Chapter 57
Hoping for the Best: A Qualitative Study of Information Technology in Primary Care

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ABSTRACT
Primary care involves collaboration by diverse, geographically dispersed health professionals, and presents unique challenges for IT. In Ireland, cross-disciplinary primary care teams are being established and extensive IT support is planned, including shared electronic patient records. To uncover factors that affect the implementation and use of IT in primary care, in-depth interviews were conducted with Irish primary care practitioners and IT specialists. The results suggest a widespread belief in the potential of IT to transform service delivery. However, substantial business change will also be needed to address longstanding process problems, barriers to information sharing, and a lack of integration. At present, health practitioners lack the time, knowledge, and resources to make best use of new IT. While progress at the national level has been slow, a regional or local approach to IT provision, with appropriate standards to facilitate information sharing, may offer better chances of success.

INTRODUCTION
Primary care is the provision of health services within the community; the first point of contact and “front line” of healthcare. This chapter describes research on information technology (IT) support for primary care in the Republic of Ireland. The Irish health system faces growing challenges, including increasing demand for health services from an ageing population and severe budget restrictions. In an attempt to improve efficiency and quality, primary care teams have been established, bringing together practitioners from different disciplines. Supporting IT systems are planned including shared electronic patient records and automated referral systems.

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Primary care presents unique challenges for IT, for several reasons. Historically, primary care professionals have made limited use of IT and the introduction of a shared patient record represents a major departure. Primary care is a collaborative process performed by a wide range of participants, including General Practitioners (GPs), community nurses, therapists and managers, as well as non-healthcare practitioners such as social workers and home helps (Schoen et al., 2006). The collaboration spans departments and disciplines, which have their own established practices, standards and norms. The participants are dispersed throughout the community, and travel a great deal; care is often delivered in the home and tends to last for long periods. Together, these factors mean that IT implementation in primary care is particularly complex (Baron, 2009). Primary and secondary care services are interdependent, and the Irish system relies heavily on hospital-based care; this is considered unsustainable. The aim is to provide more services locally (HSE, 2006).

This study examines the factors that affect implementation and use of IT in primary care. The potential of IT to transform primary care is widely acknowledged, but significant barriers must be overcome (Kim et al., 2009). We wanted to discover, from those with experience of using and supporting IT in primary care, what issues affect the use of IT and how they might be addressed. The chapter is structured as follows: the next section gives background on healthcare IT and describes the research methods used; results are then presented, and the chapter concludes with discussion of implications and suggestions for further work.

BACKGROUND

In healthcare, IT is generally viewed as infrastructure that can improve clinical processes and outcomes (Parker, 2006). However, low levels of IT investment (approximately 2% of budget on average, compared with 5–10% in manufacturing industries) can hinder innovation (Protti, 2005). Failures in health IT projects often stem from human factors including communication issues, cultural differences, under-estimation of complexity, scope creep, organisational inertia, lack of IT skills, insufficient training, high workload and weak leadership (Kaplan & Harris-Salamone, 2009). These causes reflect “the cognitive complexity, socio-cultural aspects, and labour-intensive nature of modern medicine” (Sistrom, 2005:440). Healthcare work is complex; many of its primary tasks are cognitive rather than physical, and personal interaction is integral (Khudair & Cooke, 2008). Success in healthcare IT projects is subjective and multi-faceted (Marc Berg, 2001). Risk management is important when making IT-led changes, since positive outcomes are not guaranteed. For example, computerising physician order entry can decrease adverse drug events but also facilitate prescribing errors, leading to increased mortality (Mills et al., 2009).

Primary Care in Ireland

The Irish Government’s primary care strategy is focused on primary care teams and networks (DHC, 2001). 530 teams are planned before 2012, each enabling up to 8,000 people to access healthcare services locally (Table 1) (HSE, 2010). Most primary care workers are government employees; the GPs are private contractors. The teams are supported by networks of specialists including chiropodists, pharmacists, community welfare officers, dentists, dieticians, psychologists and speech and language therapists.

“Transformation development” officers have been recruited to facilitate the move to team-based working. However, industrial relations have impacted on plans to redeploy staff and to alter reporting relationships in order to reflect the new team structures. It is hoped that a national agreement will help create a basis for change (HSE, 2010). A preliminary evaluation of the primary care programme identified several barriers to implementation, including lack of suitable ac-