New Technology in the Human Services

Contents

Papers
- Quality Improvement through the use of Home Care Information Systems
- The Looking After Children Computer System
- Factors Implicated in the Integration of Clinical Information Systems into Human Service Agencies

Practice & Policy Reports
- Dutch Branch Mirror for Generic Social Work

Controversial issues
- Does Electronic Monitoring (EM) Contribute to Community Based Penalties for Offenders?

Reviews
Contents

Up Front Papers
2 Quality Improvement through the use of Home Care Information Systems - GIRST as an example
Eric Verkaar

10 The Looking After Children Computer System: Developing Social Work Sensitive Databases
Andrew Kerslake

15 Factors Implicated in the Integration of Clinical Information Systems Into Human Service Agencies: A Concept Map
Riki Savaya, & Mark Waysman

Practice and Policy Reports
23 Dutch Branch Mirror for Generic Social Work.
Jos Potting

Controversial Issues
27 Does Electronic Monitoring (EM) Contribute to Community Based Penalties for Offenders?
Dick Whitfield and Ruud Bociens

Reviews
34 Human Services in the Age of New Technology; Harmonising Social Work and Computerisation reviewed by Judith Holt
35 Creative Computing In Health and Social Care reviewed by Peter Sharkey
36 Dreams and Realities reviewed by Harmen Grebel
38 Human Services and Information Technology: an International Perspective reviewed by Ignace Snellen
39 Information Management in Social Services reviewed by Jan Steyaert

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ISSN No: 0959 0684

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Husita-4

This editorial piece is written shortly after the fourth Husita conference ‘Dreams and Realities’. Early reports indicate that people are feeling renewed energy to follow some of the dreams. Our reviewers were out and about at the conference and we have asked presenters who made a particular impact at the conference to submit papers for later issues. During the conference in Finland negotiations were conducted to agree the venue for the next Husita conference. It is exciting to see this awarded to Hungary and we look forward to meeting more of our readers in Budapest, Hungary in August 1999. Watch future issues for announcements.

Although my co-editor Jan Steyaert was able to attend Husita-4 I had to content myself with glimpses of the conference via the Husita list. The last minute introduction of a few networked machines in the conference foyer showed interesting possibilities for people to participate from a distance. It would be good to see future conferences creating an opportunity for those who are unable to travel to link in and make a contribution.

The web page for the conference was a first for Husita. Now we need to use the Internet’s ever expanding facilities to include a wider audience. Speaking from the view of a non-participant on this occasion and observing comments on the list I would like to see, at minimum, rapporteurs providing very brief summaries of each session to be distributed on the web. These might be illustrated by photographs taken at the sessions or perhaps even short video clips.

Introducing Vol 9 No 2

We did not seek to create a theme for this issue but it is interesting to find that the same themes are emerging from a diverse group of papers and reports from the Netherlands, Israel and UK.

Verkaar describes the development of, and attempts to implement, a workload management system for health and home care workers. GIRST is an information and registration system for home care with four separate modules: intake and assessment, work planning, time-tabling and evaluation. It, like the program described in Kerslake’s paper which follows, is a PC based system developed outside commercial software houses by subject specialists. The issues of implementation which both Verkaar and Kerslake raise, although not identical, match in some respects. Human service system developers need to find a way of working alongside mainstream software houses to integrate new practice developments and make them acceptable to managers and practitioners.

Kerslake describes another practice support system developed in the UK to take the Department of Health ‘Looking after Children’ materials and turn them into a computer based system. The SSRADU Looking after Children Computer System (LACCS) has undergone extensive trialing with agencies and SSRADU and the Department of Health hope that it will be adopted throughout the UK.

Those involved in the process of testing and trialing would be advised to consider the next article which sets out research into the integration of clinical information systems into human service agencies. Savaya and Waysman outline a research project to discover why clinical information systems are underused in agencies. This is interesting both for the research design and the issues they identify as important for successful implementation.

Our practice report from Jos Potting is on a system for collecting service information. This is an attempt to go beyond collecting figures and to address the issues of effectiveness and efficiency for social work agencies in the Netherlands.

We continue our series of controversial issues with a debate on the use of electronic monitoring as a community sentence for offenders. Dick Whitfield argues against and Ruud Boelens takes the positive view. What do you think?

Finally in this very full issue we carry five reviews of new books. Judith Holt looks at Human Services in the Age of New Technology; Harmonising Social Work and Computerisation by Phillips and Berman. Peter Sharkey read Creative Computing In Health and Social Care an edited volume by Fred Yates. The next two were published to coincide with Husita and were launched there. Jan Steyaert, David Colombi and Jackie Rafferty have expanded and updated their book on Human Services and Information Technology to give it an international perspective. Bryan Glastonbury edited 17 papers presented at the Husita Conference to reflect the theme Dreams and Realities. Harmen Grebel and Ignace Snellen tell us what they think. Finally Jan Steyaert looks at Information Management in Social Services, a conference volume by Kerslake and Gould.

In the next issue

Volume 9 Number 3 will be a special issue on Coding and Classification and we have a selection of papers in review. We will be suspending the practice report and controversial issue to allow us to publish a larger range of papers.

Ann Wilkinson & Jan Steyaert

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Quality Improvement through the use of Home Care Information Systems - GIRST as an example

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Introduction

There is a trend in developing information systems in social work and health care, to support those who actually deliver help, care or cure. In the past more emphasis was placed on administrative support while developing information systems, now the focus has moved to supporting the actual process of helping, caring and curing.

The main purpose of these ‘care-supporting’ or ‘help-supporting’ information systems ought to be the quality improvement of the care providing process. By diagnosing, monitoring and evaluating clients and by generating and adequately using ‘real’ information which is essential for the process of providing care, care supporting information systems can help to improve the quality of actual care or helping processes.

In this paper an example will be given of such a newly developed help or care-supporting system. The system concerned is GIRST, designed to support helpers, nurses and their managers in the field of Dutch home care. This article will describe how such a system can lead to better quality of care. At the HUSITA 3 conference in Maastricht (1993), we presented the blue-prints of GIRST (Verkaar, 1996). This article looks back at the three years which followed and discusses development and implementation of the application.

Girst

GIRST is an information and registration system for home care which allows information needed by the care process to be stored and retrieved. It is composed of four modules, covering all aspects of the care work process from start to finish. The four modules are: intake/assessment, planning, work in progress and evaluation.

- The intake and assessment module enables information to be structured on what is needed; it helps the assessor to diagnose what help the home care client needs and to specify who is adequately licensed to provide this necessary care. It is even possible to measure complexity by using a complexity scale. The output of this module is advice about what care is the most appropriate for this client. In this module the client’s needs are being translated into specific help tasks which can be carried out by those who possess the necessary skills.
• The planning module is an instrument to assign specific tasks to specific helpers. By using an electronic planning board, the original care advice (tasks and required skills) is converted into a real plan. There can be a difference between what was regarded as appropriate or necessary and what is planned.

• The care registration or work in progress module is an instrument to make work lists for clients and helpers. Also workers or helpers can register tasks which are carried out. These can be printed out, or the Apple Newton prototype will provide helpers with a complete electronic file of the week’s clients.

• The care evaluation module is concerned with answering questions about the quality and effectiveness of care provision, whether the care was appropriate and whether clients received the help they had in mind. This module shows graphs on changes, registered over time and asks questions about client satisfaction and professional judgements about the quality and quantity of the delivered care.

GIRST

Mediation module
- client presentation
- intake interview
- complexity scale
- skill assessment
- care advice

Planning module
- job delegation
- planning

Work in progress module
- work-lists for helpers
- work-lists for clients
- care registration

Evaluation module
- historical presentation of changes
- client satisfaction scale
- registration of professional judgement, concerning quality and quantity

Figure 1 Girst modules

GIRST is a Windows 3.1 based system. It is a Visual Basic application, working with an Access database. There is also a complementary prototype for use on an Apple Newton Message pad (for pure registration tasks). This Newton prototype contains two parts: a Newton bookmaker application and a Notion application. Currently the system is stand alone, but a Network version will be available for actual buyers of the system. The contemporary functionality is individual client oriented, but work is in progress on group analysis functionality. The system is based on nursing theory (Orem etc.), but GIRST integrates nursing problems with domestic (help) needs. Further elaboration for using the instrument in residential nursing homes for elderly and handicapped people is being done. GIRST does not integrate purely administrative functionality, like billing etc. Because it’s Windows and because it supports ODBC, a connection with other more administrative oriented applications is possible.

GIRST was developed by the Netherlands Institute of Care and Welfare (NIZW). NIZW is a non-profit organisation for research and development in the field of care and welfare. Girst is exploited for the Netherlands by a small private company, GINO.

Information systems and quality assurance

Information systems offer huge possibilities for improving the quality of care or helping processes. The main professional advantages of an information system are the standardisation and the accessibility of information.

Professionalism is actually a process of standardisation. Mintzberg (1979) refers to this process as pigeonholing. A professional, such as a doctor or a nurse, explores a problem by checking pigeon holes with information. It is a process of continuously testing and checking hypotheses. Is it this...? No it is not... Is it that...? No it is not, so maybe it is that....? The better equipped with more and better structured information holes, the more successful a professional worker can be. So in order to help a professional to do his or her work better, an organisation provides its professionals with adequate (not too much, not too little) information about a client and about the possible interventions. Professional training or education is a way of providing professionals with adequate information and to teach them to structure and apply this information in specific ways.

An information system offers the possibility to structure the information in an organisation and it prescribes or suggests how to deal with this information. The way professionals deal with their work is written down in theories. Scientific theories describe how to do a helping, nursing or caring job. So a professional information system should be build upon a theoretical framework about how to perform a job and how to use information, while doing so. In this paper I will briefly describe how GIRST is built upon professional nursing theories and how standardisation is further used in GIRST to improve the
quality of the process of helping and caring in delivering home care services.

It is recognised that not every helping or caring practice has a professional basis with established consensus about how to do the job right and how to use information properly. Therefore an information system should allow some variation in the information workers can store and retrieve from such a system and in the way workers handle the information in this system. GIRST also allows some variation in the ways a home-care professional uses information in his or her job.

Professional workers need information about clients to do their work properly; quite often this information is not very accessible. Dossiers are only made as unique files, there are hardly any copies. If there are any copies, these are always outdated. Dossiers or files are also commonly available in only one office location. So in the case of more than one person providing help to one client, sometimes in several locations or in the client's home, there is a problem. Information systems can make client data more accessible: faster, in more places and more accurately. Besides this, information security can be improved, by means of passwords or several templates for different authorisations: your authorisation allows you to see only the information you need.

In this article I will describe the way GIRST improves accessibility of information for professionals and their clients, in home-care practices

A better intake and diagnosis

The organisation of intake and diagnosis

In the Netherlands, home care organisations are divided into local or regional home help services (gezinsverzorging) and district nursing organisations (wijkverpleging). There is a trend towards integration and merging of these organisations. If home help and district nursing organisations do not merge, they do tend to cooperate more than before. There is a tendency to construct one local entry for potential clients. The national government in the Netherlands has recently decided that a help demand for home care should be judged and delegated by a regional institute (Nota indicatiestelling, 1996). This means that a client will be diagnosed by this institute and after a balanced judgement, is delegated to a specific organisation: a home help or district nursing organisation, or to an elderly home or nursing home. It is possible that the diagnosis of relatively simple demands for help, is delegated to the home care organisations themselves. These regional institutes for intake and diagnosis, should be operational on 1st January 1997.

Until now, the diagnosis of a (potential) client has been made by the home-care organisations themselves. A client asks for help and a district nurse or a team manager from the home help agency visits this client and makes a simple diagnosis. On the basis of this diagnosis, a care plan is made. In the case of a complex situation, co-operation with other organisations and professionals is sought. The district nurses can use an extensive set of paper forms, called WAS forms for this diagnosis and application, while home help agencies can use a rather simple LIER form. It is common practice in the Netherlands, not to use these standard forms, but to use a set of forms, which are developed by the organisation or the professional themselves.

In search of a theoretical framework

The main problem in diagnosing a client in the field of home care, is the fact that home-helpers and district nurses have different views on clients. Nurses tend to look at clients as individuals with somatic problems, while home-helpers often look at the client as part of a household system. In GIRST a synthesis of both views is made, while using a theoretical framework which focuses on deficiencies (van Amelsvoort and Slingerland, 1993). This framework is more or less similar to the one used in the WHO ICIDH classification (International Classification of Impairments, Disabilities and Handicaps, WHO 1993) and has also strong resemblance to Orem’s theories on nursing practices (1985).

GIRST’s framework employs a health care model whose central premise is that health is the equilibrium of physical, psychological and social well-being, and not just the absence of disease or want. In general, people strive to be as healthy as possible. To achieve this, they deliberately undertake activities in physical, psychological, social, societal and domestic areas, the so-called ‘vital functions’. When health is disturbed, this can lead to deficiencies and limitations in other areas of life. Deficiencies in one’s ability to look after oneself can affect not only what one can do but also what one feels or wants. Whether a deficiency or limitation can be removed or reduced depends on the ability of that person to look after themselves, on the ability of the family to compensate, on the domestic settings and on the help that professionals can offer. So a disturbance in one’s health can lead to one or more deficiencies in one’s ability to take care of oneself. If these deficiencies can no longer be compensated by oneself or by one’s natural and social environment, professional care is probably needed. This theoretical model is reproduced in a simplified way, in the figure opposite.
GIRST’s 22 areas of deficiencies

**Individual**
1. moving around
2. changing position
3. bodily control
4. personal hygiene
5. dressing and undressing
6. eating
7. excreting
8. breathing
9. life rhythm (rest and activity)
10. sense perceptions
11. sexuality
12. psychological functioning
13. social functioning
14. societal functioning
15. nursing activities
16. medical tasks
17. paramedical tasks

**Domestic**
18. preparing meals
19. care of clothes and shoes
20. cleaning activities
21. organization and management of the home
22. other maintenance activities

Fig 2 Girst’s 22 areas of deficiencies

This theoretical framework governs the structure of GIRST. First of all, the intake worker finds out from the client whether there are deficiencies in physical functioning and whether these are complete, partial or incipient. The intake worker then determines whether this is a deficiency of knowledge, skill or motivation; whether the deficiency is current; and whether there is also a shortage of compensating capacity within and outside the home. This inventory forms the GIRST’s core data. On the basis of these established deficiencies, the help requirements and their provision are determined.

The intake worker is able to make an extremely detailed inventory of the client’s deficiencies and the compensating capacity of his or her social environment. This inventory is drawn up at the so-called ‘activity level’, which distinguishes between a manageable 22 areas of human activities. These come in two main categories, individual and domestic. Here GIRST differs from the ICIDH because of the fact that more domestic deficiencies are distinguished. GIRST also offers more elaborate categories in individual deficiencies.

Because GIRST is based upon the theoretical framework, mentioned above, GIRST offers a specific structure to diagnose potential home care clients. GIRST integrates home care services and district nursing activities. The GIRST information system differs from paper information systems in the sense that much more information in a more standard format, is more easily and quickly accessible. In other words: without these new information techniques, a diagnosis such as can be made in GIRST, is not possible.

A standardised care-plan

After a diagnosis has been made and deficiencies found, a care-plan with standardised categories can be made. For every client a plan can be made about what can be done in relation to a specific deficit: to observe, to inform, to instruct, to motivate, to assist with, or to take over activities. All these activities are related to standardised goals. Combined the deficiency, goals and helping activities, form a care plan. This care plan is part of the complete dossier, which also contains information about personal particulars, the household settings, information about illnesses, other professional help, etc. Every professional who helps a specific client, receives a complete care plan and dossier for this client, including the information for the other helpers. Every helper or nurse also knows exactly what is done by others and when.

Between tasks and qualifications: a model for skill-assessment decision support

Once it is clear what a client’s problems are in terms of deficits, goals are set and helping activities are prescribed, the question is, who is to deliver this help or care? The helping tasks should be carried out by a qualified professional. Who is qualified to carry out which tasks? In GIRST a tool is used to support the decision of allocating tasks to specific professionals, based on a Dutch qualification model. NIZW has developed this model for the Netherlands (Van Amelsvoort, Slingerland and Verkaar, 1993). A possible range of job qualifications is given for every task. The professional who does the intake and makes the diagnosis, can choose which combination of tasks should be given to which professional. He or she
can even make a combination without using the professional given within the range. This matching model, is not a prescription, but advice.

Figure 3 is a screen showing how in GIRST specific tasks can be matched with Dutch home care job qualifications/skill levels.

A separation of intake, planning and actual caring: between necessity and reality

An information system offers possibilities to integrate information, but also to separate specific information and information processing procedures. GIRST contains a procedural separation of the process of intake and diagnosing (producing advice, what is necessary) from the process of planning care (what to do when) and from registering what is actually done (reality). An information system can be of great support in separating these phases: while evaluating, each decision can be traced exactly and transport of information between phases and actors can be optimised.

By means of separating these information items, home care workers are given assistance in evaluating the differences between what help was regarded as necessary and what help was actually given. This means a quality judgement for every individual client. A judgement, which until now is hardly ever given, because the necessary information is not available, or is stored in different places. This information system also asks for the relevant information, separates this information during the helping process, but integrates this information in an appropriate way, at the moment of evaluation.

Individual evaluation as an element of quality assessment

Individual client evaluation is one of the crucial elements of GIRST. This evaluation is pre-structured and contains the following elements: changes in complexity over time; changes in deficiencies; changes in volume; changes in skill levels and client satisfaction. By means of graphical overviews, monthly changes can be shown. On the basis of these overviews of changes a professional, or a team, can evaluate a client’s help. In the last screen of this module, pre-defined actions can be taken: change volume; change skill level; change frequency; send through to other institutions or end the care process. By means of offering such a pre-structured evaluation procedure, evaluating clients can become a standard procedure, which takes up little time.

Dossiers and lists for professionals and clients

GIRST contains a lot of client-related data. Every professional who helps a specific client needs these data. In GIRST it is possible to print out complete intake dossiers and work lists for every helper. These work lists contain all clients of the week, including all tasks which should be accomplished at specific moments. If a worker has their intake dossiers and their work lists, they have a complete documentation for a whole week. It is possible to export these intake dossiers and work list to small hand held computers. So a worker has the actual information at hand in the hand held computer.

In the Netherlands home care organisations are experimenting with information for clients. In these experiments, home care clients receive information on paper, about who is helping when and which tasks are being accomplished. Because this kind of information needs to be accurate, it is time consuming to accomplish this task. Therefore in many experiments, clients receive overall information only at the start of the helping period, with monthly or three monthly updates. GIRST however makes it possible to print out a weekly list for every client, with information about who is visiting when and about what help is provided during these visits.

An information system like GIRST enables one to make print outs, or electronic data exports in almost any format at any time, for professionals, their managers and clients. In GIRST some standard formats are made available. This way communication with regard to a client, concerning the help this client receives, is made a lot easier than before.

Privacy, Access and Confidentiality

It must be said that this facility to spread client data easily through an organisation, is not without dangers. Privacy
and confidentiality are very important for a client. In the Netherlands there are legal regulations for privacy and confidentiality but also for the client’s rights to see their own dossier. But these legal regulations are relatively open and can lead to very different interpretations.

A home care organisation should distribute client related data to the professionals who actually work for and with a client. Most professionals need a complete view of a client’s situation and not only information on the specific part they actually deal with. Professionals should be obliged not to pass this private client information to anyone else but their co-workers who serve the same client. Sometimes this information can be shared with colleagues for supervision or collegial advice. The organisations for home care professionals (nurses, helpers) should develop and write down professional ethical codes on this issue.

If client related information is automated or printed on paper, it can be accessed rather easily by people, who are sometimes not qualified to see it. So a home care organisation should make safety regulations for both computerised information and paper. In the case of paper records, regulations for locking files, rooms and even suitcases should be made. Computerised data should be protected by safety plans with authorisations, passwords etc. The Dutch law further prohibits this health related client data being made public or sold to other interested parties. Only group data which is made anonymous can be made public or available for research and policy making purposes.

The issue of a client’s rights to see their dossier, is something else which should be mentioned here. In the Netherlands, it’s common practice that clients hardly know what is in their files. A client has a legal right to access the dossier, with the exception of some purely professional annotations. But even if a client asks to see their own dossier, many organisations are not very willing to allow this. Usually many dossiers are rather incomplete and hardly understandable. Therefore GIRST’s option to print out a standard dossier and a weekly list for a client, is a huge progression. But it makes an organisation vulnerable. The dossier and the weekly schedule state what should be done and when. If it is not done in reality, this fact gives a client evidence to complain. An organisation should give a client as much information as possible about the help they are receiving. Only when there are strong reasons not to do so, for instance when a client is no longer mentally able to understand their situation, can this rule be abandoned. But then the information should be given to family or neighbours who are the primary caretakers of this client.

Flexibility

There is hardly any kind of work, where standardisation is so generally accepted, that a professional has no need for their own way of using information. GIRST is also designed to allow a lot of flexibility in the way it is used. First, flexibility is possible in the way a professional navigates through the system. There is no standard way of navigating. One can choose a personnel order to fill in, or to retrieve information. Of course, when information is not stored, it cannot be retrieved. There is also no obligation to fill in a client’s record completely. So if only a little information is needed, only a little is stored. Where cooperation with others is necessary, there should be an agreement, about what parts of GIRST are used and what parts are unnecessary.

Every professional has the need to make personal non-structured remarks. GIRST allows the worker to make a text comment anywhere in the record. This text information is stored separately and can be retrieved at any place in GIRST by using a simple text searching tool. It is also possible to search for dates, if a specific remark has a date attached, or search for the specific screen. GIRST adds this information to your remark automatically.

GIRST uses a specific, rather detailed framework to enter a client’s deficiencies. Not every organisation or professional thinks this kind of detail is necessary. Details can be specified for some problems and not for others. GIRST can deal with these wishes. It is possible to use detailed recording or categories, in the same file. GIRST offers a little support in deciding who has to accomplish which tasks. The user is not forced to follow the system’s advice, but is free to deviate from it any way she or he wishes. This way professionals can always put their professional judgement above mathematics or other system rules.

The flexibility which is described here, is of course a compromise between a maximum of professional standardisation and a maximum of personal freedom. The more freedom users have, the more a system like this will be accepted by individual helpers. But a minimum of standardisation is necessary to make an information system work and this contributes to the quality of helping or delivering care.

What is not accomplished yet?

Although GIRST has been designed as a distributed database, GIRST is at the moment a stand alone software application only. GIRST has only been tested for use in isolated agencies. NIZW has no experience with GIRST as a network system yet. It is clear that using GIRST in a network between connected agencies, will optimise its
advantages. Because of the large investments needed for such an operation, GIRST will be built as a network application, as soon as home care organisations ask for it. Because GIRST is not a network system yet, NIZW has no experience with the distribution of client data in different formats, for different users.

Part of GIRST is a prototype for Apple Newton hand-held computers. Unfortunately, this part of GIRST can only be called a prototype, because of its elaborate and difficult transport of data between these hand-held computers and a PC. As soon as a home care organisation shows a serious interest in this part of GIRST, a more solid application for these Newton hand-helds will be built.

GIRST is not an instrument to measure a client’s condition in an academic way. GIRST contains no valid and reliable scores about a client’s situation. So Empirical Clinical Practice (ECP), like van Yperen (1996) and Hudson (1996) promote, is not possible yet. GIRST has not been built for this purpose. A valid and reliable measuring scale is less elaborate and contains less (but different) information than a professional needs to deliver care. Nevertheless to make the use of reliable and valid scores possible for ECP and academic research, NIZW is now working on implementing such scales in GIRST.

Problems in implementing GIRST

GIRST is developed by the Netherlands Institute of Care and Welfare, with the help of three home care organisations. Nevertheless, the demand for such an information system was more latent than explicit. The three developing partners did not commit themselves to use GIRST, after development. These organisations, as well as others, are still considering the use of GIRST. Their problems in implementing GIRST lie in the following conditions:

- GIRST is a rather elaborate information system. Hardware is expensive and a lot of training is required. Existing organisational procedures would have to be reshaped on the basis of GIRST. Implementing GIRST also has many consequences for a home care organisation. Deciding to buy such a system, therefore takes a lot of time.

- GIRST is not an administrative information system with functionality like accounting and billing. Every home care organisation uses administrative systems, which should be connected with GIRST. The commercial developers of these systems did not want to co-operate with NIZW for this purpose. Only if an organisation orders and pays for such a co-operation, are commercial developers willing to co-operate. An additional problem is, that the three largest commercial firms in this field, have problems in delivering their new systems.

Organisations put off the decision whether or not to use GIRST and wait for the delivery of the new generation of administrative systems.

- GIRST is not a management information system yet. Managers who make decisions on buying information systems, are not very happy with systems which only support the work of their professionals. Managers do not want individuals client data, they want aggregated data from groups of clients. So only those managers who can see the importance of assisting their helping or care-delivering professionals, are considering buying GIRST.

To solve these problems NIZW has tried to co-operate with developers of commercial (administrative) home care information systems. A design for data exchange with three major systems has been made by NIZW. Now that home care organisations appear to be delighted with GIRST’s qualities, the willingness to co-operate is growing. One commercial developer has agreed to make a standard data exchange, if a single client asks for it. A second developer already has been asked to do so and cost studies for such an interface are now being made. A third, large developer, simply keeps refusing any form of co-operation. For the benefit of managers of home care organisations, NIZW will publish a design for GIRST management information, later this year. Although there are hardly any technical problems in making analysis on group data from GIRST (because GIRST is an ACCESS database which supports ODBC) there are some conceptual problems. GIRST contains a lot of detailed client data in which managers are hardly interested. Which managers really want to know how many clients cannot wash their hair? Managers are interested in more general information. So the design for management information NIZW is working on, describes how GIRST data can be grouped meaningful and can be analysed usefully. NIZW hopes that this will stimulate the use of GIRST by Dutch home care organisations.

Lessons to be learned, conclusions

To round off this paper, I will try to formulate a few lessons, which can be drawn from the developing of GIRST. These lessons reflect on the problems we encountered in our efforts to develop a new information system which supports the improvement of quality of care, rather than administrative processes.

First of all, one can ask the question whether GIRST is developed for an actual market, or for more experimental and developing purposes. Since the latter was the aim of this GIRST development project, it can be said that GIRST demonstrates successfully, how an information
system can improve the quality of care. But whether home-care practices in the Netherlands will really use such an instrument, is not clear yet. So a better commitment concerning the guarantee of use, before starting such a project, would be preferable. This on the other hand is a rather problematic and perhaps impossible option: what organisation is crazy enough to oblige itself to use an information system before it has even been designed? And because of the fact that NIZW was perfectly free to develop a system according to its own quality standards and without obliging commitments, quality reducing compromises did not have to be made. So GIRST has become a quality improving care supporting information system in a rather pure form.

GIRST’s implementation success depends heavily on the willingness of commercial software developers to connect their application to GIRST. This is a complex co-operation problem. By these firms, NIZW is seen as a competitor, while NIZW only wants to fill-in gaps which are left open in this market. Until now, commercial developers did not see any potential in developing a care supporting information system.

Establishing good relationships with these third parties is also an essential part of a successful development project. This co-operation implies that commercial information system developers accept the expertise of a research and development institute like NIZW. It is also necessary for them to co-operate on a non-exclusive basis, with such an organisation, to improve the quality of their products or to design new products together. These conditions are not very familiar to commercial developers of information systems, at least not in the Netherlands. A better understanding of this problem could perhaps have lead to better implementation results.

A major miscalculation in this project was the idea that personal computers would find their way into home care organisations, on a large scale. Until now this assumption proved to be quite wrong. Home-care organisations in the Netherlands are very slow with regard to technical innovation in this field. Not because of a lack of money (a lot of money is spent on large mainframe and mini-computers), but because of a lack of strategic thinking on technological innovation. Home care organisations have little technical knowledge themselves, they hire experts from large system developing firms. These firms have displayed little interest in promoting PC applications, because of their vast interests in the mainframe and mini-computer market. It wasn’t until the change in these application building firms towards the development and support of PC based applications, that home care organisations have tended to follow this trend and start buying PC s and networks. A more conservative trend analysis, regarding this development, could have tempered our expectations about the possible market prospects for GIRST, in an early stage of this project.

Quality improvement in health care and social work is a hot issue in the Netherlands. Many articles and text books on this subject are published annually. In only a few of these publications, the relation between information systems and quality improvement is stressed. Even if the authors of these publications understand the importance of information systems, they rarely elaborate on this issue. This article is an attempt to clarify this relation between information systems and quality improvement, by means of an example. It is my personal hope that in the coming years, more and more information systems can improve the quality of helping and caring processes. Perhaps this article can be a small contribution to so huge an effort.

References
Children Looked After in State Care

In England and Wales the local authority has a duty to care for and accommodate children in need under two clear legislative sets of circumstances. First, it should provide accommodation for children in need within their area where any of the following apply:

- there is no person with parental responsibility for the child concerned; or
- the child is lost or has been abandoned; or
- the person who has been caring for the child is prevented from providing suitable care or accommodation for the child. (Children Act 1989 s 20).

Secondly, where a court has made a Care Order, following significant harm to a child, then the local authority has a duty to receive the child concerned into their care and look after them. These duties give the state 'parental responsibility' (although such responsibilities are not removed from the child's natural parents). In addition, the local authority has a duty to accommodate and maintain the child, to safeguard and promote their welfare and to provide services equal to those which are available to children living with their families. The purpose of this is to ensure that children who are in care are not deprived of services available to other children. (Children Act 1989 s 22).

However, whilst the duty towards children implicit within the legislation looks well intentioned the outcomes of state intervention are not always so beneficial. As a recent press article in the UK commented:

'What we know is this. Children in care, in open units such as Sunny Oak, cost the state £1,000 per child per week. It's money well spent if it allows them to go on and live independently in society. But success is rare. On any one day children in care are 80 times more likely to be excluded from school than children who aren't in care; 75% of kids leaving care have no educational qualifications; half are unemployed after one year; one third of homeless young people have been in care; and 23% of the adult prison population have a care background.' (Cohen, 1996, p26)

In addition to the major problems described above children looked after by the state can often suffer a number of other more minor disadvantages. For example, vital health care events such as immunisations, dental and medical checks, that parents undertake as routine, may have been missed. (Patterns and Outcomes in Child Placement, 1991, p8).

Clearly such outcomes are an unintended consequence of state intervention, although perhaps inevitable in the past given a care system which focused on the problems leading to state care and the need to 'rescue', rather than examining the consequences or outcomes of the intervention itself. This need to change the focus of childcare intervention also fits the recent thrust of government policy,
towards being more outcome centred, in all health and social welfare interventions. Consequently, the Department of Health set up in 1987 a Working Party on Child Care Outcomes which commissioned a set of paper based recording materials designed to offer detailed assessment and action records for any child looked after by a local authority.

**The Looking After Children materials**

The materials, developed initially by the Dartington Social Research Unit, divided into a series of age ranges, e.g., 10-14 years, and dimensions or aspects of a child’s care (these dimensions are; health, education, identity, family and social relationships, social presentation, emotional and behavioural development and self care skills). Within each of the dimensions there were then questions for the social worker to cover with the parent and/or the child. (see Parker, Ward, Jackson, Aldgate and Wedge, 1991)

The content of the records, to be used at six monthly intervals, were based around ‘a number of aims that a reasonable parent might be expected to hold for any child’ (Corrick, Jones and Ward, 1995, p5) and would obviously vary according to age. Special adaptations to the record were made to take account of children who may have a disability. As part of the development of the records they were also subject to a piloting process both with children in state care and with a sample of children looked after at home with their parents who were not subject to state intervention.

In addition to the assessment and action records a further set of recording devices were also developed based around the legislative requirement for placement planning and review. Finally, an Essential Information Record (EIR) was devised bringing together the key data relating to any one individual child. The overall project was funded by the Department of Health and supported by an extensive promotional and training campaign for local authority Social Services Departments (SSDs) in England and Wales. To date some 70 local authorities have started to use the approach with eventually around 80-90% of all SSD’s being anticipated to use the system.

It may be felt that such a system of state monitoring is too intrusive into the lives of children and their families. However, much of the information collected is only based on actions which any parent would undertake for, or with, their child, e.g., monitoring educational performance. It is information which may already have been stored in children’s files, but in such a haphazard way that it would neither have been secure or amenable to analysis. Finally, as the authors of the records point out;

‘The rationale for allowing the state to intervene in the private sphere of family life has always been that either children, adults or the wider society will benefit by the intrusion. A hundred years ago, the benefits of providing separate care for deprived and disadvantaged children were thought to be self evident. It has since become increasingly apparent that unless outcomes in child care can be adequately measured, we have no means of justifying the actions of social workers, which may have far reaching and permanent consequences for individuals.’ (Parker, Ward, Jackson, Aldgate and Wedge, 1991, p136)

**Fig 1 Front Screen of LACCS**

**The Looking After Children Computer System (LACCS)**

The idea of computerising some or all of these records was present from an early stage and given the amount of material that could potentially be recorded on any one child, computer storage was viewed as somewhat of a necessity. Accordingly in 1992 the Social Services Research and Development Unit (SSRADU) at the University of Bath was commissioned to produce a feasibility study to explore what material might lend itself to a computerised package and how such a program might be developed.

After considerable discussion a programme of work was agreed to develop a Windows based database (using Visual Basic and Access) for the Essential Information Record with, subsequently, word processing templates being added for the Care Plan and Review forms. It was recognised that the remaining forms were unlikely to require computerisation as they were neither completed or amended as frequently as the EIR, the Care Plan or the Review documents.
The development of the LACCS system was funded by the Department of Health with the intention that once developed continued support of the system should be taken over by local authorities via a licensing arrangement. Such a development is significant in that it is the first major database for social services to be directly funded by central government. Coterminal with these initiatives and also following on from the development of both the paper based and computer based systems a number of other projects have arisen concerning the management of child care information. These include an internal review by the Department of Health of the function of child care returns to central government, a minimum data set for all child care recording, a possible extension of the recording system to other children with which SSD's come into contact and a set of data standards for exchange of information from one computer system to another.

**Fig 3 Address Book**

Background to the Development of the Computer System

The development of LACCS needs to be set in the context of recording practice in child care in England and Wales and attitudes to, and prevalence of, computerisation in SSD’s. That accurate recording of information concerning children looked after by the local authority has in the past left much to be desired has been noted by a number of commentators. The purposes of such records has generally been ill defined but an individual file can serve a variety of roles from a legal record of a child’s looked after status through to a running record of case notes taken by the social worker. Contributions to the file may be made by a mixture of social work, administrative and managerial staff.
Overall a child’s individual record may be stored using a variety of mediums, including paper based notes and forms, word processed documents and computers, the latter varying from sophisticated networked systems through to little more than computerised card indexes. Each local authority may utilise any or all of these mediums often having a number of systems recording different aspects of a child’s care, e.g., a client index, a system concerning fostering, a database designed to record information to compile the annual statistical return to government.

Consequently, a desired outcome of the overall Looking After Children Records system was to standardise both the content and method of recording across the country as well as to improve the quality and consistency of individual records. The computer program was seen as playing a role in achieving this.

**Issues of Implementation**

Despite the logic surrounding the development of LACCS such work has not been greeted with universal approval. The reasons why this might be so form part of a wider debate concerning the role and development of computerisation by social work agencies in England and Wales.

First, computerisation in SSD’s has largely been influenced by administrative staff inputting data, information technology staff managing the system and managers using the results. Use of computers by social workers is still limited. In part this is a ‘chicken and egg’ discussion, i.e., is it that software has not been developed specifically targeted at a social work audience or is it that social workers have not demanded the use of computers? Consequently any software developed, like LACCS, encounters problems in a shortage of hardware being available for the audience at which it is directed. Whilst funding was available to provide computing resources for care in the community this has not been the case for child care. As Glastonbury comments, ‘In short, IT may be highly valued by managers and administrators, and have some limited use in professional practice, but it is also an unproven ‘Johnny-come-lately’, neither well understood nor wholly suited to the caring context’.

Secondly, although the proposed recipients of results from software have been managers the databases currently in use have still been seen as producing only limited benefits for that group. This in turn has also been encouraged by SSD’s generally not being information driven organisations. (see Kerslake 1996). Therefore, there is a general climate of opinion that databases are there to be endured rather than benefited from.

Thirdly within most SSD’s the computer development that has taken place does not readily fit locally networked, Windows based databases. Consequently such a system has often been opposed by computer staff who see the use of LACCS as deviating from the corporate IT strategy that has been developed. Little work has been achieved in linking different database systems or in the use of ‘client-server architecture’.

Finally, the design of the LACCS software potentially creates problems, its structure not being served by a large database such as Oracle and yet it is still far more complex than, for example, word processing templates which could also be used for form completion.

**Conclusion**

The aims for the Looking After Children Computer System were to develop a Windows based database, that could easily be used by social work staff, that were a direct replication of the paper based records and that offered easy monitoring of children looked after by SSD’s.

Whilst those aims have been achieved gaining its implementation by such agencies may prove a far from easy task, as the issues presented above display. If successful implementation of LACCS is to be achieved then a number of actions will need to take place:

- Computer systems in SSD’s need to move beyond serving primarily a data warehousing function. More attention needs to be paid to how systems present information in a format that lends itself to monitoring and analysis.

- Information Management strategies also need to take account of how generalist functions, such as an index of all clients, can be matched with the specialist requirements that may be present in child care or child protection.

- More attention needs to be given by all software developers as to how effective implementation strategies can be achieved. This calls for establishing common ground between IT staff, managers and social work practitioners.

All the above changes need to take place in the context of a significant investment in hardware. Many departments have little or no equipment for social work staff and even basic records are hand written or dictated into a tape recorder. Even in those SSD’s that do have a policy of equipping all social workers the time scale is sometimes
so elongated that the hardware may well be incompatible with the latest software before widespread implementation of any modern system can occur. For such an investment to be both justified and used also requires systems that address the concerns of the staff who input data. This may well mean greater linkage between databases and office systems such as word processors so that front line staff can see the benefits of information being entered in one system being replicated by other forms and documents that contain identical information. It also means offering computer based reports and analysis which help the kind of decisions social workers are required to take on a daily basis rather than just providing the longer term perspective required for managerial decision making.

If outcomes for children looked after by the local authority are to be improved then computerisation is the only way in which such outcomes can be observed and measured individually or collectively. LACCs is potentially one step along that route. However, if effective implementation of such a system is to be achieved then SSD IT strategies need to be much more practice and policy orientated.

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Conference: Information Management in Social Services (IMISS)

2nd National Conference

In March 1995, the Social Services Research and Development Unit (SSRADU), University of Bath, organised the first National Conference on Information Management in Social Services (IMISS). IMISS aims to bring together senior SSD and voluntary sector managers, representatives from the Department of Health, IT experts, academics and all those who see effective information collection and delivery as essential to managing SSD's in the 21st Century.

Venue: The Guildhall, Bath, UK

Date: 31st October - 1st November 1996.

For advance information please contact Jo Coldman, Conference Organiser:

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Fax: +44 1225 330313
Email: ssradu@bath.ac.uk
Factors Implicated in the Integration of Clinical Information Systems Into Human Service Agencies: A Concept Map

Dr Riki Savaya, & Dr Mark Waysman,

Abstract

Recent advances in computer technology have facilitated the development of computerised clinical information systems (CIS) to answer growing demands for accountability and quality assurance in the fields of mental health, social welfare and education. These systems aid and support ongoing monitoring and evaluation of professional practice. Although agencies invest considerable resources in computer hardware, software and staff training, these systems tend to be under-utilised and generally fail to live up to their vast potential. This study identifies, via the concept mapping procedure, 98 variables that form eleven clusters of factors contributing to acceptance and utilisation of clinical information systems in human service organisations. These findings suggest that successful integration of clinical information systems into a human service agency is a difficult outcome to achieve, that requires a long-term commitment to monitoring and intervention in a large number of areas. Practical and theoretical implications are discussed.

Introduction

The aim of this study was to identify, classify and map the factors that influence the utilisation of clinical information systems. These systems are differentiated from management information systems, by their focus on practice-oriented data relevant to clinical decision-making, rather than (or in addition to) administrative factors. Thus, whereas management information systems primarily track effort, such as, number of clients in treatment, number of intakes, and/or number of treatment sessions (cf. Fein, 1975), clinical information systems monitor treatment processes and outcomes (e.g. changes over time in client problems; quality and integrity of interventions applied) in order to evaluate effectiveness (Briar & Blythe, 1985). They also generally provide outputs in the form of graphic and text summary reports, on both the individual case and the agency level. While clinical information systems may also serve managerial functions, they are geared first and foremost to support and guide clinical decision making (Cwikel & Cnaan, 1991; Fischer, 1993; Gambrill & Butterfield, 1988; Mutschler & Hasenfeld, 1986; Mutschler & Jayaratne, 1993).

The demand for monitoring and evaluation of interventions is associated with the empirically-based practice movement, which has grown in the past two decades in response to two main pressures. Results of early studies in psychology and in social work began to question the effectiveness of professional practice, while at the same time, social and economic changes led to a reduction in public funding of social programs and to demands by funding agencies for greater accountability of agencies regarding the services that they provide and the degree to which they achieve their objectives. As Reid (1994) has specified, empirically-based practice has three main facets: use of research methods in practice to facilitate assessment, to guide intervention planning, and to evaluate work; the application of interventions of demonstrated effectiveness; and knowledge building via studies carried out by practitioner-researchers.
The use of computerised information systems to support work according to principles of empirically-based practice is the most recent stage in an ongoing process of professional evolution that was preceded by two prior approaches (Fischer, 1993). Historically, emphasis was initially placed on practice evaluation via experimental research designs that involve control groups and before/after measurements (MacDonald, Sheldon, & Gillespie, 1992; Reid, 1979; Sheldon, 1986). The implementation of these procedures required considerable research skills and a great investment of time and effort. More importantly, findings were reported using terminology that was alien to most practitioners (Meyer, 1992). Not surprisingly, this approach was of little value to individual practitioners or agencies interested in the ongoing evaluation of their own practice.

As a response to these limitations, the past decade has seen a rising emphasis on single case designs, which provide tools to enable individual practitioners to monitor and evaluate the outcomes of their practice (Fischer, 1993; Reid, 1993; Thyer & Thyer, 1992; Thyer, 1992). These designs, too, have proven to be of limited usefulness, however, and are rarely applied outside academic settings, for two main reasons:

i) the large amount of time, effort and skill required to design and implement a different and unique assessment for each client; and

ii) the fact that the worker was left alone to cope not only with the task of planning and implementing the evaluation but also with the interpretation of its findings (Reid, 1994; Robinson, Bronson, & Blythe, 1988).

The proliferation and increasing power of computer technology has facilitated the evolution of the most recent (third) approach to fostering empirically-based practice: ongoing monitoring and evaluation of treatment processes and outcomes, on both the individual and agency level, via computerised information systems (Caputo, 1986). These systems are increasingly being introduced into many types of professional practice agencies, despite the fact that they are extremely costly, considering the price of computer hardware, software development, staff training, and maintenance. However, although there is widespread agreement regarding the importance of ongoing monitoring and evaluation in human service agencies, and despite this great investment of time, effort and money, experience has shown that, once installed, these systems are often under-utilised or not utilised at all (Herzlinger, 1977; Larsen, 1987; Massaro, 1993; Mutschler & Cnaan, 1985).

The literature on utilisation of information systems in general, and on clinical information systems in particular, points to a wide variety of factors that may play a role in determining the degree to which a system, once installed, will actually be used. However, research to date has been fragmented and studies have each tended to focus on a small number of factors. For example, some studies have focused on user variables, such as cognitive style (Kettlehut & Schkade, 1991), amount of previous experience with computers and with information systems, and attitudes and emotions toward computer technology (Cwikel & Monnickendam, 1993; Rice & Aydin, 1991). Other studies have highlighted the role of variables pertaining to the system itself, such as ease of use (Davis, 1993), while still others have focused on the role of organisational variables, such as policies and norms (Aydin & Rice, 1991) or on factors relating to the process of system introduction, such as amount of staff training and implementation support (Tuinman & ten Brummelhuis, 1993) or amount of user involvement in system development (Franz & Robey, 1986). The result of this fragmented approach is that we lack a comprehensive, integrated picture of all the issues that need to be addressed when introducing a system. Separate examination of the impact of each factor also limits our understanding of the relative importance of each factor.

Furthermore, it is difficult for agencies considering the introduction of clinical information systems to derive practical guidelines from these studies, which would help predict their chances of success and locate potential problem areas before they invest enormous resources on an endeavour that may prove to be fruitless (Larsen, 1987). For this purpose, it is essential to have a clear, comprehensive and valid conceptual map of all the variables that need to be addressed. Prior attempts to arrive at such an understanding have been reported in the professional literature (Cwikel & Monnickendam, 1993; Mutschler & Hoefer, 1990; Weir et al., 1994). Yet these attempts were not comprehensive, for several reasons.

First, only the researchers determined which variables would be studied. Thus, we may lack important information on the variables that users and others with important experience developing, introducing and implementing systems, consider to be influential.

Secondly, the large number of variables that have been identified are virtually unmanageable for any practical purpose, such as assessing an agency prior to introduction of an information system and preparing it for acceptance and utilisation of the system. It is thus essential to reduce the large number of variables by categorising them into
meaningful and useful groups. Yet, while previous authors have attempted such categorisations, they have generally been based either on statistical groupings or on the authors' own conceptual maps.

Finally, we lack information on the relative significance or contribution of each variable to system utilisation, which is important in prioritising areas to focus on when examining feasibility and when preparing for introduction of an information system.

The current study attempts to fill this gap by examining the point of view of practitioners with direct experience in developing, introducing or using the systems,

a) to identify the variables that influence utilisation
b) to determine their relative importance, and
c) to categorise the conceptual domains to which they belong.

*Meth*od

The procedure selected in this study for identifying the relevant variables, classifying them and determining their relative importance was concept mapping (Trochim, 1989), which is a multi-method procedure combining qualitative and quantitative techniques. It enables an individual or group to lay out their ideas on any topic in a picture or a map and can be extremely useful as a first stage in a variety of endeavours. It has applications in organisations, in business, in planning services and in many other areas (Caracelli & Riggin, 1994; Knox, 1995). In the area of social science, concept mapping can be used to help articulate a theory, provide the basis for measurement, or as a framework for analysing research results (Trochim, 1989).

Concept mapping involves several steps.

i) Determining the focus for the mapping

ii) Generation of statements relevant to the focus

iii) Sorting of statements into groups and rating of each statement's importance

iv) Analysis of sorting and ratings resulting in a visual concept map

v) Interpretation of the concept map

The focus of the concept map in this study was on variables that influence utilisation of clinical information systems in human service agencies. The first task that was addressed was identifying the list of variables to be included in the map. Selection of variables was based on two sources: the professional literature and consultation with professionals who have accrued experience in attempting to introduce information systems in human service agencies.

*Literature search*

A survey of the literature dealing specifically with utilisation of clinical information systems produced only a small number of relevant papers and, for this reason, it was decided to expand the search to include literature from the fields of psychology, social work, medicine and business administration focusing on implementation and utilisation of information systems in general. Review of this material generated a very long list, comprising approximately 50 variables that have been mentioned as either promoting or inhibiting utilisation of information systems in various settings.

*Search for professionals*

The second source of knowledge was professionals with experience in development, programming, management or use of clinical information systems in human service agencies. Via a process of snowballing, we located organisations throughout Israel that had attempted to introduce a clinical information system in recent years and we asked, wherever possible, to interview four types of informants within each organisation: system developers, system programmers, managers responsible for implementing the system and members of staff with experience in using the system. Table 1 summarises the number, positions, and organisational affiliations of the informants.

<table>
<thead>
<tr>
<th>Organisations</th>
<th>Programmers</th>
<th>Developers</th>
<th>Management</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Social welfare and social welfare services (N=5)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Youth Counselling Services (N=2)</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Vocational Rehabilitation Center (N=1)</td>
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<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Mental Health Services (N=3)</td>
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<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hospital Social Services (N=2)</td>
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<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Total no. of interviews</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
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</table>

*Table 1 Informants*

As can be seen from the table, a total of 35 interviews were conducted with informants from five different types of human service organisations. These included agencies in the fields of social welfare, youth counselling, vocational rehabilitation, mental health, and hospital social
work, reflecting accumulated experience with a variety of different clinical information systems.

Informants were asked a series of questions relating to the characteristics of their system and its use, after which they were asked to answer the following two open-ended questions, based on their own experience:

i) What factors in the organisation, the staff, or the information system have promoted utilisation of the information system?

ii) What factors in the organisation, the staff, or the information system have impeded utilisation of the information system?

The informants' responses to these two questions were summarised and compared with the list of 50 variables that had already been identified in the literature search. After eliminating duplicates, 48 new variables were added to the list of variables thought to influence the utilisation of clinical information systems in human service agencies. This resulted in a final list of 98 different variables, each of which we formulated as a brief statement. Based on this list, stacks of cards were prepared. Each stack contained 98 cards, with one statement printed on each card.

**Recruiting users for sorting**

In the next stage of the concept mapping procedure, we had to decide who would be approached to sort the cards into piles. Since we felt that each type of professional might have a different conceptual map of the factors influencing utilisation and their relative importance, we decided to focus first of all on the most directly relevant group: users. We therefore approached 15 different users from five different agencies (three hospital social welfare services, one family counselling agency, and one youth probation agency) and asked each user to sort the pile of cards 'in any way that makes sense to you'. The number of piles returned by sorters ranged from three to seventeen (M = 7.6). After sorting, participants were presented a list of the 98 statements and were asked to rate the influence of each variable on the utilisation of information systems, on a scale from 1 'no influence at all' to 5 'highly influential'.

**Findings**

To analyse the data, we used the Concept System software, developed by Trochim (1993). The raters' sortings are entered into the computer and the program examines the proximity of individual statements to each other across sorters, by constructing a proximity matrix which is analysed via non-metric multi-dimensional scaling. This is a technique that takes a proximity matrix and represents it on any number of dimensions as distances between the original items in the matrix (for current purposes, the analysis is limited to two dimensions; see Davison, 1983; Kruskal & Wish, 1978). The next step performed is a hierarchical cluster analysis (Andeberg, 1973; Everitt, 1980), which is used to group individual statements on the map into clusters of statements which presumably reflect similar concepts (for more details on concept mapping, see Trochim, 1989). The main end products are two visual maps of the statements: a dot map and a border map.

**Dot map**

Figure 1 shows the relative placement of each statement in relation to all the others. Dots that are close together on the map represent items that were often sorted into the same category by the sorters, while dots that are far apart were mostly sorted into separate piles.

![Dot map](image)

**Border map**

This map presents the results of the cluster analysis. In essence, it is a dot map with a closed multi-sided figure drawn around groups of dots to create clusters, in such a way that the statements within a cluster are those that were more often sorted in the same pile than the statements in the other clusters. Furthermore, clusters which are closer to each other will in general be more similar in content than clusters which are farther apart on the map. The program allows the researcher to determine how sensitive the analysis should be and it is possible to generate solutions based on any number of clusters. Since the analysis is hierarchical, the formation of each additional cluster stems from the division of an existing cluster into two. This subdivision of clusters changes neither the geographical location of existing clusters nor the identity of the items constituting them. The final decision regarding the number of clusters to be retained...
for interpretation is made by the researcher based on conceptual and practical considerations. Each solution can be presented on the screen or printed out as a border map. This process resulted in the following final list of 14 major factors that influence utilisation of clinical information systems. The final concept map is presented in Figure 2.

Figure 2 Concept map

The clusters that emerged from this process cover the following concepts:

North Section of Map

Worker characteristics: which included items such as workers' cognitive style, willingness to follow instructions, prior experience with computers, etc.
Workers' fears and concerns: This cluster included items on the amount of emotional support that workers receive from each other, workers concern that using the system may reduce their autonomy at work, etc.
Impact of system on staffs' work load: for example, degree to which system fits in with existing work routines, ratio between amount of benefits from using the system to amount of effort involved; etc.

South Section of Map

Indicators of the importance of system utilisation to the organisation: such as amount of resources allocated for introduction of the system, for its operation and for its maintenance, the imposition of sanctions for non-utilisation, encouragement of staff to experiment with the system, etc.
The information culture of the organisation: This cluster included items pertaining to the openness of information sharing within the organisation, the existence of other information systems in the organisation, degree of computer and technology use in the organisation, etc.

Actual uses and benefits of the system for the organisation: potential applications and contributions to planning of services, research and development, etc.

Middle Section of Map

The driving force: This overriding cluster was comprised of five smaller clusters. Each of these clusters contains items that address one possible motivating force for utilising the system:

management's use of its power and authority: (e.g., use of incentives or compensation; perceived determination to implement use);
accountability of staff and organisation: (e.g., existence of clear work procedures within the organisation, workers' attitudes regarding planning and monitoring of interventions),
commitment of clinical leadership to use of system: (e.g., initiative for system came from clinical leadership);
staff initiative for system use: (e.g., staff are pressing for use; staff initiated system development);
organisational adaptability: (e.g., tendency to change work patterns).

Process of introducing the system: amount of training, timing and pace of system introduction, etc.
Contribution to work: such as simplifying preparation of reports, replacing existing forms, helping staff organise their work, etc.
Ease of use of system: friendliness and accessibility, ease of filling in forms, work environment that allows for filling in forms, ease of technical operation, etc.
Interpretation of dimensionality. Since this map is based on a multi-dimensional scaling, the location of each cluster on the map has a meaning in relation to two axes: north/south and east/west. As can be seen from Figure 2, the two dimensions can be easily interpreted. The northern section of the map clearly consists of variables that pertain to workers (such as worker characteristics, workers' fears, and impact of system on staff's work load). In contrast, the southern part of the map contains organisational variables, such as importance of the system to the organisation, information culture of the organisation, and benefits of the system for the organisation. The east/west dimension represents the process over time: at the far west we see background variables that reflect characteristics of the organisation and of staff prior to introduction of the information system. In the central region, we find variables pertaining to the period of system introduction, and at the far east, we see outcomes: the benefits of using the system for staff and for the organisation as a whole.

Ratings As noted earlier, the sorters were asked not only to group the statements into piles, but also to rate the influence of each item on utilisation of information systems on a scale from 1 'no influence at all' to 5 'highly influential'. The next stage of the process was, therefore, to examine the average rating across sorters for each of the clusters. For this purpose, clusters that received higher average ratings are drawn on the map with more layers than the others (see Figure 3).

![Figure 3 Cluster rating map](image)

Although examination of the cluster ratings did not reveal a great deal of variance between clusters, an interesting and fairly consistent pattern did emerge. As can be seen from Figure 3, clusters in the northern region, that is, clusters containing items pertaining to workers rather than to the organisation, were rated on the whole as having the greatest influence on degree of utilisation. Furthermore, when ratings of individual items within clusters were examined, considerable variance across items was observed. For example, in the cluster representing Importance of system utilisation for the organisation, item 65, 'amount of resources allocated for ongoing maintenance of the system' was rated as having a relatively low influence on system utilisation (M=2.87), whereas item 50, 'amount of resources allocated for introduction of the system' was rated as more influential (M=3.87).

Discussion

The findings of this study suggest that integration of a clinical information system into a human service agency depends on successfully coping with a series of organisational challenges that together comprise a complex, lengthy process. The east-west axis of the concept map highlights the notion that system utilisation cannot be achieved via a one-time intervention, but rather requires a willingness and a commitment to monitor and intervene where necessary over a relatively long period of time, from the preliminary stages of system planning, through initial introduction of the system, and continuing on during regular ongoing use. The north-south axis emphasises the importance of simultaneously monitoring several aspects of the organisation at each point in time. Many issues thus need to be dealt with properly in order for a system to be utilised and it is, therefore, not surprising, perhaps, that success in this area is the exception rather than the rule.

The main implications of this study are conceptual. Most prior studies have used a deductive approach to test whether hypotheses that were based on the researchers' prior conceptions are confirmed in applied settings. Furthermore, they have mostly each examined a relatively small number of variables (e.g., Davis, 1993; Aydin & Rice, 1991; Scamell, 1993; Trait & Vessey, 1988; Weir et al., 1994). In contrast, the present study attempted to arrive at as comprehensive an understanding as possible, without any prior assumptions or hypotheses and, for this purpose, it tapped a wide variety of sources, informants and content areas. By the end of the study, a total of 98 different variables had been identified, representing the accumulated professional wisdom of several academic disciplines, as reflected in their respective professional literature, as well as the points of view of experienced professionals serving in a number of different roles within a variety of human service agencies. This study thus took a grounded inductive approach to learn about the phenomena of utilisation and non-utilisation of information systems in a holistic manner. As such, it provides the basis for a theory of utilisation, comprised of a set of hypotheses, each of which still needs to be tested.
empirically. From the clusters and items comprising the concept map, we may infer hypotheses regarding the factors that influence utilisation and, from the cluster and item ratings, we may propose hypotheses regarding the relative importance of specific factors in relation to each other.

This concept map is also useful and manageable for practical purposes. For example, this map provides important information for managers and decision makers to consider before they begin to invest the enormous amounts of resources required for developing such systems. The concept map clearly indicates which areas need to be attended to and also highlights the importance of attending to them over time. For example, prior to deciding on the introduction of a system, managers should determine whether there is a sufficient driving force within the organisation, should examine worker characteristics (such as willingness to follow instructions, prior experience with computers) and amount of worker concerns to determine the degree to which the organisation and its staff are really ready to accept, integrate, and utilise a clinical information system. Should this examination point to a lack of readiness, it is recommended that efforts be made to prepare the organisation before going ahead with system introduction. The concept map further points to areas that need to be addressed after it has been determined that the organisation is prepared to integrate a clinical information system, such as amount and type of training that will be required, the appropriate timing and pace of system introduction, etc. Finally, the concept map indicates the areas that need to be monitored once the system is operational, such as impact of work load, ease of use, perceived contribution to quality of work, etc.

Furthermore, this concept map can contribute to the development of a set of assessment instruments that can be used in applied settings to measure each of the concepts that comprise the map. The map points to the dimensions that the instruments need to measure and also suggests items that can be included in each instrument, regardless of its format (Likert-scale, open and/or closed ended questions, etc.). Availability of such structured instruments may help to predict the probability of system utilisation and to identify potential problems before they arise. In addition, common use of a fixed set of instruments allows for comparisons across organisations and types of information systems.

To arrive at the map of factors influencing system utilisation, this study employed the concept mapping procedure, a multi-method approach that combines the advantages of both qualitative and quantitative procedures. From the qualitative paradigm, it takes the idea of open-ended, inductive, holistic investigation that allows us to arrive at a comprehensive and inclusive picture of a phenomenon from the perspective of insiders (in this case, users). However, whereas the qualitative approach lacks clear standardised procedures for summarising and analysing large amounts of complex data, the concept mapping procedure utilises statistical procedures to determine concepts based, once again, on the conceptualisations (sortings) of insiders. The product of this process was a clear, comprehensive and meaningful concept map that may serve many purposes.

References


Cwikel J & Cnaan R, (1991), Ethical dilemmas in applying second-wave information technology to social work practice, Social Work, 36(2), pp 114-120.


1 The complete listing of clusters and items is available from the authors.

2 It is possible, of course, that other groups would perform the sorting and rating differently (e.g., agency directors might emphasise organisational factors over staff concerns). However, since utilisation, by definition, depends first and foremost on the designated users, we decided to examine their concept map first. Further study should examine the concept maps of other groups.
Dutch Branch Mirror for Generic Social Work

Jos Potting, Foundation Symbiose

Abstract:

In generic social work in the Netherlands a registration system concerning service and client characteristics has been offered for many years. Personnel and financial information from organisations is collected through an annual survey requested by branch organisations and national authorities. In 1994 the so called 'Branch Mirror survey AMW' was added. The information which is being collected through this survey makes it possible to connect service information and client numbers with financial and organisational information. Through collection of this information at one point in the country, it has been made possible to make generalisations on national and institutional figures which contains plenty of information on the AMW-organisation itself. The way this has been realised and what it depicts is the subject of this article.

Introduction

In Holland social work has a long tradition of collecting information on a national scale. For approximately 30 years now, the institutions involved in generic social work have been collecting data about their client systems.

Since 1993, the social workers in those institutions do this using one uniform system: the 'Informatienmodel AMW' (AMW = Algemeen Maatschappelijk Werk, in English: Generic Social Work). This information was recorded by the VOG in co-operation with the Society of Dutch Municipals (VNG). The VOG is a contractor organisation for non-profit sector and functions as the representative organisation of generic social work institutions. The Informatienmodel regulates which information is collected, in relation to services and the client, and in which way this has to be done. Whether a social worker is employed in Amsterdam or in Appingendam, they work according to set rules and regulations with uniform questions and answers. Therefore it is possible and useful to collect and process this information on a national scale. The Databank AMW has been constructed by collecting all this information in one central location. The databank controls and processes this information in order to compose national figures and tailored charts for the social work institutions.

The institutional management had more information needs. Therefore, simultaneously along with the development of that one uniform registration system, systems were also developed to collect more internal information: through an annual inquiry, information will be collected with relation to
personnel, the organisation in general and the finances. With the help of this information it is possible to put together an annual report on generic social work. After the first appearance of that annual summary it rapidly became the joint reference framework for practitioners, managers and funders.

Clearly there was still something missing in the extensive range of information sources. It was still not possible to investigate the effectiveness and efficiency of the service or to calculate the cost prices and to compare these with the average national cost price. This want was supplied by the introduction in 1995 of the so-called ‘Branch Mirror’.

This article describes the design of that Branch Mirror, the data collection and the presentation. Perhaps other working areas in social services in the Netherlands and elsewhere have found some education in this already. A Branch Mirror is an important instrument for objective comparisons and evaluation of the work performed by the social workers and management, for which to date there has been no methodology. The relationship between welfare work and the different authorities have had a major change, which has resulted in finance being placed at the local authority level. The result of this is a different relationship between authorities and the local generic social work agencies. The local authority is now able to make choices on the distribution of welfare duties. Through practice experiences we can see that institutions are better off not to ‘hide’ behind the soft arguments of the welfare sector. A good, clear presentation wherein work and costs are clearly quantified and specified, nowadays helps the funder feel well informed and capable of making the right decisions.

The Question

During the development of the national client registration system, limitations were shown which are associated with a system that is based upon client information. The information generalised by such systems is limited to the clients and the helping process, yet stood apart from any information collected through other means. It was illustrated best in the annual report which was published by the VOG-section AMW. One chapter represents personnel and financial information; another chapter the information on clients. One did not get any further than a calculation of the average number of clients per social worker. The need to calculate and present, for example, the cost of an hours work with a client and to be able to present this, rose with each single telephone call from municipal institutions.

When the project was first started with the target of creating national and institutional figures some tension was experienced, one was nervously awaiting what kind of results would be produced. The reason for this ambivalence was that figures were required from a so-called ‘soft’ sector, where until recently no measurement of effectiveness or efficiency was made and where responsibility was associated with professional status.

The public social work institutions acted as the pilot group for this experiment. The VOG-section AMW sub-committee on needs supported the annual appearance of the Branch Mirror for generic social work

Data collection

As mentioned in the introduction, the organisation information, the personnel information and the financial information were collected through an inquiry. This inquiry, consisting of three questionnaires, was put together in co-operation with the National Institution for Statistics (CBS) which was one of the main consumers of the information. This inquiry, which is sent, annually, to the institutions of social work, consisted of approximately fifty questions of general rather than of ‘searching’ nature. This questionnaire had an excellent response rate (for example in 1993 approximately 85%) and therefore the decision was made to link the existing inquiry to the data collection for the ‘Branch Mirror’. This seemed obvious in view of the nature of information which was needed for the Branch Mirrors. In many cases it was supplementing or widening the existing questions. An example of this is that, for a number of years, institutions were asked to state how many access points the generic social work agency had at its disposal within the institution. Or in other words: how many offices and consulting hours were used by the social workers. In this way one could get an insight into the accessibility of the institution in comparison with other institutions for social work. To fit in with the will to develop and the will to put together a Branch Mirror, it was of great importance to know what the cost prices were for using the access points. If one wanted to calculate the hourly cost price of social work, then this cost factor has to be considered. That is why in the questionnaire supplement ‘Branch Mirror questions’ questions about use of space were asked, namely: how many m² floor surface, the monthly hours used and the rent costs per month.

New questions were formulated which asked more than the existing previous ones. In relation to personnel, extra questions were added, to establish the number of employees, the nature of the appointments (temporary/permanent contracts, students or volunteers) and the
sickness/absenteeism. In figure 1, the numbers of questions which are included in the old and new inquiry are depicted. Furthermore it shows the amount of variables.

<table>
<thead>
<tr>
<th></th>
<th>Questions</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core questionnaire</td>
<td>46</td>
<td>185</td>
</tr>
<tr>
<td>Branch Mirror</td>
<td>32</td>
<td>80</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>265</td>
</tr>
</tbody>
</table>

**Figure 1** Table showing balance between core questions and Branch Mirror questions

The supplements to develop the Branch Mirror were added following a design-phase. Research was done to see what a manager of a social work organisation needed as branch information for internal and external use. After the making of an inventory and the translation of the questions a working group considered a proposal to add a supplement to the old questionnaires. This group of institution directors looked in particular at the value of the questions; also they kept track of the new questions, and in particular the corresponding answer categories, in conformity with the national fixed core GFO (Potting 1996). In particular in the working group sessions astonishment was shown at the number of questions within the questionnaires. Although there was general agreement that there were too many, they decided not to delete many questions: it's better to have too many questions now, than too little information later.

The additional questions were voluntary. The core-inquiry has to be filled out completely by all institutions of generic social work. The institutions have, through an agreement with the VOG-section AMW, committed themselves to respond. The response however is not 100%. There are various reasons for this; there may be mergers or bifurcation's of institutions, information may not be available and there are a small number of agencies who will not provide information. The VOG-section AMW has no means of enforcing participation in the survey so a response of approximately 85% can still be called a good result.

The Branch Mirror questions, which have now been included in the regular questionnaire, have in comparison with the core questions a subsidiary place: they only have to be filled out by the institutions who have a membership of the Branch Mirror. Therefore a clear difference was made in the questionnaires between Branch Mirror questions and core questions (see Fig 2). The core questions, which have to be answered by all institutions are left white.

1. How many offices/estabishments had the generic social work agency at its disposal dated 31-12-1995 in behalf of the generic social work?

<table>
<thead>
<tr>
<th>Branch Mirror</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. total m² floor surface</td>
</tr>
<tr>
<td>Total monthly rent</td>
</tr>
<tr>
<td>price in guilders</td>
</tr>
</tbody>
</table>

**Figure 2** Sample questions

In practice it appeared that this set up works well. Some institutions filled out the entire questionnaire, although they didn’t subscribe to Branch Mirror. In all 50% of the institutions responded to the Branch Mirror questionnaire, which was positive because managers of welfare institutions more and more find themselves burdened with all kinds of questionnaires. The institutions have access to a help desk to answer questions and problems during the response period. The number of telephone calls regarding problems with the filling in of the questionnaires showed that this was necessary. Despite this help desk service a number of questionnaires were incomplete or wrongly filled in. In view of the fact that the number of faults in the regular core part of the questionnaire seemed much lower the cause for all those mistakes probably lies in the newness, and the fact that it often concerned information that was not always directly available to the organisation.

For a variety of reasons the institutions that returned the questionnaires in the first year (1993) did not receive a Branch Mirror-output. After the 1994 inquiry was returned by the institutions they received a Branch Mirror with figures for both years.

**The Branch Mirror**

After processing the data each participating institution received a report which included national as well as institutional figures. Since this was the first presentation of a Branch Mirror in the welfare sector and organisations had to wait one and a half years for their report, it was decided to offer this edition free of charge. The non-participating institutions also received a Branch Mirror;
but of course these included only the national figures. It was called ‘Basic Report serial number zero’ thereby expressing that the figures from this report should be used ‘with care’ to the outside world. To give an impression of the presentation chart 3 is hereby presented, showing one of the most popular charts from the Branch Mirror.

<table>
<thead>
<tr>
<th>1983</th>
<th>1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>Footdown</td>
</tr>
<tr>
<td>a. Salary costs social worker</td>
<td>47.27</td>
</tr>
<tr>
<td>c. Salary costs remaining personnel (not regular)</td>
<td>1.42</td>
</tr>
<tr>
<td>d. Remaining personnel</td>
<td>0.63</td>
</tr>
<tr>
<td>e. Training costs</td>
<td>0.56</td>
</tr>
<tr>
<td>f. Costs consuming consulting addresses</td>
<td>0.57</td>
</tr>
<tr>
<td>g. Accommodation costs</td>
<td>3.86</td>
</tr>
<tr>
<td>h. Gas/water/electricity</td>
<td>0.43</td>
</tr>
<tr>
<td>i. Remaining accommodation costs</td>
<td>1.16</td>
</tr>
<tr>
<td>j. Administration costs</td>
<td>0.82</td>
</tr>
<tr>
<td>k. Costs office inventory</td>
<td>3.48</td>
</tr>
<tr>
<td>l. Accountancy costs</td>
<td>0.30</td>
</tr>
<tr>
<td>m. Committee costs</td>
<td>0.14</td>
</tr>
<tr>
<td>n. Remaining organisation costs</td>
<td>0.99</td>
</tr>
<tr>
<td>o. Various costs</td>
<td>1.43</td>
</tr>
<tr>
<td>TOTAL</td>
<td>75.55</td>
</tr>
</tbody>
</table>

**The Future**

In 1995 expanded questionnaires were used with the social work institutions. It is planned that the participating institutions shall receive their Branch Mirror during this same year. Because there were strong feelings that the data input wasn’t 100% correct the data gathering for 1995 will be used for screening and control of the new and old input.

Research indicated that institutions did not only want to compare their own figures with the national figures. There was even more interest in comparing the institutional figures with those of similar institutions in the country. That is why in the new Branch Mirror room will be made for the figures of so-called ‘relevant-clusters’ of social work institutions. Relevant clusters can be different per subject: one case is chosen for a comparison between institutions with the same staff proportion; in another case the relevant cluster can be appointed by sizes of the organisations or the population density of the region. The cluster model is developed now but will undoubtedly mean a further improvement of the usability of the Branch Mirror.

**References**


1. VOG stands for Committee in the contribution or subsidised sector and is split up in different sections such as social cultural work, welfare seniors and generic social work.
2. See: Informatiemodel AMW 1992, VNG, ’s-Gravenhage
3. The yearly report is published by the title : Het AMW in beeld 19., VOG-section AMW.
4. The CBS (central office for statistics) collects information about the section Generic Social Work on behalf of the ministry of public health, welfare & sport and for their own publications.
5. The institutions who want to receive the branch mirror on a yearly basis can subscribe for f 500,- per year.
Controversial Issues

Does Electronic Monitoring contribute to community based penalties for offenders?

Following a number of press articles and reports on electronic monitoring in recent months the editors felt it would be timely to select as the topic of this issue’s controversial article the subject of electronic monitoring or ‘tagging’. We, as before, invited two professionals to write for and against the use of electronic monitoring. The articles were then exchanged to allow them to respond to each other. This was intended to be an anonymous process but it can be seen from what follows that the protagonists already knew each others’ work. The editors have again not sought a definitive conclusion but leave the reader to consider both points of view.

No, Electronic Monitoring (EM) does not contribute to community based penalties for offenders

Dick Whitfield

In the 1890s, Home Office officials were considering ways of marking the bodies of released prisoners with indelible ink. A century later, modern technology of a very sophisticated kind is being employed to bring this idea up to date, although the thinking behind what it might achieve seems to have developed hardly at all. The purpose of this article is to examine the development of electronic monitoring, or ‘tagging’ and the way in which the current English pilot projects are developing. It is also to ask on what basis - if any - tagging might sensibly contribute to community-based penalties. Some sustained lobbying, both political and commercial, has been employed to promote tagging, but my own experience of it, both at first hand and through practitioners in several countries, suggests that we should be very cautious about the claims being made.

Background

EM started as a means of enforcing house arrest, curfews or home detention. It developed in the United States, at a time when the prison population was spiralling rapidly. It seemed to offer a cheap alternative sentence which would satisfy both politicians and the public who needed reassurance that ‘something was being done’ about crime. Almost all individual states now have programmes and, apart from England, programmes or pilot schemes have also started in Australia, New Zealand, Canada, Singapore, Sweden and the Netherlands.

Participants in the scheme wear a bracelet or anklet fitted with a low-powered transmitter. Monitoring via a central unit takes place through the person’s telephone and records automatically whether the offender is within range.
The American experience

Two kinds of EM schemes have developed. The first offers simple control and surveillance, with an element of punishment. No attempt is made to do anything other than monitor the curfew hours and the offender's sentence is composed of three elements - restriction of liberty, a degree of stigmatisation and inconvenience (through physically wearing the apparatus) and financial (many schemes require the offender to pay 'rental' costs for the equipment).

These programmes have a very chequered history. Successful completion rates are good in schemes where minor property offenders, drink driving or elderly offenders are concerned and different schemes do target offenders in these ways. However, the central control and monitoring functions are still expensive. The accepted estimate in the USA is about $4 per offender per day tagged for equipment; about $12 per offender per day in total (Anguro, 1994). One has to ask whether a less intrusive penalty, a fine or compensation or a discharge, would be equally effective? Other schemes, dealing with more serious offenders, have fared much worse and even collapsed under the sheer weight of violations, when breaches of the order were so numerous they could not be followed up. The worst example was in Washington where, over a 4 year period, 7000 offenders 'went missing' in this way and an FBI investigation had to be ordered (News Report, Independent on Sunday 15.5.94).

Other schemes followed a very different developmental path using the tag only when it was complemented by community supervision programmes, such as probation, and other checks, such as regular and random urine analysis for alcohol or drugs. These intensive supervision packages account for much recent growth and the conditions can be quite draconian. In New Jersey the intensive programme, which uses the tag for the first 2 - 4 weeks, also requires twice weekly urine analysis, 20 contacts per month (ten face-to-face, the rest by telephone), group and treatment meetings and community service hours to be worked at weekends. In such circumstances it is not surprising that the tag often comes to be regarded as an optional and disposable extra; neither creative nor positive and certainly not addressing risk or offending behaviour in any real way. Any single summary of the USA experience is, however, meaningless. Successful completion rates vary from 54% in Michigan to 97% in Florida but are much affected by the nature of the offenders tagged, local discretion on compliance and the average 'time-tagged', which is only 36 days in Florida. Over half of all tagging schemes last for 6 weeks or less. Re-conviction is rarely measured, although one study in Oregon produced a 27% reconnection rate within 6 months of being tagged. Numbers are surprisingly difficult to agree with certainty, since the figure quoted is often the number of units sold or leased rather than those being worn at any one time. The National Institute of Justice quotes (Travis 1994) numbers growing to 45,000 by 1992, but the 1994 American Correctional Association survey, which covered both state and federal schemes, gave the number as 24,125, a tiny proportion of the 3 million offenders undergoing some form of community corrections.

There does now seem to be much wider agreement, however, that the limitations of the equipment must be recognised. The International Manager of one major manufacturer wrote recently (Thurston 1995) 'Reliable equipment alone will not assure a successful EM programme. The involvement of professional social workers is key.' The following criteria were widely accepted as pre-requisites to a successful scheme:

- the offender needs a settled address, not overcrowded, with a telephone
- the offender should be employed. 'Tags on unemployed offenders are less useful and certainly less successful' (Anne Schmidt, NIJ)
- tags should not be used where there is a history of violence in the household - they can produce a violent response.
- tagging works best 'with offenders who already have some internal controls and just need an extra nudge' (Dave Dillingham NIJ)

However, the National Institute of Justice, in its research summary, was more cautious, saying: 'Jurisdictions could successfully implement the programs, but there were unforeseen technical difficulties.... Further, electronic monitors uncovered many violations which, if responded to, would increase jail and prison costs. On the other hand, low risk offenders (e.g. white collar offenders) were ideal program candidates'. (Travis 1994 p.24)
Tagging came to Europe in 1989 with a brief and inglorious Home Office experiment for defendants on bail. It was hoped that at least 150 people would be tagged in the three pilot areas over a 6 month period, but the courts found only 50 suitable candidates of whom 11 (22%) committed further offences and a further 18 (36%) violated the conditions of bail in other ways, a failure rate of 58% achieved at a cost of about £14,000 per monitored defendant (Home Office 1990).

Several factors combined to ensure that a number of European countries reconsidered the option during 1993/94. Commercial pressures were certainly one; the USA was perceived as a static or declining market. A growing move by politicians to 'get tough' on crime was another and the tag was soon being hyped (often in bizarre terms) as a way of solving the problem. Britain's Home Office Minister claimed they could 'reduce crime by requiring offenders to stay at home and away from trouble at certain times' (News Report - The Guardian 31.5.1994) and talked in terms of thousands of offenders tagged.

Officials later said they hoped for 400-500 in the three current pilot areas and £1.4 million was allocated for a 9 month pilot project. After 7 months only 37 orders had been made, at that stage 4 had committed further offences, 9 been returned to court for serious breaches of the order, 9 had been successfully completed and the remainder (15) were still current. Even where successful completion was claimed or cases were outstanding, 50% recorded 'technical' or other violations (usually short absences) which did not lead to a return to court.

In an attempt to rescue the pilot scheme, the project areas have been extended and the time scale lengthened to March 1997. Current cost estimates locate the experiment firmly with Alice in Wonderland. It would be cheaper to accommodate tagged offenders at a luxury hotel for six months than to use EM.

Magistrates in the pilot areas to whom I have spoken say they are not 'resistant' to the tag - they simply are not convinced by what it has to offer. 'Who is it really for and what can it actually do?' is the most frequent question, and one to which I return in the last section.

The great failure at the heart of the English experiment has been the lack of any definition of the target group for the tag and what it might achieve. There may be no satisfactory answer to this, simple punishment is one possibility, but the USA experience suggests it is expensive, ineffective and likely to lead to yet higher prison costs if violations are properly followed through. A more measured look has been taken by Ken Pease (Pease 1995) who discusses its use in specialised circumstances (remote communities in Australia, the elderly and ill in the USA, for whom medical help is a priority) and its role in terms of spatial control. Prison affords total spatial separation of offender from victim; the tag and modern technology now offer us partial spatial separation. Pease offers four possible scenarios:

- Where only one person or place is at risk (e.g. domestic violence)
- Only a small group of people is at risk (repeat victimisation studies may be useful here)
• Specifically targeted people or places at risk (e.g. banks).
• Random risks from versatile offenders.

The degree of spatial separation increases with the different scenarios, but until precise location fixes are available from GPS systems, house arrest is probably the only practical option. The ‘domestic violence’ tagging scheme in New Jersey, in which the victim had the transmitter/receiver, has so far simply produced other problems. As its Probation Officer wryly noticed, it could not reduce offending, merely make conviction more certain.

Beyond its role as a remarkably expensive and stigmatising form of punishment, EM has nothing real to offer in terms of community supervision and the prevention of re-offending. It offers the illusion of control to politicians, whose faith seems undiminished even when, as in Manchester, one young offender kept meticulously to his curfew hours but continued his burglaries outside them. In over a decade of use some real gains are apparent: the equipment is much more reliable, and will no doubt continue to improve, and tagging things (yachts, earth movers, goods in shops) now has a good track record.

But tagging human beings, in all except a tiny minority of specialised circumstances, is as bankrupt an idea as marking convicts with indelible ink. The illusion of control may, in fact, make it more dangerous. Intensive supervision schemes, help with employment, treatment for alcohol or drug abuse, all have inherent risks and may fail but they do offer positive and practical strategies for the prevention of re-offending. Adding the tag as an optional extra may please those who want to ‘toughen up’ community sentences but it looks like an extraordinarily bad bargain for the tax payer.

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Yes, I think Electronic Monitoring (EM) can contribute to community based penalties for offenders

Ruud Boelens

My positive position on the use of EM is conditional. Currently, we, that is the Ministry of Justice, the Public Prosecutor and the Probation Service, are involved in an experiment in the North of Netherlands. My final opinion about the usefulness of EM in the Dutch penal system will of course depend on the outcomes of this experiment. But after 8 months of experimenting I predict, from my personal observation, that EM is going to become a useful extra ‘tool’ in the Dutch penal system.

EM is supposed to contribute to reducing the need for extra prisons, thereby decreasing the costs of the penal system, and to further the reintegration of criminal offences. It is for the latter reason that the Probation Service has a prominent role in the current experiment.

Before explaining why I am in favour of this experiment, I would like to explain how EM is put into practice:-

• EM is not a means to totally control somebody’s movements. People participating in an EM scheme wear an electronic device on their ankle. This
unit sends signals to a receiver connected to a telephone. Whenever a participant is out of reach of that receiver (further away than approx. 150 feet), the receiver will inform a central computer, which is run by a security company. The latter informs the Probation Service, who will subsequently take action.

- Each participant has their own personal program. For every hour of the day this program states when a participant has to be at home, when they must be somewhere else (e.g. at their place of work) and when they have personal time.

- The way EM works means that it is not suitable for people who are either not willing or not able to stick to the rules.

The current experiment in the Netherlands involves two groups: those who get EM as an alternative to a jail sentence of approx. 6-12 months and those who spend the last part of their prison sentence under EM. This period ranges from 1-6 months.

When used properly EM has many advantages over incarceration:

- EM does not take away the offender's responsibility the way imprisonment in closed prison does. On the contrary, during EM a participant is fully responsible for carrying out the program agreed to.

- EM will turn out to be much cheaper. It is of course far to early to give definite figures, but it is estimated that a day under EM will cost only 25 - 50% of a day in an average prison.

- EM enables people with a job to continue doing their work.

- When a participant has no paid job, they must engage in some form of community service, thereby making himself/herself useful to society and gaining work experience at the same time.

When EM is applied during the last 1-6 months of a longer prison sentence there is an extra advantage:

- EM gives ex-prisoners an excellent opportunity of earlier return into society. Long term prisoners find that many changes take place during their absence. During the last 1-6 months of their prison sentence they are, with EM, given the opportunity to lead a structured life, during which they are allowed to work, to look for work or to get training or treatment.

- As participants are at home quite a lot, EM can have a positive effect on the family life.

It has been suggested that EM will lead to a lower recidivism than the 80% in the case of imprisonment. But there is no proof of that yet.

As I said, EM can have many advantages when applied properly. In my view EM is properly used when the following requirements are met:

- Participants for EM should be carefully selected. In the Dutch experiment participants are either selected by the court or by the prison authorities on the basis of an advice of the Probation Service.

- Commitment of the participating parties is required.

- EM-programs should always include external activities, such as work, schooling, treatment etc. This means that participants should not be at home 24 hours a day, 7 days a week. Until now we have been able to offer programs with an average of 32 hours a week.

- Strong involvement of the Probation Service is necessary. In the current experiment the Probation Service is the key-actor. They advise in all instances and are fully responsible for executing the EM-programs.

- The EM-equipment has to be reliable. So far it has been.

What about the disadvantages? They may exist. The research accompanying the experiment will show them, if and when they occur. Opponents of EM stress that it will not reduce the need for more prisons. They claim that people will be put under EM who would otherwise not have been sent to jail. The participants who are placed under EM during the last part of their prison sentence would certainly still have been in jail. I cannot be sure about the people who undergo EM, often in combination with community service, as an alternative to a 6-12 months' imprisonment. However, only full court cases are taken into consideration, not magistrates’ court cases, therefore I am quite confident that EM is being used as a real alternative to a prison sentence.

EM is said to have an enormous impact on the privacy of both participant and their family. Experiences abroad show us that this may very well be true. Therefore EM is only used when both parties agree to it. The probation workers involved in the experiment personally interview candidates and their family to make sure they know what EM implies and that their co-operation is really voluntary. Research accompanying the current experiment will no doubt tell us about their experiences. Finally, some people say that EM is a soft option compared to incarceration. Inmates, however, rank EM as a relatively severe punishment compared to imprisonment.
**Rejoiners**

**Dick Whitfield**
I read the description of the Dutch pilot project with interest and, as always, was impressed with the care and attention which has laid such a solid foundation to the scheme. In particular, the requirements listed for participation, which build on the best research and experience in the USA, and follow the Swedish model, in insisting that EM cannot be considered on its own. It has to be integrated into a community programme, usually run by the Probation Service, which deals both with the offence and the needs of the individual.

This integration is the heart of the dilemma. If tagging can only make a real contribution when combined with a treatment programme, what is it that the tag itself can actually offer? Some certainty about whether a curfew is being adhered to? Yes, but this is no guarantee that offending will not simply take place outside curfew hours, as has happened in the UK. A reduction in the risk of re-offending? This is precisely what the alternative programmes, with or without a tag, address. The requirement in the Netherlands that unemployed tagged offenders must engage in Community Service activity to ensure a purposeful framework to their week is sensible and helpful. It might be an excellent opportunity for all offenders? I spoke recently with one of those involved most closely in the Swedish EM experiment, which is producing impressive results. 'The real success is the probation programmes which are an integral part of the Order. No one pretends that the tag does any more than remind offenders to take that programme seriously. But the tag also makes the scheme politically acceptable - both politicians and the public will accept less use of prison because they see an alternative punishment alongside the help.' It seems an extraordinarily expensive infrastructure for such a limited role.

One final point concerns the impact of the tag on relationships and family life. The Dutch scheme is right to seek consent of partners as well as offenders, because the effect can be significant. In the USA, good practice guidelines suggest that the tag should not be used where there is a history of violence or matrimonial problems, because it tends to exacerbate both. There is no really conclusive evidence of this, but the potential for creating additional pressures must be apparent.

I think the evidence points increasingly to one conclusion. Well run, comprehensive community based programmes, especially with employment help or community service for the unemployed, provide the best hope of preventing re-offending. The tag may help acceptance of such schemes but the price is much too high for such a limited role.

**R K Boelens**
In general, it is striking to find that two Probation Officers have such an opposing view on EM. Especially because I know from meetings Dick Whitfield and I had in the past that we agree on many subjects concerning the functioning of justice systems. I have the distinct feeling the Whitfield's opinion on EM is (too) heavily influenced by the negative experiences with earlier and present experiments with EM in the UK.

Our assessment of the advantages and disadvantages of EM also seems to be influenced by our evaluation of the political around criminal justice. It seems to me that Whitfield wants to challenge the current political climate of 'being harsh on criminals' by stressing that there is no need for 'the illusion of control'. We should instead use intensive supervision schemes, help with employment and provide treatment for alcohol or drug abuse.

I agree with Whitfield that in many instances there is no reason to use EM. EM is a tool with great impact and should only be used under specific conditions. One of the conditions is that it is a real alternative to imprisonment, only then does it become acceptable, to judges and the general public, not to send somebody to prison. So I agree with Whitfield that in general there is no sense in using EM in the case of minor property offences or drink driving. Penalties like a fine, compensation and community service orders seem more appropriate. Sweden should have more community service orders and fewer applications of EM. However by using EM in combination with community service and/or intensive supervision in the case of more serious crimes we offer an alternative to a prison sentence up to one year or an alternative to the last 6 months of a longer prison sentence.

Apart from making an alternative sanction possible, Whitfield, does not seem to recognise another possible benefit of using EM. In some instances we have clients who have long criminal records, want to change their lifestyles but find it hard to do so. The temptations to deviate from a probation program sometimes just seem to be too great. We experienced that even an intensive supervision program (of 100-250 hours per year) was not sufficient. EM just might give the offender the extra support he/she needs. EM should not be used as an easy accessory of probation officers. It should only be applied when justified by, the criminal background of the offender, his behaviour and the nature of the offence.
Whitfield suggests two outcomes for EM schemes. They are successful because the participants were low risk offenders who should not have been under EM in the first place. They are unsuccessful because of the many violations which, if responded to, would increase jail and prison costs. Our experiences in Holland, so far, do not support the above. We have had very serious offenders (with prison sentences from 2 to 8 years) under EM for 2-6 months, who have completed their program successfully.

It is indeed remarkable that re-conviction is rarely measured. There seems to be only one criticism for success: the completion of the program. When I visited several EM-programs in the US last year not one of them was able to show figures with regard to re-conviction. Reintegration of offenders and reducing their re-offending should along with reducing costs be the main objective of any community based penalties.

Software: New Windows Version of CASS

The CASS software is well known to those interested in the use of information technology in the human services. This package focuses on ‘Computer Assisted Social Services’ and enables practitioners to include psychometrics and single system research techniques in their daily practice. The new Windows version of CASS is freely available through the Walmyr Publishing Co. web site at url:

http://www.indirect.com/www/walmyr/wpchome.htm

Announcing a writing contest for social work students

The journal New Technology in the Human Services is organising a writing contest for social work students. The contest will run in the academic year 1996-1997. The contest is open to students who have not published before in a professional journal.

Social work students around the world are invited to write a paper or essay on the subject of information technology in social work practice, policy or education, describing either a specific application or taking a more general view.

The submissions should be structured according to our ‘Guidelines for contributors’ which are published on the back cover of the journal. The guidelines may also be found on the journal web site url:

http://www.fz.hse.nl/nths/ or obtained from the editors.

Submissions should be sent in to either of our editorial addresses before 1st of April 1997. The paper should be sent on disk accompanied by two paper copies. The editors of the journal will, in co-operation with the journal’s editorial advisors, judge the submissions. The editors’ decision will be final and no correspondence will be conducted.

The winner(s) of the writing contest will see their submission published in the journal and be awarded a financial prize of the equivalent of 300 - ECUs as well as a free subscription to the next volume of the journal.

The authors set out to show that computers have the potential to enhance social work practice itself as well as the functioning of social work agencies. Throughout the book they recognise the very different value bases of social work and of IT. Their focus is on how these two value bases can be harmonised. The co-writing of the book by E-mail, since one author is based in Sheffield and the other in Jerusalem, itself demonstrates a particular application of IT.

Part I, which covers general issues, sets the scene by exploring the present underdeveloped use of computers in social work. They draw on over 50 papers from Europe and America to explore the factors in social work practice, organisation, management, policy and personnel that have contributed to the current position. This is mainly examined from the service provider perspective and there are few surprises in what is described. The discussion of Gender issues is brief. The writers point out that IT has so far mainly been used in relation to management and caution that this has enormous potential for controlling the professional autonomy of social workers. Although they quote one hair-raising example of abuse of access to information, ethical issues are not presented as a major problem. Service user perspectives are limited to a relatively short section which reports a positive view.

Part II of the book approaches each topic in a very thorough way with the authors discussing the conceptual issues before drawing in the IT aspects. This results in a discussion of typologies of social work (Chapter 3); organisational theory (Chapter 4) and policy processes (Chapter 5).

Chapter 3 is the heart of the book, where the authors argue that if the use of IT in social work is approached from within a humanistic paradigm then it can be used to enhance the ‘artistic’ application of practice wisdom. Sadly they have found no forceful examples of this type of IT application. They attribute this in part to the fact that social work education is only just beginning to develop an effective approach to the teaching of IT in social work. The book is of particular relevance to people in social work education involved in taking on this task, since as the authors identify they will have a key role in these developments. However, the book does not discuss how the pressures and strictures of the
Higher Education system impact, in their own right, on the position of IT in social work education.

Part III is refreshing in the way that it draws on reports of experience in three countries: Israel, America and Britain. The discussion of social work, however did not fully reflect developments in current British social work. The issues of empowerment and consumerism can be fitted in to the paradigm they use but were not explored in detail.

The authors take as a basic premise that any application of IT to the human services must start from the values and goals of the service itself and not be lead by possible IT solutions. They model this in the structure of the book. Part way through my reading I was wondering just what sort of applications all the discussion was leading to. I was falling into the trap that they warn against, wanting to look at some of the IT solutions before fully considering the questions.

David Phillips and Yitzhak Berman write from a position that states that social work has one value base, IT a different one, successful use of IT can only come when social work has a clearly defined problem and goals. The problem in this approach is that the authors appear to assume a greater degree of consensus about the humanistic value base of social work than I perceive. Issues of structural power differentials and how these impact on or are impacted on by IT do not get the same airing.

The spread of IT is happening and therefore whatever your personal perspective you need to be informed. This is a book for all who are seriously concerned about the issues of the use of IT in social work. Given the role of IT in all spheres of contemporary life that should include everyone who is concerned about the future of social work.

Creative Computing In Health and Social Care
reviewed by Peter Sharkey


When trying to convince sceptical students or practitioners of at least some value from information technology for social work, there is still a shortage of literature. I am not aware of many books about which I can say, ‘Have a read of this and see what you think’. Well, here is one such book. It contains a number of interesting and understandable articles on aspects of computing within health and social care. It is divided into three parts:

* General Issues In Human Service Organisations
* Methods And Tools In Client-Led Computing
* Case Studies

These section titles give an overall sense of the content. The book has 12 chapters contributed by 18 writers. Like any collection contributions vary in quality of content and some chapters will have more appeal than others depending on the reader’s background and interests.

The first part has some interesting overview chapters on the use of information technology within agencies. Chapter 1 looks at some of the reasons why little progress has been made in terms of use of computers to help clients resolve problems. Further chapters cover the use of information technology within social services, the health service, and a voluntary organisation. As someone involved in teaching DIPSW students about IT, I found this material most useful — giving some account of how IT has developed and how it is used in different settings.

The computer package ‘IT & Social Work’, developed by our Southampton CTI Centre suggests, as an exercise, that students on placement should do an ‘audit’ on IT within the agency. This would be one of the write-ups which students usually do on placements - more usually describing their practice. This book with
its coverage of some of the background and issues concerning computing within Social Services, Health and Voluntary agencies would provide useful background reading for such an exercise.

Part 2 of the book has four chapters on the experiences of people who have written programs for clients - for example, packages on anxiety management, welfare benefits, and substance abuse.

Three case studies in Part 3 cover experiences of developing and using two programs on alcohol and one on sex education. These are readable and interesting and give a sense of the possibilities.

There are useful tips on how agencies could move forward. The editor, Fred Yates, stresses the essential requirement in this work of a quiet room which can be reserved for self-directed computer work. 'At my place of work we have a room with a computer shared by staff and clients at different times. I have installed a range of self-improvement programs which clients can use unassisted. This arrangement should be the target for any agency wanting to establish a computer resource as part of its service.' (p. 104).

Yates argues that the computer must perform in such a way as to achieve client-based objectives and be 'user-persuasive.' He argues that one of the highest aims of a user-persuasive program is to change specific behaviours.

For example this might be to reduce harmful drinking, take more exercise, commit fewer crimes, relax more, eat less, or refrain from unprotected sex. A lesser aim might be to encourage a state of preparedness to change. He gives some interesting ideas on how to build models of change into computer programs. He also indicates the distinctive aspects which a computer might bring to a learning or a change program.

This is interesting and helpful. What I would have liked more of would have been some sense of what some users had made of the packages - more research or even some narrative of any impact the program had. Perhaps it is early days for this but it would help to convince the sceptic. I also wondered if the health and social care sector could learn from the experiences of using computers in the education sector especially among young people with disabilities. Perhaps a chapter looking at some of those developments might have been included.

An attached floppy disc is an unusual feature of the book and one which perhaps explains its relatively high price of £24.95. The disc contains demonstration files of some of the programs and material referred to within the book. This is a welcome addition and does help to give a sense of the material referred to in some chapters.

Overall then this is a welcome and interesting book. It is certainly one for the library and for next year's student reading list.

**Dreams and Realities**

reviewed by Harmen Grebel

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It has become an established custom to gather a selection of contributions to the Husita conferences in a book published at the conference. Dreams and Realities is the book published at Husita 4, containing seventeen papers which were presented at the conference. The editor, Bryan Glastonbury, who helped to bring about the first Husita conference, has been involved in every subsequent event and is advisor to the Finnish organisers. The book he has composed, with the available papers, is an interesting one.

Glastonbury introduces the themes of the conference under the title ‘Dreaming with Care’. A title indicating the hopes and worries which most authors refer to in their contributions. Glastonbury maps a development in the Husita conferences from information technology for social work to the question of accessibility of information for deprived groups. The technology is still the common factor, but the discussion is about human services, including participation in decision making. Although some of his references to the former conferences have a strong 'we are one family' touch, Glastonbury sheds a
compelling light on the short history of IT in human services and the way we discuss the developments.

The editorial policy has been, not to give room to papers which are 'largely descriptive about IT applications, which might well have been published in the past...'. Instead all authors are alleged to pay attention to evaluation and reflection on past work or the analysis of future needs, or both. And indeed, the reader will find more academic analysis of information-access and information systems than descriptions of new software tools. Although in each part of the book one may find a more descriptive paper showing some practice development in the area of the other papers. An example of the last within the theme 'making IT work more usefully', a paper on a database with local statistics as developed in Finland (Hakkarainen, Sotka: a Database for Local Democracy).

The book is a compilation of papers in which Glastonbury brought some coherence by sorting them into five themes.

Sociological analysis is the first theme. Here we find a paper questioning our faith in technology as a means for progress (Ravetz); a paper in which the relation between IT and evaluation and monitoring in human services is discussed in the framework of the 'post-Fordist welfare state' (Gould); and a paper on the 'gendering of information technology' (Mortberg). Where Ravetz and Gould 'place' development of IT in human services in society as a whole, Morton confines herself to a description of the female position in the male dominated world of IT.

The second theme is the previously mentioned 'making IT work more usefully as a tool of society'. Glastonbury has chosen these papers because they take up varying aspects of the methods for analysis and development of IT. The papers all focus on the question how to implicate end-users or other stakeholders in this process. In 'applying stakeholder analysis to inter-organisational systems in the context of health care in the UK' Pouloudi and Whitley describe the new situation in which systems in health care have to work and how to develop them. The change in the situation is the interconnection between different institutions and professionals the systems have to cope with. The authors plead for stakeholder analysis to be able to develop and implement these systems. Like Gould, they refer to the new ways of service delivery and organisation, a reference found later in Hough. Laopoulos and Fernandez in 'Awareness Raising for Citizens in the Global Information Society' and Weber in 'Accessibility in other words is Equal Rights' point at the importance of accessibility of information systems. The authors of the first paper describe an EC funded project to enhance citizens participation in the development of and decision making on the Global Information Society. They present a model and scenarios and are quite optimistic about the possibilities. Weber et al are also concerned with the lack of involvement of citizens in the decision making process in the information society as painted in the Bangemann report. They see accessibility as the key issue in the confrontation between the dreams of Information Society prophets and the reality of the rights of citizens. In their paper they occupy some space explaining communication processes. Some others authors too, dwell in theory which makes their papers thicker but not necessarily more interesting.

'Reights and wrongs: ethical frameworks for future IT' is the third theme. The papers combined here have a little more focus on the ethical background than most others in this book. The most interesting may be the article of du Plooy and Roode from South Africa who put the question whether the introduction of IT should be governed by an (information) bill of rights. They take up the concept of a bill of rights for the information age from Glastonbury and LaMendola. There is also a paper discussing the tensions between public access of information and privacy (Kemppainen). Finally Weinbach points out the risk of an underclass of people not able to cope with IT. However his examples all come from his own academic surroundings.

'Networks and databases: optimism or pessimism for the future' is another collection of papers where sharing of information is one of the key issues. Interesting is the analysis of Urbanowski who shows the positives and negatives of IT mediated information compared with information from direct neighbours making use of the ecocultural theory.

The last theme is on education; 'Training is the key'. In three papers the communication aspect of IT is introduced as a strong medium to exchange information between classrooms, information holders and practice. Two describe the construction of learning environments for students where they can meet with others, teachers and professionals. (Visser and Gault & Taylor). The third describes projects to give people in rural areas access to a learning environment 'virtual classrooms' a co-production between Finland and New Zealand. (Kynaslathi and Stevens). The articles have good descriptions but miss a theoretical foundation.

I read the papers in a proof form before the conference. Altogether the book is promising an interesting and high level conference. The book in itself is worth reading for those interested in application of information and communication technology in human services and other areas as well.
Human Services and Information Technology: an International Perspective

reviewed by Ignace Snellen


This publication is the third in a sequence of collections of descriptions on Information and Communication Technology (ICT) applications in the social service sector. The three successive volumes cover an expanding range of countries and topics: from Western, Southern and Eastern European countries to finally a variety of social service regimes on four continents.

This is one of the attractions of the enterprise the editors of the volume have undertaken. It makes it possible to develop a longitudinal overview of the achievements and non-achievements in informatisation. In the last chapter of the book, the editors relate the hopes and expectations expressed in both former volumes to the sobering impressions the actual descriptions leave behind.

Another attraction is that the authors keep to a common format. Each starts with a general introduction on the main issues which are dominating the scene in the country concerned. Every author gives a practical description of the use of ICT to inform citizens about their entitlements and obligations, and the ways in which they can be realised, and also to educate and train social service professionals, and to provide the services themselves. Practitioners will use this as a handbook, for academicians it is a valuable source book.

A third attraction of the volume is its accessibility. The medium is the message in the sense that WWW addresses are, as much as possible, made available. The more interesting ICT developments in the social service sector of a country are, the greater the chance that the reader is enabled to approach the relevant sources of information directly. So, this volume may support the diffusion of the state of the art of ICT-applications. Countries which are still lagging behind are not forced to traverse the learning trajectories of the advanced countries but may profit directly from their learning experiences.

During the years covered by the three volumes fundamental background changes have occurred in the social service sector. In terms of demography, a further ‘de-greening’ and ‘greying’ of the population is taking place. In terms of economy, mass unemployment and a global competition of social security systems is affecting the viability of the social service sector. In terms of the relationship between state and society, a growing disenchantment with the performance of public bureaucracies and a wide spread predilection for market-arrangements instead of public financing are manifesting themselves.

Against these background changes ICT applications are an opportunity as well as a threat. The main opportunity is that ICTs enable social service organisations and their individual professionals to improve the quality of their service. Speed of case handling, exactness, neutrality and equality before the law are enhanced. Possibilities to empower clients are there, but are not widely used. The main threats from ICTs are a tipping of the balance between privacy and fraud detection to the detriment of privacy, and a loss of autonomy of social service organisations and professionals. ICT research itself may provide ‘privacy
enhancing technologies which could protect privacy to a certain extent. The probable loss of autonomy, as a consequence of economising as well as growing transparency created by ICT, may also hamper the empowerment of the client.

A general impression one gets from this volume is that institutional conditions mainly determine the way in which and the extent to which ICTs are used in the different national social service environments. It may be the institutional structure conditioned by geographical distances as in Australia, or by societal rifts such as in Belgium. Standardisation may be hampered by the institutional structure of public administration, in which local autonomy is a central value, or by the institutional position of private organisations which fear loss of their autonomy. There is a fair chance that the globalisation of the national economies will lead to a roundabout route to standardisation of the social service sectors in the different countries. The use of ICT applications may be injurious to the social and psychological dimensions of social services when administrators or clerks instead of social workers dominate their deployment (as in Germany).

The last chapter of the book takes the threads of the description per country together and presents a ‘multi-layered’ analysis. The editors establish a development from a technology efficiency paradigm (word processing and calculations), via an effectiveness paradigm (accountability and service support) to an innovative re-design paradigm (allocations on the basis of competition).

By this approach they open up a valuable entry to further analytical and empirical searches. A challenging invitation to practitioners and academics alike through an excellent publication.

Information Management in Social Services

Reviewed by Jan Steyaert


This book offers readers 10 different papers, originally presented at the SSRADU conference, in March 1995, in Bath. The authors come from different backgrounds such as academia, social policy and management, representing a mirror of the myriad of stakeholders involved in information management. Only the practitioners are missing, although several of the authors have their roots in professional practice. All of the authors are currently part of what we could safely label as the core group of persons that have a strong influence on the way information management in English social service departments is currently shaped. Knowing the drastic changes currently taking place in these organisations with the implementation of the community care policy, makes this an inviting book.

After the introduction by Gould, Kerslake sets the scene by sketching the brief history of information management and its roots in the unstructured information abundance in social service departments. Kerslake points out that information management wrongly started in many organisations with the introduction of technology, resulting in the question which software or hardware to purchase. He argues, as so often done in this journal, that the starting point should be the information needs of decision process on all levels of the organisation.

Bamford replies to that conclusion by wondering whether it is not an illusion to think decision making is driven by information. So many other aspects seem to influence the way decisions emerge in an organisation. Looking upon decision processes solely from an analytical point of view is grossly naive and discounts the ‘barriers to rationality’.

Oppenheim confronts the reality of communication within and between social service departments with the booming technology of the Internet. He outlines

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He can be contacted at the editorial address, which can be found on the inside front cover of this journal issue.
where and why the opportunities of the Internet can be applied to enhance communication, both on a client-level and on a managerial/policy level.

Giller raises the important issue, how can information (technology) be used to monitor effective management? In an era that thrives on the accountability of every organisational activity, evaluation of the quality of service provision is vital for survival and future funding. It's a pity though that the author focuses on monitoring of professional practice, rather than the quality of management, as the title of his contribution would have suggested. I'd love to read about assessing effectiveness of managerial activities. Giller provides several case study examples where monitoring has had a direct effect on practice and policy. From these, emerging themes for the future are identified.

Dieppe also describes a case study, this time about a metropolitan social service department and its quest for an information management strategy. The account outlines the steps and actions taken over a period of several years, and identifies the lessons that can be learned from the case. Any organisation embarking on a strategy formulation mission should read this.

Phillpotts reflects on information management from a national policy perspective. He describes how the Department of Health worked toward its own information strategy and what this strategy consists of. His article also focuses on the link between the national information strategy and that of the local authorities. An important issue when we see national (statistical) information sources being dependant upon data being provided for by organisations ‘in the field’.

Fean reports on the inspection the Social Service Inspectorate undertook, in the summer of 1994, into the information strategy of four social service departments. As the community care policy relies on an extensive information structure being accessible in daily practice, one can see the importance of monitoring and evaluating progress being made in information management. Conclusions from this inspection indicate that effective information management is not an easy task.

Sparks writes an intriguing and honest contribution about the importance of direct marketing attitudes in fund raising in the voluntary sector and the importance of adequately managing information from (possible) donors. One can wonder about the seeming easiness by which concepts from the commercial sector are used and the accompanying endangered privacy of individuals. Would the ‘for good’ aim of the voluntary sector provide an excuse for making use of these techniques?

Jeffrey concludes the book with a contribution that gives some personal reflections on how to make the most of information technology in your organisation.

A lot of this book is confined to the English social service departments and makes ample reference to child protection (see also Kerslake’s contribution to this issue of the journal). However, the information given is not only relevant for those specific parts of the human services. The abundant lessons to be learned from these articles deserve a wide dissemination of the book and numerous readers.

News of HUSITA 5

The HUSITA 4 conference was held last month in Rovaniemi, Lapland. It is very difficult to summarise our experiences in just a few words, but basically it has been a most interesting, professionally organised conference. The two publications presented at HUSITA 4 are reviewed in the review section of this journal.

The next HUSITA conference will be organised in Budapest, Hungary in August 1999 by the John van Neumann Association in cooperation with the Hungarian Ministry of Social Welfare.

Details on this conference will be disseminated in later issues of this journal.