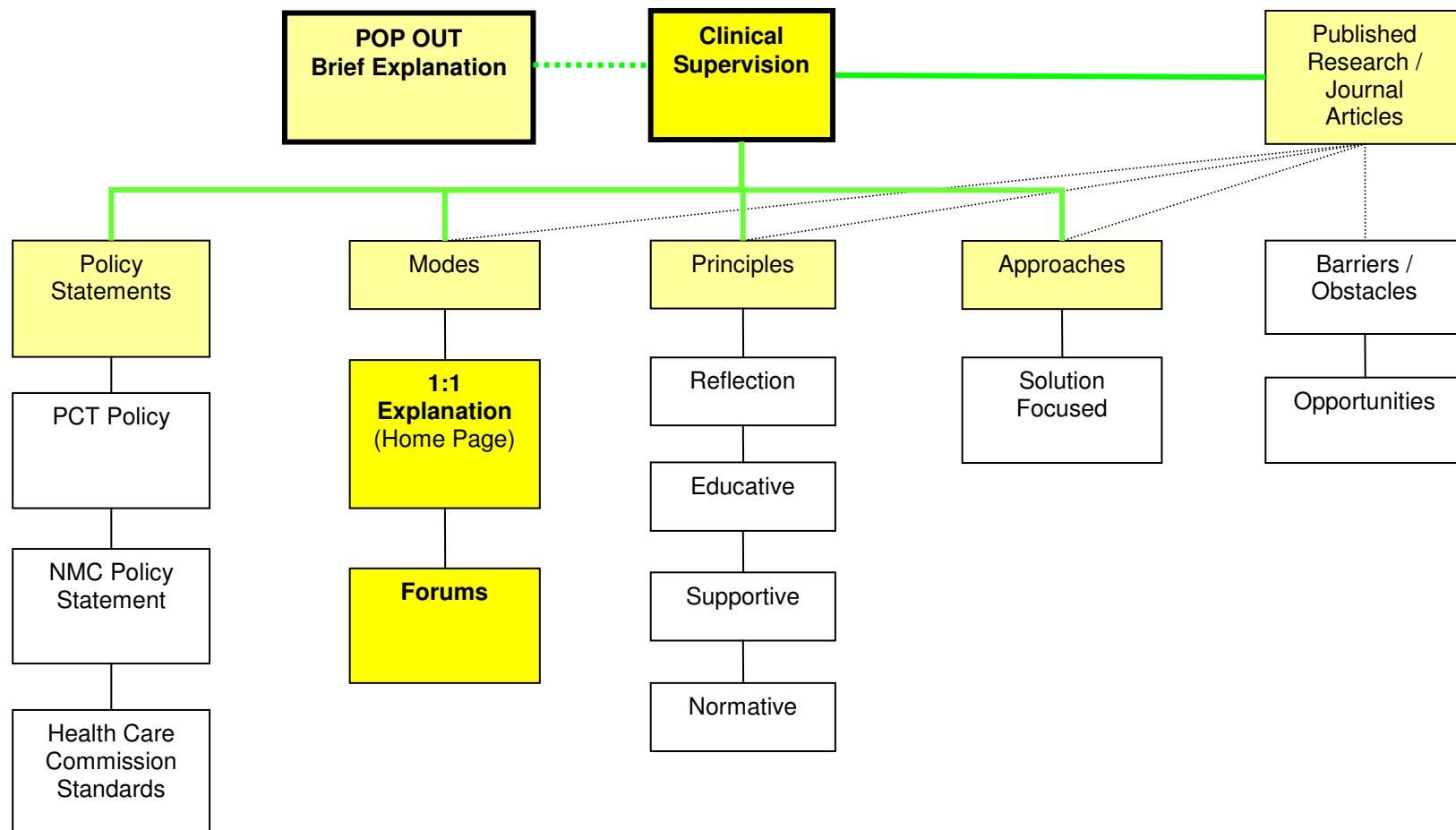
### Flow Chart 5: Home Page Navigation / Information Buttons - Linked Sites



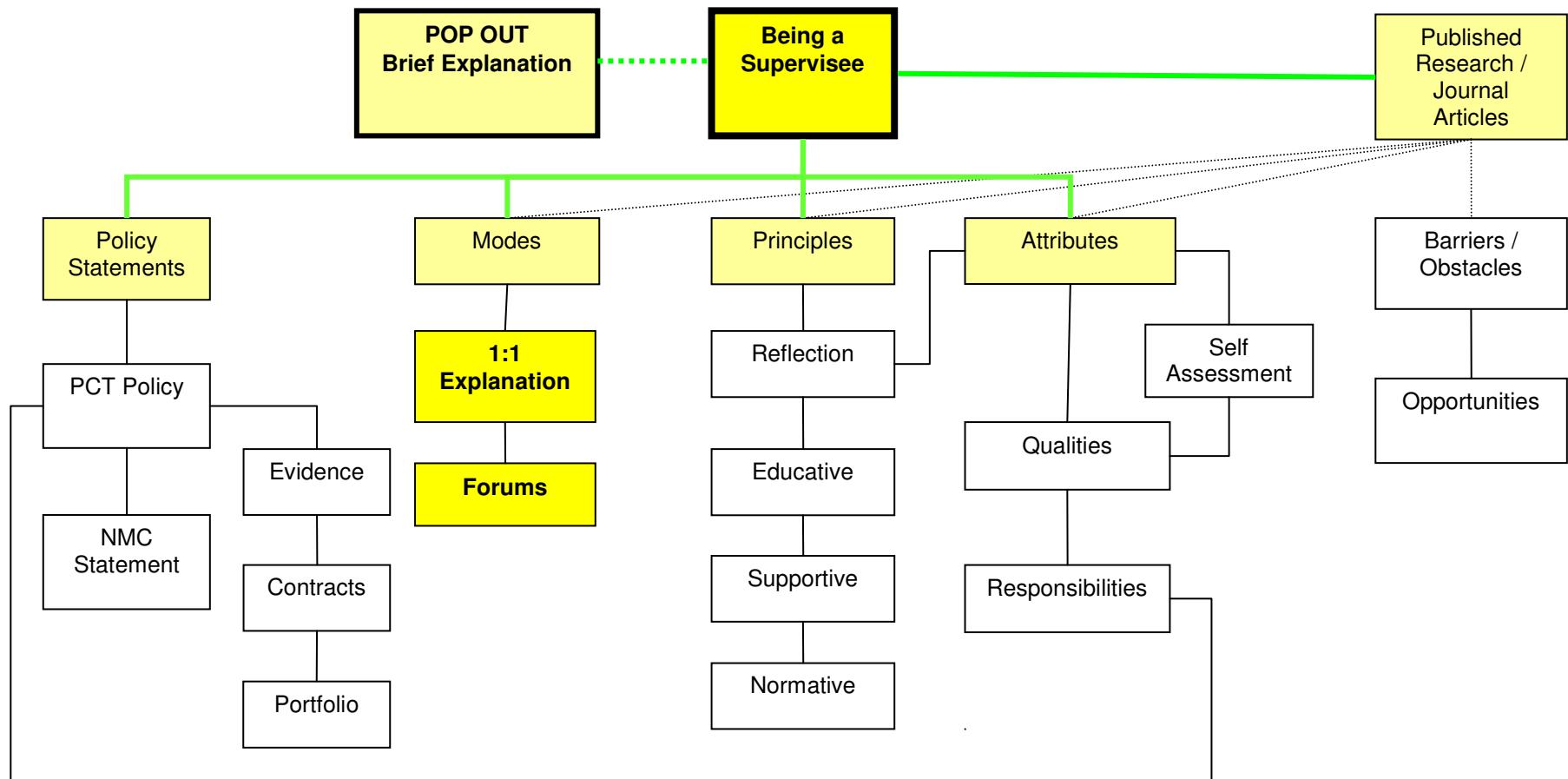
### Flow Chart 6: Home Page Navigation / Information Buttons - Forums



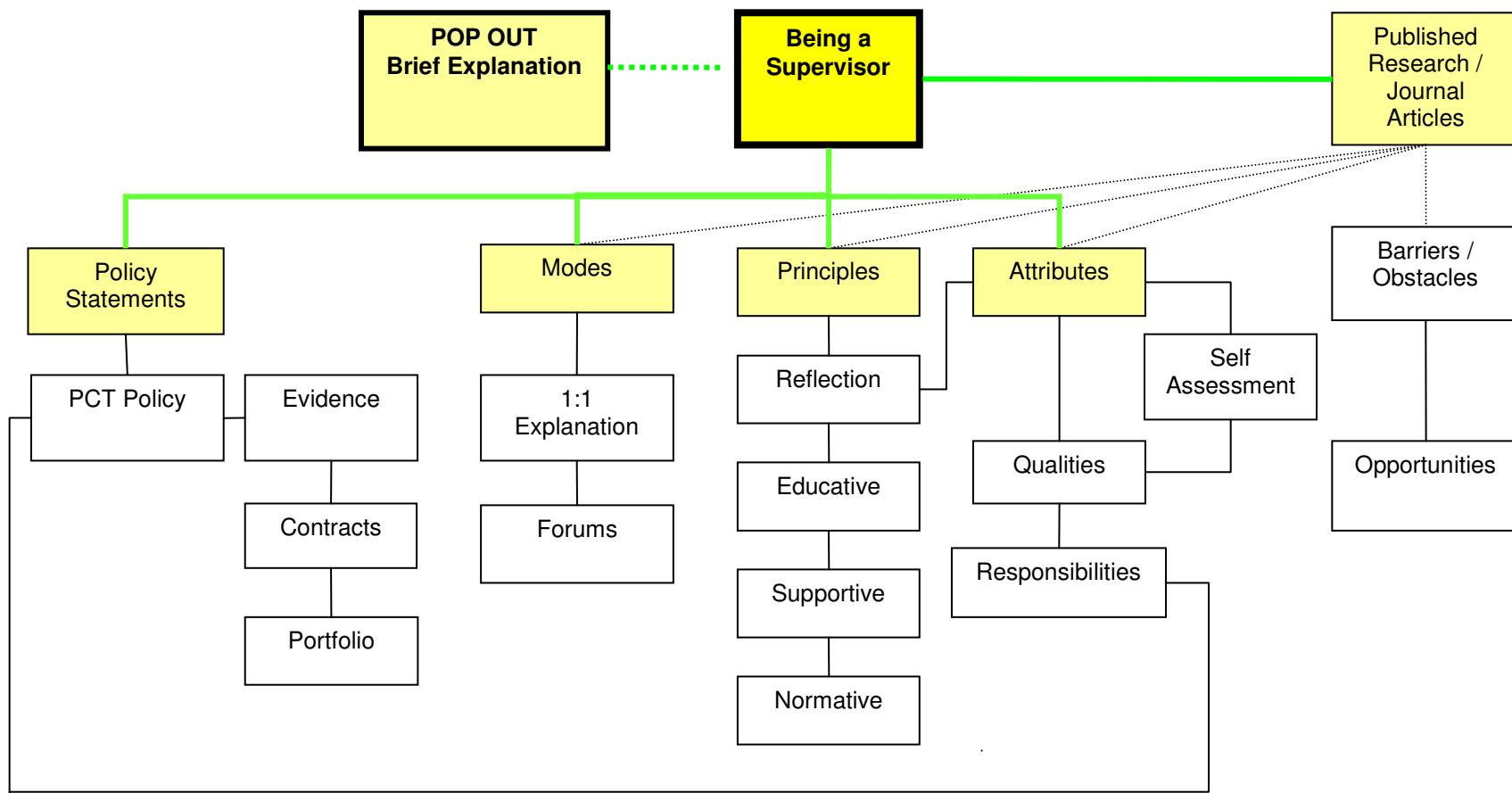
**Flow Chart 7: Home Page Navigation / Information Buttons – Clinical Supervision**



**Flow Chart 8: Home Page Navigation / Information Buttons - Supervisee**



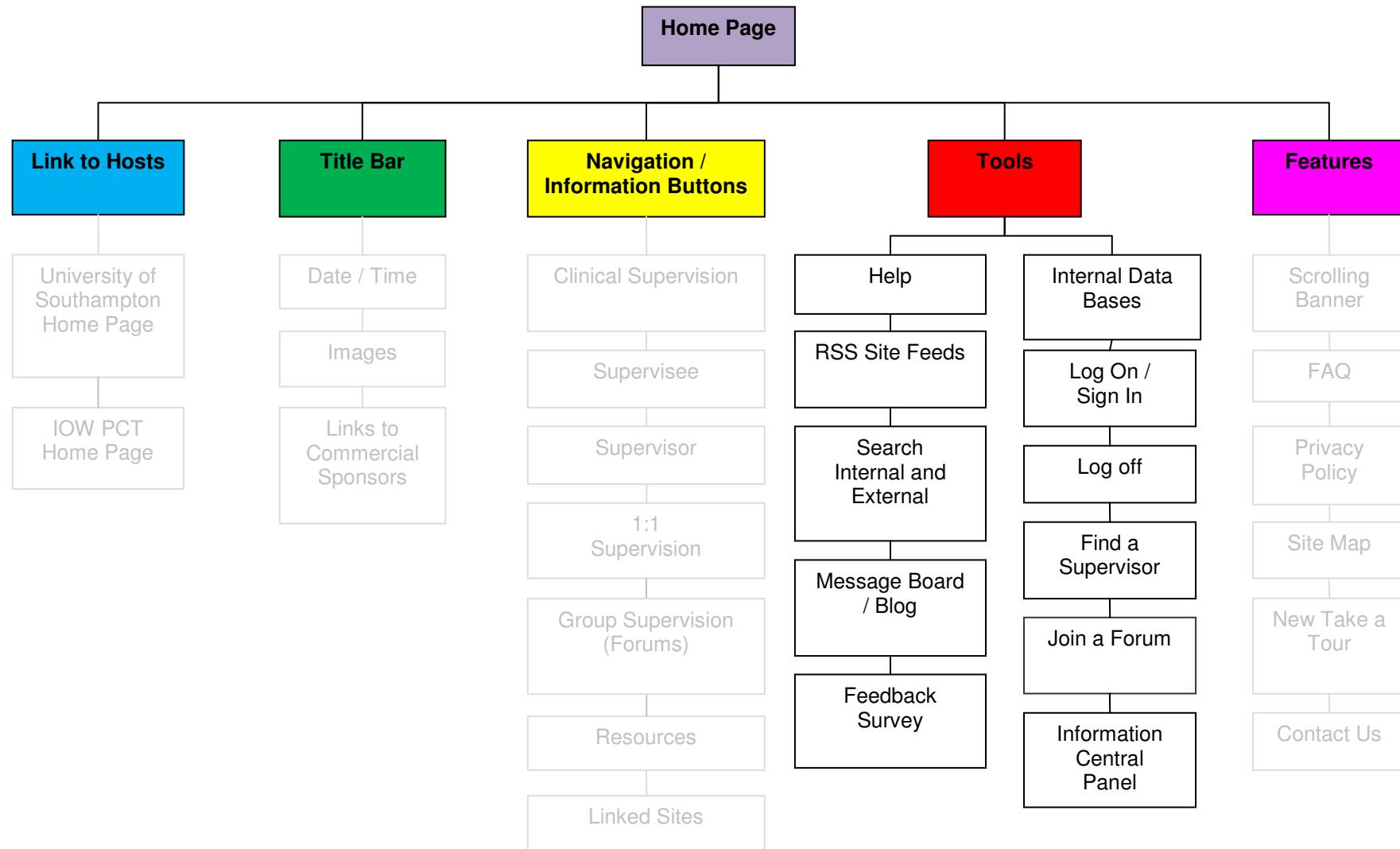
**Flow Chart 9: Home Page Navigation / Information Buttons - Supervisor**



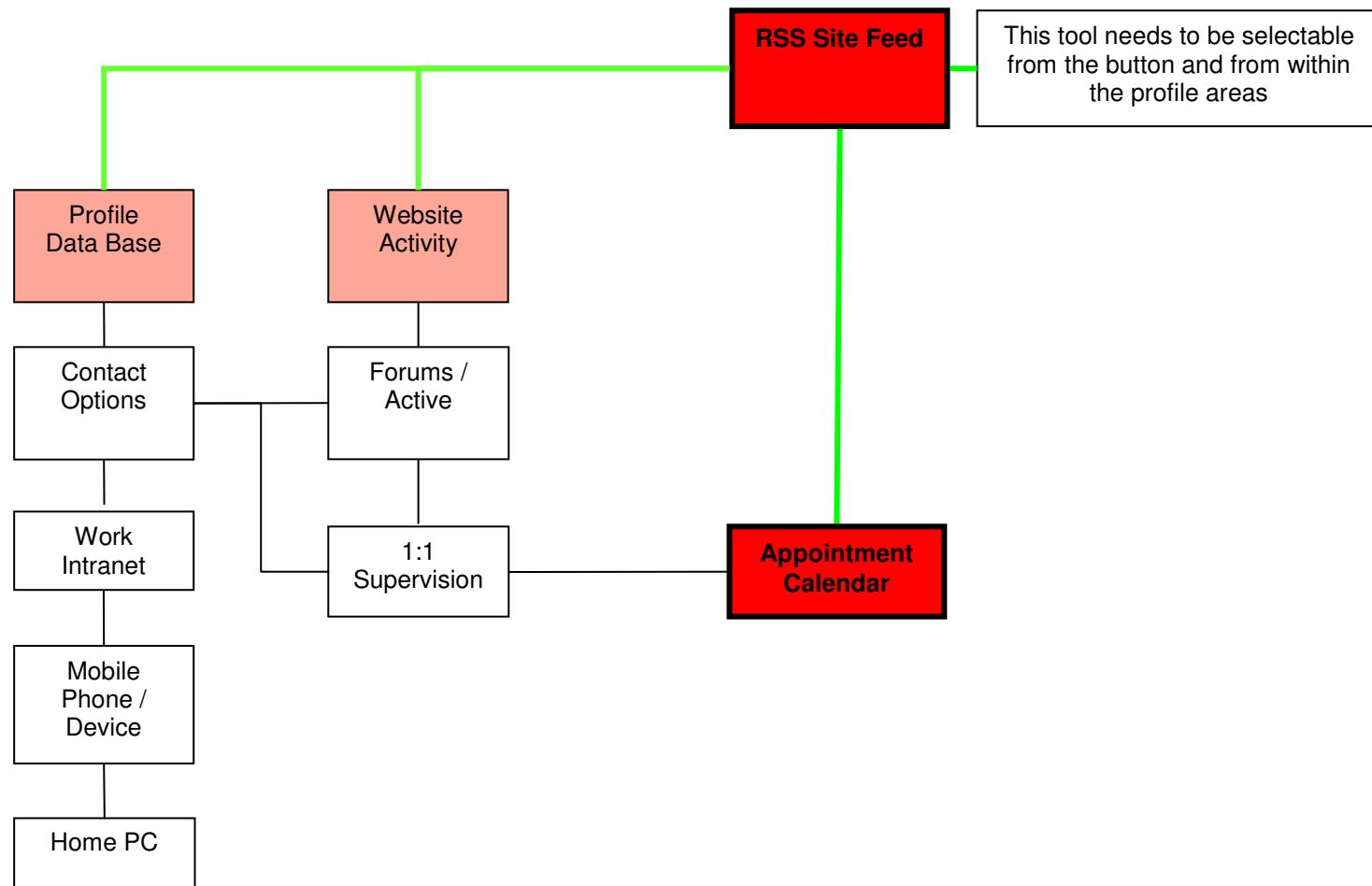
## 7.2 Home Page Tools (Flow Charts 10-16)

Tools	All tools appear on all web pages (unless specified otherwise) and form part of the display. All need to be accessible as active hyperlinked buttons or as drop down menus when a cursor is placed over them.
Log Off	Not on sign up or log on page. Executes shut down as and closes individual accounts, gives option to save session data, Initiates feedback survey on a predetermined number of log ons.
Help	Not on sign up or log on page .This 'Help' tool needs to be able to give advice on all standard operations of the website. It needs to be a how to do, when the viewer is stuck. It will require the standard Microsoft data and specific data relating to the tools and features on the site.
Search Internal & External	Not on sign up or log on page. This tool needs to be able to have the option of searching the site and searching the internet. It would also need to have the option of linking to the client's website. This would allow databases already subscribed to, to be accessed, for example NHS Athens accounts to be verified and accessed from this site. Internal searching can be in the same window. External searching needs a new window, that when closes needs to return viewer back to previous page.
Feedback Survey	On the home page only. Set questions, which require a rating scale to choose answer. Becomes a log off default after 5 log ins with an override option. Results sent calendar monthly to PCT. Identified personnel report generated 4 monthly. Possible results of certain questions sent back to commercial sponsors and available to partner organisation if involved in audit or approved research.
Log On / New Members Sign Up	On the home page only. Email orientated. Recovery of forgotten password. Log on using PCT / employer logon. <b>Default to log in page or sign up page. Log on allows access</b> to restricted areas once signed up and user verified by client.

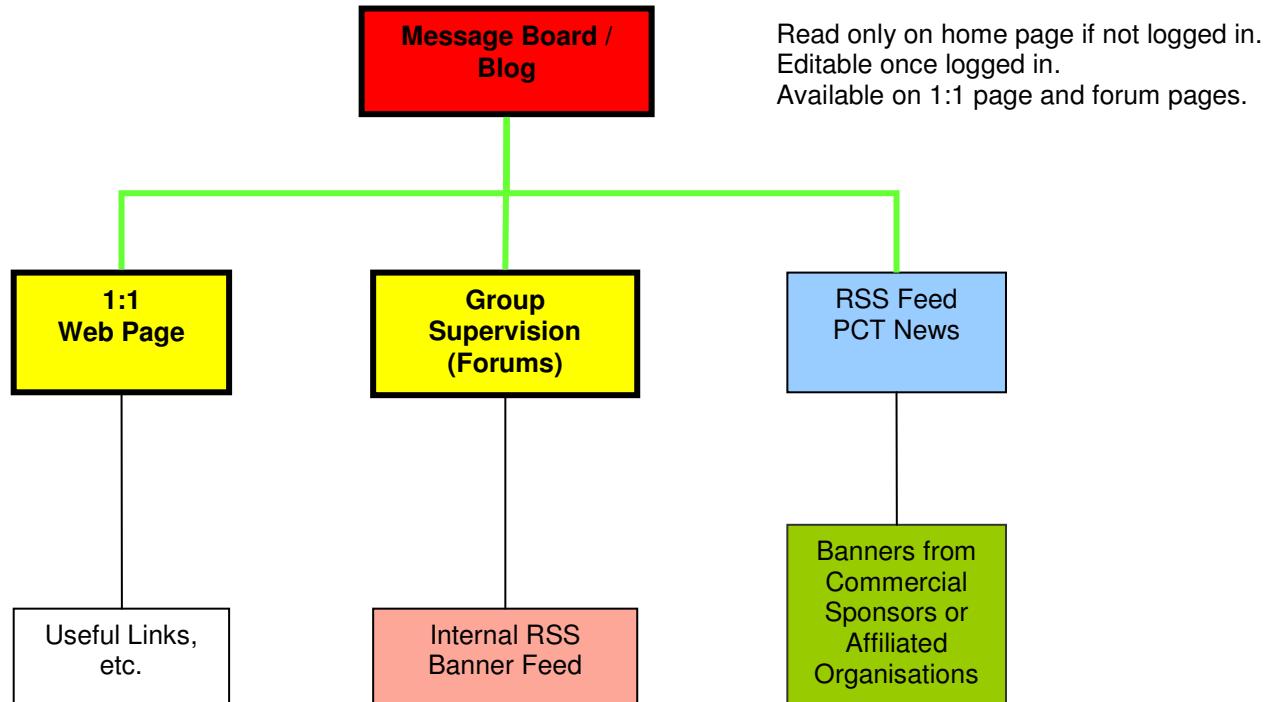
### Flow Chart 10: Home Page Tools



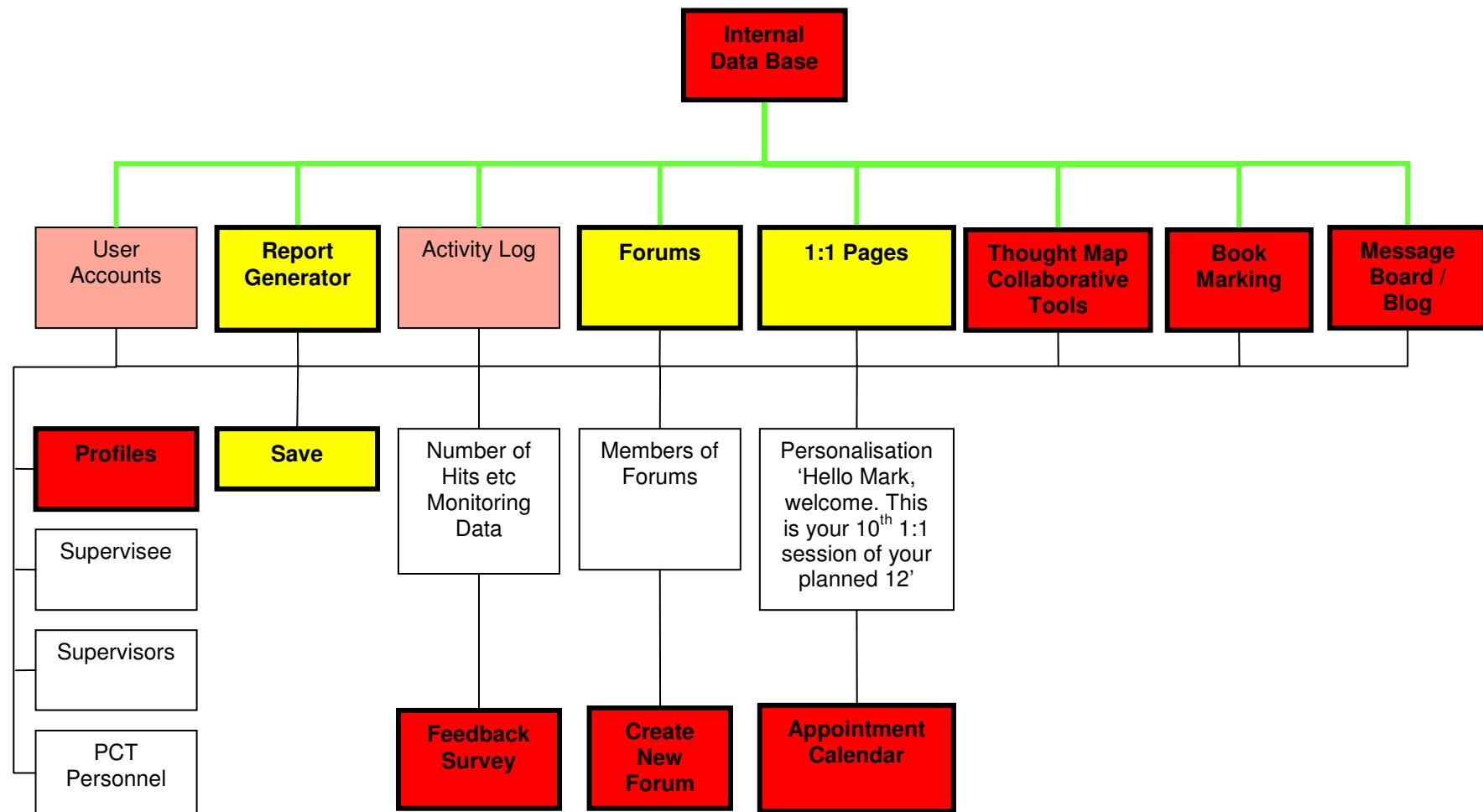
### Flow Chart 11: Home Page Tools – RSS Feeds



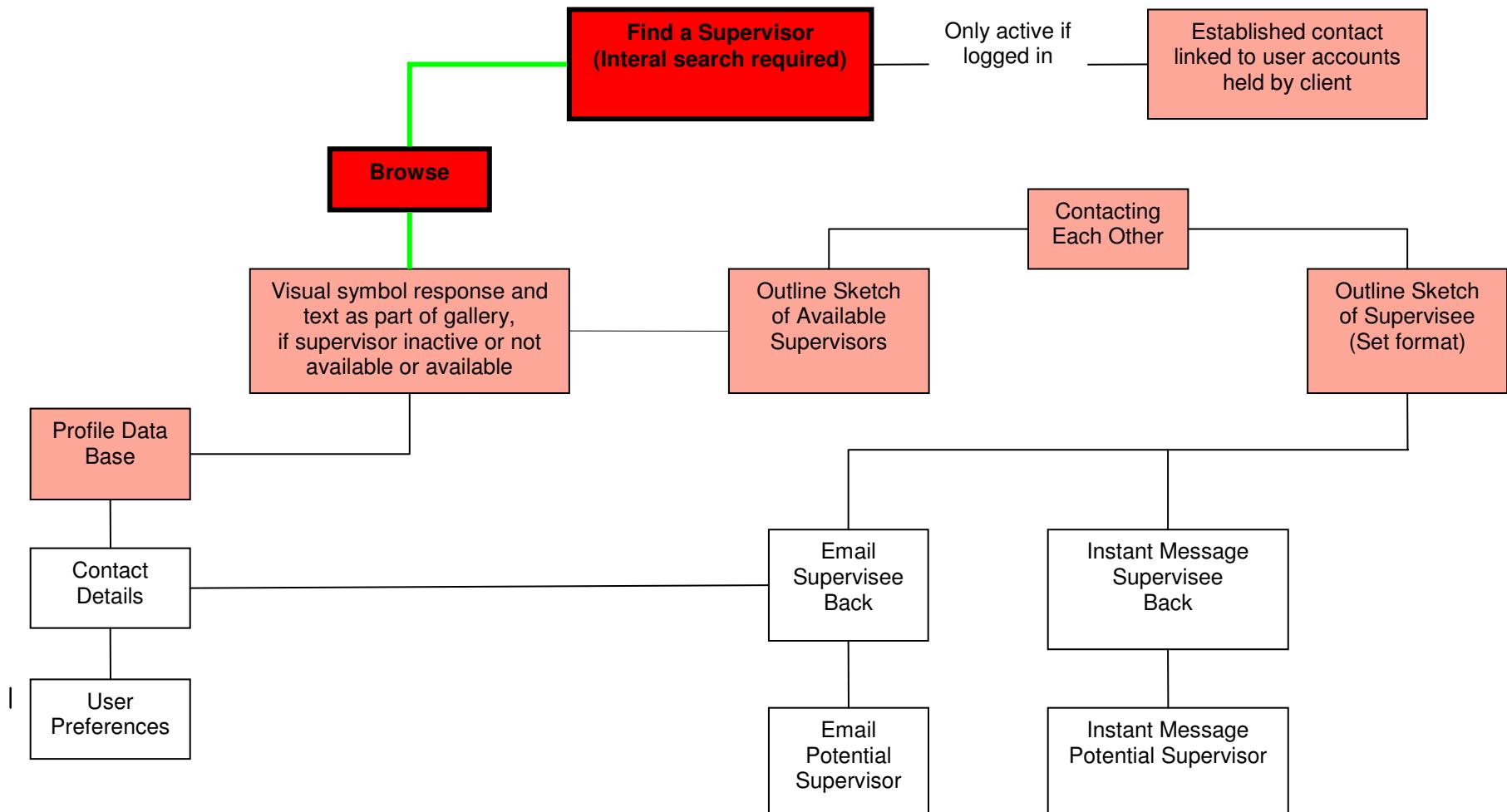
### Flow Chart 12: Home Page Tools – Message Board



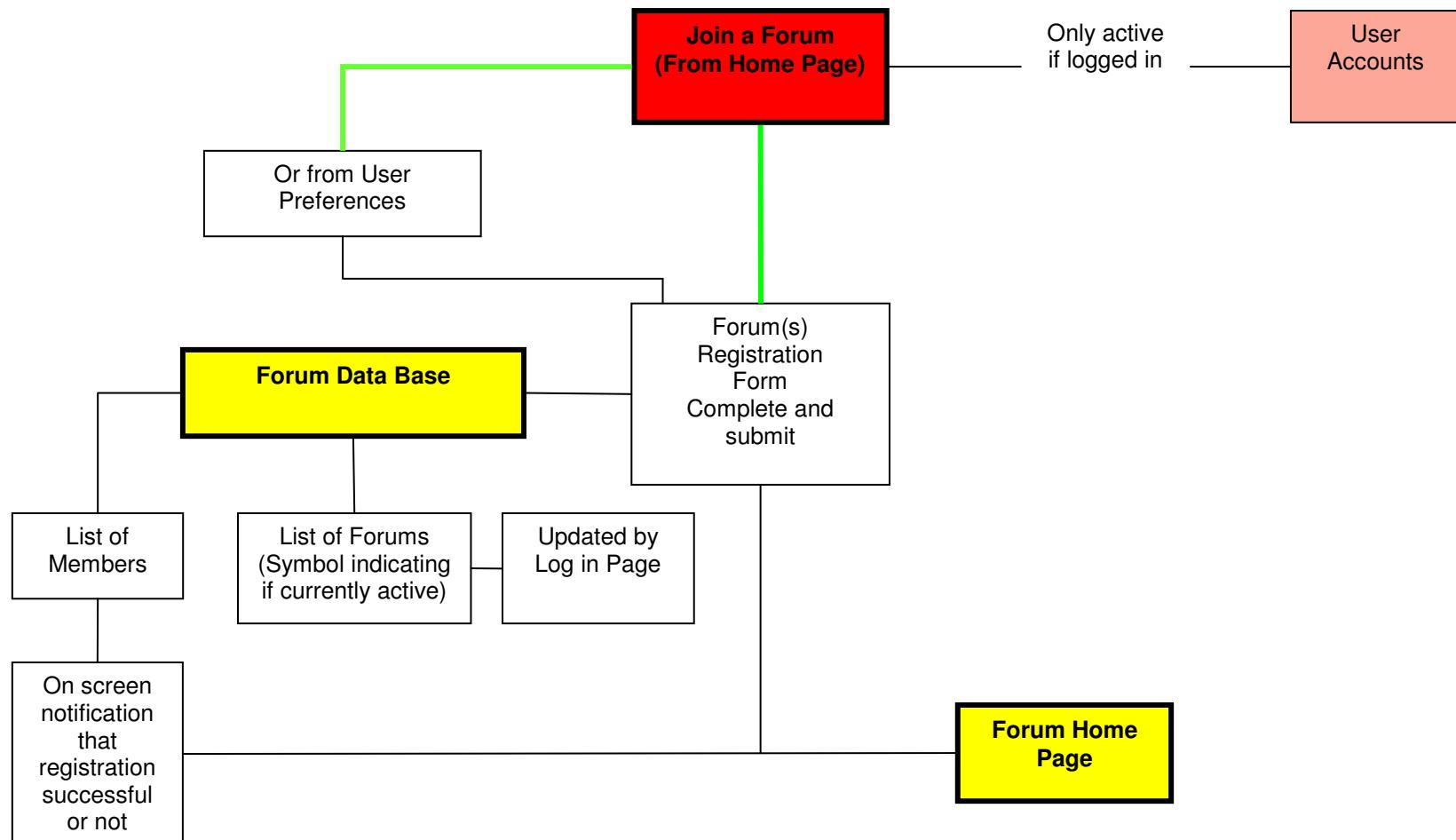
Flow Chart 13: Home Page Tools – Internal Data Base



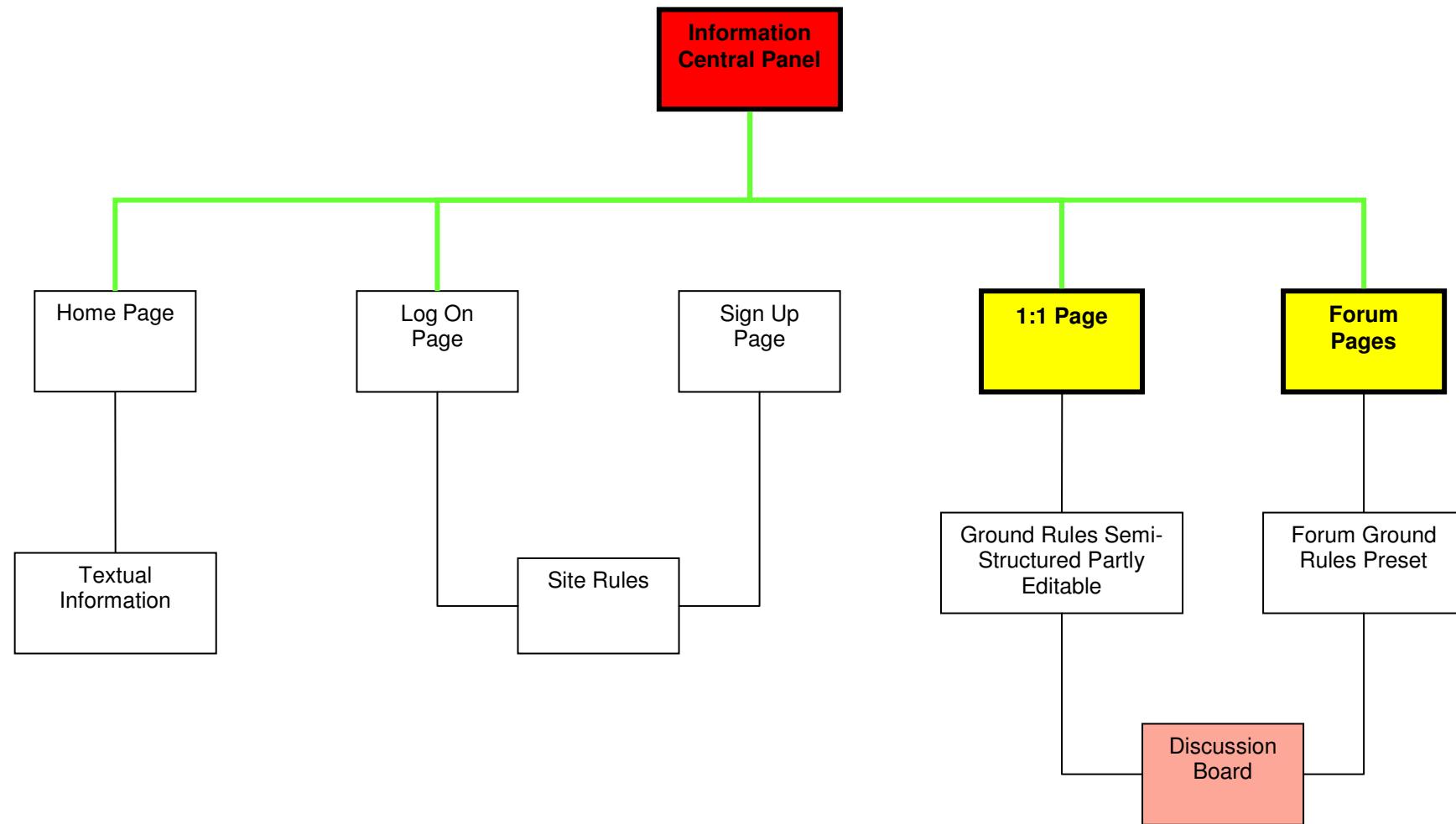
**Flow Chart 14: Home Page Tools – Find a Supervisor**



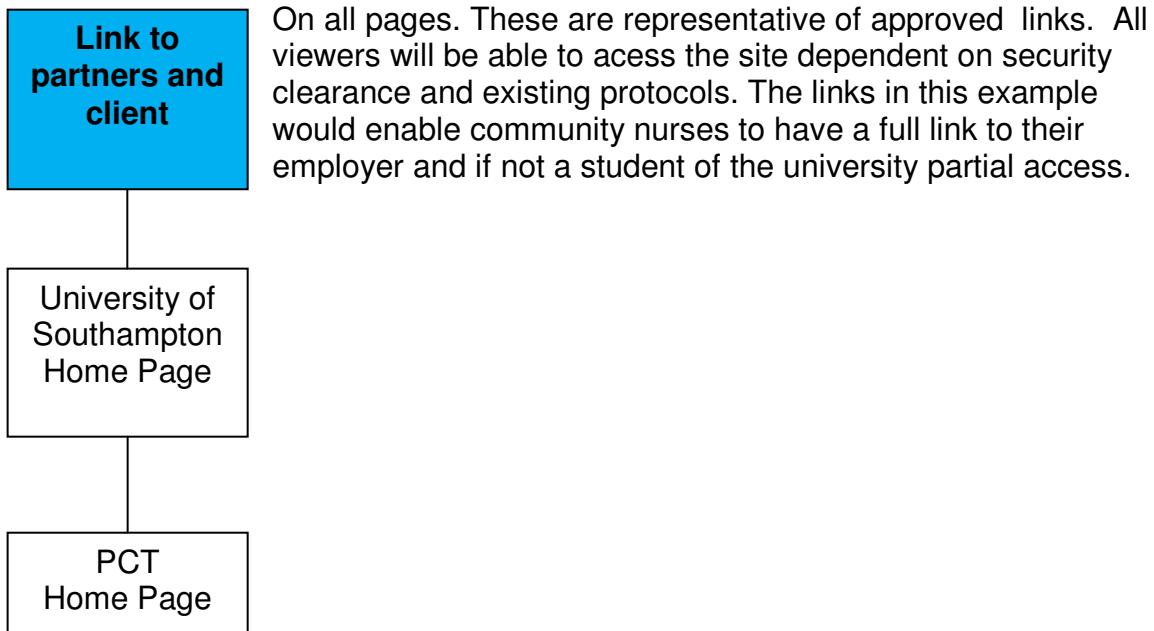
Flow Chart 15: Home Page Tools – Join a Forum



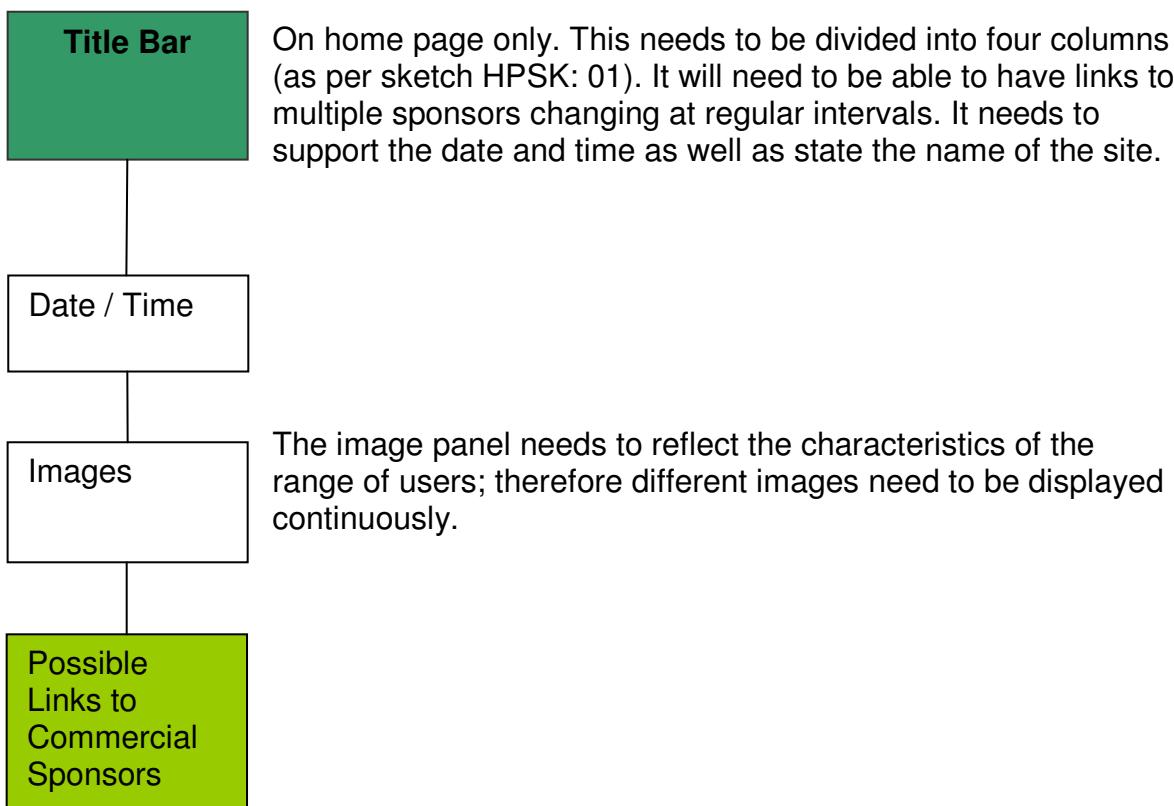
### Flow Chart 16: Home Page Tools – Information Central Panel



## 7.3 Home Page Links to Host



## 7.4 Home Page Title Bar



## 7.5 Home Page Features

<b>Features</b>	All the intended features are there to add to the usefulness of the site.
<b>Live Feed from DOH Website</b>	This feed is located in the message board on the home page. It is designed to be a direct link to the Departments of Health website, a key feature being the broadcasting of live DOH news articles; text, image and sound.
<b>FAQ</b>	This feature of the site will be available and accessible at the foot of all webpages. The content will be developed in partnership with the hosts and the client. The FAQ will be linked to the help menu and comply to normal webpage requirements.
<b>Privacy Policy</b>	Refers to governance and site usage.
<b>Site Map</b>	This will be developed when the site has been completed.

## 7.6 Log On Page (Flow Chart 18)

<b>Log On Page</b>	The log on page is a separate web page on the site. It can be accessed from the home page and is username and password protected. The home page also has recovery password facilities (linked to 'user preferences' and 'contact client' on sign up page). Log on is required every site visit. Log on defaults to sign up page if first visit to site. To continue, an individual needs to be signed up.  All restricted pages features and tools are log on dependent. In order to log on you have to be approved by the client organisation. (This would come up as a stop on Step 2 sign up page with an option to sign up). Verification could be a link to the client's data base via email. The client would set access criteria and permissions. This would also include the ability for someone who was not a member of that organisation to request access to the site. This would be dependent on them meeting the criteria set by that client and be undertaken via email via the site. This would enable others, who were employed elsewhere in health and social care, to use the site.
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## 7.6 Sign Up Page (Flow Charts 18-19)

### Sign Up Page

This page has to be completed by all users of the site (except the client when accessing data as an administrator).

Access to this page is via the log on / sign up tool on the home page or via the text link on the central panel on the home page saying 'if you wish to join, click here' and will form the security point of access to the rest of the website. The sign up page is for new users. Its purpose is to collect data about the individual and how they wish to use the site in order to verify them as a potential user of the site as well as having a very clear simple numbered step process to follow with buttons that clearly indicate what action to do next, i.e. a welcome message with a set of joining instructions. Data exchange / transfer will be via email between the potential user and the client.

**Step 1:** Welcome message in the central information panel along with the site rules and regulations. These have to be accepted before proceeding.

**Step 2:** Complete the contact box. This will have two forms with instructions, which will be displayed in the central panel. Form 1 will be for an employee of the client. They will need to use their 'work' user name and password on the form. (This should allow internal verification to take place within that organisation.) An immediate email response needs to go out acknowledging the application to join the website. Information regarding time frame and who to contact will be forwarded. There will be a lot of similarities with Form 1 and Form 2. Form 2 will be for someone who wishes to be a user of the site but is employed elsewhere. Contact data will need to be supplied, including work address, role, grade, qualification, experience of clinical supervision, etc. For this 'guest' applicant checks will need to be made to verify that the individual is legitimate. This will need to be done in a set time frame - immediate contact via email to acknowledge the application request, then a set time given to give feedback, yes or no, etc.) All sign up data needs to be completed at this stage but will not be activated until verification by the client has been confirmed. This will be via email.

**Step 3:** Create a profile - this needs to be editable and saveable. Here, detail is given about the individual in a set template. This will form part of the data base of user accounts. A provisional request for a supervisor can be made at this stage if a supervisor if desired.

**Step 4:** This is where user preferences are detailed via a set template. This includes selecting forums to be a member of as well as other personal preferences.

Once this page is completed and the applicant approved, the user can go live. It will inform the log on page facility and the relevant data will populate the relevant profile data section.

## 7.7 One-to-One Supervision Page (Flow Charts 20-22)

### 1:1 Supervision

This is a separate secure, personalised private web page. It is only accessible after a successful log on by signed up members that have agreed to have CS together, one supervisor with one supervisee. A user cannot be active on a forum and be having one-to-one supervision at the same time.

The first session needs to have separate elements, where supervisee and supervisor agree a contract of engagement as ground rules before they can proceed. The ground rules themes will be preset, by the client although free text areas will need to be completed: for example, agreeing and recording how often meetings will take place and using the calendar to preset, say, the next five sessions.

It needs to work with the sign up page using the data from the profile and user preferences. It also needs to work with the appointments calendar and these need to link to the log on page. Contact details need to work with these features. If a supervisee has not got a supervisor, then they need to use the 'find a supervisor' function. This will then allow both parties to collaborate together, synchronise diaries, etc. Supervision can only happen if both parties have agreed in principle (via email from the site) and both parties have been verified by the client.

This page needs dynamic tools and features, thus it requires most tools and features to be available. It needs to be able to work synchronously as well as asynchronously; data needs to be able to be retried, changed and saved. Users also need to be able to access it via their chosen methods (home PC / work PC / portable device). The collaborative tools need to be quick and easy to use. The 'thought builder' should be synchronised to the discussion board. File uploads needs to be able to play when the discussion board is in use. The 'bookmark' button needs to be accessible to look back and retrieve, if relevant, and again linked to the discussion board. This is equally true of most of the main features, such as navigation buttons and most of the tools.

Tracking data is required by the client: who has had clinical supervision, in what way (one-to-one, forum or both), the number of supervisees, the number of supervisors, how much activity is taking place, what, where and when.

Separate report data is required by the supervisee and the supervisor. The exact nature of the reports needs to be agreed. They will be partly preset by the client and have free text areas available for completion. The reports will be used for several different purposes, for example, as evidence of having had clinical supervision or evidence for a professional portfolio, and as such will need to be able to be saved and printed. Supervisors will need data detailing that they have facilitated supervision, to whom and how often, plus the title of topics only; whereas, a supervisee will need to have data that details how often, with whom and the topic title. This could be the same user that needs two different reports.

## 7.8 Group Supervision Page (Flow Charts 23-24)

### Forums or Group Supervision

These are a separate secure set of web pages. They are only accessible after a successful log on by signed up members that have indicated that they wish to be a member of a forum. On selecting to go live on a forum, the forum rules and regulations have to be accepted in order to proceed. If not agreed, then a default return to home page will need to occur.

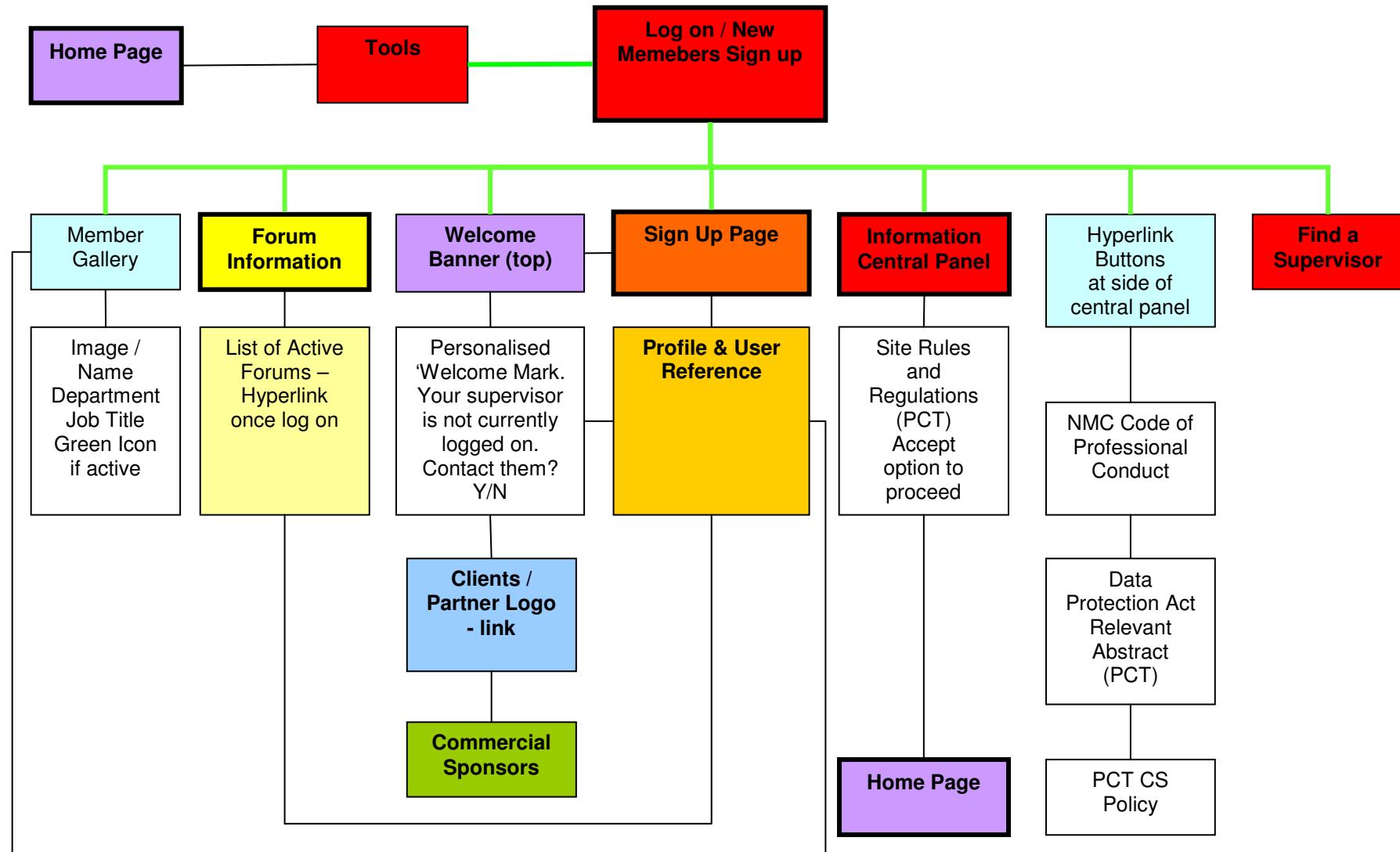
The forums are dynamic pages that utilise all of the website features and tools unless stated otherwise. Individuals can be members of as many forums as they wish.

Information needs to link to the scrolling banner on the home page advertising that a forum is active and the current topic under discussion is... This also links to 'join a forum' and the profile data. These pages need to be dynamic. The users are the authors, creating a discussion and introducing new threads and topics. New forums also need to be creatable.

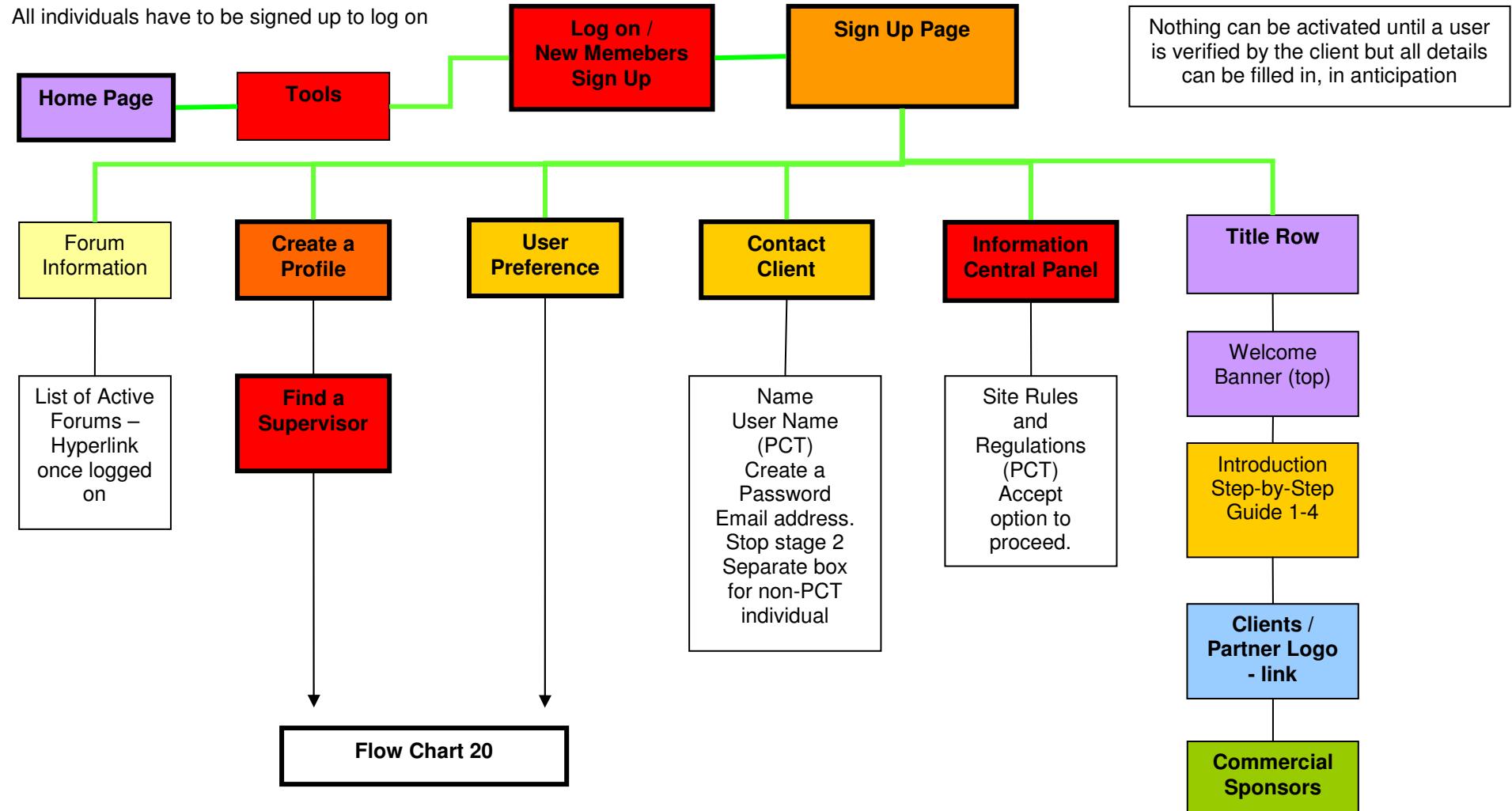
Tracking and monitoring data on site usage and titles of topics discussed only is required by the client (unless site abuse or misuse is reported).

Downloadable, printable separate report data is required by the individual members, reflecting their activity on forums; how often, when, for how long and which forums. This needs to be accessible on request.

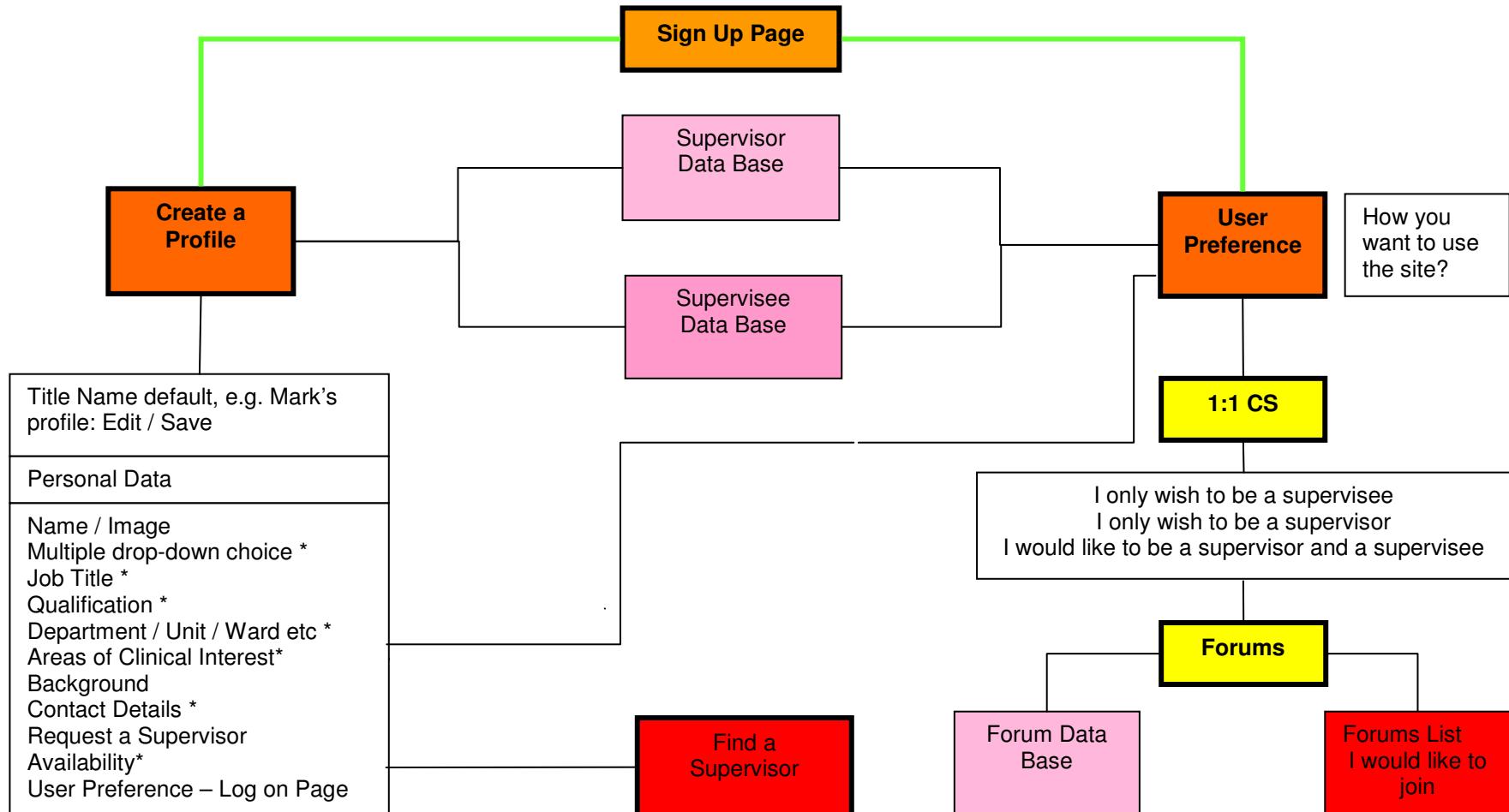
### Flow Chart 17: Log On Page



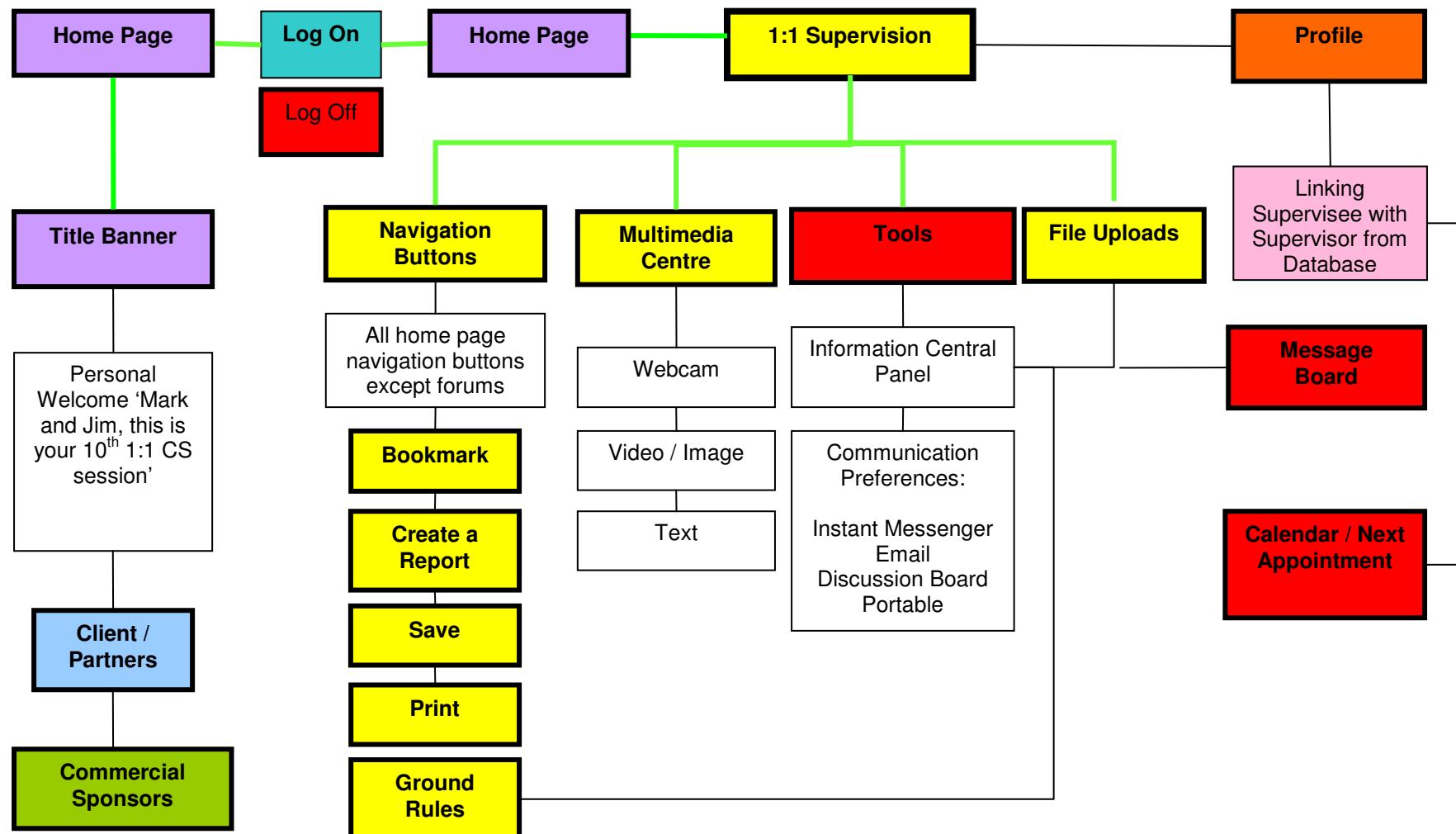
## Flow Chart 18: Sign Up Page - First Time User



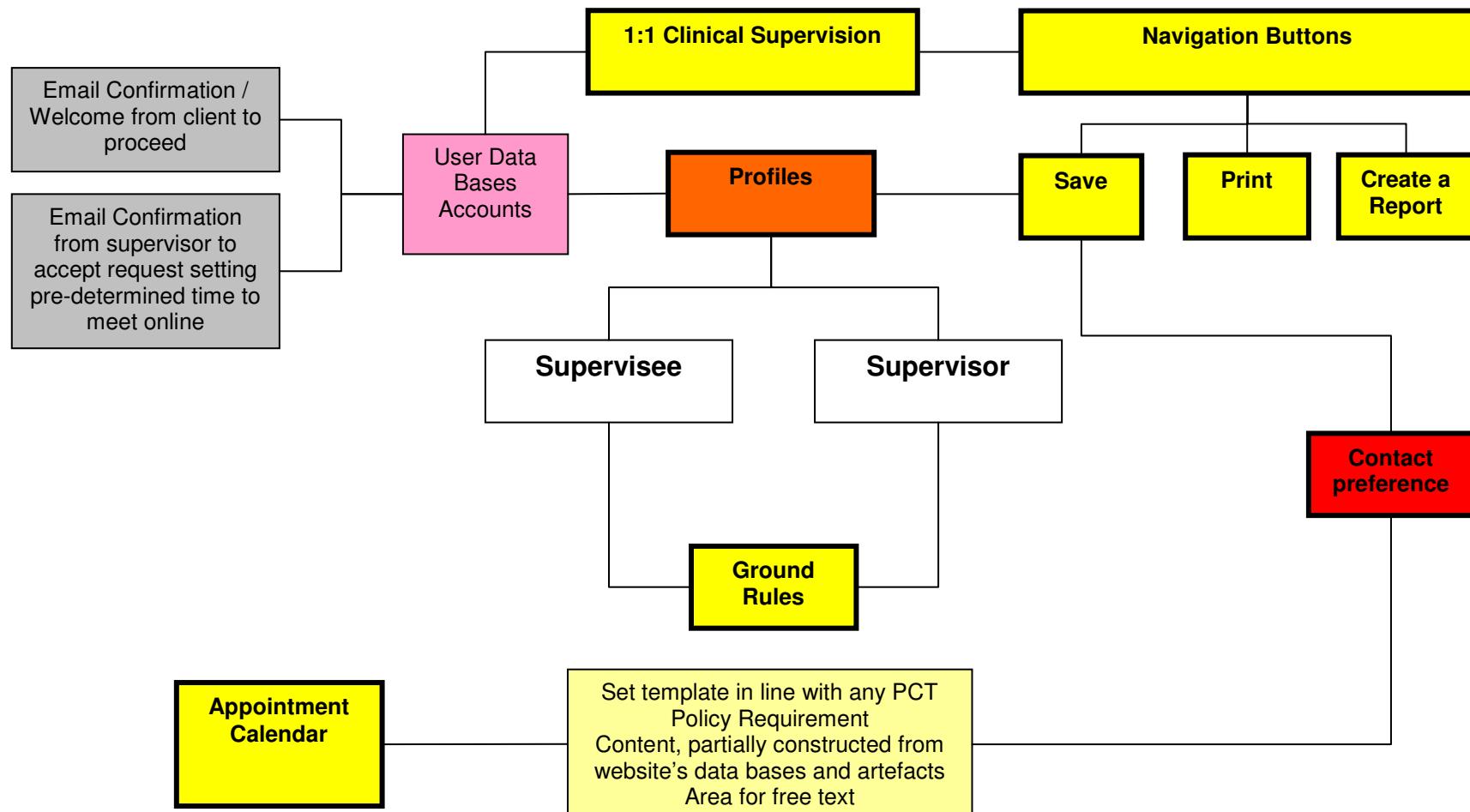
### Flow Chart 19: Sign Up Page – Contact and User Preferences



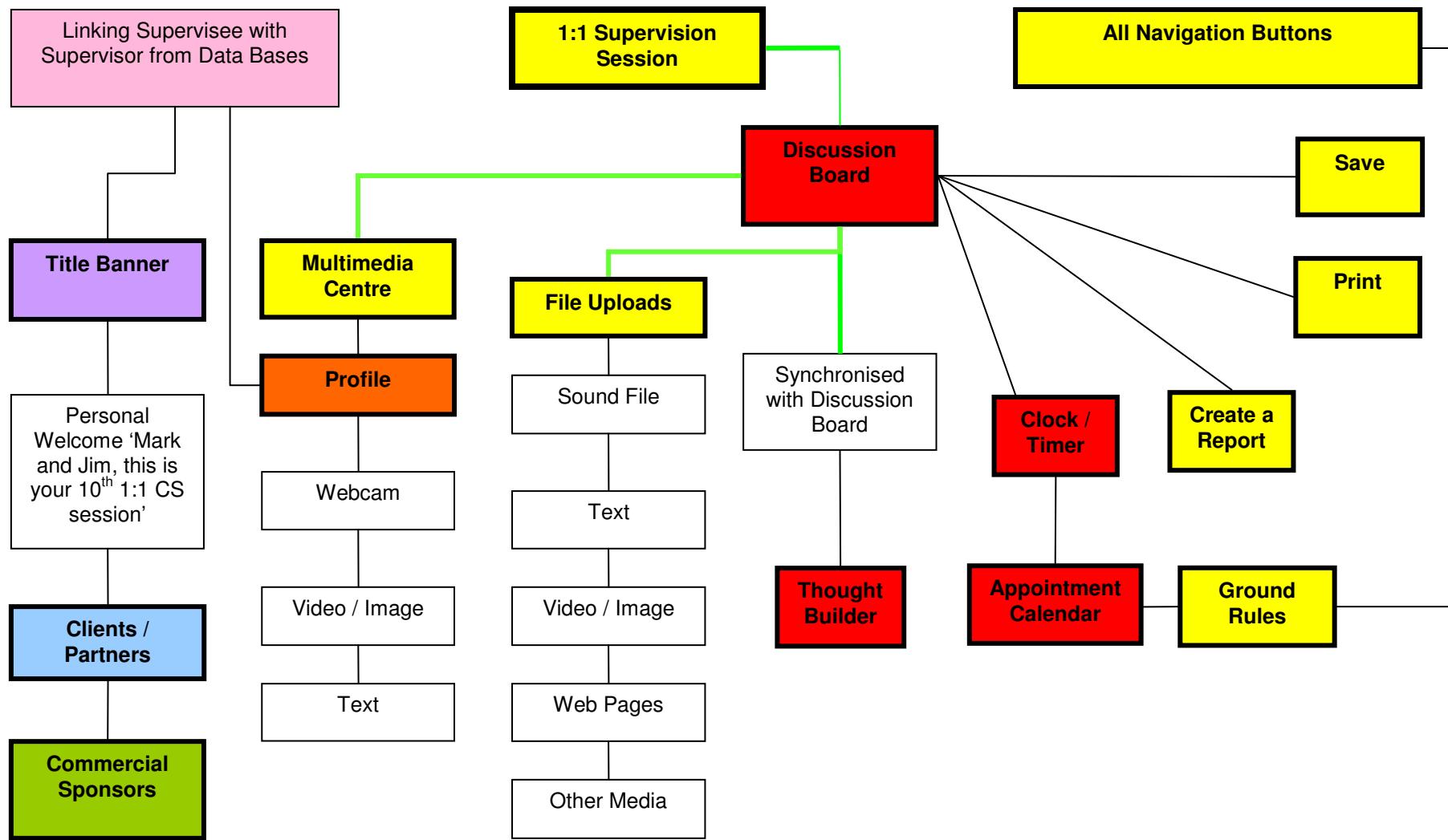
## Flow Chart 20: One-to-One Clinical Supervision Page



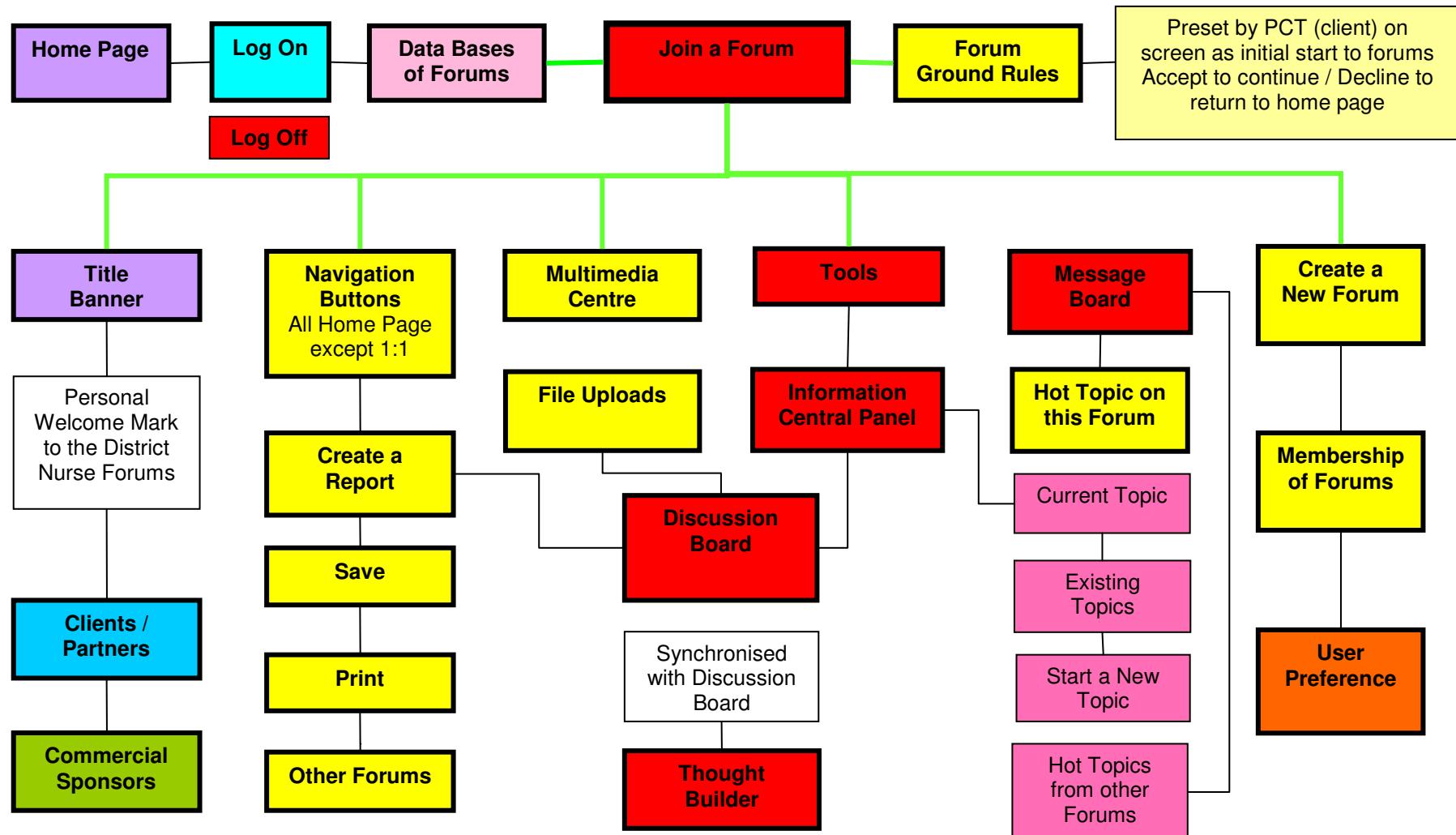
**Flow Chart 21: One-to-One Clinical Supervision Page – First Time User**



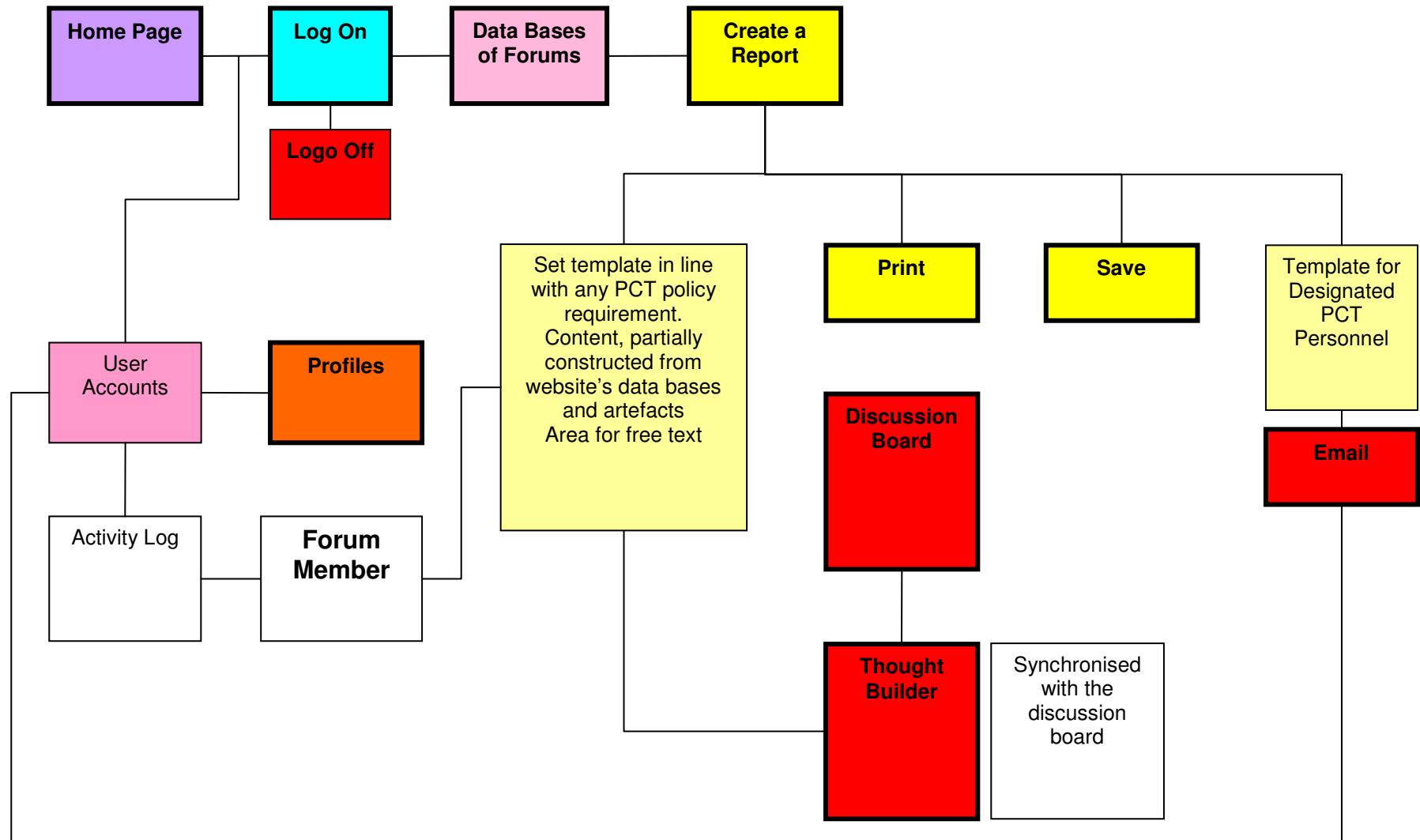
Flow Chart 22: One-to-One Clinical Supervision Page – Supervision Session



**Flow Chart 23: Forums – Group or Network Supervision**



**Flow Chart 24: Forums – Group or Network Supervision**





## 7.10 Web Page Mock ups

### Home page

A PCT **NHS** Clinical Supervision UNIVERSITY OF Southampton  
July 16<sup>th</sup> 2009 18:35 School of Health Sciences

Commercial Sponsor  Commercial Sponsor

Take a Tour Department of Health RSS Feeds Search Help Logoff

**Clinical Supervision**

**Nurses Need Clinical Supervision**

Who benefits from using this site ?

**You** will – Professionally & Personally

**Your** Patients / Clients / Carers

**Your** Employer

To join Click ... [here](#)

**Login** **Sign up New Members**

E mail   
Pass word   
Forgotten Password   
Remember

**Message Board**

**Find a Supervisor**

Browse **GO**

**Join a Forum**

Browse **GO**

**Feed Back Survey**

FAQ Privacy Policy Site Map Contact us

### Sign up page

A PCT **NHS** Clinical Supervision UNIVERSITY OF Southampton  
July 16<sup>th</sup> 2009 18:35 School of Health Sciences

Commercial Sponsor  Commercial Sponsor

Welcome

Do you work for The IOW NHS PCT and wish to become a member of this Clinical Supervision Website then Click [here](#)

**Yes I would like to join**

If you don't but wish to have Clinical supervision with an employee of this PCT or become a member of one of the forums then Click [Here](#)

**Join as a guest**

## Log on page

## Individual clinical supervision page

## Forum page(s)

A PCT  Clinical Supervision July 16<sup>th</sup> 2009 18:35 UNIVERSITY OF Southampton School of Health Sciences

Commercial Sponsor  Commercial Sponsor

Take a Tour Department of Health RSS Feeds Search Help Logoff

Instant Message E Mail Portable Devices File up loads Calendar / Appointments

Clinical Supervision Supervisee Supervisor Ground Rules Bookmarks Create a report Forums Links Resources Save Print

Welcome to Mark to your 2<sup>nd</sup> Clinical Supervision Session with your Supervisor David

Web Cam Link

Thought Builder

Message Board

Discussion Board

FAQ Privacy Policy Site Map Contact us

# Glossary of Key Terms

**Action Research** is a systematic, cyclical process that normally (but not exclusively) begins with the recognition of a problem or issue and interprets and explains a social situation in order to plan and/or implement change (Meyer 2010).

**Clinical Supervision** is a designated interaction between two or more practitioners, within a safe and supportive environment, that enables a continuum of reflective critical analysis of care to ensure quality patient services and the wellbeing of the practitioner (Bishop 2007).

**Cognitive Load** “is the amount of work needed to acquire and use information” (Bunch and Lloyd 2006, p210). This involves short and long term memory in relationship to data, volume as well as type.

**Focus Groups** - the research participants involved in this research study organised into three groups. According to Sloan (1998), focus groups are normally made up of people who the change will affect. Involving them will assist them to have ownership of the problem as well as be a part of the solution. Working with participants represents a commitment to the idea of collaboration and partnership in the research process. Discussion acts as a mechanism to reduce bias because it allows more than one viewpoint to be considered.

**Online environment / Website / The Product** - these terms are used interchangeably to describe the intended output from the research study.

The design specification document (Appendix 15) details the functionality as well the non-functional aspects of a potential online environment for clinical supervision.

**Requirements Analysis** is a general starting point for most software projects and involves the elicitation of user and client needs starting with an understanding of the problem and context. In software development terms this means building an understanding of the purpose of the technology, who will be using it and in what way (Lengel 2001).

**Supervisee** is a role descriptor pertaining to someone who is having clinical supervision - practitioners who receive professional advice, support and guidance from a supervisor (Nadirshaw and Torry 2011). The term is also used to describe the membership of the first focus group in this study.

**Supervisor** is a role descriptor pertaining to someone whom is facilitating a clinical supervision session - a skilled professional who assists practitioners in the development of their skills, knowledge and professional values (Nadirshaw and Torry 2011). The term is also used to describe the membership of the second focus group in this study.

Nadirshaw, Z. and Torry, B. (2011) *Transcultural health care practice: Transcultural clinical supervision in health care practice*. Available at: [http://www.rcn.org.uk/development/learning/transcultural\\_health/clinicalsupervision](http://www.rcn.org.uk/development/learning/transcultural_health/clinicalsupervision) (Accessed 1 August 2011).

**Technical Collaborative Approach** to action research is about engaging the collective intelligence of others, through collaboration, to find a solution to a previously identified problem or issue (Holter and Schwartz-Barcott 1993).

**Techno Managerial** is the term used to describe the membership of the third focus group in this study. The group comprised managers and information governance personnel from within the PCT. This group were also considered to represent the client in the requirements analysis.



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