



# FOCUS ON RESEARCH

## THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY TO INTEGRATE THE PREOPERATIVE ASSESSMENT OF PATIENTS AWAITING SURGERY ACROSS PRIMARY AND SECONDARY CARE IN SCOTLAND

### Researchers

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### Aim

To evaluate information management (IM) processes across primary and secondary care in the course of the patient surgical pathway in NHS Scotland; develop recommendations for improving the integration of clinical information into the preoperative assessment (POA) process and examine barriers and facilitators of IT information integration across the patient pathway.

### Project Outline/Methodology

We undertook a meta-review of POA processes; visited surgical pre-assessment clinics (PAC) in all health-boards of Scotland; and carried out semi-structured interviews (n=45) with key members of the preoperative multi-disciplinary team (MDT) and with GPs from 9 health-boards (n=25). We also conducted a focus group with members of the Electronic Patient Record Programme, a focus group with GPs and 1 interview with a SCI (Scottish Care Information) Gateway system developer. Data were analysed using process-mapping techniques and qualitative methods. We used Normalisation Process Theory as the conceptual framework to interpret the barriers and facilitators of information integration across the patient pathway.

### Key Results

#### Metareview:

- Current practices of POA are suboptimal
- Evidence underpinning existing practices is weak
- There is a need for greater standardisation of processes of medical information collection, physical examination, and risk assessment

#### Primary Care:

- Primary Care Computing: While the majority of GPs interviewed considered electronic information management systems (IMS) essential many were not fully satisfied with the functionalities of the IMS.
- Electronic Referrals: GPs believed eReferral through the national SCI Gateway system streamlined referral processes
- Post-Operative Discharge: Almost all GPs reported marked variability in the quality of discharge information. GPs suggested that a national electronic discharge system would significantly facilitate their

work and promote continuity of care.

#### Secondary Care:

- POA processes vary significantly across Scotland, with most services using paper based systems, considerable duplication of effort and insufficient use made of information provided through the referral
- 3 health-boards have implemented POA IMSs. These have transformed clinical practices and facilitated communication and information-sharing among the MDT and across the health-boards. Other services are keen to do the same but need additional resources to enable service redesign.
- There is a lack of evaluation of PACs effectiveness across Scotland.

### Conclusions

Substantial progress has been made towards improving information transfer and sharing within the surgical pathway but there remains scope for further improvements at the interface between services.

### What does this study add to the field?

This is the first holistic study of IM processes across the patient pathway. Key facilitators to the successful implementation of national and regional services (eReferral, clinical portal) such as the effort put into policy building and engagement with stakeholders and barriers such as lack of IT training, a lack of inter-professional communication, the lack of integration of IMS, the lack of effective utilisation of referral information, the poor coordination of discharge documentation, have been identified.

### Implications for Practice or Policy

PACs are at the intersection between multiple hospital services and surgical specialties and effectively managing communication and interaction between various services and care providers requires institutional and health-board wide support.

### Where to next?

The development of best-practice guidance for POA and systems to assess effectiveness are strategic priorities to promote continuity of care and improve clinical outcomes for patients.

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