The real value of IT

Remember the American Hospital Supplies case in the early 1990s? By giving its clients ordering systems for its products, AHS was able to push out the competition and maintain its preferred position, enabling the company to achieve a significant competitive advantage. The case gained international renown as a prime example of the strategic use of IT. The AHS case is relevant to the ongoing discussion about the value of IT and how it can best be realized. Trade journals and other publications often limit the discussion to the value IT can have within a project or within the limits of an organization. Examples of how IT can serve as a tool for solving problems in society are few and far between.

The article on 'Inventing Wellness Systems for Aging in Place' is an exception. It examines the social issue of the added value IT can have for the time bomb ticking away under many Western countries: the double problem of the ageing population. Not only are more people living longer, but these people are also living to a much older age. Consequences include an increase in certain age-related health problems such as senility and diabetes, a need for (many) more people to care for the elderly, (much) higher costs of healthcare, and relatively fewer young people to pay for those costs. Allies and enemies alike agree that the healthcare system cannot possibly be continued indefinitely in its current form.

"What does that have to do with me, as a reader of IT Management Select?" you may ask. The answer is simple: a great deal. First and foremost, you yourself will someday be a senior citizen and a potential future client of the healthcare system. Gaining an idea of the healthcare of tomorrow and the future seems only prudent. Moreover, it is likely that you work for an organization that provides services and/or products to consumers. IT may be able to realize a paradigm shift in healthcare. In addition, each of us may face a future in which IT permeates the home and its surroundings, even extending to your own body. Possible uses go far beyond healthcare to include many different functions, including personal safety and security, comfort, entertainment, etc.

What directions can IT take to help solve the issue presented here? The following is a sampling of the options for using IT in healthcare for people at home:

- People can stay living in their own homes for longer. It fits with the trend toward extramural care, in which many senior citizens prefer to grow older in their own, familiar surroundings rather than in a nursing home or in group care. In most cases, the costs of extramural care are substantially lower than an intramural solution. There are a number of ways that technology can help people live at home longer, including:
  - Prevention. Technology can help to diagnose some illnesses more quickly, such as senility. This makes it possible to begin treatment earlier.
  - Assurance of unplanned care. One of the main reasons for admitting people to a nursing home is the certainty that care is available quickly if it becomes necessary.

Technology can offer that assurance at a distance. Current solutions generally use a two-way intercom-like system. Video communication can improve on that option.
    - Support for the chronically ill. Some health problems, such as asthma, require a daily routine with specific exercises for therapeutic purposes. By supervising the activities from a distance, it is possible to extend the period at home between intramural therapy sessions.
- The efficiency of the existing care and nursing in people's homes can be improved. IT can be used to facilitate that improvement by:
    - Various forms of telemonitoring. This could include certain diagnoses that can regularly be carried out at home with relatively simple equipment, communicating the recorded values online.
    - Reducing the healthcare demand. This could include the use of video instruction at a distance to explain how to use certain medical aids.
    - Supporting volunteer aid. Support for volunteer workers reduces the need for professional care. This could include the use of tracking systems for senile senior citizens, eliminating the need for a volunteer to be on duty 24 hours a day.

It goes without saying that IT is not an end in itself, here or in any situation. A solution appropriate to the specific problem is crucial. For many people, the concept of 'IT in healthcare' evokes an association with distance, coldness and alienation. Many of the recent initiatives for healthcare-related IT in the home are based on a common principle: a two-way connection, often broadband (in the Netherlands, this includes e.g. VieDome, CamCare, Thuiszorg-on-line and ZorgTV). The video communication is precisely the point here, because not only can it support telecare and telemonitoring, but it also facilitates all sorts of communication that improves the quality of life. It opens a door for these people to communicate with their friends, family, neighbors, fellow patients and others. The testimonials provided by the people using the first services offered only confirm this. Moreover, some health insurance companies are already considering compensating their senior citizens for their broadband connection. The reason is not hard to deduce. Many demands on the healthcare system are essentially rooted in social isolation. Broadband video contacts can help prevent such isolation from developing, thus reducing the costs of healthcare.

'The real value of IT' may sound terribly pretentious. However, if the use of IT can prevent the healthcare system from running aground due to a lack of sufficient manpower – some studies predict a demand on the healthcare system in some Western countries by 2015 which will require one-third of the professional population to provide healthcare for bedridden patients – or due to prohibitively high costs, then it will truly be a major achievement.

On behalf of the editorial staff,

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