

Executive Summary

Regina Health District Home Care (RHDHC) is currently developing a long term plan that includes a strategy for the use of new and mobile information technology. The purpose of the plan is to develop a systematic approach for handling increasing demands on its services, financial tensions and pressures to integrate with acute care oriented organizations. One proposal involves an information management system (IM system) that would allow staff to work more independently in the community using new mobile technology. Staff would visit clients and use mobile computers to access needed information and update client files. Currently, client files are in a hard copy format, which limits staff time and resources. For example, a client's file is now retrieved from and returned to the central office, so that any emergency calls in off-hours can be handled appropriately. This requires staff to make several trips to the central office each day.

In this report, I examine the consequences of implementing an information management system that uses mobile computer technology, and I make recommendations about an appropriate implementation process for Regina Health District Home Care. To do this, I examined the details of the proposed IM system, compared this to the goals and objectives of Regina Health District Home Care. Secondly, I completed a literature review and then surveyed both the staff and management.

I found that the IM system complemented the goals and objectives of Regina Health District Home Care. This was especially true in terms of assisting Regina Health District Home Care in many of its initiatives and "challenges for the future". Furthermore, the Health District has committed itself to increasing resource expenditures in the area of IT (Regina Health District Community Services, Home Care, "Presentation -

Board of Directors, April 25, 1996; Regina Health District, "1996/1997 Management Plan", p. 6).

From the senior management team perspective, Regina Health District Home Care's current information management system does not allow for fast, easy access to information, particularly client information, that is timely or accurate. This means that all staff, including field staff, do not have all the information they need to provide quality client care and information for planning and administration is limited. Information errors, duplication, missed client appointments, lack of historical client information, lack of communication within RHDHC and between RHDHC and its clients are all problems that face the organization. An analysis of the interview data revealed that there was some consensus among the senior managers that the proposed IT system would solve these problems. Client information, including demographics and assessment information, would be collected quickly and in a format more accessible for all staff, as well as service information for scheduling, billing and payroll, and caseload management. This information would be used for budgeting, scheduling, monitoring of staff, projecting workloads, billing, inventory of supplies, better determination of overall client characteristics, monitoring client outcomes, and assisting with strategic planning.

Staff participation in the planning and implementation of the project will be essential for its success. Therefore, staff perspectives on the current IM system, suggestions for improvement, and their reaction to the proposed IT system were gathered. Unfortunately, response to the staff survey was quite low, 9.4%. This low rate means that any analysis of the data would not necessarily reflect the feelings and opinions of the entire RHDHC staff. Therefore some assumptions about the feelings and opinions of the

other 90.4% of staff were made. A finding from the literature review is that employee participation can be a very powerful tool in successful implementation. Unfortunately, it seems that RHDHC management has failed to include employees in previous planning and decision making processes. Sixty-two percent of respondents (26) said that they did not feel their needs were considered when a change was made at RHDHC. Furthermore, 71% of respondents (30) had never participated in a planning process at RHDHC and most had not been asked to participate. A small number of respondents (9) said that they would not be willing to participate. However, an incentive, such as approved work time, could persuade most (6 of 9) to participate if asked. An historical lack of employee participation, and busy schedules may account for the very low response rate to the survey. If this is so, then there seems to be either an overwhelming sense of powerlessness or indifference for staff. This will prove to be a difficult barrier for RHDHC's implementation of the IT system.

Notably, there was a significant number (36%) of respondents (15) that said they would like more monitoring of their work. As well, the senior management team identified the improvement of client care as one of the most important objectives for the proposed IM system. If management uses the IT to its full advantage, IT should give RHDHC the opportunity to fulfill the staff's request and improve client care. This benefit will prove to a critical focal point for RHDHC's implementation process.

A significant finding of the staff survey was that staff feel that they do not spend enough time on documentation. I speculate that this is an underlying cause of some of the information problems that RHDHC is experiencing, for example, incomplete records. As well, there was misunderstanding by survey respondents about what information is

collected by RHDHC. In my recommendations I argue that as part of the IT project RHDHC staff will have to complete an information need analysis and definition exercise and that it may be necessary to review work tasks and scheduling to allow for more time on documentation. Possibly this could be completed by having everyone record their activities in a journal.

After cross - referencing survey data and the results of the literature review, I conclude that RHDHC has some information management needs that IT may be able to fulfill and RHDHC should therefore *consider* using this technology in its operations. In order to undertake such a project it is necessary that RHDHC take some careful and conscientious steps in a long implementation process. First, RHDHC must include staff and management as much as possible in the decision to use the IM and the planning and design process. This can be accomplished by continuing, to expand its use of a 'continuous learning model' and moving towards a participatory work environment. It is also suggested that RHDHC creates a project team using a "joint user-specialist" framework with representatives from management, the affiliated professional staff, nurses, program support workers, and home aides.

Secondly, RHDHC must clearly and comprehensively define the project and understand the costs and benefits of using information technology in its operations. If the system is more costly than beneficial or adequate financing cannot be found then the project should be reconsidered or discontinued.

If RHDHC then decides to use IT in their organization, it is important for them to keep in mind that imprudently planned IT projects are notorious for negative impacts on organizations. Consequently, some careful thought about system design, how to secure

commitment from staff and management, and how to successfully implement the project is essential. I recommend that RHDHC use a Project Champion and Project Sponsor, and a Prototyping and/or Phased Introduction Implementation Strategy for implementing their IT project. I also recommend that RHDHC should seriously consider hiring on a permanent "IT Manager", this person may be someone already on staff who is designated to the design team to learn about IT and RHDHC's system in particular. I also warn of various purchasing scams, checking service availability and avoiding lock-in contracts when purchasing an IT system. Moreover, I argue that training and support will be essential to the success of this project.

Information privacy is demanded by law in health care, and IT brings with it new responsibilities to protect privacy. In my recommendations, I propose that RHDHC develop a new privacy policy based on the codes of conduct developed by the Canadian Health Records Association, and the Canadian Organization for the Advancement of Computers in Health. I also recommend that RHDHC consult with the developers of the Saskatchewan Health Information Network (or even use the same IT company) on the design of a new IT system. In the future, it is important that RHDHC's IT system be able to easily connect with the new Saskatchewan Health Information Network. This network will eventually be a fully integrated system and be useful in providing a continuum of care.