Integrated Services Pathways (ISP): a best practice model

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Abstract

Under the National Demonstration Hospitals Program, Phase 3 (NDHP3), Flinders Medical Centre (FMC) developed a best practice model for integrating acute care services with primary and community services. The project methodology included the examination of existing literature, involvement of consumers and other key stakeholders and the application of contemporary change and project management practices. Common elements were identified from four NDHP3 clinical service enhancement projects – aged care, cardiac surgical, gastroenterology and orthopaedic services. The generic elements were transferred to the model.

FMC's approach focused on developing a generic model that could be applied to clinical programs in a range of acute care settings. Although a number of barriers were encountered, the NDHP3 experience has shown that integration can be improved at the clinical program level without changing financial and management structures.

The integration project

Flinders Medical Centre (FMC) is the major teaching and research hospital in the southern region of Adelaide. It serves a population of approximately 318,000 people and is the centre for retrieval and major trauma for the southern sector of South Australia.

In 1999 FMC was selected, one of four lead Australian hospitals, to participate in NDHP3 which was funded by the then Commonwealth Department of Health and Aged Care (DHAC). The aims of the program were to integrate all services delivered by the acute care sector, including links with the primary and community care sector, and to disseminate information about a model that delivers quality, seamless integrated acute care services to preclude inappropriate length of stay, and/or inappropriate admission or readmission to hospital.

Under the program, FMC undertook to document a best practice model for integrating acute care services with primary and community services. This article provides a brief overview of the literature, how the four clinical programs influenced the 'best practice model', the critical project management factors that contributed to the project's success, and the key elements identified from the four clinical programs.

Literature review

The Australian Concise Oxford Dictionary (Sykes 1987) defines integration as 'the combination of diverse elements of perceptions' and to integrate as to 'combine into a whole', 'bring or come together into equal membership of society' and 'complete by addition of parts'. Gans and Horton (1975) define integration as 'the

linking together by various means of the service of two or more providers to allow treatment of an individual's or family's needs in a more coordinated and comprehensive manner'. This definition is widely accepted.

DHAC (1991) recognised that the health care system lacked integration and services were poorly coordinated. The need to improve integration to ensure the cost-effectiveness and quality of health care across services was driven by a number of factors (Centre for General Practice Integration Studies 1996). These included increased budgetary pressures, a focus on population health, shortages of health care professionals, an increasingly ageing population, growing prevalence of chronic conditions, and the increased use of technology. Leuzt (1999) reported that integration could occur at the policy, finance, management and clinical levels and that integration includes 'joint planning, training, decision making, instrumentation, information systems, purchasing, service delivery, monitoring and feedback' (p78).

The Centre for General Practice Integration Studies, based at the University of New South Wales, has successfully undertaken a number of projects to improve integration. The Integration Support and Evaluation Resource Unit (ISERU) was established in 1996 to support the Divisions of General Practice by improving integration between general practitioners (GPs) and the broader health care system. The results of these projects provided practical ways for general practice to improve links with hospitals (Centre for General Practice Integration Studies 1996 and 2000).

A number of models of integrated care were identified in the literature (Wilson and Popplewell 1999; Centre for General Practice Integration Studies 2000; Centre for Nursing Research and Development 1998). These included Hospital at Home, managed care, shared care programs, GP Home Links, coordinated care trials, and collaborative practice clinics.

Jackson et al (2000) described the '3 C's' model that provides a generic integration framework and includes three essential elements for improving integration of health care services – communication and access, commitment and incentives, and culture, values and team work. The Centre for General Practice Integration Studies (2000) identified four main elements for effective communication and coordination between GPs and acute care centres – the referral process, discharge planning, discharge communication, and guidelines and protocols.

Cramer and Tucker (1995) introduced the concept of 'partners in care' as a critical component of successful service integration. This has been central to all the FMC projects. Patients were encouraged to participate in the planning of their hospital and post-acute care.

FMC adopted a collaborative approach to develop process documentation and systems for improving health care for patients and their carers. These processes and systems targeted better health outcomes, a smooth transition across sector boundaries and optimal use of resources. The collaboration involved consumers, hospitals and primary care and community services.

The project provided an opportunity to review best practice in service delivery by obtaining stakeholders' input, reducing fragmentation and increasing benefits to consumers and providers. FMC built on existing work and identified core elements to ensure a smooth transition for patients through the Integrated Service Pathway. An important component was the clear specification of the roles, responsibilities and expectations of the various service providers.

Method

FMC, in partnership with the Southern Division of General Practice (SDGP) and collaborating hospitals, formed a network of major stakeholders to develop a best practice model for integration of acute care services with GPs and community services. The SDGP is the largest Division of General Practice in South Australia with over four hundred GP members. Stakeholders included consumers, clinicians, administrative staff, community health care providers and State Government representatives. The collaborating hospitals were St George Hospital, Royal Darwin Hospital, Goulburn Valley Health, The Prince Charles Hospital and Health Service District and Wentworth Area Health Service.

The Integrated Service Pathway (ISP) combines best practice clinical care and service provision for health related population groups across the continuum, and may include processes and clinical practice across all, or some, of preventative health care, primary care, secondary care, and tertiary care. The model was developed utilising a literature review, action learning from four service enhancement projects, stakeholders' perspectives, and learnings from workshops with consumers and health service providers. The best practice model draws on core elements of the FMC NDHP3 service enhancement projects – aged care, cardiac surgical, orthopaedics, and gastroenterology.

Collectively, the project team identified the critical factors for the successful integration of patient care services across the acute, primary and community care settings. The Australian Council of Healthcare Standards (ACHS) framework was utilised to assist in developing core elements for the model. This framework covers access and entry, inpatient management, separation and community management processes.

Consumer participation was integral to changing the way in which health services were delivered. Input was sought in a variety of ways, including focus groups, surveys, interviews, and community representation on the Steering Committee and other teams.

Contemporary change management principles were applied to the redesign of services to achieve improved integration across the service pathway (Kotter 1998). The key management principles for progressing an integrated clinical program were executive support, leadership by heads of units of clinical programs, the appointment of experienced project managers, the inclusion/participation of all stakeholders (including consumers), and the use of evidence-based guidelines.

Clinical programs' service enhancement projects: enhancements and outcomes

The four clinical programs involved in developing integrated service pathways with primary and community services and the best practice model are described briefly below. The core elements from these programs were used to develop the critical factors for integrating clinical programs with primary and community services.

The 'aged care project' implemented a range of evidence-based interventions for people over the age of 65 years, in the southern region of Adelaide. A strategic approach to fall management was adopted within the region in an effort to reduce falls and fractures. The project involved identifying barriers for older people following falls, implementing evidence-based guidelines, and the development of a regional network to provide a comprehensive range of fall prevention and management interventions. The project resulted in improved measures for screening and providing help for people and improved communication links between hospitals in the region and other health care providers – particularly GPs.

The 'orthopaedic project' improved communication and information transfer between hospitals, GPs and community providers. Strategies included the introduction of a case management model for nursing and allied health services, design of an electronic discharge summary to enable GPs to receive timely information on patient discharge, and development of an integrated outcomes database for use across FMC and the Repatriation General Hospital. Changes to models of care, through the implementation of a Care Coordinator role, were critical to ensuring patients and their GPs were actively involved in their care and to the streamlining of the integrated service pathway for individual patients.

The 'cardiac surgical project' integrated services for cardiac surgical patients. The project improved the management of patients while on the waiting list, streamlined preadmission and admission processes, increased day of surgery admissions, and shortened patient stays in intensive care services.

The 'gastroenterology project' consisted of two parts – the Southern Cooperative project for prevention of colorectal cancer (SCOOP) and the Percutaneous Endoscopic Gastrotomy (PEG) project. SCOOP initiated a coordinated surveillance program for people with, or at risk of, colorectal cancer. The program integrated acute secondary and community services for colorectal cancer. Best practice guidelines were implemented covering all aspects of diagnosis, prevention and management of people with, or at risk of, colorectal cancer. GPs participated in the development of the program. A resource kit and continuing medical education sessions were provided. The PEG project achieved integration of services by developing a PEG care and support service, which provided a link between the acute care services and the community. This ensured optimal management of patients with PEGs, increasing patient satisfaction and minimising attendance at the Emergency Department.

Critical project management factors that contributed to the projects' success

Nine key factors contributed to the successful management of the integration projects. These factors are discussed below.

Clear project management structure

Clear reporting arrangements and management structures were important in the management of the project. In the FMC model, each enhancement project team and collaborating hospital reported to the Project Steering Committee, which was responsible for overall project management. This committee was supported by a Project Executive, which met weekly.

Commonwealth funding

Substantial funding provided by the Commonwealth was vital as it ensured adequate resources were available to implement sustainable changes to clinical practice. In the current healthcare environment, clinicians and managers have limited time available to implement change.

The project funding enabled the appointment of skilled project managers to work with clinicians and collaborating hospitals – St George Hospital, Royal Darwin Hospital, Goulburn Valley Health, The Prince Charles Hospital and Health Service District and Wentworth Area Health Service.

Executive leadership and support

The leadership and support provided by the executives from both the hospital and the Division of General Practice was vital in securing initial funding (with clinician support) and meeting the contractual obligations to the Commonwealth.

Project and change management skills

Providing clinician leaders with project management support was critical to the success of sustained clinical practice change. The support provided enabled clinicians to activate change.

Clinician-led change

In the FMC model, this involved medical specialists identifying best practice and collaborating with GPs and leading interdisciplinary teams. The purpose of these groups was to provide the right care, in the right place, at the lowest possible cost and with better or the same health outcomes.

Consumer participation

FMC and the SDGP embraced the notion of consumer participation in shaping health care delivery. Consumer involvement was vital to the success of this project and involved participation through a number of models. Consumers, through their input, were crucial to shaping the integrated service delivery model.

Information systems

The quality of information systems and supports influences the capacity to improve communication and information flows across an integrated service pathway. In the ISP model, these were vital. It is acknowledged that growth in this area will continue to enhance information flow.

Cost benefit analysis

Access to relevant data to undertake an economic evaluation of changes to clinical practice is essential to ensure changes are cost-effective. During this project a costing model team (including a health economist) undertook a detailed cost benefit analysis.

Financial management

Business manager skills were utilised for the development of project budgets and reporting systems. This allowed monitoring of project expenditure and accurate reporting to the Steering Committee.

Critical factors for successfully integrating clinical programs

Analysis of the projects enabled identification of a number of key factors critical to the integration of acute care clinical programs with primary and community services.

Clinical leadership across the service pathway for a clinical program

Clinical leadership from the head of a clinical program is critical to effectively sustain integration. Leadership needs to extend across the primary, secondary and tertiary phases of the service pathway.

Clinical leaders need to be responsible for drawing a clinical team together across the integrated service pathway and developing, in conjunction with the team, an agreed vision and goals for the inter-disciplinary team. They need to identify who is accountable for each aspect of care along the service pathway, create trust and respect between the inter-disciplinary team, GPs and community services, and ensure consumers' perspectives, and their ongoing participation, are sought.

Inter-disciplinary team across the service pathway

An inter-disciplinary team should work together to improve and review health service delivery for the targeted population group. The team should include the Medical Head of the clinical program, GPs, community services representatives, nurses, allied health representatives and consumers. The role and responsibilities of each team member needs to be clearly defined. The acute care inter-disciplinary team should work in partnership with each patient and their GP to plan for discharge from the hospital and ongoing care.

Inter-disciplinary team assessment form

The inter-disciplinary team should assess the patient using a multi-use assessment form to avoid duplication. The assessment should include physical, psychosocial, cultural environmental supports and spiritual variables. The assessment should begin in the Emergency Department or in the Pre-admissions Clinic. Information from the GP should also be utilised to reduce duplication.

Patient engagement and participation

Involving patients, carers and their families in determining the care processes and outcomes, improves communication and compliance with agreed interventions. To ensure patients are able to participate in their care, education about self-management covering self-monitoring and a written action plan should be provided.

Accountability for care coordination and discharge planning

Accountability for care coordination and discharge planning needs to be clearly defined along the service pathway. For example, during the community phase, the GP or other primary service provider may be accountable for overseeing and reviewing care while patients are on the waiting list for surgery or receiving post-acute care and ongoing management. During the hospital stay, a Nurse Coordinator or a case manager should be assigned to coordinate the inpatient and discharge planning aspects of care (for example, primary nursing or a case management model).

Key aspects of the care coordination and discharge planning role in the FMC project included assessment and coordination of inpatient care and discharge planning, revisiting the plan daily with the patient, establishing the potential date of discharge within 24 hours of admission, ensuring appointments for the GP and other follow-up services were arranged in advance, identifying a community case manager if applicable, reassuring the patient on the day of discharge, providing relevant education material and a written action plan, and ensuring the patient was aware of the 'one point of contact' for following up issues and concerns (either a GP or hospital contact).

Standard GP referral

Effective communication between GPs and hospital outpatient departments is very important. In the project we developed a standard referral form (developed in conjunction with GPs) to ensure adequate information was provided to the hospital to enable patients' appointments to be prioritised based on clinical need. GPs were provided with relevant fax numbers to enable easy access for outpatient appointments through the standard referral. Emailed referrals were also used.

Managing patients on the waiting list

Effective waiting list management strategies are also vital. In the projects, the hospital provided GPs and consumers information on the length of waiting time (to GPs through articles in GP newsletters and the fortnightly fax from the General Practice Divisions and to patients when they attended the clinic), GP 'one point of contact' details, and how to manage patients' clinical conditions while awaiting surgery.

Hospital clinical staff prioritised patients according to clinical need. This was reassessed if the patient's clinical condition deteriorated, either by the GP contacting the surgeon directly, or patients attending specially convened waiting list clinics.

Patients were provided with written information about how to manage their care while on the waiting list. This included advice on how to get fit for surgery, the benefit of attending support groups, when to contact their GP and how to access allied health and community services.

Timely outpatient letters to GPs

GPs need to receive prompt and accurate advice on inpatient appointments. Medical staff had the option to dictate letters or use a standard GP proforma. The letter was forwarded to GPs for all new patients and when there was a change in treatment. GPs received the letter within 24 hours of the outpatient appointment. The proforma provided standard high quality information.

Timely referrals to allied health and community services

Well-planned and timely referral to allied health and community services was important. Referrals to these services were instigated, in consultation with the patient, as soon as they were deemed necessary. This ensured the patient received timely services and allowed for smooth planning and efficient referral to services.

'One point of contact'

'One point of contact' is a nominated position, held by one person, which ensures ease of contact by, and standardised information for, consumers, GPs and community services. In the projects, 'one point of contact' was provided for managing patients on the waiting list and providing estimates of the length of time each person would have to wait for surgery, for GPs to contact while patients were on the waiting list and to access a Nursing Coordinator for the clinical program. Patients were also able to access the service for general reassurance type enquiries after they had returned home (the advice/reassurance was based on policy guidelines endorsed by clinician leaders).

Clinical program Nurse Coordinator

The provision of an expert nursing role, which extends across the primary, secondary and tertiary phases, improves the continuity of care. Service line delivery management theory supports this, as does literature surrounding case management theory (Mullahy 1998).

The gastroenterology project developed two Clinical Nurse Coordinator positions. Qualitative data supported the establishment of these roles.

The evaluation of the FMC model concluded that consideration should be given to further developing and researching the benefits of a Clinical Program Nurse Coordinator position that extends across the integrated service pathway. The role would include consulting on specific program requirements; 'one point of contact' for GPs and patients before admission and after discharge; assistance with coordinating waiting lists; pre-admission clinic expertise; expertise in inpatient episodes including outpatient departments, emergency admissions, operating theatres, ward episodes and effective discharge planning; and undertaking research and quality

improvement programs for the clinical program. Project participants also identified opportunities to take up patient assessments and opportunities for case conferencing utilising the Medicare Benefit Schedule (MBS) Enhanced Primary Care package.

Progressive discharge planning

Discharge planning needs to commence at the first entry point on the Integrated Service Pathway. GPs and community services can choose to be involved in discharge planning when patients require complex ongoing medical management and social support after leaving hospital. This can be achieved through teleconferencing utilising the MBS Primary Care Enhancement case conferencing schedule.

Key aspects of discharge planning include the provision of information to patients about the approximate length of stay and date of discharge prior to admission, the completion of an assessment and needs analysis within 24 hours of admission, patients' participation, where possible, in decision-making regarding their care, collection of GP details, informing GPs and community services of admission, identifying and prioritising high risk categories that require assistance with ongoing management and support, obtaining patient consent for the transfer of information, and actioning referrals to allied health and community services within 24 hours of admission (or well in advance of discharge).

Timely discharge summaries

GPs require prompt advice of patient discharges. Discharge summaries were sent to the GP on the day of discharge or within 24 hours. Patients who did not nominate a GP were given a hand held summary, on discharge from the hospital, to give to their chosen GP.

Patient action plan

It is important that patients are informed about their care. Surgery patients were given an action plan detailing admission procedures, guidelines for their inpatient stay including GP and community services follow-up appointments and a follow-up management plan of when community appointments could occur.

Emergency patients who were having surgery received information about the unit and hospital. They were provided with a record of their doctor, operation, team members and GP appointment. Prior to going home, patients received written information about their ongoing management.

Patient information pamphlets

Patients require written information, in addition to verbal explanations, about how to manage their care while waiting for surgery, their surgery and care while in hospital, their ongoing management on leaving the hospital, and how to reduce the risk of further acute care episodes.

One-page best practice guidelines

One-page guidelines should be developed with clinical leaders and an expert inter-disciplinary team, using evidence-based practice. The guidelines should provide concise user-friendly, up-to-date knowledge about the ongoing management of a clinical condition. GPs and community agencies should be consulted in the process to ensure the content, formatting, layout and dissemination suits their needs.

Guidelines may incorporate waiting list management for surgery and 'one point of contact' details; post acute care management for a clinical program, including health objectives; evidence-based outcomes; community management timelines for follow-up appointments; and a patient action plan attached for service provider information. The one-page guidelines that were developed by FMC were very well received by service providers and patients.

Regional network

Developing a regional network for a specific clinical program assists in sustaining integration across the hospital and primary and community services. A network provides a forum for stakeholders to discuss and implement ideas to further integrate services. It also provides a focus for the development of a strategic approach to reduce the occurrence of hospital admissions through public health programs as well as secondary prevention programs.

Integrated database across sites

Integrated databases across sites have been shown to improve the coordination and management of patients in a clinical program. Examples of the benefits derived include coordination of a surveillance program (for example, for bowel cancer) that enables patients to be recalled for surveillance procedures at appropriate times, and the monitoring of the quality of service and outcomes of care at both the individual and program level.

Primary prevention principles incorporated into acute care

The World Health Organization Ottawa Charter (1986) emphasises the need for a whole system approach to health care and, in particular, a primary health approach to prevention. Primary prevention principles should be considered and implemented at each phase of a clinical program across the service pathway in order to promote health and well being, assist recovery to the point where a patient can self manage, and prevent inappropriate admission to acute care facilities when an acute care episode could be prevented or managed elsewhere.

Barriers to integrating services

A number of barriers to integrating acute care services with primary and community services were identified. While this paper does not allow for a detailed explanation of the barriers, the broad categories of issues addressed were structural, strategic, professional, cultural and rural and remote issues and consumer powerlessness.

Conclusions

It is clear that integration of acute care, GP and community services can occur within current financial and organisational arrangements. The ISP model of integration involved collaboration of consumers, the Division of General Practice, hospitals, primary care and community services to develop documented processes and systems for improving health care for patients and their carers. This resulted in better health outcomes, increased consumer satisfaction, a smooth transition across sector boundaries and optimal use of resources.

Contemporary change and project management knowledge and skills assisted the successful integration of acute care with primary and community services. Although others have identified key elements for improving integration, FMC's approach provides a starting point for acute care clinical programs to integrate with primary and community services.

Consumer participation is vital to ensure consumer focused integrated services. The FMC model focuses on orienting clinical programs to take a preventive approach to healthcare. Most important, the critical elements for integrated services identified in this paper are transferable to other clinical programs that operate across the continuum of care.

References

Centre for General Practice Integration Studies 2000, *GP-Hospital Integration Case Studies*, Divisions and Hospitals Integration Program (DHIP–Nov), School of Community Medicine, University of New South Wales, Sydney.

Centre for General Practice Integration Studies 2000, *Integration: an overview*, School of Community Medicine, University of New South Wales, Sydney.

Centre for Nursing Research and Development 1998, *Models of best practice for integrating care across the community-hospital interface in Western Australia*, School of Nursing, Curtin University of Technology, Perth.

Commonwealth Department of Health and Aged Care 1999, *Phase 3 Guidelines for Detailed Proposals,* National Demonstration Hospitals Program, p 1.

Commonwealth Department of Health and Aged Care 2001, *National Demonstration Hospitals Program Phase 3, A resource for integrating health services*, Canberra.

Commonwealth Department of Health, Housing and Community Services 1991, *The Australian Health Jigsaw: Integration of Health Care Delivery, Issues Paper No 1*, National Health Care Strategy, Melbourne.

Cramer D & Tucker S 1995, 'The consumer's role in quality: partnering for quality outcomes', *Journal of Nursing Care Quality*, vol. 9, no. 2, pp 54–66.

Gans S & Horton G 1975, *Integration of human services: the state and municipal levels*, Praeger Publications, New York.

Jackson C & de Jong I 2000, *Achieving effective health care integration: the essential guide*, McPherson's Printing Group.

Kotter J 1998, *Harvard Business Review on Change*, Harvard Business School Press, Harvard.

Leutz W 1999, 'Five Laws for Integrating Medical and Social Services: Lessons from the United States and the United Kingdom', *The Milbank Quarterly*, vol. 77, no. 1, pp 77–110, IV–V.

Mullahy C 1998, *Essential Readings in Case Management,* Aspen Publication, Maryland.

Sykes (ed) 1987, *The Australian Concise Oxford Dictionary*, Melbourne Oxford University Press, Melbourne.

Wilson B & Popplewell R 1999, *Enhancing Integration through the Formalisation of Collaboration between Hospitals and Divisions of General Practice, A Guide to Smooth Sailing in Developing a Service Agreement,* National Demonstration Hospitals Program, Phase 2 Extension Project, Flinders Medical Centre.

World Health Organization 1978, '*Declaration of Alma Ata*', Primary Health Care, Report of the International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September, Health For All Series; no. 1, World Health Organization/UNICEF, Geneva.

World Health Organization 1986, Ottawa Charter for Health Promotion, *Health Promotion International*, vol. 1, no. 4, pp. i-v.