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New Technology in the Human Services



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We welcome papers, articles and reviews from both academics and practitioners. Please read the guidelines for contributors on the back inside cover and do not hesitate to contact either of the editors.

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Up Front

This first issue of volume 9 marks a new stage in the history of the journal which we hope you, as readers, will welcome. As indicated in the Upfront of issue 8/3, *New Technology in the Human Services* is now a co-production between the Centre for Human Service Technology, University of Southampton and the new partner Causa, a research and development unit from the Higher Institute of Professional Education, Faculty of Health Care and Social Work, Eindhoven.

We will continue to seek high quality academic papers on aspects of technology in the Human Services and we will also have a section for practice and policy reports. Academic papers will be subject to blind peer review and we have gathered an international panel of referees who promise to provide immediate feedback to authors. Our aim is to publish articles within six months of receipt as we wish the journal to reflect the latest developments in our field. In order not to discourage practitioners writing for the journal practice reports are not blind peer reviewed unless requested by the author. They report on significant developments in either practice or policy and innovations taking place in those areas.

We are introducing a new section labelled 'Controversial Issues' and would be interested in the opinion of our readers on the style of these contributions. In this, the editors formulate a significant question in the application of information technology in the human services and ask two authors to write a for and against contribution respectively. The aim is to offer you a condensed summary of arguments in a form that juxtaposes the two views in one publication.

This issue displays the new internal format with papers, a practice report, a controversial article and reviews of new books.

Liz McSorley and Colin Barnes report on an experiment undertaken by Coventry Social Services Department. Coventry have a policy that all data input into computer systems should be done by practitioners which was challenged by the trade unions. In selected settings, input by practitioner was evaluated and found to result in more

reliable data. This finding links to several of the risks related to information technology and social care, as identified by Bryan Glastonbury in his contribution to issue 8/3 of this journal.

James Atherton discusses how community care issues were taught using computer assisted learning.

Daniëlle Colsoul, a practitioner, describes the introduction of a specially commissioned computer program in all general social work agencies of the Flemish Christian Mutualities. This was a large undertaking, equipping social workers with customised portable computers and office based workstations and reflects the purchasing power of a large agency which can aggregate its resources in a coordinated plan to implement new technology solutions.

The controversial issue section brings together two authorities on social security non-take up. Gareth Morgan, director of the software company producing an extensive range of welfare benefit calculation systems, outlines his arguments on why these kinds of applications can reduce non-take up. Wim van Oorschot, a leading researcher on this subject, outlines why he feels their impact is minimal. We do not offer you a conclusion to this debate, but invite you to make your own assessment.

We have substantially expanded our web site for *New Technology in the Human Services*. While this web site mainly gives information on the journal itself, you might be interested to visit it for the electronic version of the software directory and for the electronic indexing and abstracting service we offer you. Thanks to Don Mabey, one of our advisory editors, we can give you references and abstracts on more than 1.000 publications in our field. Direct access which also allows you to email us can be found at URL <http://www.fz.hse.nl/nths/>

Jan Steyaert & Ann Wilkinson

Computerised records: a tool for practitioners?

Liz McSorley & Colin Barnes

Abstract

Nearly all Social Services Departments in the UK (SSDs) use computers for recording details of their clients (Barnes, 1996). It has been proposed that the direct use of these computer systems by professional staff "must surely be an objective if the systems are to support the direct delivery of services" (SOCITM, 1992). However, some practitioners resist using computerised records as they are not sure about how this might effect their work. This article describes how Trade Unions and Coventry SSD cooperated to carry out an experimental trial of 'Practitioner Inputting' (P.I.) to computer based client record systems.

Background to the use of computerised recording in Coventry

Coventry City Council SSD have been using a network of computers for its client record index since 1987. Pinnell (1987) and Marsh et al. (1986) describe the system and how it was implemented. Although networked computers were situated in most of the departments' decentralised units, the original intention was that the system would not be used by practitioners. Practitioners would complete a set of forms onto which they would record the information about the clients with whom they were working and clerical staff would transfer the data from these forms onto the computer.

In March 1993, the management team of Coventry SSD agreed a policy that all input to computer systems should be undertaken by practitioners. However, staff expressed concern about these proposals through their Trade Union representatives. Extensive negotiations failed to reach an agreement about how the proposed change would effect staff, clients and the organisation of the department. After a period of 'deadlock', during which practitioners refused to use the computer system, both sides agreed that there should be a 'trial' of P.I. in three, representative, fieldwork teams. The Trade Unions and Management of the SSD formed a 'joint negotiating group' to oversee the trial and evaluate the outcome. In 1995 a project manager and project assistant were appointed to introduce P.I. to the trial teams and collect data about the resultant changes.

Hypotheses about introducing the use of computers to social services practitioners.

DeLone and McLean (1992) described a comprehensive taxonomy to organise empirical research in respect of information systems. They posit six major dimensions of I/S success:

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1. System Quality,
2. Information Quality,
3. Use,
4. User Satisfaction,
5. Individual impact and
6. Organisational impact

The changes most likely to be observed as a result of the limited trial of P.I. would be in respect of (2) Information quality (the reliability of the data input to the system by the practitioners in the three teams which were part of the trial), and (4) User (practitioner) satisfaction. If there was an improvement in either (or both) of these parameters, information system quality would be enhanced.

The project manager had reviewed the literature in respect of social services agencies implementing computer systems within social welfare agencies (Barnes, 1993). He was aware that various hypotheses from the 1980's about social workers having 'negative attitudes' towards office automation (see, for example, Forrest and Williams, 1987) had been refined in the light of several studies (Monnickendam and Eaglstein, 1991 and Gandy and Tepperman, 1990). Sempke and Nurius (1991) had postulated that the lack of success of innovations relating to the use of computers by social workers was related a "poor fit between technological innovations and the organisational environment". The project manager therefore sought to maximise the compatibility of the recording of tasks on the computer required of the practitioners in the trial to those other tasks in their day-to-day work. Every effort was made to ensure that computer recording was introduced in such a way as to facilitate the 'real business' of the fieldwork teams i.e. providing quality assessments to clients.

The trial methodology.

Three teams representing the range of fieldwork services were chosen for the trial:

- i. A team assessing the needs of children and families living in one part of Coventry,
- ii A team assessing and managing 'care packages' for elderly people living in another part of Coventry,
- iii A team of 'specialist' practitioners who prepare care packages for disabled people living throughout the City (this team included the occupational therapists working for the SSD).

The joint negotiating group asked representatives from each of these teams and the Trade Unions together with the project manager to make a joint evaluation of the changes which occurred as a result of the three teams implementing P.I.

Hammer and Hile (1982) point out that if resistance to using computers does arise, it need not be unproductive. Resistance might provide valuable feedback about the effect of technology on the organisation. In the light of the lengthy dispute which had led to the trial being established, it was anticipated that resistance from practitioners would be met as the trial progressed. A high priority was given therefore to creating opportunities for practitioners to voice any worries they had about using the computer record. This feedback would then be translated into positive action to provide help and support as well as make modifications to the recording systems in place in each team.

The Project Manager met with the managers in each of the three teams so as to analyse how to change the way the teams operated to implement P.I. with minimum disruption. The considerable differences in the way the three teams worked were taken into account and individualised strategies for integrating computerised recording by practitioners into office systems was drawn up for each of the three teams.

Everyone in the three teams was allocated a week of 'intensive' training followed by two weeks of intensive support. Extra staff were employed so as to provide 'cover' to allow groups of approximately 10 staff at a time to devote a full week to understand and comment upon the changed arrangements. Changes to the roles of clerical and administrative staff within the teams were given as much attention as those of practitioners.

The training for practitioners was geared towards 'hands on' use of the systems. Time was given to staff for them to discuss any fears they had about using computers. Debates arose about the advantages and disadvantages of social services practitioners joining other professional groups in expanding their use of information technology.

The evaluation of the effects of P.I. used 'before and after' measures of change. Several 'objective' measures were used to look at reliability of the record, stress on staff, and workloads. A questionnaire was used to gather the 'subjective' satisfaction of staff in the three teams. This was administered before any training began, immediately after the training week, one month after that and, finally, three months after P.I. had been introduced.

It was emphasised to all participants that there was a desire to hear their comments at every stage of the trial. Data was collected about:

- a) The quality of the training and support being given;
- b) The 'user-friendliness' (or otherwise) of the computer systems;

- c) The problems of integrating computerised recording into day-to-day work;
- d) Any barriers to the use of computers as a result of a staff members' personal circumstances (e.g. physical impairment);
- e) Any fears about 'Health and Safety' aspects of equipment;
- f) Any worries about the security of information on the system.

Making positive responses to resistance to practitioner inputting

The preliminary planning to integrate the pattern of computer use with the other tasks required of practitioners was, on the whole, successful. However, many minor changes were made to the system and office methods, so as to take account of the comments received, as the trial progressed. For example, if practitioners commented that certain categories used on the computer record did not reflect the reality of their clients' circumstances, then the availability of codes within the system was changed to take account of what was required of the practitioners. Obviously, more major changes in the way the computer record worked (e.g. a request for a 'windows style interface' for the software) could not be made in the timescale of the trial. However, there were opportunities for the practitioners to meet the programmers who worked on the software used for the computer record system. In this way, a dialogue between the perspectives of practitioner, 'end-users', of the system and those responsible for the long term development of the software was started.

Perhaps the best example of 'fitting' the computer recording to the social service task was to accommodate the comments of the occupational therapists who participated in the trial. Although the occupational therapists were part of an integrated team with social workers, it soon emerged from discussions during the trial that their methods of working were very different from other social service practitioners; even the social workers working in the same team. Realisation of this led to a modified pattern of computer inputting for the occupational therapists which would be far more suited to their needs than the pattern of computer use that had been designed to meet the needs of other practitioners. Several practitioners expressed doubts about being able to use computers as a result of 'disabling barriers'. As a result of this, a listing of agencies and individuals who could help facilitate access to information technology was compiled. Information about how to overcome disabling barriers, which might hinder access to using computers by some staff, was gathered and arrangements were made for

confidential consultation by individuals who thought they may face difficulties. The importance of this aspect of the trial was demonstrated by a practitioner who had always experienced severe migraine headaches when she had tried to watch television. She feared that looking at the screen of a computer would, therefore, be impossible for her. Obviously she and her colleagues would have been reluctant to change to a recording system in which she could not participate fully. Thanks to her being able to try different types of equipment suggested by expert advisors, modifications to the VDU on the computer she used were made so that it did not create a problem for her. In similar ways, others were helped to overcome other disabling barriers such that at the end of the trial there were no members of the trial teams unable to access the computers for recording.

The greatest resistance to recording on computer was as a result of practitioners feeling that too much time would be taken up by administrative procedures allowing them less time to see clients. The evaluation was therefore used to gather as much objective information as possible about whether practitioners' time with clients was being reduced because of the changes brought about by P.I.. Practitioners were also reminded of the potential of information technology innovations to save time once the initial implementation stage had been achieved and they had been integrated into routine office procedure. Practitioners agreed that fax machines and portable telephones had come to play an essential (and time saving) part in their respective offices.

Outcome

All three teams were enthusiastic about the training and about being able to comment upon the way the computer record 'reflected' their practice. New 'computer skills' were gained by all the practitioners who were trained and these continued to develop over the period of evaluation.

After practitioner inputting had begun, the computer records of clients of practitioners in trial teams were found to be significantly more accurate and up to date (measurement accuracy of the records was made using the methodology described in Barnes, 1993).

Practitioners expressed concern about the amount of time used for recording competing with time spent with service users. However, the 'before and after' measures (and some comparisons with control teams not taking part in the trial) showed that these worries did not increase as a result of changing to recording on the computer from the previous recording by filling in forms.

Objective measures showed that there was no change in the level of output of the teams as measured by numbers

of referrals taken, assessments carried out, and care packages/childrens' plans produced.

Conclusions

The significant changes to occur as a result of 'practitioner inputting' were the establishment of competency at using computers for the practitioners in the three teams and improved reliability of the records. Despite this, in the short term, there was no observable change in the overall productivity of the three teams taking part in the trial. However, this 'no gain/no loss' scenario in the short term needs to be considered in the context of Coventry's computer system not having been significantly upgraded since 1987. The evaluation revealed that the changes in Coventry SSD's policies (especially after the implementation of the Children Act, 1990 and the Community Care Act, 1991) had created a tension between what practitioners do and the format for recording it on the system. The ability to adjust the format of the computer record, together with the improved computer software tools which had become available since 1987, means that there is great potential for improving the 'user-friendliness' of the system. Practitioners who are accessing the system can feedback on what is useful to their work and suggest the development of new features.

The improved reliability of the main client index which would occur if the trial results are repeated citywide, will lead to the computer record being used far more productively by all sections of the SSD than at present and would, almost certainly, reduce the duplication from the computer index onto manual records.

The 'way forward'

Coventry Social Services Department will now implement practitioner inputting throughout its fieldwork units. The observations and comments made by the staff of the trial teams are already being used to inform the modifications of the way the computer record index works. Major changes are planned for the recording of information about children at risk and users of occupational therapy services. The cooperation between Trade Unions, departmental managers which was found to be productive during the trial will continue throughout the rest of the P.I. implementation and beyond. In this way it should be possible to ensure that the recording system was always working to support the practice of staff and hence contribute to better services for clients.

The recent inspection of U.K. SSD' information strategies (Social Services Inspectorate, 1995) concluded that the development of effective operational information systems depends on "the active involvement of operational staff to ensure that systems are sufficiently customised to their

working practices to be operated effectively". The experience of this trial would suggest that 'Practitioner Inputting' may be a means to achieve this.

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Computer-Aided Learning and Experiential Learning

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Abstract

The article explores issues in the integration of experiential and computer-aided learning, with reference to a spreadsheet-based simulation exercise developed to assist in the teaching of community care to social work students. The spreadsheet served as an information centre to link the activities of interacting groups of students, in such a way that process issues of inter-group relations could be explored within the context of the roles required by the implementation of the NHS and Community Care Act. The exercise is analysed critically with particular reference to the potential and limitations of the computer model, and the extent to which spreadsheet-based modelling can deal with the questions of value and priorities which are raised by the simulation.

Introduction

At first sight, computer-aided learning and experiential learning appear to be two ends of a continuum, which runs roughly from the precisely-specified and mainly fact-based at the computer end, to the woolly and unpredictable at the experiential end. There is no denying that computers (even without virtual reality) can engender feelings and promote experiences, ask any player of 'Doom', or anyone wrestling with a recalcitrant operating system, for that matter but this has not been the traditional area to explore. The University of Southampton Department of Social Work Studies, for example, are developing a CAL package for use on social work courses on race and gender issues, but intend to use it as an explicit complement to experiential methods, providing the literature and conceptual base so that tutors can spend their time more profitably conducting the experiential exercises.

In this paper I wish to review an exercise which seeks to integrate CAL and experiential approaches, and to discuss some of the issues raised for future consideration in the design of such exercises.

The exercise under discussion covers much of the same substantive ground, as the Bath/CCETSW 'Unlocking Care Management' package (Gould and Wright, 1995). It is a simulation of an implementation of the NHS and Community Care Act, and the relationship between needs assessment, the constitution of care packages, budgeting, and the negotiation of contracts for the provision of care. Whereas the 'Unlocking Care Management' approach, however, is to provide an overview and a series of structured exercises for individuals or very small groups to undertake, that of the 'Careby Simulation' is slightly different. The computer-based simulation serves simply as an information centre which structures and reflects the interactions of groups of students taking various roles within the community care system, so that their learning is as much about working with each other in those roles, as it is about the 'facts' and procedures of community care. There is no wish to argue the superiority of one approach over the other and indeed the 'Unlocking Care Management' package is a much more sophisticated piece of software but to explore a different angle on a similar topic.

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The context

The social policy and organisational context of community care is touched on in Gould and Wright (1995), and discussed in a growing number of texts, such as Orme and Glastonbury (1993). Broadly, the passage of the National Health Service and Community Care Act in 1990 marked a radical shift in the conception and organisation of community care in England and Wales, to a strongly market-influenced pattern of service commissioning and delivery. This was introduced in Social Services Departments in April 1993, and has had a dramatic effect on their organisation and the job descriptions of social workers and other staff, as outlined in various items of government guidance (Department of Health, 1991a, 1991b, 1991c).

For social work educators, the change presented a number of challenges. Before the implementation of the Act, for example, they only had the vaguest idea what the new system was going to entail, and therefore how to prepare students for working within it. Later, the variations in the speed and pattern of implementation from one local authority to another made it difficult to keep track of what was going on. Students returned from practical placements with quite different accounts of what was involved, and how the new job descriptions were affecting practice. Articles in the social work press focused on very disparate examples of good practice, and slightly more consistent accounts of practice constrained by confusion and lack of resources. Among the most difficult issues were those which surrounded budgets and the handling of money, an aspect of practice from which front-line social workers had traditionally been preserved.

It was not too difficult to teach some of the central principles such as needs-led assessment, and the design of care packages, in part because students found the ideas quite congenial; but an overview of the working of the whole system was much more complex. Students' views were conditioned by their experiences limited to one sector, often with only one user-group, within a single agency. They complained that the system did not work as it was described, and attributed this (beyond a general complaint about lack of resources) either to the failures of management in their placement agencies, or even to the personal quirks of members of the bureaucracy.

A major question, therefore, was what dilemmas and conflicts were inherent in the system, as opposed to those which did indeed follow from local factors? Associated with this were issues about how it feels to work in other sectors of the system (as a resource provider, rather than a purchaser, for example, or even as a budget controller).

It seemed to our social work teaching team that one of the best ways to get at this would be through a simulation exercise, and hence the Careby Simulation evolved.

The experiential aspect

This article concentrates on the computer-based element of the simulation and issues raised by it, but the experiential component also had a logic and pedigree (Kolb, 1984). Some of the issues raised by the simulation had nothing at all to do with the computer model (or more accurately had a relationship of unknown complexity with it), but followed from the issues of inter-group relations.

It so happens that the clearer delineation of roles within the community care system which followed from the Act brings into focus the endemic problems of inter-group relations. Structurally, these involve issues of authority, organisation and representation between groups; and dynamically those of delegation and accountability, and information control and fantasy about other groups. These may be manifest in competitiveness, prejudice, or failure to maintain boundaries. The basic design of experiential events to explore these issues is well-established, and could readily be adapted to a simulation exercise (Higgin and Bridger, 1964; Rice, 1965).

The full conceptual apparatus was not, however, necessary for the design of the exercise, which simply called for the students to work in interacting groups (of about five or six people) representing the various sectors of the system, in this case purchasers, providers and management. Since whole groups find it difficult to negotiate with each other, and since to do so would create massive inefficiencies in getting the work done, the groups had to delegate functions and authority to their members to work with representatives of other groups in order to achieve the objectives (which were, of course, to provide suitable needs-led packages of care for users within their budgets). In this way, students were presented directly with a number of issues, including (apart from the practice dilemmas):

- How much authority could be delegated to one member to work on behalf of her or his group;
- How conflicting requirements of different groups could be managed face-to-face without 'getting personal';
- How information could be controlled: both positively disseminated and even restricted where necessary;
- How face-to-face negotiations with representatives of other groups might 'seduce' a representative from the group policy, and
- How general rules might be drawn up which were sensitive to particular circumstances.

Students were instructed that this was not a role-play: they were simply trying to do their best to fulfill their briefs on behalf of their groups or sectors. This emphasis on representation and responsibility to their sector, rather than on individual performance, also permitted some members to swap between sectors from session to session, so that they could get 'the feel' of what was involved in working in the different sectors. Clearly, some members had to remain constant in each of the groups for at least a few sessions for the sake of continuity, but the continual swapping of personnel also underlined the necessity for record-keeping so that new individuals could step into established roles with minimal problems.

The computer-based information centre

The community care system both requires and generates a vast amount of information, largely in the form of details of users and their circumstances, the care packages constituted for them, and of course the financial transactions involved. It was the latter which was the most unfamiliar aspect to most of the students, who like the local authorities themselves at the time of the introduction of community care had little idea of what services cost. One clear outcome of the exercise for many students, for example, was to disabuse them of naïve notions of profiteering and excessive overheads within the system: they could have learned this in many other ways, but their direct experience of trying to work against it (of trying to bring costs down) brought it home to them with considerable force.

This information, therefore, had to be accessible to the students and also had to respond to their actions. The most effective way of doing this was to model the whole system on a spreadsheet. Starting with a very basic spreadsheet running on an Amstrad PCW, the system evolved to a large (1.8 Mb) Excel 5 workbook running under Windows 3.1 on a 50 Mhz 486 PC, with much more detail, and macros to automate and standardise a number of tasks. (It had to be on a relatively fast computer: one of the macros takes an hour and a half to run on a 386)

The spreadsheet has three major areas (each consisting of one or more worksheets), each of particular interest to one of the sectors, but naturally linked so that decisions taken and entered in one area could be reflected instantaneously in others:

- A database of potential users, for purchasers to provide care packages for, together with provision for entering those packages.
- A number of resources with suggested initial costings for their components, to be managed by providers, with provision for creating others if demand requires it.

- A budget information centre, so that managers are aware of the pattern of expenditure and its projection over a year.

Designing the simulation

A number of problems had to be addressed in the design and refinement of the spreadsheet. One of these concerns the modelling of the system, and is discussed separately below. The other remains primarily that of accessibility. The original (PCW) spreadsheet was incomprehensible to the majority of students, and required a skilled intermediary for the simplest of tasks: the adoption of an industry-standard application (as well as the independently increasing computer-literacy of students) has greatly simplified the situation, but the general purpose nature of the application remains confusing for some students. Understanding of information technology itself may be a significant subsidiary objective of the exercise, but apart from word-processors most students will in practice encounter dedicated software which is easier to operate. It is possible to customise the interface of Excel to some extent, but a disproportionate amount of time can easily be spent training students to use the application. One thing is very clear: it is essential to lock and hide sheets and formulae which should not be changed.

The initial design had to balance two major considerations. The first was that it had to be 'pure', in the sense that the intentions of the Act and the Department of Health guidance (with the obvious exceptions of user consultation) had to be implemented clearly, and without any of the organisational complications which might obtrude in a particular agency. On the other hand it had to be 'plausible', in that it had to bear a fairly close relationship to reality. That, in turn, meant researching costings, which revealed that many agencies themselves did not know at the time how much various resources were costing them. We also had to consider how formal the financial systems had to be, in terms of conforming to accounting procedures, but decided that comprehensibility was a more important consideration.

The next stage was to test the system, and this was done in a dry run with a group of students and a number of individuals with varying degrees of acquaintance with community care. We made no claims for the completeness of the model, but simply asked them to try it and to see what happened. The first reactions were very gratifying: apart from discovering a number of features which did not work properly. The testers commented that the spreadsheet did help them to get, what can best be called, a gestalt of the whole system apart, that is, from those who were horrified by the fact that such a 'human' process could be reduced so easily to a set of formulae on a spreadsheet.

This concern was repeated in every subsequent run of the exercise.

It was only when the spreadsheet was relatively complete that it was used in the context of a full-scale exercise, supporting the inter-group interaction, and here its initial inaccessibility proved to be both a problem and an opportunity. The problem was that the more computer-literate of the students attained what can best be described as a 'priestly' status, being regarded as intermediaries between the practitioners and the System (with a capital 'S'). From the point of view of the experiential learning, this distorted the group processes. The opportunity was that the students who could not use the System directly concentrated on what they would be doing in the real world: negotiating and managing using their social work skills. The downside of the increasing accessibility of the system (now with a small 's') has been that its information has come increasingly to govern the students' activity.

Subsequent developments have been prompted largely by the experience of the students using the system: they complained that the care packages were static, for example, and so a time dimension had to be introduced. The development of new resources from scratch was too complex to begin with, to the extent that users were shoe-horned into existing provision. An analogue of the resource-led rather than needs-led provision, which community care had been intended to get away from and so templates were introduced which simply had to be filled in. One difficulty in deciding which innovations to introduce has been the temptation to concentrate on the efficient working of 'Careby' itself, rather than to remember that it is intended as a simulation of the generic community care process. The other has been the limits of the designers' skills!

Running the exercise

The exercise has been developed over four years with two Diploma in Social Work programmes, and has been progressively modified so that it has never run more than once in precisely the same form. In duration, the exercise has run for between 8 and 18 hours on each occasion, which seems an unrealistically long period of time given the other demands on the social work curriculum. However, the completeness of the simulation has meant that most aspects of working within the community care system can be addressed, even if the spreadsheet only provides a starting point. Consideration of Service Level Agreements, for example (which are the contracts between the local authorities' commissioning services and the providers) can be incorporated, with students having to draw up such agreements between management and providers, and then having to work within them as the exercise progresses.

The exercise itself has several phases:

- An orientation phase, which introduces the procedures and the spreadsheet. Several copies are made available so that students can play with them and familiarise themselves with it.
- An optional preparatory phase, in which the required forms and record-keeping paperwork are designed, and Service Level Agreements negotiated. Although this is a valuable exercise in its own right, it can be bypassed using forms prepared in advance (or even the standard forms from a real agency).
- The exercise itself, and
- The plenary review, which is essential and never long enough.

The first point to emerge in running the exercise is its slowness: the tutor is likely to feel some sense of urgency, because there is a desire to make things happen with a speed comparable to the real world. However, the aim is to promote learning, and so discussions of principle which would be resolved in the real world through pre-existing policies can profitably be debated (and researched) within the simulation. The most 'productive' run of the exercise has so far provided for only 16 out of the 100 potential users on the database, over about 10 hours. It is apparent that the exercise with the computer is best tackled in a substantial number of one-hour or shorter sessions: negotiations can take place outside these times, and the spreadsheet needs to be on-line only for up-dating when decisions have been made. Otherwise, there is the likelihood of some sectors waiting around while others are busy on a task which does not concern them.

So far, one of the limitations of the simulation has been that the workload has fallen differently on the three sectors. The purchasers have a constant load: there are always new users who need provision. The pattern for providers is rather different: they are very busy at the beginning trying to negotiate their contracts and to maximise their Quality Ratings (see below), but (unlike the real world for service providers), things may then tick over without much attention until something untoward happens, or the deficiency reporting system prompts management to commission a new service. The managers, too, may find that if the purchasers are continually proposing care packages within budget, they do not have enough to do, although contrary to the spirit of community care but in accordance with much actual practice they do have to approve each care package individually. If necessary, the spreadsheet provides for an umpire to institute global budget cuts or salary increases or even change interest rates, thereby precipitating a re-examination of priorities, but in practice this facility has not yet been called upon.

It would not be fair to say that the learning outcomes of the exercise are unpredictable, but the combination of the opportunities of the experiential component with the discipline of CAL mean that while certain cognitive outcomes are bound to be delivered, the affective outcomes are more variable (Kratwohl, Bloom and Masia, 1964). Some exercises have been frenetic and almost manic, with tempers running high between groups and desperate purchasers threatening managers: and others have been disciplined, plodding and disengaged. Some versions have been highly partisan, with members of some sectors imputing dubious motives to their colleagues in other sectors: others have been characterised by attempts at a high degree of cooperation, with requests for help being refused apologetically and many pleas to 'understand my point of view'.

Whatever the emergent culture, the participants have had to address:

- inability to meet the needs of users, sometimes long-term and sometimes in the short run while resources are developed
- conflict between managers taking the long view and purchasers advocating for their particular users
- providers grappling with the implications of new admissions for existing residents or users

The most interesting feature of the entire event has been its complex nature: these similar themes have emerged every time, but not necessarily in relation to the same cases or in the same form. Student feedback has been generally very positive: managing the review sessions has not always been easy, because of the competition for time between substantive and process issues, but that is characteristic of this kind of event. What has been particularly gratifying has been the unsolicited reactions of former students working in social services departments after graduation, when they have encountered similar situations and have been able to understand them better in the light of their experience of the exercise. Indeed, in the terms of the original objectives about finding out what problems are endemic in the design of community care and what are attributable to specific local circumstances, it is clear that this 'stripped-down' version has much to offer: but a continual theme in the reviews has been the need to point out (particularly on the inter-group issues), that nothing and no-one had been 'set up' in advance. Emergent conflicts, problems and opportunities are revealed as features of the system, rather than the products of either tutor conspiracy or students being difficult.

Issues in Modelling

The creation of a simulation requires the reduction of reality to a model. Computer modelling is of course well-established, and the spreadsheet is a common tool for financial modelling: but when that modelling is undertaken for analytical purposes, the criterion of judgement is closeness to the system being modelled. When used for simulation purposes, the picture is complicated by issues of accessibility, comprehensibility and simplicity. Indeed in this case, one of the important requirements was to present the 'bare bones' of the community care system, rather than the idiosyncrasies of implementation which the students were encountering in practice.

The first and simplest issues concern the selection of facts. 'Unlocking Care Management', for example, presents a vast amount of information on each user, even including the addresses of next of kin and informal contacts. This requires the student to sift the information for relevance. Limitations of space and development time, as well as the slightly different emphasis of the exercise, led the exercise under discussion to present much more limited and hence selective information on each potential user. Naturally, one wished to provide all the necessary and relevant information to facilitate the needs-led assessment, but of course, that means that the assessing student is entitled to regard the information provided as necessary and sufficient, and to act purely on the basis of it. There is little scope for detective work, and questions such as, 'how does this person get her washing done?' and 'what happens to him at weekends?' had to be posed by the tutor, and of course answered speculatively.

Second, spreadsheets are excellent tools for mathematical modelling, but they presuppose quantifiable elements in the system, and the expression of mathematical relationships between them. In the community care simulation, this was a significant issue. The system is indeed driven by financial transactions, between purchasers and providers. For example, it fits with what the spreadsheet can model. However, financial considerations are not the whole story, even in community care; and yet it appeared that all modelled transactions had to be reduced to this level, thus reinforcing the views and prejudices of many students about the system.

At a more general level, the community care system is fuzzy, and standard computer applications are not good at modelling fuzzy systems (Kosko, 1994). The solution adopted in this exercise was effectively to export all the value decisions to the experiential component, hence the effort to convey that the spreadsheet was simply an information centre, and that the 'real work' went on apart from it. Thus the database of users and their needs can easily raise issues by postulating difficult cases, such as

the elderly person from an ethnic minority with little command of English, for whom there is no support service with staff who can speak her language. Indeed, there is a temptation to make all the cases pose problems at this level. It proved more effective to resist the temptation: the existence of almost ‘standard’ cases for whom purchasers could provide resource-led solutions which ignored aspects of need raised equally important questions about the typification of cases and the administratively convenient solutions which are too readily adopted by care managers under pressure (Zimmerman, 1969).

This suggests that the information centre, representing the system, is value-free: and yet that cannot be the case. First, the database of potential users contains 100 people: they were dealt with differently when students were instructed to deal with them from the top, on a ‘first come, first served’ basis, from when the students were asked to deal with them on the basis of priority and urgency, or again from when they were allowed to pick at random (when simple cases, for whom appropriate resources already existed, were dealt with first). No experimentation has yet taken place systematically varying the order of presentation of cases, but it is to be expected that quite different results would emerge under different conditions. The facts themselves are not value-free, and their selection is far from it.

D16		=SUM(D12:D15)			
RESOURCE A		Quality rating		Residential Care	
		5/10		[learning disabilities]	
To Grey Projection	To Yellow Projection	Week 1			
all costs weekly		Hours	Rate (p.a/p.hr)	Costs	Optional variations
Head of Centre		37	£18,000.00	£519.23	Vary hours and/or rate
Deputy		37	£15,500.00	£447.12	Vary hours and/or rate
168 hours basic		168	£4.06	£1,023.12	Vary hours and/or rate
Additional staff		33	£4.06	£200.97	Vary hours and/or rate
Sleep-ins (number)		7	£21.13	£221.87	Vary frequency and/or rate
Basic care staffing				£2,412.30	
Cook &		30	£4.21	£189.45	Vary hours and/or rate
domestic staffing		40	£3.80	£228.00	Vary hours and/or rate
Total staffing				£2,829.75	

Fig 1 Resource database

Second, however, the spreadsheet was not merely a database of ‘facts’: it also had to connect those facts, and every formula used implies a value-judgement, both in its very existence and in its action. So merely having a formula to keep a running total of the number of potential users provided for implies that it is important to know that number, and embodies assumptions about how they should

be counted. As one student pointed out, the expensive provision she was proposing for a woman with mental health problems would also reduce the probability of the department having to get involved with her three children; but that family system was counted as only one user in the running total.

In an effort to get away from the merely financial concerns of the model, two non-financial numerical indicators were developed, and here the necessity of value-judgements became even more apparent. One indicator was simple to institute, primarily because it is grossly over-simplified: this is a ‘Dependency Rating’, on a scale of 1 to 3, for all potential users. This was intended primarily to account for the impact which the arrival of a new resident might have on a residential establishment, and to require providers to make active decisions about whether or not to accept a resident, rather than simply seeking to fill beds. It raised interesting questions for providers, but in practice its existence in numerical form may well have excused them from making more detailed judgements, and hence examining the assumptions and values they used in making them. Moreover, there was some evidence that purchasers treated users differently according to this pre-emptive label: perhaps this rating should have been calculated by purchasers as a result of their assessment. This approach was not taken in the design to avoid the ‘micro-political’ issue for purchasers of whether to inflate the Dependency Rating in order to claim a higher level of service, or whether to play it down in the hope of persuading a provider to take the user on: but such an issue has its counterparts in the real world, and so perhaps it could have been incorporated.

The other indicator was a ‘quality rating’ for the residential and day-care resources. This was set at a default of 5, on a potential scale of 0 to 10. Establishments had to try both to maximise their quality ratings and keep their prices down to remain competitive: if the rating fell below 3, the managers received a message requiring them to inspect the establishment. The designer’s problem concerned how to reflect concrete features of the establishment in quality judgements. In practice, this was resolved by constructing an index which took into account staffing levels, staff training investment, expenditure on food and amenities, and so on. These were weighted (on the basis of guesswork, and hence of course on the designer’s assumptions about relative importance), and the final result was a function of these and the number and average dependency rating of the users. The limitations of this approach were exposed on the last exercise completed to date, when the providers running a residential establishment for people with learning difficulties decided, for the best motives, to dispense with the services of the cook. Their quality rating slumped.

Report as of	15.Feb.96	Week 1
Management	Known costs per week	£50,918.96
	Estimated costs per week	£14,204.55
	Costs per week	£65,123.51
	Average costs per user per week	£123.34
	Surplus/(Deficit) this week	£9,876.49
Purchasers	No of users provided for	0
	Users awaiting assistance	100
	Users requiring Review	0
	Total cost per week	£0.00
Providers	A (Residential Care: Learning Difficulties)	
	Places occupied	8 /20

Fig 2 Budget summary

The ensuing inspection exercise did confirm that in practice in the real world, such standard considerations as the cook's hours may well assume disproportionate significance in the official rating of an establishment: but that was not the intention, merely a response to the constraints imposed by numerical indices.

Time perspectives also lead to different value-judgements. The initial versions of the model took no account of time (other than, for example, the number of domiciliary care hours a user might receive). Progress and deterioration were left out of account. However, once the computer and the application used were capable of it, the model was made to reflect a year of working.

- Services could be used for defined periods and then had to be reviewed and modified;
- Providers had financial projections to work with, which required them to make judgements about usage rates; and
- Management had to make judgements about how long their budget would last.

The effects were considerable. Purchasers felt freer, but the management tended to become more conservative, querying care plans in case they should run out of money. There was also an interesting side-effect: progression and updating from week to week was achieved through a macro, which was run by the umpire (a tutor), who came under considerable pressure from all sectors not to run it (its effects being irreversible, short of returning to a previously saved version of the spreadsheet) on the grounds that the students were not ready. That does seem to reflect reality, although time in the real world is not so forgiving.

Much of the discussion surrounding the exercise concerned these value-judgements, as indeed it was intended that it should. Students working in different

sectors (purchasers, providers and management) were inclined to take up the corresponding positions, influenced by the boundaries of their roles. Sometimes the assumptions and value positions implicit in the spreadsheet were exposed and debated, as in the case of sacking the cook, but often they were not. The definitions of the situation, and indeed the imperatives, implicit in the spreadsheet were too readily accepted. The providers, for example, were furnished with a charted financial projection for each resource: among other things it conveyed the issue of the balance between capital and current costs in different kinds of agency. Members of the provider group were themselves a little dismayed to find how easily this chart seduced or dominated them: breaking even or making a substantial profit readily became a central concern. (Actually, it appears that it was the shape of the graph which was most important: the scale changed automatically to adjust to the projected figures, and participants paid more attention to seeking a steady upward curve than a fluctuating one, regardless of the absolute return on turnover). When group members berated each other for commercialism, the group rapidly came to a consensus rejecting it, but equally rapidly oscillated back when someone said (as they always did), 'Yes, but if it's not financially viable the users will suffer.' Perhaps this too was an accurate reflection of the real world.

More important, perhaps, was the way in which purchasers could construe users: they were, after all, merely brief case-studies on a computer screen who became entries on an assessment form. The purchasers never met them as real people, and the consequences of developing a particular package of care for them were purely speculative. As the exercise designer, I became well aware of this when I entered arbitrary packages to test the system: there was no feedback on the effectiveness or otherwise of the decisions arrived at, and little opportunity (apart from the referral information) to consult with or empower the users. All of that had to rely on the professionalism or even sheer goodwill of the purchasers. As this may simulate the bureaucratisation of the community care process, it may be realistic, but it will remain a severe limitation of this particular simulation. Unfortunately, the only alternative I can conceive of at present is the incorporation of a 'right' answer into the system and some means of testing the package developed in the exercise against it, and that is fraught with problems at humanitarian, professional and technical levels. Similarly, the review process for care packages is arbitrary: any information as to their effectiveness can only be supplied by extra-system intervention by the umpire.

Conclusion

Spreadsheets are basically suited to the modelling of technical systems and perhaps to the taste of the convergent thinker: experiential learning tends to suit the divergent thinker (cf. Hudson, 1967; Kolb, 1984). The community care simulation exercise demonstrates, albeit in a flawed way, the tension and also the complementarity between the two approaches. It certainly shows that while computer-aided learning has a useful part to play in this kind of practice education, there are considerable dangers in over-reliance on it.

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Client files in social work, from pen and paper to the portable computer

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Abstract

This report describes the development process and the main features of an integrated clinical information systems, used by the 300 social workers of the Flemish Christian Mutualities social work agencies. It outlines the different functions and opportunities of automated client files and discusses the consequences, both on a national and professional level.

Introduction

In social welfare in general and social work specifically, one works and thinks very incrementally about the usage of information technology. The nature of caring activities makes it less easy to embrace automation in daily work. In practice, we can find information technology in word processing and purely administrative tasks, the production of reports and standard letters and forms, often compiled by professionals but completed by administrative staff. Automated client information systems have been established, with the professional or administrative staff entering coded data about clients and their situation. This allows for structured data analysis. Automation can include expert systems, based on the entry of data and answering questions, resulting in a kind of advice about care, generated by the computer. One can, in bigger organisations, consult information based on mainframe computers to examine the actual state of more administrative client files.

A program that combined these functions as well as being user-friendly was, however, not available within the Flemish welfare services. The centres for general social work of the Christian Mutualities¹ urged their national organisation to develop an application for automated client files. The management of the National Secretariat granted this request, and decided to have a special program developed. Special attention was given to the integration of the program with other functions. All employees were involved in every phase of the development, to decide upon and evaluate the contents. Now all practitioners in these agencies work with a personal computer and this program, called ADORA. This practice report describes the development process, the contents of the program and its aims as well as its application within social work.

¹The Federation of Christian Mutualities unites 20 Flemish and 13 Walloon Mutualities. The national secretariat has a steering and supporting function for these organisations. The social work unit of this national secretariat has a similar function for the 20 Flemish social work services of the Christian mutualities. These services have been recognized by the Flemish community as centres for general social work. They have the commitment to provide care for persons with problems resulting from health problems.

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Selection process

The decision to automate

The decision to automate client files, as any significant decision, was influenced by a number of different issues. The starting point was the advancement of technology. An important aspect for social work is the combination of data entry and usability parallel with the automatic production of useful output.

Due to the increased cooperation between our social work services and the other services of the mutualities and the sharing of datasets, the introduction of information technology in the social work services could not be avoided. The resources need to be used better and more efficiently and more information is needed about service provision. In order to make this information useful on the national level, the National Secretariat decided to centralise and coordinate the developments. The availability of comparative data on the national level was something that in the past required a lot of calculations and interpretation.

The choice of hardware and software

Making a choice of specific hardware and software is not only a case of understanding the technologies, but also knowing the needs of the target group of users, the programs that will be used and last but not least, the organisation within which the application will run. No commercial software was available which offered an acceptable level of functionality.

The initial basic assumption of the project was that the application of information technology should support the practitioner in their daily work. The client file is the starting point of the application. A second priority was that data-entry and data-processing during care provision should automatically generate management information, without needing extra data-entry.

Given these basic requirements, preferences for hardware and software were easy to outline. The need for social workers to be mobile resulted in a decision to equip them with portable computers and install central desktop PCs in each social work office. This was achieved within budget because the central organisation negotiated the purchase. This reduced the cost price to about 2.500 Ecu's per unit.

The result

Development was initiated in August 1993. The name ADORA was chosen for the Windows based personal computer program. ADORA is an acronym and stands for 'geAutomatiseerd DOssier en Registratie Administratie' (Automated administration of client file and client information):

- 'geAutomatiseerd': on personal computer with a portable for each user. This creates a flexible mobile workforce.
- 'DOssier': the program has as the starting point the making of the information file, useful for both client and practitioner.
- 'Registratie': quantitative client information is an inherent trade-off. Manual forms no longer need to be compiled. A number of coded data items have been included in the client file from which a complete database is automatically generated.
- 'Administratie': when the program is implemented an important percentage of the administrative work can be substantially reduced. This includes writing letters or reports, maintenance of addresses or linking of data from the file with letters.

Policy and management information

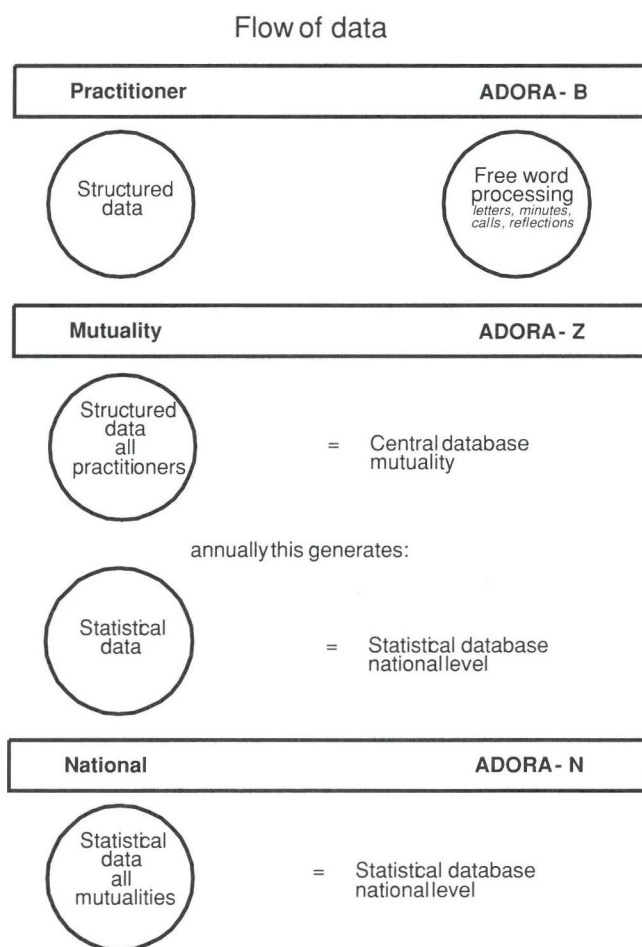


Figure 1 Policy and management information

Confidentiality

Access to the data is controlled by the use of key-diskettes and passwords. The data is saved in encrypted format to enhance security. Thus it cannot be accessed by unauthorized persons, who gain access to the database itself.

Each client has a record in which client information is assembled. Any number of files can be linked to each client record. The case record for each client includes notes on the work completed which can be used to brief the social worker prior to visits. Each practitioner has, through this file, access to a built-in client information database and an aid to reflection. Moreover, each unit has an elaborate and regionally adopted database of useful addresses (a 'social map'). Also, this resource base has been expanded with a national as well as a local aid on social legislation or other checklists.

The course of the data can be visualised in the following figure:

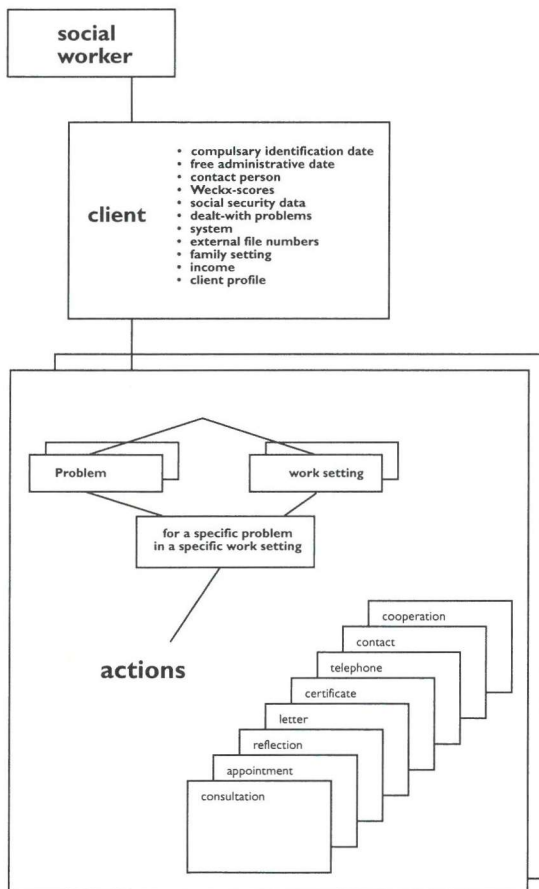


Figure 2 Client information

The data, entered by the practitioner in a coded format, is transferred to the central database ADORA-Z. All text data from the file are maintained in ADORA-B. From the central database statistical reports are made. All identifying information is removed to protect privacy of clients. Each mutuality will annually forward the set of

statistical data to the National Secretariat. The identity of individual practitioners is removed at this level.

Functions and extra opportunities with automated client files

The creation of client files in an agency or across agencies usually builds up in several phases and through several formats. Even when one starts from a standardised form or folder, the practitioner adapts these to their own style of work. Automated files though needing to have certain fixed fields should still allow flexibility.

A standardised file makes alterations easy or more meaningful, as the same logic can be found in every file. All activities can be consulted, as well as significant persons and contacts. The central screen looks as Fig 3:

The added benefit of automated data processing is, that similar data can be grouped and controlled. Planned activities such as, scheduling printing jobs and appointment diary. Browsing through a manual file or agenda should become unnecessary. The client files can be sorted alphabetically or by case type.

Apart from file maintenance, ADORA offers the opportunity to go beyond the individual file and do overall file management. This can be done by the practitioner. A number of other possible file handling activities can be done at the agency level. All files matching certain selection criteria can be grouped and shown. In that way, similar files with a mutual problem situation, or an appointment before or after a certain date can be grouped. Files can also be allocated to a closed or dormant category.

Central management includes a shift in attention from the individual practitioner towards the agency level. A central database allows files with similarities to be grouped e.g. by comparing their score on the scale of Weckx (regarding activities of daily living) or to do a mailing to groups of clients affected by recent changes in regulations. Files relating to more than one practitioner can be selected. It is also possible to search for and identify the practitioner relating to certain clients.

Statistical information on clients had been assembled separately from the client files. The client file was the basis for the client information system, but was done on separate paper-based forms. Previously, the daily overviews, agendas, week planning or separate monthly overviews were the basis for the client information system. ADORA combines the two functions (client files and client information system) into one program. Whilst using the client file, data items can be added, both by the supervisor or on closing the client file.

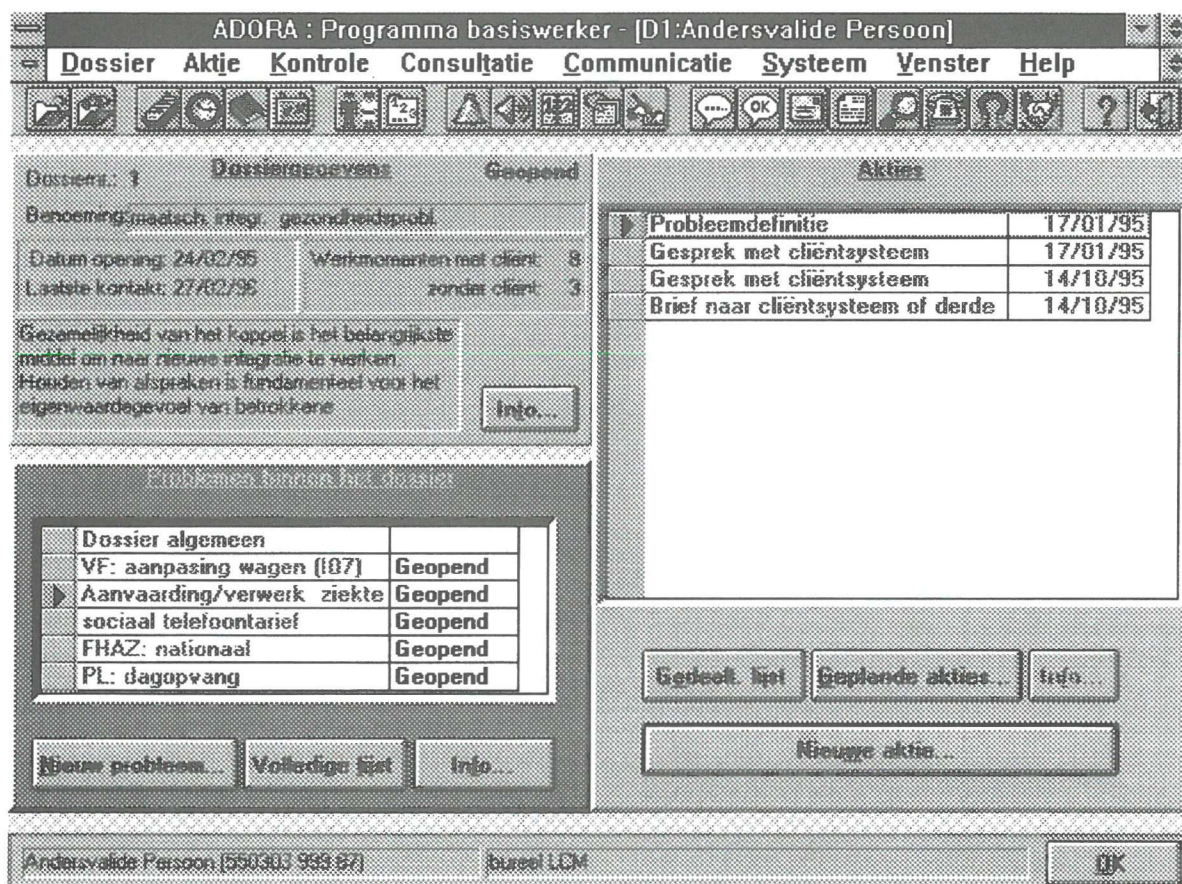


Figure 3 Screen of ADORA

Consequences for the general social work, on the national or mutuality level

Effects on the agency level

The implementation of information technology in an agency is more than the installation of a personal computer and exchange of pen and paper file for a program. As ADORA has been developed from a certain vision about the organisation of care provision (a specific practitioner for each client), problems such as shopping behaviour of clients, follow-up of one client by more than one practitioner or transfer of clients cannot completely be dealt with within the program.

The speed of the information flow can be increased, but only if comprehensive and clear procedures are outlined for all those involved.

Availability of data

The human services and especially the area of general social work is at the heart of the area of tension between qualitative and quantitative evaluation. The services offered by the staff of the general social work agencies is, by its nature, an interpersonal activity. Making this care provision visible, able to be evaluated and managed will always be a matter of both quantity and quality.

By using ADORA, a wealth of quantitative data will become available in the short term, be it on the level of the client or on the level of the care provision.

The screen shown in Fig 4 can be used on the agency level. One can generate frequency distribution on clients with at least one contact, the number of contacts per client, which actions have been taken for clients, which file categories have been used, what the geographical distribution of clients is. This data can be generated for the complete database or a part. Selections on the database can be done on dates, on number of sessions, home visits, office hours, or a selection of practitioners.

The client file in ADORA is comprehensive enough to include all necessary data from the care process. It is not possible or useful to complete all fields for short term contacts. It will improve the clarity for the care provider, as well as increase validity, if it is coordinated nationally and data reflects changing patterns of care provision.

Qualitative data regarding contents can also be generated. This is crucial to complement and give value to the quantitative data. It also makes it possible to support the practitioner in providing care to a quality level.

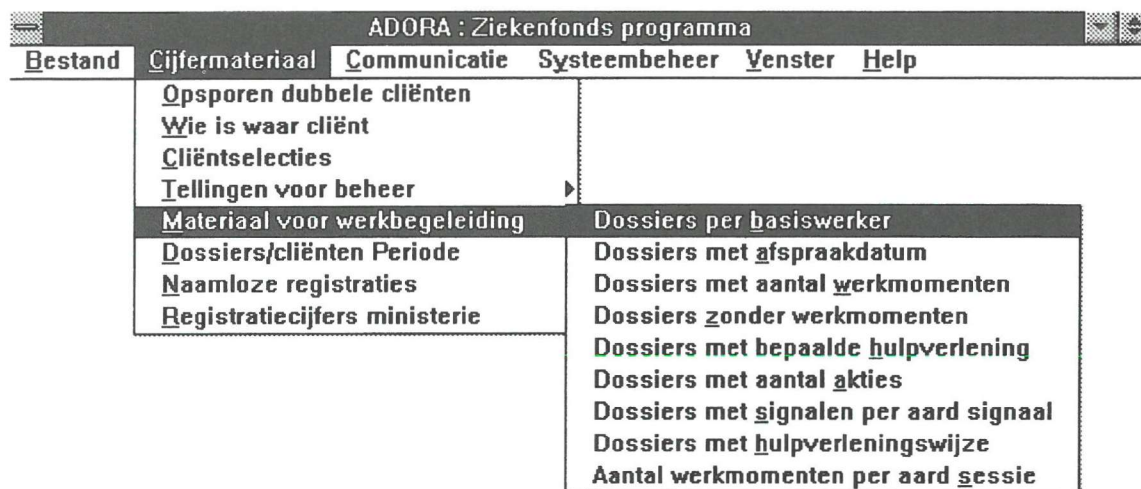


Figure 4 Management Information Screen

Image of the agency

The policy of an agency is based on the current 'image' or understanding, supported by available material, knowledge of the profession and the human services, by the strategies, aims of the organisation and the needs of the target group. The 'image' of the agency can be translated in propositions, pronouncements and hypotheses about the daily work. These hypotheses lead to the allocation of available funds. ADORA in future will be able to generate data against which these propositions and hypotheses can be checked. In order to make this validation happen it will be necessary to make the hypotheses explicit and to come to agreement on how to use the program and how to enter data.

One could for instance check the development of the number of files on home care. If one wishes to generate a clear picture however, previous agreement is necessary on which parameters result in assigning the label 'home care' to a file. The National Secretariat is currently developing a thesaurus of the different options within ADORA.

The intuitive images of the agencies, based on little empirical data, can now be mirrored with standardised data.

Consequences for the general social work, on the level of the practitioner

Effects on the daily work

For a number of practitioners the organisation of daily work, recording data and time sheets will be changed by the introduction of ADORA. The changes will include: typing rather than writing, letters will no longer be copied and archived, daily data entry becomes a necessity for good data management (not so crucial for paper files).

Availability of data

Data will be processed and be available immediately. With most client information systems, especially manual systems, the user has access to processed data only a long time after the data-entry. Recognizability and usability are in those situations limited. ADORA aims to link the effort of data-entry with immediate availability of data on the one hand, and extra features such as file selection on the other hand.

The information from the social map (information and referral system) is available immediately and permanently. The practitioner also has access to information about much-used social legislation, regulations and methodical checklists. The data on clients and files can also be retrieved immediately, wherever the practitioner is at that moment. Standard letters, reports and certificates can be made on the spot.

Image of the practitioner

The practitioner can also question the hypotheses that are being used in daily care provision. A number of questions might be:

- do I have too many/too few long term cases?
- this month has been hectic, is that confirmed by the data?
- is it right that I have a lot of files of a certain problem category?
- do all clients with a similar problem receive equal care?
- do the number of clients relate to the number of inhabitants?

- does a national policy on file closure result in better coordination in file closure?
- are there any client files that have not been opened for a specified period of time and that need to be closed or reactivated?

By using the information on a personal computer in combination with the support from the agency, the practitioner has the opportunity to check their own work profile against the available data.

Wanted and unwanted effects

If the program is being used solely to record more data on clients, ADORA will be used and considered to be a pure recording system. Only data that can be easily quantified will be entered. When no advantages are experienced by the practitioner and the client, minimal usage of ADORA will be made.

ADORA is an extensive program, mainly because the aim was to be as complete as possible and to link the client file system and the quantitative client information system.

Although the program is user friendly (Windows environment), the user sometimes has the experience that the package is too broad, especially for short term contacts with clients. Another concern from practitioners is that direct, individual contact with the client must not be replaced by data entry and administrative work. These persons define it as a shortcoming that the package does not give enough reflection on the professionalism of the practitioners. One can however say that the package is an aid; supporting file management, administration and client information. In the end, it can never replace the contacts in the care process.

Conclusion

ADORA has gone through the phases of introduction, testing and implementation in most of the agencies of general social work of the Christian Mutualities. The evaluation of the system in the light of necessary improvements can now start. Currently, the last development is taking place of ADORA-S, the module for statistical analysis. The National Secretariat has again chosen a project approach. This implies a number of pre-defined frequency distributions and crosstabulations. Moreover, every data item that has been entered in coded format can be a unit of analysis. In the near future, this data will need to be converted to the data format requested by the government.

The challenge for every individual practitioner is to have care provision supported by information technology. Avoiding a reverse scenario is crucial for the future.

For policy makers, the assembling of available data and the evaluation of choices about the data entry by the many social workers and agencies can be made. Training will be provided for the managers of the 20 agencies in the last phase, the statistical module. This enables them not only to use the application itself, but also to assess the value and opportunities of quantitative data. For them the challenge is, after control of reliability and validity of the data, to give new focus to their organisational goals and to provide their practitioners with a tool for quality improvement instead of a tool for increased managerial control.

HUSITA - 4

The main international conference regarding new technology in human services, the HUSITA conference, will take place in a few months time in Lapland, Finland. It's the fourth HUSITA conference and it follows the last edition in 1993, in Maastricht, the Netherlands. Currently, well over 130 presentations are scheduled.

The conference takes place at the University of Lapland from 12th June to 14th June. An international summer school is scheduled on Monday 10th of June.

Up to date information is available at the HUSITA 4 web site at <http://www.stakes.fi/husita.html>

Controversial Issues

Introduction

This new section in the journal aims to bring together subject authorities in a dialogue. The editors of the journal will pose a question. Two professionals are invited to write short responses taking opposing sides in the debate, being unaware of the identity of the other author at this stage. We may ask individuals to play 'devil's advocate'. We do so to raise issues concerning a particular subject. Once the original texts have been written, these as well as

the identity of the authors, are exchanged and a short rejoinder can be written by each of the authors. In this way, we hope to offer you a summarised lively debate on significant issues in our field of interest.

The first question we formulated for the controversial issues section was: do welfare benefit calculation systems reduce non-take up? We invited Gareth Morgan and Wim van Oorschot to conduct this debate.

Do welfare benefit calculation systems reduce non-take up?

Yes, computers can increase the take-up of benefits.

Gareth Morgan

There are a number of reasons why people do not receive benefits to which they are entitled:

- they may be ignorant of their entitlement to benefits;
- they may be ignorant of the existence of the benefit;
- they may be receiving the benefit but at a wrong rate of payment;
- they may be aware of potential or actual entitlement but be dissuaded from claiming by the difficulty of the process;
- they may be unwilling to claim for various good personal reasons or simply out of perversity.

The first three of these obstacles can be removed by the provision of information and advice in a form which is particularly amenable to the use of computers.

"The majority of people who used the computer learned they were eligible for benefit they were not receiving; many discovered they were entitled to a benefit they had never even heard of before." (Epstein, 1982, p.1) In a modern state with a complex interlinked system of social welfare benefits it is not possible for individual claimants to be au-fait with all the details of the benefits which may be available to them. This is recognised by the provision of, more or less, information about the existence and operation of schemes by official agencies, leaflets, advertising and by advisors such as social workers, Citizens Advice Bureau workers, charitable agencies and lawyers.

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Most advice provision has traditionally been geared to the answering of queries. A question is posed and an answer is received. With benefits entitlement this is often not good enough. '...people are generally uninformed about public services, and this means that they are not actively seeking information - from any source - about services they do not know exist and to which they have no notion of being entitled.' (Epstein, 1982, p.2) What can work better is a system which allows a person to describe their situation and to be informed about what that situation entitles them to. Such a holistic system, using much information in common to examine different possibilities, works well when computerised.

'...over one-quarter of the survey sample used the computer for some specific reason and found out that they may be entitled to money on a totally separate benefit that they hadn't been enquiring about. This is very important in view of what emerged in the staff interviews. It was common for staff at all agencies to say that when clients came in with a benefit question, it was easier and faster simply to give them a direct answer to that question, rather than going through a half-hour session with the computer (or making the client go through a half-hour session with the computer).'' (Epstein, 1982, p.25)

Even where advisors have the resources to be able to give the time to examine in detail the circumstances of a client this does not necessarily mean that they will be able to provide the same quality of information about these complex, formulae ridden benefits. The social worker does not often enter the profession because of a love for difficult mathematics.

A university social work course compared the performance of students who had the use of the Maximiser computer program compared to those using traditional handbooks and leaflets.

'Previous experience of welfare benefits work had no effect on the scores in either the test cases or the knowledge test. Few students reported having substantial work experience in welfare benefits but it is nevertheless surprising that it had no effect. Similarly surprising was the lack of effect of previous teaching. This had no effect on the students' ability to calculate entitlement. What clearly made the difference between high and low scores was using the computerised benefit package' (Hayes & Acton, 1991, p. 8)

The authors were surprised at the results of the comparison but felt that the results were clear, the computer users produced more accurate information.

'Our hypothesis at the beginning of this project was that those students who had both undertaken a course in welfare benefits and had the training session with

Maximiser would score noticeably higher than the other groups on both the knowledge test and the test cases. Our results clearly do not support this. The significant factor in enabling our students to identify and calculate entitlement to benefits was the use of the computer program and previous teaching was insignificant in helping them to do this.' (Hayes & Acton, 1991, p. 9)

The same findings have been made in other research, additionally it is frequently shown that advisors who rely upon their own experience and knowledge are frequently out of date with current rules for benefit award.

'Not surprisingly subjects were able to produce more accurate results using the computer system. Though many errors did occur. These were often mistakes in inputting information or incorrect reading of the problem. Unexpectedly, experienced subjects did significantly worse than inexperienced subjects using the leaflet system. It appeared, in at least a few cases, that experienced subjects had outdated or incorrect ideas about how the benefit system worked and tended to apply these without looking in detail at the leaflets.' (Jones, 1987)

One of the major users of computers to provide information about benefits entitlement in the UK has been the Employment Services agency. Since 1988 they have used Ferret's In-Work Helper program to offer advice about entitlement to benefits to job seekers. The program calculates such items as the 'better-off' figure (the wage at which a claimant becomes better off working and claiming benefits available to workers than remaining on out of work benefits) and benefits over a range of earnings as well as individual benefits entitlement. These calculations would be impractical to carry out by hand because of the numerous iterative calculations involved.

'"Better-off" calculations: The regulations are so complex and interactive that ordinary people simply cannot calculate accurately whether they will be better off in work, and there is a lot of mythology and guesswork (usually pessimistic). Many participants (single parents for example) wildly overestimated what they would need to earn to be better off. Having access to a precise calculation from IWBP is therefore extremely valuable - and that is a service well worth publicising in its own right. Having a specific figure can dispel uncertainty and breed confidence, as well as correcting misconceptions. This in itself can be motivating.' (Hedges, 1993)

The ability to quickly and accurately check the figures of benefit which are being paid to claimants is a particularly effective way of increasing the amount of benefit in payment. Many benefits in payment have been calculated incorrectly. In the UK, Department of Social Security error rates for Income Support, the main means tested benefit, in the latest report run from 16% to 36%.

'The main cause of error was failure to obtain sufficient evidence before making a decision' (Chief Adjudication Officer, 1994) There are no precise figures on the amounts of error or which errors result in over or under payments, but most welfare rights workers would say firmly that in the vast majority of incorrect assessments claimants are being underpaid rather than overpaid. One of the often expressed reasons for underpayment of benefits is that the officer makes incorrect assumptions about the claimant and simply does not ask the relevant questions which would increase their entitlement. Computers, of course, always ask the questions.

I would argue strongly that informing a client of his or her entitlement to a calculated amount of a particular benefit is particularly persuasive in motivating them to take up that benefit and that computers with good benefits advice systems are an effective way of achieving this.

There is criticism of computerised benefits advice, coming sometimes from those who believe that computers in some way 'come between' the worker and the client. There is a feeling expressed that the client feels dehumanised by the process although most evidence points the other way, 'People who used the computer preferred that way of getting information to any other they had tried' (Epstein, 1982, p.36) and social workers in turn have been criticised for their reluctance to take up such tools.

Another fundamental issue is the empowerment of service users. The lack of universal implementation in social work agencies of, for example, welfare benefits programs, coupled with long-standing traditions of lack of service-user power in the social work relationship lead one to question whether the goal of client empowerment - as opposed to client independence (i.e. getting the client off the books) - is actually taken seriously. (Phillips, 1989)

The major criticism frequently expressed is that computers are too slow, that it's quicker to do calculations by hand.

'Virtually all staff members commented on the length of time the computer takes, saying they could answer a simple direct question so much quicker. What many professional workers fail to realise is that though they can answer a question quickly, they cannot answer the unasked question. Most people do not even know what is relevant to ask. The program is long because it covers all areas, professional workers do not. The second thing to note about the length of the program is that hardly any members of the public complained it took too much time. In fact, just the opposite - again and again people told us how much faster it was - than DHSS, UBO, Social Services, even CAB to some extent. What the professionals do not appreciate is that people do not object to long periods of receiving service and attention; what they do object to is long periods of waiting for service and attention.' (Epstein, 1982, p.65)

No, computers do not increase the take-up of benefits.

Wim van Oorschot

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Whether welfare benefit calculation systems can reduce non-take-up of benefits depends wholly on the question whether such systems and their practical applications are able to remove the causes of non-take-up sufficiently. Having studied the extent and causes of non-take-up for some years I do not believe they can.

Non-take-up is not the result of a single factor, not even of a relatively small number of factors. Instead, causal factors are numerous and present at different levels of scheme structure, administration and clients. I do not believe that one single new tool, like a benefit calculation system, is able to tackle this causal complexity. Furthermore, in the total process of realizing rights to benefits, the calculation of entitlements - by administrators or clients - is only one small step.

For about twenty years now benefit calculation and expert systems have been developed and applied in nearly all countries with well-developed social security systems, and in none of them has a serious reduction of non-take-up has occurred yet (e.g. in the United Kingdom and the Netherlands). To explain my reservations more clearly I would like to point to the fact that non-take-up of entitlements to welfare benefits is very closely linked to means testing (Van Oorschot, 1991 and 1995). Studies from a number of different countries show that non-take up of means-tested benefits is never less than 10 to 15 percent, but on average between 30 and 40 per cent (Zedlewski & Meyer, 1987, Bendick, 1980, Van Oorschot,

1991 & 1995). Non take-up of non means-tested benefits, on the contrary, is very rare. Means-testing, i.e. making entitlement to a benefit dependent on people's and their spouse's resources, is a way of targeting welfare selectively to those who are in greatest need and at the same time morally 'deserving' support by society. In practice means-testing implies a number of things, some of which are known to be important causes of non-take-up. The most crucial of these are complexity of scheme rules, discretion for administrators and stigmatization of clients. No doubt computerised calculation systems, let alone more sophisticated expert systems, can and will be adequate tools for coping with the complexity of means-tested benefits. That is their strong point. They may even reduce, be it only partly, the discretionary power which the administrator has over the client (which reduction, however, will be dimmed by the administrator's greater control over the calculation or expert system). I do not see, how in practice, such systems can do away with the stigmatization problem. In theory one could imagine a situation of complete anonymity, in which feelings of humiliation and degradation will be minimized: the client feeds a user-friendly computer system with the necessary data and the payment of the benefit follows automatically. However, I do not think that it will ever come so far, since means-tested benefits are also a means of controlling and policing the poor, which implies that society will always feel the need for personal contacts between welfare administrations and clients: they have to show up, hold up their hands, prove that they are honest and trying their best to escape dependency etc. We must not forget that there is a deep-rooted antipathy in society against making things as easy as possible for the poor or let them do as they like. So, it is in the structure and purpose of means-tested benefits itself that calculation systems can only have a limited effect upon take-up.

Another crucial reason for this is present at the administrative level and can be referred to shortly as 'passivity of the administration'. One of the main conclusions of my empirical studies on the problem of non take-up is that factors at this particular level are of critical importance. The extent and quality of information and advice activities of administrative bodies have a strong and direct effect on take-up. Where administrators are active in this respect, they can reduce non take-up substantially. Not only of the benefit(s) they are responsible for themselves, but also of other benefits administered by other bodies. By creating an overall information context the take-up of a number of benefits encompassed in this context can easily be stimulated mutually (as has been shown by the municipal social service of the Dutch city of Nijmegen). However, what I also have found is that only very few administrative bodies in the field of social security actually are active. Most of them in fact care little about the problem of non take-up: their ambitions and feelings

of responsibility do not seem to go beyond just being there for those active citizens who appear before their desks and ask to be helped. In other words, the dominant attitude of and within administrative bodies towards welfare clients is 'take-it-or-leave-it'. If this mentality does not change I do not see that substantial reductions of non-take-up can be the result of the application of new technologies by these bodies. Such technology is only a tool, and as with all tools, its use and effects depend mostly on how they are applied, by whom and with what intention and purpose.

Finally, not only administrators are passive. The same is true for a large section of their clients. Clients' passivity in the process of realizing rights manifests itself mainly in two ways. One is that usually a substantial number of eligible people do not take a firm decision whether or not to claim, and among those who do, many make a decision only after delay. The other is that people usually do not actively monitor or seek information, with the result that, if decisions are taken, they tend to be based on relatively little information. As for the passive deciding behaviour of clients - the 'non-deciding' and the delayed deciding - I do not think that new technologies can easily have a positive influence. For, such passive behaviour is the result of cultural and personal factors, rather than of the actual availability of information and advice and the actual form in which they are present. As outlined above, many welfare clients do not actively search for information. This means that just giving them the possibility of making use of new technology in the different stages of claiming is not enough. As with written and oral forms of information and advice 'reaching out' to clients is most important. The possibility of using new technology by clients has thus actively to be turned into a reality. Clearly, people with low incomes, who form the target population for most means-tested benefits, are usually not 'calculating citizens' who actively scan the provisions of the welfare state and pick out rationally those items to which they think they might be entitled. Rather, their passivity in this respect should form the premise for the design of schemes and of administrative practices. The latter including the application of benefit calculation systems.

Rejoinders

Gareth Morgan

I find myself agreeing with much that Wim van Oorschot wrote in his article. Indeed we appear not to be arguing about the same thing. I argue from the stand point of an ex-practitioner who sees a computerised welfare benefits calculation system as a tool for assisting the take-up of benefits by individual clients and not as a tool for solving the structural problems of a benefits system.

Even were the resources given to provide such a tool to every relevant agency in a country, I agree that this would be extremely unlikely to provide 100% take-up of welfare benefits.

I also agree with the premise that the actions of the administrative bodies of benefits are likely to have a particularly strong and direct effect on take-up. However where, as in the United Kingdom, there is a strong and well developed independent advice and advocacy network the actions of those people may also have a strong and direct effect upon the take-up of some benefits. This has been seen on a number of recent occasions where the campaigning of such agencies has been so effective that the Government has changed the rules in order effectively to reduce the costs involved. It should also be recognised that the majority of users of computer systems designed to offer advice to benefits claimants in the UK are not from the agencies which administer or award the benefits but from organisations which tend to a more critical view of the benefits system.

When the present 'income-related benefits' system was initially established in the United Kingdom in 1988 one of the factors in its design was the removal, to a very large extent, of any discretion available to administrators in determining the entitlement to and the amount of means tested benefits. This was specifically so that the schemes could be more easily computerised for administrative convenience. As the regulations were drafted in this way it is much easier for a computer to decide upon a definite entitlement to an amount of benefit than is the case in countries where discretion still plays a part in the calculation.

Interesting things can however be done with computer systems designed for administrative use as is shown in the UK where a number of systems for housing benefit and council tax benefit schemes administered by local councils have been used by welfare rights units as campaigning tools. Programs have been used which make use of the data recorded for these local benefits to decide whether there is a possible entitlement to any state benefits, particularly disability benefit entitlements and these initiatives have proven to be extremely useful on a local level.

Further modern welfare benefits advice programs have moved beyond the area of means tested benefits as the technology permits the incorporation of more text based information containing law, precedent and commentary in such a way that the more discretionary award of benefits can be described and modelled as advisory tools upon computers.

As Wim van Oorschot says the client group most likely to benefit from computerised welfare benefit systems tend not to be those who actively seek or trawl for information and it is precisely because of this that many agencies now use computers as a part of their general activities. When in contact with clients with a wide range of presenting problems, not necessarily even financial, it is common practice to run a benefits entitlement check on the client. Poverty is recognised as being a cause of many other problems and illnesses and the provision of competent advice will often depend upon a precise awareness of benefit entitlement.

In summary, the computer program provides a tool which can make the non-specialist almost as effective as an experienced specialist (and certainly more accurate), and the more effective the worker the more benefit will be taken up.

Wim van Oorschot

I agree with Gareth Morgan that computers can increase the take-up of benefits in the ways he sketches. Indeed, the obstacle of ignorance can be removed by the provision of information and advice in a form which is particularly amenable to the use of computer. It is true that most people do not actively seek for information, or that administrators usually do not scan all possibilities for their clients, and that therefore the computer's possibility of offering better-off and 'holistic' calculations is a strong plus. There is no doubt that using the computer will mostly result in more accurate, less erroneous calculations and decisions. Clearly, all of this is to the benefit of take-up.

However, my point is that the application of computers will not reduce non take-up substantially, since the situations which are described by Morgan are all situations in which administrators or clients actually have access to computers and do really use them. At this moment, I think, clients lack sufficient access to the computers (not in the least due to their own passivity) and most of them who have access will experience high thresholds in using them. Also with regard to administrators the core of the problem is their passivity, as I have emphasized in my statement. What is needed more than using computers at their desks and offering clients access to them, is to actively 'reach out' to clients.

I believe that computers can only reduce non take-up substantially when they are brought into action in a way such that the barrier of administrators' and clients' passivity either is broken through or overtaken in one way or another. A prerequisite for this to happen will be that computers have entered the daily life of ordinary people, comparable to the degree in which television has done. We are not that far as yet.

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Ferret Information Systems Ltd is a Cardiff based organisation producing a number of products for human services. Their managing Director Gareth Morgan contributed to this issue in the controversial issues section. Last September, Ferret Information Systems organised a succesful conference on Advice and Information in the Community. The full text of the contributions to this conference have now been made available at their web site at <http://www.ferret.co.uk/>

Reviews

Information Technology and Human Services, More than Computers?

Reviewed by Neil Ballantyne

Steyaert, J. (Ed.) (1996), *Information Technology and Human Services, More than Computers?* Utrecht, NIZW - Causa, 202 p., ISBN 90 5050372 1

The papers in this edited volume were first presented at the Causa/ENITH 5 conference organised by Causa and held in Eindhoven in September 1995. The conference focused on the information technology implications of the profound changes in social policy that have swept most western countries in the last fifteen years. The papers in this book explore these changes within three sections: paying for care; care management; and professional practice. It includes fourteen papers from an international group of authors - all distinguished experts in their respective fields. Each section begins with a keynote paper written from a 'visionary perspective', followed by other authors who reflect critically on the keynote paper.

Jan Steyaert introduces the book with a very helpful overview of the relationship between social policy, IT and human services. Ignace Snellen follows with a global perspective highlighting the dynamic relationship between societal developments; changes in the way governments govern; and developments in information and communications technology.

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Paying for Care

The common trend of most western states away from collective provisions and towards the marketisation of welfare services is evident within all three of the papers in this first section. Howard Glennerster explains the demographic and economic forces necessitating radical alterations in the way governments fund social welfare services. He goes on to outline the techniques employed by governments to contain rising expenditure, and the need for information technology to assist in the rational allocation of scarce resources.

Greater targeting and means testing of welfare benefits has complicated legislation and procedures. Gareth Morgan describes how new technology is helping to cut through complex benefits legislation to provide service users and professionals with accurate and up to date information. The view that recipients of welfare benefits are empowered in their new role as customers of welfare services is, Morgan suggests, a myth. However, he argues that new technology applications in the welfare rights field may support them in their struggle against bureaucracy.

Peter Roosenboom discusses three phases in the development of administrative arrangements for providing care: from bureaucratic control, through management control, to market control by the use of voucher systems and client based budgets.

Roosenboom argues that an emerging role for information technology will be providing market information on likely customer choices and preferences.

Care Management

Hans van Ewijk begins the second section with an optimistic view of the new willingness amongst different welfare professions and services to collaborate in designing packages of care tailored to individual need. Van Ewijk suggests that this new 'open care environment' needs to be complemented with a relational database approach to IT enabling service users and professionals to plan together appropriate packages of care.

Nick Gould takes a more sceptical stance towards claims of user empowerment and the rationality of market mechanisms. Gould outlines care management developments in the UK and describes a conceptual model incorporating three levels of planning. He considers the relational database approach suggested by van Ewijk as too limiting and argues instead for care management information systems that are flexible, provide qualitative information, and enable networking and information sharing.

A complex web of independent service providers offer welfare services in the Netherlands. Eddie van Hierden describes an information system for managing and coordinating care between agencies in the youth services field. The system he describes seems to be a way of limiting the 'shopping around' behaviour of service users and his paper raises many unanswered questions about data protection and rights.

Jos Aarts ends this section describing the IT implications of increased accountability in the health care sector in the Netherlands.

Professional Practice

In the final section Walter Hudson argues that social workers need to meet increasing demands for accountability and provide evidence of effectiveness by concerning themselves with the outcomes of their actions. Hudson goes on to outline a specific model of Empirical Social Work Practice. The model involves measuring change in response to treatment by the use of software to administer individual quantitative tests and scales, combined with time series monitoring and evaluation.

As other contributors point out, Hudson's model is not appropriate to all, or many, human service settings. It fails to capture the rich complexity of human lives and situations, and leaves to one side the importance of the reasoned judgement and experience of the human services practitioner in effecting change. Gail Auslander critiques Hudson's single systems methodology and commends an information system in use in a health setting in Israel. The system she describes enables practitioners and managers to obtain reports on aggregated data in response to queries, gaining useful information for practice.

Joe Ravetz's paper offers a devastating critique of all attempts to apply rule-based systems to the essentially ill structured domain of most human service agencies. Tom van Yperen suggests modifications to Hudson's model by introducing the notion of goal directed practice. Finally, Sylvia Hoekstra describes developments in the functional mapping and measurement of outcomes in the field of nursing care.

The debate over social work as art or science gets a good airing throughout this section, but I cannot help feeling that an opportunity to discuss a whole raft of other practice issues was lost. Not least amongst which are the potential uses of electronic networking, the Internet, and the world wide web.

Conclusions

There are problems inherent in any text attempting to generalise about international trends in social welfare. The degree of convergence amongst welfare systems can be overstated; and differences in value systems, social and economic context, and administrative arrangements are de-emphasised. Nonetheless, there is considerable insight to be gained from the macro perspectives offered by the contributors to this volume.

The papers themselves vary widely in the clarity and detail of their argument. The best offer a comprehensive review of the area under discussion and include references for further reading. However, all of them are, in their own way, engaging and thought provoking. This is a book that deserves a place on the shelf of reflective human service managers and practitioners everywhere. Don't expect to find neat solutions to the problems of providing welfare services in post-industrial society. Do expect a stimulating tour of the IT and human service themes and issues emerging across the western world at the end of the 20th century.

Both Sides, Technology and Human Services

reviewed by Albert Visser

Kolleck, B. & Rafferty, J. (Eds.) (1995), *Both sides: technology and human services*, Alice Salomon School of Social Work, Berlin, ISBN 3-930523-60-4

In reviewing this (to my knowledge) first electronic book in the field of Human Services, entitled *Both Sides, Technology and Human Services*, there are two main elements to consider: besides the contents there is the very remarkable way it is presented.

How to read this book?

To tell the truth, for a reader of paperbacks, this is a challenge. Now you have got a book that does not look like a book, and you even cannot handle it like a book. Not easy to read it in the bath or in bed. It has to be treated as if it is *work* and taken to the office or desk and loaded into a computer. Then there are two choices, based upon the level of your computer equipment: - if you have a modem and Windows, you can use Internet (World Wide Web); if your computer is setup in the right way the WWW option is easiest: start your Web browser and go to <http://enith.asfh-berlin.de/> and there you are, start reading. If you don't have a browser, you can use the diskette and you will be reading the book 'off line'. To read it this way you need to be rather familiar with computers and software. You need to know how to make directories, copy and extract files and even find out what to do by reading the 'read.me file', etc. But then ... you can read the book.

Why would one want to publish a book this way?

The editors write about it: *'The decision to publish through the WWW was not taken lightly by the publisher (Alice Salomon School of Social Work). Much of the work on the book was undertaken using electronic mail. It was felt that the time had come to use the technology that is growing phenomenally fast on a global scale to promote and disseminate discussion and debate on the use of Information Technology in the Human Services. Hopefully readers will be able to select the papers of most interest and link directly to them, perhaps downloading on to their own computers those they wish to keep. The copyright of the papers belongs to the School but papers may be printed out and used for individual study, though they may not be photocopied and distributed for profit. If you have your own Web page we are happy for you to add a link into this text via the URL'*

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This clearly gives indications of differences between paperbacks and electronic books: If texts are already available in electronic format, they don't have to be transferred to paper. It does not have to be printed. This will increasingly be the case, as writers use computers in their writing process and they deliver their texts on disk to their publisher. If the subject is information technology it makes sense to use information technology for publishing; You can read (or download) those parts that are most of interest to you, so you don't have to have the complete version (more or less a 'personal book', publishing on demand); You can even add your own remarks to the texts you have downloaded (as I did with the citation above and partly for information about the contents of the book that is in the next paragraph); this makes the retyping of texts unnecessary. There is also a negative aspect; although copyright is restricted and legalised, you lose control over the contents. Anybody can, after downloading, add their own comments and even publish it under their own name. It can sometimes be difficult to prove what and how much is stolen.

These points make it important to consider how you want to publish your texts. If you stress the fact that you want (world) wide dissemination and you want to reach as many people as possible and you don't need to earn money with it: publish it electronically. You do have to realise, that people without computers cannot read your work. If you want to get paid for your work you still need the old fashioned paper-publishing way.

Publishers are also very much concerned with the phenomenon of electronic publishing. With the rise of importance of Internet and the increasing possibilities of electronic payments on the Internet, publishers will start making their products available through WWW.

About the contents

The book has developed from the cooperation and collaboration which is the hallmark of the European Network for Information Technology in the Human Services (ENITH). This is a network of practitioners and academics who share a common idea; based on their concern that the implementation of Information Technology should advantage human service users and professional care workers as well as the IT industry and the business sectors. Hence the title of the book: Both Sides: Technology and Human Services.

The papers in this book were first presented at the 4th ENITH Conference, September 1994 in Berlin, hosted by the Alice Salomon School of Social Work.

The hypertext book is divided into four chapters; the introductory chapter sets the scene and gives an overview of the papers. Chapter Two focuses on Support for Clients. The criteria for inclusion in this chapter is that the paper deals with issues and tools which directly impact on the citizen or client of services. One of the interesting papers is that of Berndt Kirchlechner. He summarises in his paper, Client Advice Software, A Counselling Program, a survey on his social benefits calculation program SOLDI which is distributed on a non-profit basis. It is designed to be used by experts and clients to give information on their entitlement to social benefits. While the survey shows that the use of the system by clients is uncomplicated, in most cases, the use by clients is still unsatisfactory. Reasons are seen to be in social workers resistance to handing over parts of their competence to a computer program as well as the widespread suspicion of exaggerated demands and abuse of the social system. For these reasons, local governments often do not support public installations of the system.

The common theme linking the papers in Chapter Three is the concentration on theory and tools that support professional workers and managers in social welfare. Chapter Four includes five papers dealing with the use of technology in human services education. While databases

are commonly considered to provide data which represent external realities, Andy Bilson confronts this perspective with the constructionalist view that observers participate in the construction of the reality they experience. In his paper he argues that knowledge is a result of interpretation, of understanding and experiencing whilst interacting. Not only external facts are relevant, but also the intentions of observers. Consequences from this critical analysis are the necessity to introduce reflection and critique into the processes of information technology. The paper outlines how the theoretical approach should be applied to teaching social work students and that project oriented learning should be preferred to other forms of training.

The collection of papers in the book ranges widely both geographically and from a subject perspective. Though the subjects of the papers will be familiar to readers of Human Services and Information Technology literature they show a deeper and more critical analysis than was possible in earlier writing. The countries represented from Western Europe but extending as far as India illustrate the common preoccupations of those in countries with similar political and societal structures but also serve well to remind us that not all populations enjoy the same level of affluence and social welfare and technology infrastructures.

A final remark

In spite of the fact, that I could not read this book, leaning back in an armchair, I liked reading it this way. The added value is, that I could make a next step from just reading: the electronic format makes it possible to add comments to it, to make selections and to make new combinations. Of course this needs a very responsible attitude: copyrights have to be respected! Although the editors have been rather reluctant with it, it is also possible to make more hypertext links within and between texts. Not to speak of the opportunities of full use of WWW and linking to other sources of information. In using these techniques we could come to more profound discussions on important issues in the field of Human Services.

Electronic Tools for Social Work Practice and Education

reviewed by Norman Smith

Resnick, H.(Ed.) (1994), *Electronic Tools for Social Work Practice and Education*, The Haworth Press, New York, 405 p., ISBN 1-56024-658-8

There is much talk about the negative effects computer games have on people, particularly children. Concerns about the interaction of people and technology and the possible resultant social and psychological problems are not new, similar issues were raised when TV and the cinema first appeared. Advocating the use of computer games as a tool for the helping professional however on first consideration could seem slightly at odds with the human service practitioners' basic humanistic stance as opposed to a mechanistic one.

The collection of thirty three papers edited by Hy Resnick under the title 'Electronic Tools for Social Work Practice and Education' published by The Haworth Press Inc, simultaneously published in *Computers in Human Services*, in reality focuses on computer games, simulations and interactive videodisc programs. It gives us an opportunity to examine some of the games currently being used but also the rationale for games and simulations in a human service context. The book is divided into a number of sections and sub sections which at times is confusing since some papers are repetitive with regards to the history of games and simulation.

Broadly the areas covered are first a review and statement regarding the differences and similarities between games and simulation. However the two terms are difficult to tease out since the two concepts are not mutually exclusive at a practical level some simulations may be presented in game form. Two sections cover programs suitable for work with youth, followed by the area of adults and then work with the elderly. Section three is devoted to electronic tools for education and training. The penultimate section deals with practical issues and to conclude the future of electronic technology in Human Service practice and education is discussed. The book finishes with very useful bibliography.

It is surprising that no attention was given to the use of gaming and simulation with physically disabled persons since these are used particularly with those who have head injuries to improve spatial functioning or where motor coordination needs strengthening. Despite this omission there is enough variety in the kinds of games described which stretches across a wide age range; children and the cognitively impaired frail elderly for example.

Anyone with a beginning interest or curiosity in the subject should find enough variety to satisfy themselves as to the type of game or simulation available. They should, more importantly, be able to grasp the underlying rationale for the games use and its basic treatment or helping approach. Sadly one paper by its brevity, two and a half pages, leaves a lot to be desired although its summary indicates the potential for a very interesting paper.

Whilst the book is well worth reading and makes a useful contribution to the growing work in this area, as well as being a useful reference point I suspect that it will only attract the aficionados. This is a pity since this is a good and user friendly way of attracting colleagues who may still not yet have toyed with the technology.

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On the editors' desk

The following publications have come to the editors' attention. Several of these will be reviewed in the following issues of this journal.

Steyaert, J., Colombi, D. and Rafferty, J. (Eds) (1996), *Human services and information technology, an international perspective*, Arena, Aldershot, pp. 288 pages, in press

Building on the ENITH book published at the HUSITA 3 conference in 1993, this publication brings together seventeen country reports on the use of information technology in the human services. Countries represented here range from most European countries, Canada, USA and Japan to Australia and Micronesia. These reports are 'sandwiched' in between a substantial introductory chapter 'setting the scene' and a challenging final analysis chapter 'rhythms of our future'. Each HUSITA 4 participant will receive a free copy of this publication.

Roe, P. (Ed.) (1995), *Telecommunications for all, Commission of the European Communities*, Brussels, 299 p., ISBN not available

For many years the European Union has supported the usage of telematics by elderly and disabled users. This was done by the funding and coordination of research and development projects under the policy and management of TIDE (Technology applications for the integration of the disabled and elderly, DG XIII). These innovative, experimental projects are unfortunately so much on the frontline of the future, that their immediate relevance to the current life circumstances of elderly or disabled persons is not always apparent. For this reason, the European Union has enabled the publication of a comprehensive overview, to enable one to see the wood for the trees. Under the title *Telecommunications for all*, Patrick Roe brings together 22 contributions about specific applications of technology for either elderly or disabled people. Subjects covered are the development of standards

and marketing issues, but above all practical instruments such as videophones, alarm systems, smart houses, smart cards and the like. The book is a sequel to an earlier publication, *Issues in telecommunication and disability* by Stephen von Tetzchner.

Reading of this publication gives access to the current state of affairs in this area. For those who might still hesitate, **this book is available free of charge** by sending your faxed request to Dr Jan Ekberg, COST 219, STAKES, Finland, at fax number +358 0 3967 3054

Kerslake, A. & Gould, N. (Eds) (1996), *Information management in social services*, Avebury, Aldershot, 99 p., ISBN 1 85972 293 8

This edited volume brings together a number of British contributions on the use of information in social service departments. It's core thesis is that information is not on the edges of daily practice in these services, but the backbone of the organisations. Hence, application of information technology is not a cosmetic innovation, but touches the heart of social services.

Phillips, D. & Berman, Y. (1995), *Human services in the age of new technology: harmonising social work and computerisation*, Avebury, Aldershot, 151 p., ISBN 1-85972-128-1

Contrary to the common belief that information technology does not go along with the person-oriented value base of social work, this publication argues that "computers, if appropriately used, can be a major asset to even the most individualistic and person-centred social worker". It argues this case by providing numerous examples of how computerisation may be to the direct benefit of clients.