



Independent Evaluation of North East Hampshire and Farnham Yateley Integrated Care Teams

Using the Normalisation Process Theory [NPT] framework to evaluate a new care model [NCM]: the Happy Healthy at Home [HHH] Yateley Integrated Care Team [ICTs]

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12 July 2017**

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Disclaimer

This report presents the findings of an independent evaluation comprising a non-participant observation of a multi-disciplinary team meeting, a survey and a focus group undertaken with Yateley Integrated Care Team (ICT). The findings and interpretations in this report were those of the author and do not necessarily represent the views of Yateley ICT and other partners involved in the implementation and evaluation of North East Hampshire and Farnham Vanguard.

Acknowledgement

Many thanks to the Yateley Integrated Care Team for participating in this evaluation. Many thanks to Cindy Brooks and Syd Anstee for taking notes and to Philippa Darnton, Senior Programme Manager for Evaluation and for Spread, Wessex Academic Health Science Network for her help and support.

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Abstract

Background

To achieve better patient centred care, greater efficiency, and improved health and well-being outcomes, the findings of successive reviews of successful integrated care systems recommended greater partnership working and new integrated models of care (Cameron and Lart, 2003; Banks, 2004; Williams and Sullivan, 2010; Ham and Curry, 2011; Rand Europe and Ernst and Young, 2012; NHS England, 2014; GovUK, 2015).

Aims and objectives

Core and extended ICT members aim to provide enhanced out of hospital care involving both hospital based and community teams in order to enable service users to be pro-actively involved in their care. Patients and their care plans are reviewed during weekly multi-disciplinary team meetings [MDTs]. The team evaluation sought to understand the experience of the staff involved in developing and delivering the implementation of Yateley ICT and ascertain whether they were able to move from a “fragmented” to an “integrated” way of working and the extent to which the team was able to embed ICT in a long term sustainable way.

Methods

The conceptual framework was mixed methods (Plowright, 2015) informed by Normalisation Process Theory (May and Finch 2009), Force Field Analysis (Lewin, 1949; 1951) and Alexander (1985) team effectiveness as well as the NEHF Vanguard HHH ICT Logic Model. Data collection was by way of: non-participant observation of a regular multi-disciplinary team meeting [MDT] (n=9); a focus group that took place directly following the MDT (n=6), which included an anonymous survey and brainstorming and a ranking exercise; the same anonymous survey available electronically as a final opportunity to participate for those who could not attend the focus group (n=3). Data were analysed using the constant comparative method (Glaser and Strauss, 1967) and thematic analysis (Braun and Clarke, 2006).

Results

A number of key enabling factors were identified: access to patients’ records and dashboards; working in a good team of trusted people with a flexible length MDT; the ability to refer patients to other specialties; shared learning and ideas from other specialties and Vanguard funding. Optimal implementation of ICT was felt to be inhibited by insufficient resources. Poor information technology support (e.g. problems with Wi-Fi connection) and lack of integration across networks and patients’ records management systems [EMIS, System1, RIO, TIARA, IRIS, Hand Direct] were identified as the most important barriers. Other barriers were shared role/commitment to other agencies (e.g adult and social care, palliative care nurse, occupational therapy) and hence lack of availability to attend the weekly MDT and of integrating ICT into existing work. Less than optimal communication with Frimley Park (due to cultural differences) re IRIS and patient being discharged) was also underlined as an issue as were inappropriate referrals from various providers with no clear indication of what ICT could do for the patients. Concerns were expressed about the uncertain future of ICT and the impact that this had on the ICT team and on patients and carers.

Conclusion

Together the team has moved from “fragmentation” to “integration” and is on track to embed the implementation of ICT in a long term sustainable way. This independent evaluation has provided opportunities for reflexive monitoring, an area which could benefit from improvement.

Recommendations

As a matter of priority NHS and the Vanguard programme management should sort the IT and Wifi issues, provide clearer directions, and help overcome other barriers to ICT. The team believed that ICT would be more worthwhile if it became more fully rather than partially integrated. To achieve full integration, they planned to have HCPs (one day per week) populating workstations at Oaklands medical centre one day a week or more to work even more closely together to achieve an integrated new care model.

Executive summary

Key findings

Non-participant observation of a multi-disciplinary team meeting (n=9), survey (n=9), brainstorming and ranking exercise (n=6) and focus group (n=6) led to the following key findings.

Coherence Team members clearly differentiated ICT compared to the traditional more fragmented approach (average score 7.8). They had a shared understanding of the purpose of ICT and required responsibilities (average score 8.4). They understood how ICT affected the nature of their work (average score 8.4) and valued such a potential impact (average score 8.2). Contributing to ICT meant working in flexible and informal ways with a friendly and trusted team with the most appropriate healthcare professional [HCP] stepping in when and as required for the benefit of patients and carers. ICT was constructed as being innovative and proactive in preventing problems for the benefit of patients at the very centre of the new model of care [NMC] as well as reducing health service usage and improving early discharge. However, not all team members were sure about the role of others HCPs within the ICT, especially if the former or the latter were not able to regularly attend the MDT.

Cognitive participation The GP lead and ICT co-ordinator were key driving forces getting others involved (average score 8.8). How the team members decided to engage was dependent on each case. Most of the discussion and actions involved the GP lead, the paramedic and the community matron. There was frequent involvement from the specialist mental health nurse (anxiety, depression, eating disorder) and adult and social care practitioners and 'making connections' (drinking problem, depression, not taking medication), occupational therapist, physiotherapist and specialist palliative care nurse. All team members were open and willing to work in new ways (average score 8.2) and keen to learn more about each other's roles through informal learning sessions. The flexible nature of ICT and the responsiveness to the needs of patients showed that ICT was a legitimate part of the work (average score 8.1). Despite having to find the balance between the ICT and their existing workload, team members continued to support ICT (average score 8.1).

Collective action Required tasks could be easily be performed (average score 7.6) and were appropriately allocated to those with the required skills (average score 7.4). Both paramedic practitioner and community matron had a similar set of skills, but paramedics could be most responsive. The demand for a paramedic practitioner had been such that a second post was created to respond to the existing demand. ICT had not disrupted good working relationship (average score 7.2). Team members trusted both each other and the ICT (average score 8) and believed that sufficient training was provided (average score 8). Learning was conceived as an ongoing process within the team from the team members feeding back to each other. A potential lack sufficient resources available to support ICT (average score 6.1) was underlined.

A number of key enabling factors were identified: access to patients' records + visual information and dashboards; working in a good team of trusted people+ flexible length of MDT; ability to refer patients to other specialties; shared learning and ideas from other specialties and Vanguard funding. It was felt that overall NHS and the Vanguard programme management team supported ICT (average score 7.2), optimal implementation of ICT was felt to be inhibited by insufficient resources (average score 6.1). Poor information technology support (e.g. problems with Wi-Fi connection) and lack of

integration across networks and patients' records management systems [EMIS, Systm1, RIO, TIARA, IRIS, Hand Direct] were identified as the most important barriers. Other barriers were shared role/commitment to other agencies (e.g adult and social care, palliative care nurse, occupational therapy) and hence lack of availability to attend the weekly MDT and of integrating ICT into existing work. Less than optimal communication with Frimley Park re IRIS and re patient being discharged (due to cultural differences) was also underlined as an issue as were inappropriate referrals from various providers with no clear indication of what ICT could do for the patients. Concerns were expressed about the uncertain future of the ICT new model of care and the impact that this had on the ICT team and on patients and carers.

Reflexive monitoring Team members present were aware of the effect of ICT (average score 7) through attending the MDT and being aware how the work of ICT had a positive impact on patients and carers. Verbal feedback from patients and carers and formal feedback on health care utilisation (e.g. admission avoidance) via the Vanguard dashboards (to which not all had access) provided reassurance that ICT was effective. Team members valued the effect of ICT on their work (average score 8.1). Through working together as core and extended team enabled on-going feedback to improve ICT (average score 8.1). Constraints imposed by the ICT framework was often felt to prevented the team from modifying how they worked within ICT (average score 6.6). Agreement that ICT is worthwhile was positive, but not overwhelmingly so (average score 6.4). This could be due to ICT team wanting fuller integration than at present.

External relationships Some members of ICT felt more valued than others (average score 6.6). The ICT team believed that those external to ICT value the work of ICT (average score 7.5) and had a good understanding/awareness of ICT (average score 7.2). The team believed that they had achieved shared learning through working with partner agencies (average score 7). Team members agreed to various degree that communication between ICT and partner organisation needed to be improved (average score 6.3)

Conclusion Although some aspects of collective action and more especially reflexive monitoring could be improved, the ICT team has moved from "fragmentation" to "integration" and is on track to embed the implementation of ICT in a long term sustainable way. This independent evaluation has provided qualitative and quantitative data on the impact of the team which should provide new opportunities for reflexive monitoring, an area which could benefit from improvement.

Recommendations

Team members suggested improving/developing ICT by improving the identified barriers. In particular, they wanted the NHS and the Vanguard programme management to sort the IT and Wifi issues, provide clearer directions and listen to them more. The team believed that ICT would be more worthwhile if it became more fully rather than partially integrated. To achieve full integration, they planned to have HCPs (one day per week) populating workstations at Oaklands medical centre one day a week or more to work even more closely together.

The ICT team should also be encouraged to access all available information about ICT and its effects in order to take steps to optimise the effectiveness and worthwhileness of ICT.

1. Introduction

1.1. Background

To achieve better patient centred care, greater efficiency, and improved health and well-being outcomes, the findings of successive reviews of successful national and international integrated care systems recommended the introduction of new care models [NCMs] focussing on integrated care which require a more collaborative approach and greater partnership working (Cameron and Lart, 2003; Banks, 2004; Williams and Sullivan, 2010; Ham and Curry, 2011; Rand Europe and Ernst and Young, 2012; NHS England, 2014; GovUK, 2015). Previous Wessex based independent evaluations of the implementation of multi-specialty integrated models of care have shown their effectiveness (Wessex AHSN 2016a, 2016b). The implementation of HHH Farnham ICT has demonstrated that it was effective and had a good potential for sustainability in the long term (Wessex AHSN, 2016c).

1.2 Purpose of the evaluation

Yateley ICT brings together staff from a wide range of health and social care professions and organisations to provide holistic care and support to patients identified as being in greatest need (HHH, 2017). The team evaluation sought to understand the experience of the staff involved in developing and delivering the implementation of Yateley ICT and whether they were able to move from a “fragmented” to an “integrated” way of working. The team evaluation also sought to ascertain the extent to which the team was able to embed the implementation of ICT in a long term sustainable way.

2. Methods

Conceptual framework

Normalisation Process Theory¹ (NPT) is a validated instrument that has been widely used to evaluate quality improvement interventions in health care. The focus is on factors (beliefs and behaviours) that promote or inhibit (enablers and barriers) the implementation of an intervention, in this case the ICT. The factors are divided into four themes:

- i. **Coherence:** the mobilisation of a practice – how it is conceptualised and held together in action
- ii. **Cognitive participation:** participation in a practice – how members decide to engage and actually engage
- iii. **Collective action:** enacting a practice – how the work is organised and activities structured and constrained
- iv. **Reflexive monitoring:** the appraisal of a practice – how it is appraised and the effects of appraisal, i.e how it is ‘understood’ and what changes the team make

¹ May and Finch 2009; Finch et al 2015

The mixed methods (Plowright, 2015) conceptual framework was also informed by Force Field Analysis (Lewin, 1949; 1951) of enabling and restraining forces (drivers and barriers) in respect of the implementation process and Alexander (1985) team effectiveness as well as the NEHF Vanguard HHH ICT Logic Model.

Scope and design, data collection and sampling

Three researchers undertook a non-participant observation of the weekly multi-disciplinary team meeting [MDT] on 12 June 2017 (12.30 to 2pm) (n=9). Three researchers attended the structured focus group (n=6) that immediately followed the MDT (2pm-4pm). Two researchers took notes. The lead researcher facilitated the structured focus group (n=6).

At the beginning of the focus group participants undertook an anonymous paper based survey based informed by the conceptual framework (See appendix 1 focus group schedule and appendix 2 survey questions).

Participants (n=9) were asked to rate each question on a scale of 1-10 where 1=not at all agree and 10=completely agree. Negative scores start at 5.4 since 5.5 is the mid-point. Average scores between 5.5 and 6.9 are slightly positive and require attention. Average scores between 7 and 8.9 are positive. Average scores above 9 are highly positive.

Participants then undertook a brainstorming and ranking exercise about identifying enabling (drivers) and restricting forces (barriers) in relation to the implementation of ICT, putting them into categories, before voting on the most important categories of drivers and barriers.

As a final opportunity to participate for those who could not attend the focus group, an electronic link for the same anonymous survey (to be completed via SurveyMonkey) was circulated to the team by the ICT co-ordinator after the focus group.

Data were analysed using the constant comparative method (Glaser and Strauss, 1967) and thematic analysis (Braun and Clarke, 2006)

The results from the non-participant observation, survey and focus groups are described.

3. Results

Coherence

Table 1 summarises the survey results for the area of 'coherence' or how a practice is conceptualised and held together in action.

Table 1: Survey results for 'coherence' [Not at all agree =1 completely agree=10]

Coherence	1	2	3	4	5	6	7	8	9	Average score Y	Difference higher/lower score
1. ICT is distinct from previous ways of working	9	9	7	10	6	8	8	6	8	7.8	4 pts
2. Team members have a shared understanding of the purpose of ICT and of specific responsibilities required	8	7	9	8	9	9	8	9	9	8.4	2 pts
3. Team members understand how ICT affects the nature of their work	9	6	10	10	9	9	6	8	9	8.4	4 pts
4. Team members can see potential value of ICT for their work	9	6	10	8	9	9	6	8	9	8.2	4 pts
Total	35	28	36	36	33	35	28	31	35	8.2	8 pts

Survey results are in line with the findings of the non-participant observation and focus group and showed a positive level of coherence. The highest score was 10 and the lowest 6. The average scores varied between 7.8 and 8.4 with an overall average of 8.2. The highest individual total score was 36 and the lowest 28 [out of 40] showing a variation of 8 points between the highest and lowest individual total score. (See table 1)

The participants clearly differentiated the ICT way of working compared to the traditional more fragmented way (average score 7.8). Team members had a shared understanding of the purpose of ICT and required responsibilities (average score 8.4). Contributing to ICT meant attending the weekly MDT on the same day, same time and same place each week and working in flexible and informal ways with a friendly team going through the list of patients with the most appropriate healthcare professional [HCP] stepping in when and as required for the benefit of patients and carers.

Team members understood how ICT affected the nature of their work (average score 8.4) and valued such a potential impact (average score 8.2). They constructed ICT as being innovative and proactive at preventing problems in order to provide a better service to patients at the very centre of the NCM as well as reducing health service usage (ambulances, A&E visits, hospital admissions) and improving early discharge (patients coming back home sooner with the support from a number of health and social care professionals). An additional benefit was breaking down traditional barriers and moving from fragmented to integrated approach which also enabled shared learning i.e together and from each other.

However, not all team members were sure about the role of others within the ICT, especially if they were not able to regularly attend the MDT.

Our role was more unclear earlier on and we have a clearer idea of the roles within the ICT team, but we don't have yet a full understanding of all the roles in ICT [Adult and social care services].

I don't quite yet understand all the roles within IICT as I have recently started and I am still finding out about things [Paramedic practitioner].

Lack of understanding of roles of others in ICT was underlined as a key barrier, more particularly by those who felt more at the edge i.e. adult and social care service rather than at the very core of the new model of care (See table 4).

Cognitive engagement

Table 2 shows the results for 'cognitive engagement' or how team members decide to engage and actually engage with ICT.

Table 2: Survey results for 'cognitive participation' [Not at all agree =1 completely agree=10]

Cognitive engagement	1	2	3	4	5	6	7	8	9	Average score Y Average score F	Difference higher/ lower score
5. Key individuals drive ICT forward and get others involved	8	8	8	9	10	5	8	7	9	8.8	5 pts
6. Team members are open and willing to work in new ways	7	7	9	10	10	8	8	6	9	8.2	4 pts
7. Team members believe that contributing to ICT is a legitimate part of their work	8	6	9	10	10	9	6	6	9	8.1	4 pts
8. Team members continue to support ICT	7	7	7	9	10	9	8	7	9	8.1	3 pts
Total	30	28	33	38	40	31	30	26	36	8.3	14 pts

The results of the survey are in line with the findings of the non-participant observation and showed positive level of cognitive participation. The highest score was 10 and the lowest 5. The average scores varied between 8.1 and 8.8 with an overall average of 8.3. The highest individual total score was 40 and the lowest 26 [out of 40] showing a variation of 14 points between the highest and lowest individual total score (See table 2).

Survey results are in line with the findings of the non-participant observation and focus group. The GP lead and ICT co-ordinator were key driving forces getting others involved (highest average score 8.8). The GP led the ICT team in an understated but effective manner. The ICT co-ordinator ensured that all agreed actions were carried out by the various HCPs before the next MDT.

How the team members decided to engage was dependent on each case. Most patients were known and were on-going cases. Due to the nature of the medical issues, most of the discussion and actions involved the GP lead, the paramedic and the community matron. There was frequent involvement from the specialist mental health nurse (anxiety, depression, eating disorder) and adult and social care practitioners and 'making connections' (drinking problem, depression, not taking medication). The occupational therapist, physiotherapist and specialist palliative care nurse were not able to attend the MDT on the day, but would also be frequently involved.

All team members were more than open and willing to work in new ways (average score 8.2). Team members were keen to learn more about each other's roles and organised informal learning sessions. The GP lead admitted that his *greatest learning* had been *finding out and understanding adult and social care services, what they do and how they work*.

The flexible nature of ICT and willingness to step in when and as required as well as the responsiveness to the needs of patients demonstrated that all team members believed that contributing to ICT was a legitimate part of their work (average score 8.1).

Despite having to find the balance between the ICT and their existing workload, team members continued to support ICT (average score 8.1).

Collective action

Table 3 outlines the results for 'collective action' or how team members enact the ICT i.e. how the ICT work is organised and activities structured and constrained.

The results of the survey are in line with the findings of the non-participant observation and had a positive level of collective action, except for sufficient resources available to support ICT (average score 6.1). The highest score was 10 and the lowest 5.

The average scores varied between 6.1 and 8 with an overall average of 7.3. The highest individual total score was 63 and the lowest 37 [out of 70] showing a variation of 26 points between the highest and lowest individual total score (See table 3).

Table 3: Survey results for 'collective action' [Not at all agree =1 completely agree=10]

Collective action	1	2	3	4	5	6	7	8	9	Average score Y Average score F	Difference higher/ lower score
9. Team members can easily perform the required tasks	8	6	9	8	9	9	5	6	9	7.6	4 pts
10. The intervention not disrupt working relationships	8	7	5	8	8	9	3	7	9	7.2	6pts
11. Team members trust ICT and trust each other	9	6	10	10	10	9	7	6	5	8.0	5 pts
12. Work is seen as appropriately allocated to staff who with required skills	5	6	9	8	9	9	6	6	9	7.4	4 pts
13. Sufficient training is provided to staff	8	7	9	10	9	10	7	6	6	8.0	4 pts
14. Sufficient resources are available to support ICT	3	4	8	8	8	8	5	5	6	6.1	5 pts
15. NHS/ Vanguard programme management team adequately supports ICT	8	6	9	7	9	9	4	5	8	7.2	5 pts
Total	49	52	59	59	62	63	37	41	52	7.3	26 pts

The required tasks could be easily be performed (average score 7.6) and were appropriately allocated to those with the required skills (average score 7.4). However, at first it had been difficult to integrate the new care model into existing work i.e. to adapt to the ICT framework

I have learned everything from scratch which has been really, really tough, I don't think other people appreciate just how tough that has been. My learning is very, very different to what other team members do. At the beginning it was like a foreign language to me. I would say that my learning has been huge [ICT co-ordinator].

Most follow-up actions involved one of the paramedics and/or the community matron. Both types of HCPs had the required skills, but paramedics could be most responsive and they had developed extensive links with patients and other HCPs. The demand for a paramedic practitioner had been such that a second post was created to respond to the existing demand. Key support for the activities of the ICT team was provided by the ICT coordinator. Her good organisational skills facilitated team members being able to perform the required tasks.

ICT had not disrupted good working relationship (average score 7.2). Team members trusted both each other and the ICT (average score 8). Specifically underlined as a key enabling

factor for ICT was *interaction with colleagues* and *a good team of trusted people* (See table 4)

The ICT team believed that sufficient training was provided (average score 8). Learning was conceived as an ongoing process within the team.

While it was felt that there were a number of key enabling and restricting factors and that overall NHS and the Vanguard programme management team supported ICT (average score 7.2), optimal implementation was felt to be inhibited by insufficient resources (average score 6.1).

The brainstorming and ranking exercise highlighted additional key drivers and barriers specifically identified by the ICT team (table 4).

Table 4: Brainstorming exercise about barriers and drivers to ICT

Barriers	Drivers
<input type="checkbox"/> IT issues	<input type="checkbox"/> Ability to refer patients to other specialties
<input type="checkbox"/> Lack of access to systems eg Hand Direct and IRIS	<input type="checkbox"/> Ability to get ideas from other specialities
<input type="checkbox"/> Understanding other people’s roles	<input type="checkbox"/> Interaction with colleagues
<input type="checkbox"/> Shared role/commitment to other agencies	<input type="checkbox"/> Good team of trusted people
<input type="checkbox"/> Difficulty with information from Frimley Park Hospital	<input type="checkbox"/> Set day, set time, set location for MDT
<input type="checkbox"/> Lack of full integration	<input type="checkbox"/> MDT allows all to speak as required (length of MDT varies according to needs)
<input type="checkbox"/> Lack of clarity with directions	<input type="checkbox"/> Visual information (Dashboards, EMIS etc. projected on wall)
<input type="checkbox"/> Day of multi-disciplinary team meeting in the week not suitable	<input type="checkbox"/> Great documents/notes to scroll through
	<input type="checkbox"/> Happiness to persevere
	<input type="checkbox"/> When IT is working and we do have access to records
	<input type="checkbox"/> Funding

The brainstorming exercise enabled key barriers and drivers to be identified quickly that would complement the results of the survey and provide insights into the implementation of Yateley ICT.

After the brainstorming exercise, the participants were asked to categorise the drivers and barriers and select the most important category of barriers and drivers so that they could be ranked in descending order. The first barrier and first driver were also directly related. (See table 5)

Table 5: Results of ranking exercise about barriers and drivers to ICT in descending order

Barriers	Drivers
1. IT and Wifi issues (Lack of access to systems and IT not working)	1. Access to patients' records + visual information and dashboards
2. Lack of understanding of other people's roles	2. Working in a good team of trusted people+ flexible length of MDT
3. Shared role/commitment to other agencies + not available to attend MDT	3. Ability to refer patients to other specialties
4. Communication with Frimley Park re IRIS and patient discharged (cultural differences)	4. Shared learning and ideas from other specialties
5. Less than full integration	5. Vanguard funding

The main barrier was unanimously identified as IT and the main driver/enabler of ICT was access to patients' records even though IT issues made this more difficult. (See table 7). *My problem is that I have been taught all the IT systems and I am not often able to use them. There's nobody there to help me with IT if I have problems.* [ICT co-ordinator]

Further discussion of key drivers and barriers confirmed poor information technology support (e.g. problems with Wi-Fi connection) and lack of integration across networks and patients' records management systems [EMIS, System1, RIO, TIARA, IRIS, Hand Direct] as the most important problems.

The adult and social care practitioner raised concerns that it was difficult to integrate ICT into existing work.

We are involved in many other new ways of doing things such as the Enhanced Recovery at Home and often pulled into different directions because of many other demands on us and struggle to always be able to attend the MDT [senior adult and social care services practitioner]

The GP lead said this was also a problem for the palliative care specialist nurse and other HCPs who could not regularly attend the weekly MDT because of competing demands of other providers and the fact that staff are managed by different HR systems and different budgets.

Employers of some members of ICT may not share the same vision than we do. For example because of a lack of workforce, the palliative care nurse can't get easily attend MDT meetings. If her employers were more understanding of how her absence affects us, it would be helpful. [GP lead]

Inappropriate referrals from various providers with no clear indication of what ICT can do for the patients were not identified during the brainstorming and ranking exercise as a barrier, but emerged during the discussion.

We all know patients at the top of the list. As we get further down the list, information becomes more vague about who the patients are, what is wrong with them with a lack of detail about why they are on the list, which means that they may not be appropriate for ICT.
[GP lead]

There seemed to be an underlying fear that inappropriate or unclear referrals could potentially place an overwhelming burden on the ICT team.

Reflexive monitoring

Table 4 shows the results for 'reflexive monitoring' or how ICT is represented via verbal and written feedback and hence how it is 'understood' and the changes the team can make consequent to feedback.

Table 6: Survey results for 'reflexive monitoring' [Not at all agree =1 completely agree=10]

Reflexive monitoring	1	2	3	4	5	6	7	8	9	Average score Y	Difference higher/lower score
16. Team members can access information about ICT + are aware of the effects of ICT	5	7	7	6	9	9	5	6	9	7.0	4 pts
17. Team members agree that ICT is worthwhile	2	6	8	8	9	5	6	5	9	6.4	7 pts
18. Team members value the effect of ICT on their work	8	6	8	8	10	9	8	7	9	7.8	4 pts
19. Feedback about ICT can be used to improve it in future	8	6	8	8	10	9	6	7	9	8.1	4 pts
20. Team members can modify how they work with ICT	4	5	5	8	9	8	5	7	9	6.6	5 pts
Total	27	36	38	38	47	40	30	32	45	7.2	20 pts

The results of the survey are in line with the findings of the non-participant observation. ICT has a positive level of reflexive monitoring. The highest score was 10 and the lowest 4. The average scores varied between 6.4 and 8.1 with an overall average of 7.3. The highest individual total score was 47 and the lowest 27 [out of 50]. (See table 4)

Team members present were aware of the effect of ICT (average score 7) through attending the MDT and being aware how the work of ICT had a positive impact on patients and carers, verbal feedback from patients and carers and from other HCPs and through formal feedback

on health care utilisation (e.g. admission avoidance) via Vanguard dashboards (to which not all had access) which provided reassurance that ICT was effective.

Team members valued the effect of ICT on their work (average score 8.1). Through working together as core and extended team feedback about ICT was constantly used to improve ICT and would continue to be used to improve ICT in future (average score 8.1).

However, constraints imposed by the ICT framework were felt to prevent ICT team members from modifying how they worked within ICT (average score 6.6). *I am constantly accountable for the ICT team, but my views are not always taken into account ... The Vanguard team wants 2% of case load on ICT, which is an unrealistic expectation and we are fighting back on this [GP lead].*

The average score for team members agreeing that ICT is worthwhile was relatively low, in fact the second lowest (6.4). A reason might be the perceived inability to modify how the team works within ICT. Another reason for the relatively low average score was that the ICT team wanted fuller integration than at present. *I think ICT will be more worthwhile if it becomes fully integrated. We have a full area of space for 7-8 workstations. If these were populated, this would enable HCPs to work in situ in Oaklands medical centre one day or even one half a day per week and deal with issues immediately rather than wait until the next MDT. [GP lead]*

While the ICT team was grateful for the Vanguard funding that had enabled the implementation of the new model of care, they felt that the new model of care was not integrated enough. They were planning to make this happen soon.

Overview of responses to NPT questions and NPT four domains

Figure 1 shows that collective action, to some extent, but, more especially, reflexive monitoring have the potential for improvement.

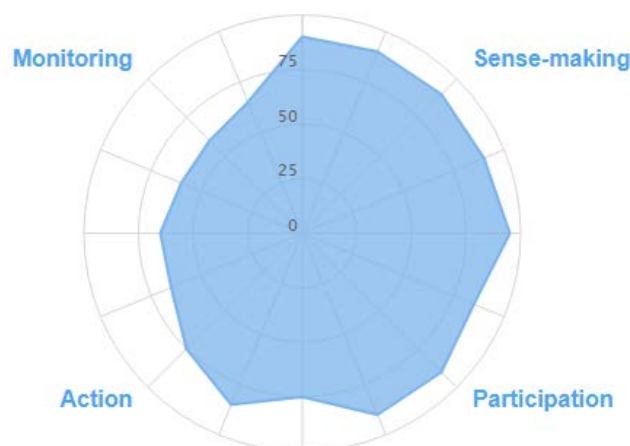


Figure 1: Overview of the 4 NPT domains

Team members agreed they could access information about how ICT was performing e.g. monthly dashboards, but some members could do this more easily than others (See table 6). However, team members said they were felt limited in how they could can modify how they worked with ICT (See table 6). Also, in part because it was thought that fuller integration would make ICT more worthwhile and in part because this question showed the greatest difference between the highest score and the lowest score, there was a relatively low score in relation to the perceived worthwhileness of ICT (See appendix 3).

For more details on the ranking of the responses to the NPT questions see appendix 3.

External relationships and feeling valued as a team member

Table 6 shows the results of the non NPT questions in descending order. The highest average score is that those external to ICT value the work of ICT (7.5) which is a higher average score than for the question about ICT team members agreeing that ICT is worthwhile (6.4).

Table 6: Responses for non NPT questions re external relationship and feeling valued as a team member in descending order

Non NPT questions	1	2	3	4	5	6	7	8	9	Average score Y	Difference top and lowest score
Those external to ICT value the work of ICT	8	8	6	9	10	9	6	6	6	7.5	4 pts
Those external to ICT have a good understanding/awareness of ICT	7	8	5	9	9	9	6	5	7	7.2	4 pts
ICT has achieved shared learning through working with partner agencies	9	6	5	7	9	10	5	5	7	7	5 pts
I feel valued as core/extended [cross out as required] member of the ICT	4	5	5	8	9	8	5	7	9	6.6	5pts
Communication between ICT and partner organisations need to be improved	9	7	3	8	7	10	5	3	5	6.3	7 pts

Participants agreed to various degree that communication between ICT and partner organisations needed to be improved (6.3). A lower score for agreement indicates that communication does not need to be greatly improved, just improved. Surprisingly, the second lowest, but still positive, score was for feeling valued as member of ICT (6.6). This could be because some members were more at the edge of the ICT as their input was not always required whereas the input of others was almost always required e.g. community matron and paramedic practitioners.

In addition, concerns were expressed about the uncertain future of the ICT new model of care and the impact that this had on the ICT team and could potentially have on patients and carers.

4. Conclusion

Overall the ICT team has moved from “fragmentation” to “integration” and is on track to embed the implementation of ICT in a long term sustainable way.

Out of 25 questions (5 non NPT and 20 NPT) there were no negative average scores (5.4 and below) and no highly positive average scores above (9 or above). Four fifth of the questions were rated positively (between 7 and 8.9). Only one fifth (n=5 out of 25) were rated slightly positively two non NPT and three NPT questions (6.1 to 6.6): one from collective action and two from reflexive monitoring.

On occasion, some of it has felt painful because of external forces (i.e. the vanguard team), battling against IT and Wi-Fi, but it has all been worth it because there has been an improvement in our working lives and an improvement in the care of patients. [GP lead].

Although collective action and reflexive monitoring could be improved, this independent evaluation has shown that the Yateley ICT appeared effective and had a good potential for sustainability in the long term.

4.1. Limitations of the study

This was a pragmatic evaluation of a pilot implementation of a new model of care in a real life setting undertaken with limited resources (without a control group to see what things were like for GP practices with a similar demographic and burden of illness profiles). The overall sample was small with 9 undertaking the survey and attending the MDT during which non-participant observation was undertaken. One third (n=3) were unable to attend the focus group as they had to rush away. For similar reasons, one team member had to leave the focus group before the end. It is not known to how many HCPs the electronic survey was circulated by the ICT co-ordinator, so return rates cannot be commented upon. Low overall average scores on reflexive monitoring could be explained as dissatisfaction about the fact that the ICT is not as fully integrated as the team would like.

4.2. Benefits of the study

A main benefit was a mixed methods approach with a validated conceptual framework [NPT, Force Field analysis, team effectiveness and extent of meeting team goals as per the logic model] and three different data collection methods: non-participant observation, survey and structured focus group, including brainstorming and ranking exercise of drivers and barriers to the embedding of a successful implementation that could be sustained in the long term.

5. Recommendations

Recommendations based on suggestions from participants for improving/developing ICT are:

- ❑ Improve information technology and information technology support
- ❑ Better integration across networks and patients' records management systems
- ❑ Make it easier for HCPs to integrate ICT into existing work.
- ❑ Enable all HCTs to attend the weekly MDT
- ❑ Ensure that employers of HCPs involved in ICT share the same vision of ICT
- ❑ NHS and the Vanguard programme management should ensure better resources to support ICT.
- ❑ The Vanguard team should speak to ICT team more and listen to the ICT team more. Make it more of a reciprocal process.
- ❑ ICT will be more worthwhile if it becomes more fully integrated.
- ❑ HCPs should be encouraged to regularly (one day per week) populate workstations at Oaklands medical centre to make ICT more integrated

The team was already planning to put into action a plan to make ICT more integrated by having other HCPs attending Oakland medical centre one day per week to be more responsive in dealing with arising issues as soon as possible.

Although some aspects of collective action and more especially reflexive monitoring could be improved, and the ICT team should be encouraged to access all available information about ICT and its effects in order to take steps to optimise the effectiveness and worthwhileness of ICT, the ICT team is on track to embed the implementation of ICT in a long term sustainable way.

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Appendices

Appendix 1

Focus group schedule

Individual activity

1. Complete survey [i.e. NPT (Finch et al, 2013, 2015), Alexander (1985) and extent to which goals of ICT were met]

Individual then collective activity

2. Force Field Analysis exercise [4 drivers and 4 barriers identified and ranked]
 - a) Identify up to four enablers or barriers re ICTs – write a few words re each enabler on up to four post-its
 - b) Categorise post-its, then distribute your 5 votes on most important categories i.e 1 for each of five categories or all post-its on one category because it is such an important category. See what ranking looks like. Brief discussion.
 - c) Identify up to four barriers or enablers re ICTs – write a few words re each enabler on up to four post-its
 - d) Categorise post-its, then distribute your 5 votes on most important categories i.e 1 for each of five categories or all post-its on one category because it is such an important category. See what ranking looks like. Brief discussion.

Discussion

3. To consider the extent to which ICT model is conceptualised and held together in action [NPT]
4. To explore how team members came to engage with ICTs [NPT]
5. To gain a better understanding of how team members enact ICT model i.e. how the activities of team members are structured and constrained [NPT]
6. To investigate the extent to which team members appraise ICT and the impact of this appraisal [NPT]
7. To identify the extent of which the ICT team members feel that the team is effective i.e. team is productive and team members feel valued [Alexander]
8. To assess the extent of shared learning, working with partner agencies, communication between providers and staff external to the core and extended ICT staff members and in particular the extent to external staff are aware of the range of services offered by ICT and how to access them [HHH ICT logic model]
9. How could ICT be improved? If you could give advice to the CCG/team leaders, what would you say to them?

Appendix 2

Survey

What is your role in ICT? e.g GP, matron, nurse, other healthcare professional etc.

.....

Item 1 - NPT NoMAAd questionnaire (Finch et al, 2013, 2015)

To what extent do you agree with the following statements?

<i>Not at all</i>					<i>Completely</i>				
1	2	3	4	5	6	7	8	9	10

Coherence

1. Intervention distinct from previous ways of working 1 2 3 4 5 6 7 8 9 10
2. Team members have shared understanding/collectively agree *re* the purpose of the intervention and of specific responsibilities required –roles clearly defined 1 2 3 4 5 6 7 8 9 10
3. Team members understand how the intervention affects the nature of their work 1 2 3 4 5 6 7 8 9 10
4. Team members can see/construct potential value of the intervention for their work 1 2 3 4 5 6 7 8 9 10

Coherence free text box

Cognitive participation

5. Key individuals drive the intervention forward and get others involved 1 2 3 4 5 6 7 8 9 10
6. Team members are open and willing to work in new ways 1 2 3 4 5 6 7 8 9 10
7. Team members believe that contributing to the intervention is a legitimate part of their work 1 2 3 4 5 6 7 8 9 10
8. Team members continue to support the intervention (and can collectively define actions/procedures required to keep the intervention going) 1 2 3 4 5 6 7 8 9 10
9. Team members can easily perform the tasks and operationalise the components of the intervention in practice 1 2 3 4 5 6 7 8 9 10
10. The intervention does disrupt working relationships 1 2 3 4 5 6 7 8 9 10
11. Team members trust the intervention and each other 1 2 3 4 5 6 7 8 9 10

Cognitive participation free text box

Collective action

- 12. Intervention can easily be integrated into existing work 1 2 3 4 5 6 7 8 9 10
- 13. Work is seen as appropriately allocated to staff who have the required skills 1 2 3 4 5 6 7 8 9 10
- 14. Sufficient training is provided to staff 1 2 3 4 5 6 7 8 9 10
- 15. Sufficient resources are available to support the intervention 1 2 3 4 5 6 7 8 9 10
- 16. The programme management team and learning and development provider, if applicable, adequately support the intervention 1 2 3 4 5 6 7 8 9 10

Collective action free text box

Reflexive monitoring

- 17. Team members are aware of [informal and formal verbal or written feedback/evaluation, if applicable] about the intervention and its effects 1 2 3 4 5 6 7 8 9 10
- 18. Team members agree that intervention is worthwhile 1 2 3 4 5 6 7 8 9 10
- 19. Team members value the effect of the intervention on their work 1 2 3 4 5 6 7 8 9 10
- 20. Feedback about the intervention can be used to improve it in future i.e. team members have the opportunity to reflect and modify how they work with the intervention 1 2 3 4 5 6 7 8 9 10

Reflexive monitoring free text box

Item 2: Team Effectiveness questions (Based on Alexander, 1985)

- 1. I feel valued as core/extended [cross out as required] member of the ICTs 1 2 3 4 5 6 7 8 9 10
- 2. Communication between ICT and other providers need to be improved 1 2 3 4 5 6 7 8 9 10

Team effectiveness questions free text box

Item 3: Goals of ICTs (Based on HHH ICT logic model)

- 1. ICT has achieved shared learning through working with partner agencies 1 2 3 4 5 6 7 8 9 10
- 2. Those external to ICT have a good understanding of the range of services offered by ICT 1 2 3 4 5 6 7 8 9 10
- 3. Those external to ICT value the work of ICT 1 2 3 4 5 6 7 8 9 10
- 4. Communications with other providers need to be improved 1 2 3 4 5 6 7 8 9 10

Goals of ICT questions free text box

Appendix 3

Overall scores for all NPT questions in descending order [Not at all agree =1 completely agree=10]
In bracket in left column NPT domain number.

Results for NPT questions in descending order	1	2	3	4	5	6	7	8	9	Average score	Difference
5. Key individuals drive ICT forward and get others involved [2]	8	8	8	9	10	5	8	7	9	8.8	5 pts
2. Team members have a shared understanding of the purpose of ICT and of specific responsibilities required [1]	8	7	9	8	9	9	8	9	9	8.4	2 pts
3. Team members understand how ICT affects the nature of their work [1]	9	6	10	10	9	9	6	8	9	8.4	4 pts
4. Team members can see potential value of ICT for their work [1]	9	6	10	8	9	9	6	8	9	8.2	4 pts
6. Team members are open and willing to work in new ways [2]	7	7	9	10	10	8	8	6	9	8.2	4 pts
7. Team members believe that contributing to ICT is a legitimate part of their work [2]	8	6	9	10	10	9	6	6	9	8.1	4 pts
8. Team members continue to support ICT [2]	7	7	7	9	10	9	8	7	9	8.1	3 pts
19. Feedback about ICT can be used to improve it in future [4]	8	6	8	8	10	9	6	7	9	8.1	4 pts
11. Team members trust ICT and trust each other [3]	9	6	10	10	10	9	7	6	5	8	5 pts
13. Sufficient training is provided to staff [3]	8	7	9	10	9	10	7	6	6	8	4 pts
1. ICT is distinct from previous ways of working [1]	9	9	7	10	6	8	8	6	8	7.8	4 pts
18. Team members value the effect of ICT on their work [4]	8	6	8	8	10	9	8	7	9	7.8	4 pts
9. Team members can easily perform the required tasks [3]	8	6	9	8	9	9	5	6	9	7.6	4 pts
12. Work is seen as appropriately allocated to staff who have the required skills [3]	5	6	9	8	9	9	6	6	9	7.4	4 pts
10. The intervention does disrupt working relationships [3]	8	7	5	8	8	9	3	7	9	7.2	6 pts
15. NHS/Vanguard Programme Management adequately supports ICT [3]	8	6	9	7	9	9	4	5	8	7.2	5 pts
16. Team members can access information about ICT and are aware of the effects of ICT [4]	5	7	7	6	9	9	5	6	9	7	4 pts
20. Team members can modify how they work with ICT [4]	4	5	5	8	9	8	5	7	9	6.6	5 pts
17. Team members agree that ICT is worthwhile [4]	2	6	8	8	9	5	6	5	9	6.4	7 pts
14. Sufficient resources are available to support ICT [3]	3	4	8	8	8	8	5	5	6	6.1	5 pts

