Assessing the value of electronic records

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Background With the introduction of electronic records, some nurses have expressed concern about the length of time they spend inputting data on computers.

Aim To explore mental health nurses’ views about computer use when engaging with patients in care planning, and to investigate how electronic records contribute to improving service user involvement and care planning in mental health services.

Method A literature review and a descriptive survey based on a questionnaire distributed to 10 wards.

Results Respondents raised several concerns about electronic records and patient contact. They called for more training specifically on electronic care plans. Concerns were voiced about duplication of work, with nurses continuing to use paper then rewriting on a computer, leaving less time for patient care. A shortage of computers and a lack of space where nurses and patients could meet and develop the electronic care plan together were also issues. A stated benefit was that patient information was easier to read.

Conclusion Ongoing training, availability of interview rooms, staff attitudes and evaluation of electronic care plans in terms of patient care, interaction between nurses and patients, and partnership working need to be addressed.

High-quality care depends on good information being accessible when and where it is needed. One way to achieve this is through the use of electronic health records (Department of Health, 1998). An electronic health record has been defined as a “repository of patient data in a digital form, stored and exchanged securely, and accessible by multiple authorised users. It contains retrospective, concurrent and prospective information, and its primary purpose is to support continuing, efficient and quality integrated healthcare”, and is usually a mixture of unstructured narrative text and coded data (Häyrinen et al, 2008). The Department of Health (1998) distinguishes between
“Change can be difficult. You may need to take two steps backwards to take one step forward”

Anne Marshall p45

Electronic health records and electronic patient records:
- Electronic health records are longitudinal records that follow patients’ care for a lifetime;
- Electronic patient records describe the records relating to periodic care given by one provider.

Although there has been much concern within the Department of Health and parliament about the NHS IT strategy and its cost, the DH’s aim is that all electronic patient records across services will be linked to form electronic health records.

This study looked at electronic patient records within one service from a nursing perspective.

Electronic records are used daily in relation to care plans. They have many benefits. For example, they can be accessed without the need to go to where paper records are kept, and information given to patients from these records is more legible than that written by hand. It is easier for managers to audit the quality of electronic record-keeping than audit large amounts of paper files. Ideally, using electronic records should mean nurses spend less time completing documentation and more on direct patient care.

Background
In 2005, Poissant et al conducted a review of the literature on the use of electronic patient records in the US and found conflicting evidence. They looked at 11 studies in relation to nursing care and found six reported the records led to less time being spent on documentation, while two suggested they increased the time spent on documentation.

In mental health services, concerns are routinely raised about the amount of paperwork and the fact that it reduces time for direct care. Poissant et al (2005) suggested documentation time was reduced if a bedside terminal was used to complete records, but not if a computer in a central station was used. In many settings, the only computers available are fixed in central stations such as the main office.

Documentation is more than a paper exercise. Berg (1998) stated that compiling a nursing record is a sociological process as well as a cognitive one. One-to-one interaction is central to nursing and nurses have to meet with patients to assess their needs, plan their care, deliver interventions and evaluate care. What is documented should be the information gathered from consulting or observing patients.

With paper documents, nurses and patients can discuss, write and agree together what was decided in a meeting.

Since computers are often located in a central office, the crafting of the care plan is generally completed separately from patients. Even though it should still follow a discussion with the patient concerned, this could create a barrier in a physical as well as psychological sense between nurses and patients.

Laptops or tablet PCs are useful for taking notes while meeting with patients, avoiding the need for nurses to retreat into offices to write up care plans. The information can then be uploaded on to the main computer or server without the nurse having to type up handwritten notes. This saves time and enables patients to be more involved in the writing of their care plans.

We decided to set up a project to explore mental health nurses’ views about using computers when engaging with service users in care planning. The aim was to establish to what extent electronic records could contribute to improvement in service user involvement and care planning in mental health services.

Methodology
We used a descriptive 19-question survey to find out nurses’ attitudes towards electronic records and patient contact. Questionnaires were distributed to 10 acute and forensic wards; they were left in a box on each ward with instructions and a response deadline. This resulted in 73 being returned.

Findings
There were 36 female and 37 male respondents. The age range was skewed towards older nurses (57 were aged 36 or over), which may have a bearing on the computer literacy and competence of the respondents. Younger people are more likely to have used computers at home and in school so may not be as hesitant in using technology as some older nurses.

An electronic patient record system was being implemented across the trust at the time. Known as RiO, it enables information about patients to be collected, stored, reviewed and, where authorised, disseminated to the multidisciplinary team. Fig 1 shows the frequency of nurses’ use of computers for care plans.

RiO allows for quick access on a 24-hour basis for all practitioners who may be involved in patient care. This allows staff who may be involved in “crisis” situations with patients to access accurate, up-to-date, patient-focused information. Details such as patient demographics, care plans, risk management strategies and contingency plans can improve the treatment responses and interventions available. The system also enables clinicians to involve patients – where practicable – in their care.

We asked the nurses if they had received RiO training; just 20 said they had.
Given the continuing move towards electronic care plans, we asked nurses if they had received any training specifically on computerised care plans and if they needed or would like this. Given that most use computers for care plans on a daily basis, it is important the workforce is competent in using RiO so that time is not wasted inputting data. Forty said they had not received any specific training on computerised care plans and 52 said they would like some training.

Asked whether they were alone or with patients when inputting data for care plans, only four respondents said they were with patients. However, 26 said they met with their allocated patients weekly, 29 daily, and 12 said they met on request or at any time.

Of 65 responses to a question on whether electronic records have improved one-to-one contact with patients, only 28 were positive. Several comments suggested electronic records were taking time away from patients; these included “Less patient contact”, “Records not integrated with day-to-day care”, “Too few computers so one cannot use them with patients” and “Computers take up more time”. Some of the more positive comments were: “Notes are now easier to read and accessible”, “Able to spend more time with patients” and “Legibility no longer an issue”.

Asked whether electronic records had affected the amount of contact time with patients in the past 12 months, 22 nurses said they had less time, 32 said they had the same and 10 that they had more time with patients. While this may seem to contradict the greater number of negative responses to the previous question, that related to quality rather than quantity of time. A number of previous comments had suggested that most ward environments were not conducive to spending uninterrupted time with patients in a private space to fill in electronic health records. However, 36 respondents said they did have private places available, which suggests that while more private spaces may be needed others simply need staff to be able to use computers in them. Comments included: “No computer in the interview rooms”, “Laptop only available in ward rounds”, and “Whatever room is available”.

Further questions asked if nurses knew how to use tablet PCs, laptops or slates, and, if these were available in their areas of work, whether they help to improve one-to-one contact with patients for writing up care plans. Most comments were positive and suggested that portable devices could enhance patient contact and save time. Responses included: “You could type the care plan while having the conversation – it makes sense,” and “If a laptop that could be taken anywhere, it would save a lot of time.”

There were also some negative comments, including: “Computer and typing skills would still be a problem for some nurses” and “Not all patients are aware of electronic records.”

We asked nurses what they thought was the most limiting factor in enhancing one-to-one working and electronic records. Training needs, room availability and nurses’ attitudes were popular responses (Fig 2).

Our request for any other comments elicited the following:

“If the electronic system is more consistent and reliable, then staff will have confidence in it. Staff need positive feedback and reassurance in how they are performing and not [to] be criticised for what they are not doing. This will help improve the quality of work and additional resources will make options more flexible and mean that patients will be more involved in their care.”

“The use of electronic equipment could be counterproductive to the clinical session.”

“There has been an increase in workload but staffing does not reflect proportionally, hence difficult to take on new systems.”

“Electronic records are useful but problems can arise when working with staff who are not trained in the system or have no access, for example agency nurses.”

“Notes are too often handwritten and then have to be typed electronically.”

“Electronic data records are the future and in a decade will really help.”

“We only have access to two desktop computers on the ward!”

“Electronic care plans are easier to read and understand.”

Discussion
Most respondents said they needed more training specifically on electronic care planning, as much of this is not done with the patient and some fears were expressed regarding possible damage to computers and issues of confidentiality and whether patients should be able to write/type into their own records. How they should handle such issues was a concern but this may have been staff anxiety due to a changing system. Plans tend to be written on paper with the patient, then rewritten on a computer; this takes more time, leaving less time to spend with the patient. The Nursing and Midwifery Council acknowledges that “electronic records are evolving and it is clear that paper-based records are still commonly used” (NMC, 2010).

There were concerns about the number of computers and space available to meet with patients and develop electronic care plans together, but it was suggested that some areas were beginning to use laptops that provided more flexibility. Although concerns were expressed about possible damage if laptops were taken away from the office, on a positive note it was suggested that typed patient information is easier to read. The factors limiting the use of electronic health records most were said to be a need for more training, availability of equipment and nurses’ attitudes towards this technology.

There are clear indications that ongoing evaluation is needed to ascertain whether electronic records result in more or less nurse-patient interaction.

Conclusion
From our survey findings, we would recommend the following:
- The availability of private/quiet rooms to meet with patients for electronic record development needs to be improved;
- Nurses to be given specific training in electronic care planning;
- Provision of laptops/tablet PCs with the ability to upload information should be considered;
- Further assessment of nurses’ opinions/attitudes of one-to-one working should be undertaken.

While electronic records clearly have many benefits, more needs to be done to ensure nurses are able to make the most of them to increase service user involvement and enhance patient care.

References


