Full Length Research Paper

Improving the coordination of palliative care

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New Zealand is a country with an aging population where the provision and funding of palliative care services are still in its developmental stages. In order for people with terminal or chronically morbid diseases to have access to such services, the process of provision needs to be coordinated and tailored to the needs of the individual. This study will discuss the principles and difficulties with palliative care coordination by carrying out an examination of international literature on the importance and effectiveness of various palliative care models and interventions that impact on the coordination of palliative care services. Subsequently, evidence-based recommendations are made on how to improve care coordination. Additionally, this paper will be complemented by semi-structured interviews and questionnaires of health professionals involved in the development of palliative care in New Zealand during the time of this study. In conclusion, there is ample evidence on the importance of service coordination in palliative care for better patient outcomes and a reduction of burden on health resources. Studies on a number of palliative care programs and interventions have been published showing variable levels of success in improving the efficiency of palliative care delivery, patient's quality of life and the barriers between service provisions. Palliative care services need to be coordinated to optimize the utilization of health resources, thereby reducing costs and to allow patients, in their end stages of disease, to have a better quality of life.

Keywords: Palliative care, coordination, New Zealand, cancer, death, multidisciplinary, quality of life.

INTRODUCTION

Palliative care has become a legitimate component of healthcare around the world. This importance is evidenced by a number of studies on the effectiveness of palliative care to improve the quality of life for dying people (Twycross, 1997; National Council for Hospice and Specialist Palliative Care Services, (UK).1994; Bruera et al., 1999; Higginson et al., 2000). In 2001, about 90 percent of people accessing hospice and palliative care services have cancer and the majority of these people are aged 60 years and over in New Zealand (Ministry of Health, 2001a). The proportion of the New Zealand population aged 65 and over is set to more than double over the next 50 years (Ministry of Health, 2001a). Therefore, the future challenge is to have adequate palliative care services to meet the needs of an

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increasing population with cancer and life limiting illnesses.

Multi-disciplinary aspects of palliative care

Palliative care has a focus on addressing the physical, psychological, socio-cultural and spiritual needs of the patient and family. Since the care requirements during the terminal phase of a disease is frequently complex and cannot be fulfilled by one discipline (Aranda, 1998), a collaborative multidisciplinary approach (Ministry of Health, 2001b), and teamwork (Hull et al., 1989), are essential to the provision of holistic and effective palliative care. Subsequently, this will potentially allow better quality of life for the patient and family (Ajemain, 1993). This is one of the visions of the Primary Health Care strategy in New Zealand (Ministry of Health, An example of the people and agencies 2001b). involved in the delivery of palliative care at home could include the following (in figure 1).

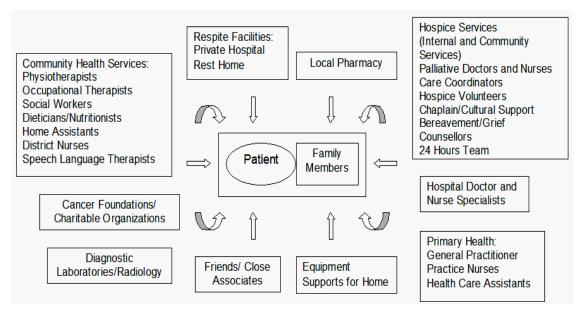


Figure 1. Network of multidisciplinary services to the patient and family in New Zealand

Care coordination

Care coordination could be defined as the organization of health services to enable the patient and family to be informed of all palliative care options and services. This includes provision of necessary information and skills for the family to facilitate palliative care for their family member (Ministry of Health, 2001a). The care coordinator(s) has the additional obligation to ensure access for the person and family to appropriate palliative care and health services such as primary and specialist medical care, hospital services, home and social support, voluntary services, and others (Ministry of Health, 2001a). A wealth of evidence supported the importance of care coordination to the patient (McKenna and MacLeod, 2005; Sellick et al., 1996; Smith, 2000; Tieman et al., 2007; Turner-Stokes et al., 2007; Byock, 2001; Krishnasamy et al., 2007; McLaughlin et al., 2007; Meyer et al., 2006) where quality palliative care is best provided by a diverse group of people working effectively as a team (Twycross, 1997; Ajemain, 1993). Gains could then be achieved in care quality, access, equity, and choice for the patient (Australia, 1996) with a potential to restrain growing expenditure in areas of hospital care, medical and pharmaceutical benefits, and other specific highcost comorbidities (Calder, 1998). Care coordination can promote collaborative teamwork and facilitate care across service providers (Doyle et al., 1993; Gomas, 1993) to alleviate patient stress and burden during the transition from hospital to home or to another care facility. In this way, the continuity of care is maintained

(Twycross, 1991).

METHODS

Published material

The main search sources of literature came from a number of electronic databases and contemporary reference books. Databases used: MEDLINE (1950 -October 2007), EMBASE (1980 - 2007 Week 41), CINAHL (1982 - October Week 2 2007) and Cochrane Library (CENTRAL/CCTR 3rd guarter 2007, CDSR 3rd guarter 2007, DARE 3rd guarter 2007). With all the aforementioned databases accessed, terms used in the search include: (1) "Palliative", and (2) each of the following individual terms [1 and 2] "Coordination" -250 hits /"Co-ordination" - 46 hits, "Integration" - 438 hits, "Network" - 362 hits, [(1) and "Program\$" and "Model\$" yielding a total of 562 hits], "Continuity of Care" - 199 hits, "Document" - 372 hits, [(1) and "Communication" and "Record" - yielding a combined 79 hits]. Only the articles in English were selected with their reference lists searched for more studies. These articles and other types of relevant publications were obtained from the Philson Library and Voyager (University of Auckland's Library catalogue). Local literature came from the (New Zealand Government Ministry of Health) publications as well as various projects and conference presentations from a number of hospices around New Zealand. Additional sources include the Auckland Cancer Society Library; Mercy

Hospice Library; and websites recommended from various health professionals.

Interviews/Questionnaires of local health professionals

To get information from the local community, five health professionals were interviewed. Collectively, they have experiences in: the development of palliative care policy and integrated palliative care networks, delivery of coordinated care and involvement with governance of Auckland District Health Board (Governmental Health Agency). I met with two of them in person (Dr Margaret Horsburgh [MH], January, 2003), (Dr Willem Landman [WL], January, 2003) with the conversations taped, transcribed to paper and verified by the speakers. The other three interviewees (Robyn Boocock [RB], January 2003), (Laura Lambie [LL), January, 2003] and Chris Murphy [CM), February, 2003], were each given a structured questionnaire sent via email with their replies used directly as reference for thematic analysis. The interviews addressed the vocational backgrounds of each professional, their conceptions of palliative care, service coordination and associated barriers, as well as their suggestions for the future of palliative care in New Zealand at the time of this study.

RESULTS AND DISCUSSION

Studies that implemented interventions to improve the coordination of services

There is research to suggest that care coordination can be cost effective. Zimmer et al (1985) conducted a randomized controlled study on terminally ill patients in the home by looking at the delivery of primary health care coordinated by a team of one physician, nurse practitioner, and social worker. Patients managed by the team and their informal caretakers showed significantly higher satisfaction with the care received. These patients also had fewer hospitalizations, nursing home admissions and outpatient visits than the control group. Conversely, the control group used less inhome services and incurred higher overall cost but the total day costs and the patient's functional status were similar between the two study groups.

Raftery et al (1996) exemplified cost effectiveness of a coordination service for a group of terminal patients with less than 12 months expectancy compared to standard services within the study location. Nurses provided the coordination role and arranged access to appropriate services. Between the two groups, cost reduction was most notable by way of fewer days in the acute hospital (24 vs 40, p=0.002) and less frequent home-visits by nurses (14.5 vs 37.5, p=0.01). However, the crude quality of the data made these cost reductions less sensitive to a wide range of unit costs and thereby undermining the statistical significance.

Addington-Hall et al (1992) assessed the effects of service coordination by community based nurses within the National Health Service, from local authorities to the voluntary sector, in a randomised controlled study of patients receiving routine services. The results showed little difference between the two groups in symptom control, service provision, support and satisfaction from patients and families. Explanation for the insignificant difference was accounted by large financial limitations and staff resourcing.

One article (Hurley, 1986) recounts the experience of those working in case management for the elderly where health professionals may be relatively less suited to the "broker" model of services than non-health professionals. The inadequacies of the service may partly be due to a mismatch between the professional skills of the nurse coordinators and the requirements of the coordinating role (Addington-Hall et al., 1992). Challenges within such role could be limited by time and resource constraints, leading to intrapersonal and interprofessional conflicts (McWilliam et al., 1993). On the other hand, a number of studies (Raftery et al., 1996; Addington-Hall et al., 1992; McWilliam et al., 1993; Williams and Sidani, 2001; Smeenk et al., 1998; Henderson, 2004; Rosenfeld and Rasmussen, 2003) found that nurses have an inherent part in coordination and continuity of care but with proper job definition and adequate support, nurses can be effective care coordinators within their scope of practice (Fitch and Mings, 2003).

Smeenk et al (1998) investigated the effects of a transmural home care program on the quality of life of informal caregivers for terminally ill patients compared with standard care programs. The program had the following elements: a 24-hour telephone service in the hospital with access to a transmural home team, a collaborative home care dossier (case file) to improve communication between care givers and protocols designed for specific care. The results yielded positive effects on the quality of life for direct caregivers of terminal cancer patients, both one week after discharge and 3 months after death. The enhanced coordination and cooperation between intramural and extramural caregivers can lead to better supportive care for these patients and their informal caregivers.

Jordhoy et al (2000) conducted a cluster randomized trial of an intervention programme that gives patients opportunity to have more time and the preference to die at home. The programme requires collaboration between community professionals as principal caregivers and a consulting multidisciplinary team that coordinated the care. In the findings, more intervention patients than controls died at home (54 [25%] vs 26 [15%], p<0.05), with less time spent in nursing homes (7.2% vs 14.6%, p<0.05). The study concluded the possibility of longer patient duration in the home and

less hospital admissions if given more resources of care with a greater focus on nursing home facilities as backup support.

Intervention studies from several countries utilized a type of record for terminally ill patients as a means to coordinate services and guide continuing care by recalling previously documented information. They can also act as a memoir of patient's experiences and symptomatology. Drury et al (1996) described a shared care record that detailed a patient's schedule of appointments, significant events, important contact information and medications whilst comparing those patients without such record. Both groups showed a high level of satisfaction in the communication with caregivers and greater participation of care but minimal difference was found in the quality of life scores. That was also the case for the multi-disciplinary patient held record (Williams et al., 2001) with equivocal quality of life measures and service utilization. However, patients felt greater empowerment by way of monitoring their own clinical progression and preparation for service appointments.

Latimer et al (1998) looked at a Patient Care Travelling Record (PCTR), in function as a 'passport' of relevant medical information for reference by all involving levels of a complex health system that a patient encounters. This PCTR was found to reduce patient uncertainty in the younger age group (below 65 years) but found no significant difference for mood states, pain relief, health service participation and satisfaction of health care. A study from Scotland (Cornbleet et al., 2002) evaluated the introduction of a supplementary patient held record (PHR) for those receiving advanced cancer management and palliative care. No significant improvement was found in the provision of information by caregivers, patient satisfaction. level of family involvement and communication between health professionals. Nonetheless, most patients found the record somewhat useful. Unstructured patient held records (Finlay et al., 1998) in one study did promote communication between patient and service providers, and kept some aspects of management up to date. A systematic review (Gysels et al., 2007) of 7 randomised controlled trials and 6 nonexperimental studies reached ambiguous findings in the potential for patient held records to promote continuity of care and patient participation.

Published evidence of some palliative care models/programs

A study on the pilot program 'Pathways of Caring (Rosenfeld and Rasmussen, 2003) was published after 3 years of implementation in the United States on a group of patients with chronic disease. The program had a strategy to identify poorer prognostic patients for earlier referrals, multidisciplinary palliative assessment, nursing coordination of services, symptom management and family support. Good results were found in advance care planning, hospice enrolment, and lower hospital use.

The PhoenixCare program (Aiken et al., 2006) was studied in a randomised trial comparing an intensive nurse-coordinated home-based care in adjunct to patient's existing medical services with those receiving usual care from managed care organizations (MCO). The patients for the PhoenixCare group had better selfmanagement, physical function, legal preparations and awareness of resources than the control population.

The case control study on the CHOICES program (Comprehensive Home-based Options for Informed Consent about End-stage Services) (Stuart et al., 2003) was designed to give patients of high disease burden better end of life care by creating a seamless concurrence of disease-modifying treatment and a coordinated focus on home-based palliative care. CHOICES had an active referral process, increased access to palliative care for ethnic minorities and noncancer patients, granted preference of death at home and acted as an intermediary provider for those patients ineligible for hospice care and other sector services. The program was researched to be feasible and acceptable.

In the sparsely populated western part of Spain, there is a palliative care model (Herrera et al., 2007), that is fully integrated with the public health system called The Regional Palliative Care Program in Extremadura (RPCPEx). The program operated from a network of 8 palliative care teams (one in each district) under the guidance of a regional coordinator. Cohesion of the program is maintained via the development of an annual training program, a registry of patient assessment tools, concordant treatment guidelines, quality improvement and research program. Continuity of clinical care is facilitated by a single clinical chart shared amongst health professionals, with data integrated into a registry within the Central Coordination office for analysis and peer review.

The paediatric care model (Toce et al., 2003) "FOOTPRINTSSM," had high satisfaction from family and health care providers, enhanced palliative care for children and the quality at end of life. The program facilitates advanced care planning, care coordination, research, evaluation and education. Advanced care plans entail anticipatory guidance from healthcare providers and shared decision making with family and child, recorded as guidelines in a discharge order document similar to advanced directives. The continuity physician is the central figure, who coordinates tailored treatment irrespective of geography with the nurse and chaplain as primary care coordinators.

The TriCentral Palliative Care Program (Brumley, 2002), from Kaiser Permanente, a non-profit health organization in United States, has visibly lower costs on service utilization without compromising quality of life

and patient satisfaction indicators. The Program combines multiple care modalities, including hospice and curative care. The team unit comprised of a nurse, social worker and physician who coordinates the care.

Significance of the studies

The studies implemented different types of interventions and care coordination with variable efficacy. They all converge on the idea that improved coordination and cooperation between health organizations will complement each other and result in better quality of service provision (McKenna and MacLeod, 2005). Over the years, there has been a prevailing preference of patients to die at home (Hockley et al., 1988; Townsend et al., 1990; Smith-Reese, 2005; Gilbar and Steiner, 1996; Choi et al., 2005; Fried et al., 1999) and therefore health care should ideally be more focused on the home environment. Good coordination of services can lead to the possibility of full-time home care for patients at the end of life and provide significantly better supportive care and education for their immediate caregivers.

The opinions of local professionals in palliative care

The following are perspectives of the 5 participants involved in this study on the health system and the state of New Zealand's palliative care services.

interviewees emphasized that care All the coordination entails a number of services working appropriately together to meet the care demands of the patient: "The role of the care co-ordinator is to provide information and to co-ordinate access to all the services."-[LL]. "Managing palliative care offered to those patients in my area involves liaison and careful negotiation with all other key players." - [RB]; " there is some overarching management of patient care and is co-ordinated..." - [MH]; the co-ordinator's "objective is to link (the relevant health disciplines to palliative care) and to be a source of information for patients and their Care coordination "ensures families." - [WL]; coordinated, integrated, seamless care for people requiring a number of services and a range of care." -These opinions are well supported by [CM]. international literature (Tieman et al., 2007; Turner-Stokes et al., 2007; Junger et al., 2007; Fleissig et al., 2006; Byock et al., 2006).

Barriers to the efficient delivery of palliative care

A number of common themes were highlighted from the interviewees. [MH], [WL] and [CM] addressed the issue of funding as a significant barrier: "I think the single biggest barrier is the healthcare budget being very

fragmented" – [WL]. Similarly, the New Zealand government mentioned in its Cancer Control Strategy (Minister of Health, 2003), the need for sufficient funding resources and substantial restructuring of services that were in piecemeal arrangement. The integration of services for better pediatric and adult patient care needs to occur at all levels of provision: the primary, secondary and tertiary sectors through which the patient's clinical journey occurs from initial diagnosis to death. Consequently, the end outcomes would show an improvement in patient's access to these services via a seamless process, quality of life, and satisfaction with patient care. The restructuring will also accommodate the demands of support and rehabilitation services integral to palliative care.

Cultural barriers have been identified as one of the major issues causing under utilization of palliative and cancer management services by the indigenous Maori people (Minister of Health, 2003). It has been found (Ministry of Health, 2001a; Palliative Care Expert Working Group (NZ), 2003) that the ethnic representation of mainstream providers is not proportional to that of the population with the situation compounded by inadequate cultural understanding. One aspect of the Cancer Control Strategy (Minister of Health, 2003) addresses the need for services to develop and adopt Maori cultural conceptions of health along with innovation, flexibility and choice. Information availability in various languages and ethnically appropriate formats is important in that more informed decisions can lead to better self-care, compliance with treatment, and anxiety reduction (Farrell, 2001).

Another area of significant impediment is the friction within inter-professional relations: "teams struggle to maintain cohesiveness and team spirit" - [RB]; "it is [the] barrier between different professions (nursing, medical, allied health workers)" - [WL]; "Traditional views/attitudes on the roles of health professionals. General Practitioners, District Nurses, hospital doctors and nurses, are not used to working in a co-operative way." - [LL]; "The (care coordinator) role is not always appropriately recognised by outside agencies" - [CM]; "professional barriers and determining professional roles" - [MH]. Part of this friction arises from an incompletion of the workforce, a situation that could majorly disrupt patient's continuity of care and bring dissociation amongst health professionals. However, the primary steps to develop the workforce and training of future professionals need to be done by determining the scope and requirements within these services (Minister of Health 2003). Clear guidelines and standards are to be laid out by the medical and nursing councils with implementation of palliative care and cancer services in the undergraduate curriculum (Ministry of Health, 2001a; Palliative Care Expert Working Group (NZ), 2003). Professional and voluntary organizations that contribute to patient care will clarify their roles in forming a national framework for standardization and to fill any gaps in training. The workforce also needs to reflect the cultural representation of the population via availability of funding and accessible educational opportunities for those under represented, namely the Maori population and to meet the need and diversity of the cancer population (Palliative Care Expert Working Group (NZ), 2003).

The New Zealand government formulated steps to implement its objectives in the Cancer Control Action Plan (Cancer Control Taskforce, 2005). One aspect of progress is the publication of the cancer workforce stocktake (Ministry of Health 2007) of health professionals providing cancer services, including palliative care. With reference to research on population-based needs of palliative care services in Australia, recommendations were made on the numbers for each workforce discipline per population as benchmark targets for adequate service provision. Although the employment numbers are increasing with time, there are obvious shortfalls in the allied health sector (occupational therapists and physiotherapists) based on the surveys of 25 hospices throughout New Zealand between 2002-4. However, the data is collated prior to a funding boost in 2005-6 and is confined to the hospice setting. To date, more in-depth research analysis is awaiting publication. The numbers of New Zealand palliative medicine specialists within a locality (Northern Region) and non-specialist medical practitioners providing palliative care in 2006 also fall below benchmark targets by nearly half with the gap projected to be much bigger over the next 10 years due to the aging specialist group and the general population. The research on the nursing profession did not show the similar severity of shortfall but more on the defining, development and training of the palliative specialist role.

Possible recommendations to improve the coordination of palliative care delivery

Establishment of integrated networks

Integrated care networks or delivery systems are organizations that offer or arrange the provision of a coordinated spectrum of services across various settings to a defined patient population (Turley et al., 1998). An article by Porter et al (1996), revealed that the integrated care networks can improve care coordination, care outcomes, better communication among the care providers and increased patient and caregiver satisfaction.

Loco-regional network formations to integrate palliative care services in Netherland's health system were found to improve the engagement and collaboration amongst health organizations, with a more informed process in health care provisions and organization of patient-centred care (Nikbakht-Van et al., 2005). End of life networks (Dudgeon et al., 2007) in Ontario, Canada were a useful vehicle to develop service delivery models in a number of regions to optimise resource utilization and continuity of care across the sectors. They also helped foster strong communication and cooperation across service providers and settings, making the delivery system easier to navigate.

In order for these networks to develop in accordance to one of the objectives from the New Zealand Palliative Care strategy, a common vision of integrated service delivery and culture across various care settings and agencies is required.

Development of care pathways

An integrated care pathway is a multifaceted tool that allows a multidisciplinary practice to manage a specific patient group within defined guidelines. The pathway is a clinical record with care arrangements documented to evaluate patient outcomes for continuous service quality improvement (Riley, 1998). It is gaining wide acceptance in North American healthcare systems and is used in various forms among many American hospitals by providing a method of coordinating and standardising care (Ellershaw et al., 1997). The benefits of care pathways include: a consistency in health practice by encouraging consensus amongst health professionals and use of evidence-based care; clarifies roles and responsibilities within the team; highlights health care constraints and redundant overlapping of services; reviews patient information and education (De Luc et al., 2000) and records 'variances' or failure of care practice so they can be reviewed and rectified (Ellershaw et al., 1997). Despite the published effectiveness of these care pathways, successful implementation requires a great deal of professional expertise, funding, resources, time and effective management (Mirando et al., 2005).

The care pathways are similar to the pilot schemes (on care coordination) in place from 2003 in Saint Joseph's hospice (now renamed Mercy Hospice Auckland), New Zealand. There were two local pilots schemes tested, each with 2 nurse care coordinators. However, the schemes were not completed due to financial professional staffing and barriers. Nonetheless, the increasing evidence for care pathways has prompted the re-initiation of larger and more structured pilot schemes by the New Zealand government to allow a seamless journey for cancer patients (Cancer Control Taskforce, 2005; Minister of Health, 2003).

Communication, information management and technology

Close communication within the multidisciplinary team is vital to fulfilling the evolving care needs of the patient by good cooperation and teamwork (Junger et al., 2007). Regular meetings or conferences could necessitate as a forum for continual patient care improvement, contemporary education of the latest evidence-based information and skills in palliation (Anstey, 1995) and facilitate changes required in the referral of care. In addition, team meeting can enable inter-discipline referring to reduce unnecessary duplication of professional roles (Kindlen and Walker, 1999).

Communication across various settings highlights the flexible nature of care coordination so that health service provision can adapt and adjust to the changing needs of the patient. Information management and technology can allow timely access to relevant clinical information and thereby facilitate prompt clinical decision-making and health outcomes for individual patients (Ministry of Health, 2000).

Communities using information technology can gain better awareness of health resources in their locality and expedite access to local services currently in place. Telehealth technology (Kobb et al., 2003; Hersh et al., 2001; Hospital Home Health, 2004) has the costeffective potential to improve care coordination and long-term management of symptoms from chronic comorbidities by prompt device detection and communication with health professionals leading to earlier intervention and prevention of complications.

Training programmes, education and coordinator role

Education on the expertise of palliative care is pivotal to its development as a specialty of medicine (Lee, 1998). This can be in the areas of symptom control, bereavement care, communication, team skills. complementary therapies as well as social, cultural and spiritual aspects of care (Minister of Health, 2003) and management of particular populations such as children (Copp, 1994; Jeffrey, 1994). One of the nine main objectives in the NZ Palliative Care Strategy is to develop a palliative care workforce and associated training programs (Ministry of Health, 2001a). Education and training of health professionals are crucial to care coordination as it can bring more accurate referral practises, enhancement of inter-professional relations (Turley, 1998), prevention of care fragmentation between health carers and maintenance of the patient and family in the care decision-making (Field and James, 1993). Learning and training programs can also extend to other participants (Handscomb, 2006) of

caregiving such as volunteers (Freeman et al., 1998), who could make big contributions to reduce burden on palliative care professionals, increase home nurse visits, promote community awareness and improve patient quality of life (Jensen and Given, 1991), with better supports.

Two studies support the role of advanced practice nurses (APNs) (Henderson, 2004; Kuebler, 2003), as coordinators and educators of palliative care services. In the United States, an APN is a registered nurse with advance tertiary qualifications and clinical skill training above basic nursing level. This training gave the APN the expertise to evaluate a patient clinically and manage ongoing symptoms of advanced disease. They can apply some evidence-based interventions and most importantly, coordinate appropriate referrals and services to meet the needs of the patient. These skills could allow the nurse to follow the patient through the course of the disease as well as reducing care fragmentation.

Developments in the New Zealand palliative care system

The New Zealand Cancer Control Strategy Action Plan encouraged the development of a system and structure for national representation in palliative care. The initial consequence of this ambition is the formation of the Palliative Care Advisory Committee (PCAC) in early 2006. This committee comprises a diverse group of clinical experts from hospitals, hospices and primary care, as well as advocates from the community and cultural services. They worked collectively to consult a large number of organizations, consumer groups and individuals, coming to a unanimous recommendation that an organization would need to oversee and bring together all principal interests and development of palliative care on a national level. From this, the inception of Palliative Care New Zealand (PCNZ) (Palliative Care Advisory Committee, 2006) is conceived. This committee is akin to the peerprofessional workgroups (Byock et al., 2006) in the United States which are congregations of motivated professionals looking at current efforts and obstacles to make consentient recommendations to advance palliative care. However, lack of governmental funding capped any further developments in this organization.

National representation of palliative care is taking place within the nursing profession. An interim committee of nurses (Palliative Care Nurses New Zealand interim committee, 2007), are rallying funds and other nursing professionals to form an organization called Palliative Care Nurses New Zealand (PCNNZ) in subsequence to the newly established Palliative Care Nurses Australia (PCNA), an organization that held its inaugural conference in September 2006. With nurses comprising a majority of the palliative care clinical workforce, the organization allows cohesiveness, better coordination and a more directive influence on other health sectors for better service provision and future development of palliative care. The organization can potentially implement internal processes to standardize clinical skills and conduct quality assurance purposes to ensure a robust level of patient care.

The process of better service delivery and coordination is underway for cancer patients in the northern part of New Zealand. Four local health districts have been working in collaboration to form the Northern Regional Cancer network as one of the four regional networks throughout the country (Cancer Control Council (NZ), 2007). The network progressed through the transition from a 'cancer center' to a 'continuum of care' where a number of other sectors are incorporated, namely, non-governmental organizations (NGOs), Primary Health Organization (PHO), researchers, Maori, Pacific Island and consumer advocacy groups. The nature of this network represents an effective method of coordination "where all cancer care providers are involved and not constrained by organizational or professional boundaries. It gets rid of the traditional silos and enables us to identify where there might be gaps in cancer services. Essentially, we are building a pathway for delivering better patient care over time". (Dr Richard Sullivan, October 24th 2007)

Progress report in the first 2 years (phase 1) of the Cancer Control Strategy Action Plan (Cancer Control Council NZ, 2007), was published in 2007. The regional cancer networks mentioned above are advancing at different levels of development, structure and degrees of shared governance with the wider cancer control community. They will eventually evolve into similar entities but unique in their regional areas. Patient pathway projects, stocktake and gap analysis studies have ascertained data on access to hospices by region and ethnicity. Research is underway on a national framework for nursing education in palliative care to boost nursing resources in the palliative health system. The care coordinator position is being appointed in some health boards and created in others, to help patients and information move expediently between care providers. Collaborative relations are forging ahead between district health boards and local hospices, looking at areas to integrate and coordinate palliative care across primary and secondary settings.

More recently, care coordination has become focused on the role of the general practitioner (Cancer Control Council NZ, 2007). A trial of funding from Primary Health Organizations (ProCare and HealthWEST) in Auckland city and a MidCentral Palliative Care partnership have together organized a package for each palliative care patient to cover home and surgical visits by GPs, which include the coordination role of referring to other services according to patient need. The HealthWEST Hospice Home Care programme is a more extensive model of care, operating in shared responsibility between GPs, hospice and district nurses, with GPs having 24hr on call responsibility. All the trials have concluded with positive evaluations from patients and their GPs.

Models of care plans and pathways from overseas are currently in active trial in a number of places throughout New Zealand (Cancer Control Council NZ, 2007). The Liverpool Care pathway has been implemented (Auckland District Health Board, 2008), in Auckland City Hospital, Mercy Hospice Auckland and Waikato District Health Board hospital and community. There is marked improvement in the documentation of care and fewer inappropriate referrals to specialist Palliative care providers. It has also facilitated undergraduate nursing education. The Gold Standards Framework will help facilitate care partnerships between primary and secondary palliative care services where most of the Palliative care is provided by the General Practitioner in collaboration with district nursing and non-governmental organizations. Specialist providers will have a consultative role. The reorientation of existina service deliverv svstem as а recommendation for the foreseeable future will depend on this framework.

CONCLUSION

Palliative care in New Zealand is undergoing a pivotal phase of development from fragmented provision by existing services towards recognition as a specialty of medicine. Such progression entails a collaborative and comprehensive research process, involving patients, professionals of many disciplines, governmental agencies and other organizations. Much literature is available internationally on existing models of palliative care and their outcomes, from which some components are implemented across a continuum of care in New Zealand hospitals and communities. There are still many challenges ahead for the coordination of palliative care in New Zealand to become a fully cohesive system and will take many years of change in the face of aging demographics.

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