

## DEVELOPMENT OF PRIMARY, COMMUNITY AND CONTINUING CARE (PCCC) ICT STRATEGY AND ACTION PLAN SUMMARY OF OUTPUTS FROM USER WORKSHOPS

This Briefing Paper is a summary of the main findings from a series of user workshops undertaken in November and December 2004 as part of the development of a PCCC ICT Strategy and Action Plan. This paper is available from the Primary Care Task Force web site: [www.primarycare.ie](http://www.primarycare.ie)

### Background

The Primary Care Strategy, *Primary Care: A New Direction*, recognises the crucial role that information and communications technology (ICT) can play in supporting and facilitating health service reform and particularly the development of more integrated primary, community and continuing care (PCCC) services.

A project has been established to develop a PCCC ICT Strategy and Action Plan, which is being carried out by Secta Consulting. The primary objective of the project is to define a strategic approach for ICT development in Primary, Community and Continuing Care that is aligned to the service model and objectives in *Primary Care: A New Direction*, and forms a key component of the implementation of *Health Information: A National Strategy* and the national Strategic ICT Framework, *Embedding the 'e' in Health*.

This Briefing Paper summarises the outputs from a series of 5 multidisciplinary workshops, involving approximately 350 people across the country, the aims of which were:

- To highlight the most common interface challenges (in respect of the information required to support the care pathway) within and across care sectors;
- To identify the core business information requirements to support the primary care model and deliver person centred care;
- To gather views and recommendations for the ICT support priorities for primary care;
- To elicit views of the potential challenges for implementation, to inform the strategy and action plan.

### Current Context – The Information and Interface Challenges

The main interface and information challenges identified at the five workshops are:

**Information for the Public** – There is very little information available directly to members of the public, to inform them about self-care, healthy lifestyles or where to access services, if required. Without adequate emphasis on information provision; public empowerment and importantly health promotion, there is an over emphasis upon service delivery and disease management. PCCC professionals want a greater emphasis upon disease prevention and best utilisation of services.

**Demographics/Case History/Risk Information** – There is currently no way of singly recording basic and important information about the individual which can be simply transferred to other professionals/organisations. There are limited protocols and procedures for joint practice and joint communication. As a result, it is difficult to trace an individual either through a range of care settings in the management of one care episode, or throughout his or her lifetime to provide appropriate care from 'cradle to grave'.

**Referral & Discharge Process and Interdependent Communications** – Because of the lack of developed communication procedures and protocols, once an individual requires care from one or more professionals or organisations, information and care transfer can be difficult. The most problematic area is between the PCCC and the hospital sectors, although it is recognised that this is an issue across the whole health system.

**Multiple Input/Flagging** – It is accordingly very difficult to know how many professionals and/or agencies are intervening with a particular individual and/or family. There is no straightforward way to 'flag' requirements to other professionals in order to co-ordinate or time interventions. This can have serious consequences in emergency situations/protection issues.

**Support for Discharge/Self Care/Long Term Conditions** – Because of the difficulty in smoothly transferring care management information, artificial delay and/or problems can be introduced into the support of hospital discharge (requiring community follow-up) and the care of individuals with long term health conditions.

**Out of Hours Care** – Although access to a GP out of normal working hours is not difficult (as a result of successful GP co-operative schemes), there are difficulties in ensuring the necessary information pathway from out of hours to in hours services, and vice versa.

**Step Down Facilities/Residential Care/Voluntary Care/Social Care** – The information and care process can break down when the individual moves into care settings within the wider primary and community network, and particularly private or voluntary residential care settings. These settings often operate quite independently from the primary care team or GP practice, utilising different care and information systems. This is therefore problematic for the consistency of the care process and particularly for the flow of information about the care process and outcomes.

**User Information and Co-ordination** - The current organisation and operation of health care services often (by default) works against the interests of person centred care. It is very difficult for the individual at the centre of the care journey to take control over the process and their own information.

**Scheduling/Availability/Special Interests** – It is often difficult from within PCCC to access necessary information from the acute sector about treatment options, for example – booking information, waiting times for particular treatments and/or clinics, or special interests of consultants.

**Care & Diagnostic Outcomes** – The most frequently cited breakdown point in the care delivery process is the rapid transference of outcome data from the acute sector to the primary sector. If a test request is sent, or a patient is referred to the acute sector, it is a common occurrence for no acknowledgement to be given to the referrer of receipt of the request, and for no notification to be given of initiation of care process, outcomes of treatments/results, subsequent complications or even death. Such information and operational silos between care settings severely curtails the ability of PCCC to operate efficiently, effectively and in the interests of the individual at the heart of the care process, or their families.

**Public Health/Health Promotion/Disease Prevention** – Information on population health at a practice/primary care level is underdeveloped. This militates against practitioners understanding the health needs of the populations they serve, planning preventative measures, or indeed receiving feedback on particular issues such as infectious diseases, health alerts or epidemiological profiles.

**Equipment/Supplies/Logistics** – Ordering, availability, monitoring and recycling of equipment and supplies is a frequent problematic area, impacting upon patient care and the timeliness of discharge arrangements.

**Prescribing Errors/Checks** – Prescriptions are often hand written and can contain inaccuracies in terms of requests or correct codes and therefore need to be checked before being dispensed. A wider issue concerns the lack of monitoring of prescribing at a community level and the risk therefore of multiple prescriptions for the same individual by different GPs.

**Diagnostic/Tests/Imaging Results Reporting** - Significant delays and 'lost' information occur around crucial results reporting where one professional or setting is dependent upon the outcome to plan treatment or the next steps. Problems in this area often lead to repetition and duplication of tests and re-assessments, which is inconvenient for individuals, wastes professional time and uses up valuable resources.

Other general issues across the service include:

- Many settings and professionals have limited ICT and still have to convey clinical and other important information by paper and post. This is a frequent source of lost information, error and delay.
- No overview of service availability or delivery
- Complicated communications with Health Boards etc regarding, for example, eligibility
- Central communication of births and deaths is not circulated
- Co-ordination with other agencies is still problematic and time consuming
- Public and private interface poses challenges for care co-ordination
- Lack of standardisation

## **Business Requirements**

The workshops identified the broad information requirements to support each stage of the process of person-centred care. The main issues identified are recorded below:

### ***Prevention/Promotion/Monitoring***

The first priority for a person-centred model of healthcare is the promotion of health and well-being. There were clear messages from the workshops that ICT within PCCC needs to support information provision for the general public, health promotion activities, monitoring and screening activities and a clear emphasis on epidemiology.

### ***Individual Identification and History***

As soon as an individual accesses services for the first time (or for each new episode of care), whether at the GP surgery, in the community with the public health nurse, or through A&E, every professional requires the ability to uniquely identify the individual and access their personal details (name, address, date of birth) and their relevant medical history.

### ***Treatment & Referral Pathway***

Once an individual has accessed healthcare services, the activities of assessment, treatment and care planning/co-ordination need to be supported by ICT. There is currently no straight-forward way of managing the possible number of interactions required to deliver treatment to the individual as a single integrated service – the cornerstone of person centred care.

### ***Scheduling & Ordering***

Efficient treatment requires the ability to schedule events in the correct order for the care pathway. Significant clinical time is taken up in determining (often by telephone or letter) where and when there is availability across the health care system. Effective scheduling can be supported by ICT so that available resources can easily be identified across a range of care delivery environments, and activities such as a patient treatment intervention, a review, or an appointment booking, can be efficiently co-ordinated and follow-up events flagged.

### **Results Reporting**

Many decisions about the course of an individual's treatment rely on the results of diagnostic tests. Delay could be introduced into the patient's journey waiting for the outcomes of tests – blood results, x-rays or scans, pathology tests, etc. Much of this activity is carried out in the hospital setting and therefore appropriate and timely communication needs to be prioritised to speed up the notification of results across the system and enable the activation of appropriate treatment.

### **Information for the Public**

It is important that during the care delivery process, or pathway, that the individual involved is kept fully informed of all activities and progress. ICT could support the rapid transfer of information from one sector to another, to enable the individual to monitor progress and particularly to be empowered to discuss his or her care with the involved clinical professionals.

### **Management Information**

There are a number of other areas, which although not necessarily involved in the front line delivery of clinical care, are fundamental to the delivery of effective care within PCCC and across the health care system. However, clinical and management information should not be seen, or managed as separate functions – all information to manage the business of health care should flow from the same source – clinical interaction. Different people might need to input or extract different information (in line with appropriate access rights), but there should not be separate or duplicate systems, which would not interface.

These elements have been grouped together under the heading 'management information' and include practice management, budget and contract management, schemes management, human resources, audit and performance management, processing complaints and service development.

### **ICT Implementation Priorities**

The top priorities for ICT implementation identified across all five workshops are shown in the table below. A wide range of suggestions emerged from the workshops, although there was a good deal of consistency across the five workshops as to the priority areas.

Unique Patient Identifier (single identifier in use across all agencies)
Improved access to basic infrastructure for PCCC (hardware and software)
National strategy and system across PCCC (even if started within focus areas e.g. PCTs, dental) with clear milestones
Appropriate standardisation of clinical and business processes across health service (including agreement of minimum data sets). This should build upon best practice within Irish and other systems.
National booking and information and messaging systems around patient flow and availability (outpatient slots, waiting times, booking) available to both professionals and the public
Clarification of team membership and how different parts of the system work together (development of effective care networks)
Training for Users
Committed resources (both financial and human)

### **Articulating the Benefits**

It was clear from the workshops that ICT could support improvement in a number of areas:

- **Supporting the Person Centred Model of Care** – Without the implementation of more generic and systematic communication systems and processes across the health and social care system, the vision of person centred care is fundamentally undeliverable.
- **Efficiency & Risk Minimisation** - Use of a common and unique patient identifier will enable linkages with other systems, eliminating the potential for mistakes and the duplicate entry of data. This will avoid the individual having to relay the same information to different professionals. The electronic availability of information and results will improve the efficiency of the care delivery process.
- **Speed** – The facilitation of electronic communication and messaging across the system will improve the speed of the care delivery process, reducing unnecessary delays or waiting.
- **Consistency** – Unique identification will ensure a certain amount of data consistency, timeliness and integrity of patient identification across the various health providers. The ability also for ICT to support integrated care pathways and delivery will also reduce treatment inequalities
- **Care Co-ordination** – Integrated ICT across PCCC will support the delivery of care from more than one organisation in an integrated fashion.
- **Improved monitoring** – Being able to track an individual's progress through the care delivery process (irrespective of how many professionals or organisations are involved) will improve the monitoring of the care process and of care outcomes, leading to the potential of greater effectiveness and efficiency across the service as a whole.
- **Better use of individual and professional time** – Using ICT to improve and speed up the transfer of care information across the health care system, will automatically improve the use of professionals' time within the service; focussing their time on appropriate delivery, rather than wasting it upon unnecessary bureaucracy or 'chasing paper'. This will equally have benefits for the utilisation of users' time.
- **Reduction in the number of hospital admissions** – Using ICT to improve the ability of PCCC to manage the care process in the community should reduce the profile of unnecessary admissions to the acute sector, where people had to previously be admitted to hospital because of delays in results reporting or follow-up treatment.
- **Improved outcomes & patient satisfaction** – The ability to better plan and co-ordinate care should result in the improvement of care outcomes and the experience of users. In addition, screening and health promotion activities in the community should contribute to the improvement over time in preventable diseases and an improvement in the overall health of the population.

## Implementation Issues

A number of issues were raised at the workshops which will need to be taken into account as part of the further development of the PCCC ICT Strategy and Action Plan, under the following headings:

- **Supporting Client Focussed Service Delivery** – ensuring that development and change is focussed upon the needs of those who use the service;
- **Benefits Realisation and Change Management** - ensuring that the benefits of change are clearly articulated and that the 'softer' issues associated with implementing change are given as much, if not more, attention as the ICT agenda;
- **Complexity of PCCC Sector** - given the complexity of PCCC and some of the significant business and technical challenges around supporting ICT-enabled patient centred care; solutions need to be flexible to support local and professional situations. However, there is a clear requirement for consistency around standards and areas of shared care;
- **Convergence Across Wider Public Services** - the matching of systems across wider public services represents both a technological and a process challenge to ensure that various systems can communicate and that the processes are in place to enable different organisations to interlink for a common purpose;

- **Service Reform and Organisational Structures** - at the time of the workshops, announcements had not been made about the exact shape of the service reform landscape and where people would 'fit' into the new system. Although it was accepted that this was a short term issue, more medium term challenges were identified in terms of how the new health service structures would support different models of care;
- **Cultural Issues and Potential Resistance to Change** - supporting changes in the way that PCCC services will be able to work in the future and, importantly, be able to more smoothly interface with other sectors such as hospitals, residential care and community services, will undoubtedly change the status quo. It was felt that, certainly in the short term, this could raise a number of organisational and professional cultural issues and possibly introduce resistance to change, which would affect how the system will operate;
- **Funding** - a major issue for implementation will be a lack of adequate resource to fund both the infrastructure required across PCCC (much of which is starting from a very low base) and the requisite processes to provide software, standardisation and support and training;
- **Training and Support** - any ICT support initiative will fail if inadequate resources are allocated to training professionals in new ways of working. With a paucity of ICT infrastructure across community care facilities in particular, adapting to new technologies, although welcomed, will take time and additional support;
- **Management and Accountability** - in a shared care scenario, it is often unclear where accountability lies. Without clear and transparent agreements and processes, this could prove a block to the sharing of information. There were also issues raised around one professional group assuming professional accountability and control for decision-making.
- **Information Governance and Standards** - flowing out of the need for clinical process standardisation or agreements, data standardisation was also acknowledged as a major challenge. In order to run consistent processes for key activities like referral, results reporting, admission and discharge planning, a certain amount of both the information conveyed and the process itself have to be standardised – irrespective of care setting. This will require agreements on clinical coding, for example. There are also considerable practical challenges to achieving this level of consistency within the current system.