



FOCUS ON RESEARCH

INTEGRATING PATIENT ACQUIRED TELEHEALTHCARE-GENERATED DATA WITH THE GENERAL PRACTICE ELECTRONIC HEALTH RECORD: EXPLORING THE VIEWS OF PRIMARY CARE STAFF

Researchers

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Background

Telehealthcare involving the remote monitoring of patients with chronic diseases such as diabetes, lung disease and heart failure, is increasingly being introduced in the UK. However, current systems do not integrate the patients' data (e.g. recordings of blood pressure, blood sugar, oxygen saturations) into their GP electronic health records (EHRs).

Aims

We aimed to determine the acceptability and clinical usefulness to health care practitioners of an information technology (IT) system which can combine data collected remotely by patients with their EHR.

Project outline/Methodology

20 healthcare practitioners (10 GPs, 8 practice nurses and 2 physios) within the NHS Lothian Health Board area, Scotland were shown a demonstration of a new IT system which featured such integration and interviewed to obtain their views on the system. Interviews were recorded, transcribed and analysed to identify themes.

Key results

Factors which would drive practitioners to use this system were simplicity, enhanced patient care, confidentiality and financial reimbursement. Barriers to the system were practitioners' familiarity with IT, problems experienced in implementing other IT systems and, in particular, the compatibility of the system with normal working ethos and practices.

The introduction of this system may change the way in which care is delivered, including the relationships of practitioners with patients, and also with other care providers.

Participants identified benefits of the integrated system, but also risks of which increasing workload was the greatest concern. Surprisingly, legal considerations were not of major concern.

Detailed discussion of the optimal pathway for data to be delivered was used to generate a data pathway

modeled on practitioners' preferences; designing the data flows to be as similar as possible to those of their existing results, e.g. blood results/via Docman, featured as a key element.

Conclusions

This study confirms the acceptability and usefulness of this system amongst healthcare practitioners, as long as it is compatible with their existing care practices and normal data flows. The study has also provided us with clear guidance of the system design preferred by practitioners.

What does this study add to the field?

Investigating integrated telehealthcare systems is a novel area and the information gathered here can significantly contribute to future systems development.

Implications for practice or policy

Considerable investment has already been committed to the implementation of telehealthcare policies within Scotland. However, driving practitioners to adopt these systems has often proved challenging. Integration of telehealth data with EHR has been proposed as a method of increasing the acceptability and utility of these systems within primary care. This study provides valuable insight into the drivers and barriers to the adoption of such a system, including a model pathway designed by practitioners that could be utilised by the NHS in the development and implementation of any future telehealthcare system.

Where to next?

Future research should include:

- collaboration with software developers to design integrated telehealth systems based on the specifications of practitioners in this study
- action research to evaluate the use of these systems in primary care

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