

**UTILISING PRACTICE DEVELOPMENT AND THE PARIHS FRAMEWORK
TO IMPLEMENT THE LIVERPOOL CARE PATHWAY**

by

Theresa Mary MacKenzie

**A research paper submitted to the Victoria University of Wellington
in partial fulfillment of the
requirements for the degree of
Master of Nursing (Clinical)**

Victoria University of Wellington

2007

Abstract

The LCP is an evidence-based integrated care pathway that provides guidance to generic health care professionals to deliver best practice end-of-life care. My role as the LCP Project Coordinator in a District Health Board in New Zealand is central to the exploration of this process of implementing practice change. Working with clinicians to advance effective care and management of patients during the process of dying in an acute hospital setting requires not only knowledge and understanding of the clinical pathway and evidence supporting best practice, but also careful working with cultural and contextual change. This paper descriptively addresses the bases of both components, and provides a case example of the development.

Working with health care professionals to bring about practice change is complex and challenging. Successful implementation of evidence in practice is dependant not only on the strength and nature of the evidence, but also the context and models of facilitation. Practice development (PD) methodology informs the realities and complexities of practice change and of achieving sustainable development. The ‘Promoting Action in Research Implementation in Health Services’ (PARIHS) framework identifies the interplay and interdependence of factors that resonate with the reality of the complexity of practice change in relation to the evidence and best practice for particular clinical contexts. Highlighting PD processes and the relevance of the PARIHS framework alongside real-time practice change will continue to stimulate recognition of change and development complexities and bring consideration of these as robust methods for working between the theory and implementation of evidence in practice.

Key Words

Palliative care, Liverpool Care Pathway, PARIHS framework, practice development, literature review.

Acknowledgements

I would like to thank Associate Professor Cheryle Moss from Victoria University, Wellington, New Zealand and Professor Bev Taylor from Southern Cross University, Lismore, Australia for their encouragement, advice and support throughout the construction of this research paper. The staff at Victoria University are inspirational and have been my second family throughout the four years of my post-graduate study. They were right about ‘trusting the process’! Thank you to Jo Rycroft-Malone for her permission to reproduce the PARIHS framework. I hope that I have given the PARIHS framework and its authors the credit they deserve.

Thank you to the DHB for their permission to present the material in this document. Thank you to Margaret Stevenson, Waikato DHB Regional Palliative Care Coordinator, for her belief in the value of post-graduate study, and in particular, her belief in my ability to coordinate the LCP project and achieve my Masters in Nursing. Thank you to my colleagues in Waikato’s hospital-based Specialist Palliative Care Team for your patience and support. The success of the LCP Project described in my research paper belongs to us all.

Most of all, thank you to my husband, Scott, for all the hot drinks, study snacks and ‘IT’ support. To my children, Caine and Mallory, believe in yourselves and know that you can achieve anything you choose to in life – no matter what age you are.

Table of Contents

Abstract.....	i
Key Words.....	i
Acknowledgements	ii
Table of Contents	iii
List of Tables	v
Section One: Utilising Practice Development and the PARIHS Framework to Implement the Liverpool Care Pathway	1
Introduction.	1
Background: The Origins of a New Zealand LCP Project.	4
Section Two: The Liverpool Care Pathway (LCP)	6
Transferring the Hospice Model of Care of the Dying to Other Care Settings.	6
The Transferability of the LCP.....	8
Summary.....	10
Section Three: Linking Practice Development Methodology and Models of Implementing Evidence in Practice	12
Introduction.	12
Practice Development Methodology and Models of Implementing Evidence in Practice... ..	12
The PARIHS Framework.	16
Section Four: A NZ Hospital LCP Pilot: A Descriptive Case Study of Implementing Evidence in Practice	20
Introduction.	20
The Nature and Strength of the Evidence Informing the LCP.	24
Research in Care of the Dying.....	25
Clinical Experience.....	27
Patient Experience.	28
Local Data/Information.	29
Context.	29
Culture.	31

Leadership.	34
Evaluation.	35
Models of Facilitation.....	36
Purpose.	36
The Role of Facilitator.....	37
Skills and Attributes.	39
Outcomes of the LCP Pilot.....	40
Section Five: Conclusion.....	43
Closing Reflections	45
References	48

List of Tables

Table 1. Elements of the ‘Promoting Action on Research Implementation in Health Services’ (PARIHS) framework (reproduced with the permission of Jo Rycroft-Malone).	17
Table 2. Implementation Strategies for the LCP Pilot Project.	20
Table 3. Evaluation Strategies for the LCP Pilot Project.	23

Section One: Utilising Practice Development and the PARIHS Framework to Implement the Liverpool Care Pathway

Introduction

In a society where over 66% of deaths occur in hospitals, one of the outstanding questions of our time has to be: Why has the model of best practice not been transferred from the hospice to hospital settings, and indeed to community and nursing home settings?

(Ellershaw & Wilkinson, 2003, p. xii)

Dr. John Ellershaw and Susie Wilkinson are the editors of 'Care of the dying: A pathway to excellence' (2003). This is the primary text describing the conception, development, and pilot of the Liverpool Care of the Dying Pathway (LCP) in hospital, hospice, community and rest home settings in the United Kingdom (UK) and is referred to extensively throughout this research paper. The above quotation by Ellershaw and Wilkinson asks health care professionals (HCP) to consider why models of evidence-based best practice are not instinctively put into practice, regardless of the care setting, and succinctly identifies the issue central to this research paper – implementing evidence in practice.

Ellershaw and Wilkinson (2003) concur that the hospice model of care of the dying is widely accepted as being synonymous with best practice. The Royal Liverpool University Hospital Trust (RLUHT) Specialist Palliative Care team, led by Dr. John Ellershaw, together with staff from the Marie Curie Hospice Liverpool, worked together on a project to transfer the hospice model of best practice to the hospital setting. Integrated care pathway (ICP) methodology was used as a way to empower generic workers in the hospital setting to follow best practice to improve care of the dying (Ellershaw, Foster, Murphy, Shea & Overill, 1997). The outcome was the development of an ICP "based on the best evidence of optimum care in the dying

phase from both the literature and current hospice practice” (Ellershaw, 2007, p. 365) named the LCP. In response to new research and feedback from those using the LCP, additional versions were developed for hospice, rest homes and community settings. The LCP has gained worldwide recognition as a tool to improve the care of dying patients and their families/whanau and has been widely disseminated nationally and internationally.

In these times of higher consumer expectations and accountability for the effectiveness and efficiency of health care services, implementing evidence-based best practice into clinical practice is a central premise of contemporary clinical governance agenda (Department of Health, 1995, 1998, 2000; Hewitt, 2005; Minister of Health, 2001, 2005). The outcomes of informing clinical practice with the best available research and evidence include improved patient outcomes, improved patient care, delivery of cost-effective health care and enhanced confidence, critical thinking and decision-making skills in HCPs (Billings & Kowalski, 2006; Kitson, Harvey & McCormack, 1998; Rycroft-Malone, Harvey, Seers, Kitson, McCormack & Titchen, 2004). Evidence-based practice is one of the cornerstones of modern day patient-centred health care, but the ‘how to’ of successfully implementing evidence into practice in a measurable and sustainable way remains a quandary.

My interest in the LCP stems from my dual role as a Palliative Care Nurse Specialist (PCNS) in a hospital-based Specialist Palliative Care team (HSPCT) and an LCP Project Coordinator in New Zealand (NZ). The mandate of my LCP Project Coordinator role is informed by clinically governed practice change (Minister of Health, 2001; Hewitt, 2005) aimed at improving access to quality care for dying patients and their families/whanau in hospital, rest home and community settings across one of NZ’s largest District Health Board (DHB) regions. As a novice to project work at an organisational level, and with no previous experience of using the LCP in clinical practice, I faced the challenge of implementing the LCP in practice in a way that would be meaningful and sustainable.

In ‘Section Two’ I will describe the conception and development of the LCP as an evidence-based integrated care of the dying pathway and the adaptability of the LCP to the local context of care to meet the needs of dying patients in NZ.

My previous academic work in tools for clinical leadership and practice development (PD) at Victoria University of Wellington, NZ, informed my decision to explore PD methodology as an approach to implementing the LCP in practice. In ‘Section Three’, I describe the advancement of a literature search beginning with the search term “practice development”. I explore the strengths and limitations of three PD processes – technical PD, emancipatory PD and alongside PD. Kitson et al. (1998) propose that successful implementation of research in practice is “a function of the relation between the nature of the evidence, the context in which the proposed change is to be implemented, and the mechanisms by which the change is facilitated” (p. 150). This premise was central to the conception of the ‘Promoting Action in Research Implementation in Health Services’ (PARIHS) framework (Rycroft-Malone, 2004). I explore PD processes and the evolution of the PARIHS framework and their relevance to the successful implementation of evidence in practice.

In ‘Section Four’ I position myself as a PCNS and LCP Project Coordinator working inside the service and inside the collegial networks within the context of a descriptive case study of real-time practice change. I present the case study under the headings of evidence, context and facilitation, and their sub-elements as presented in the PARIHS framework (Rycroft-Malone, 2004), to demonstrate the usefulness of utilising PD processes and the framework alongside implementing the LCP in real-time practice. Under the heading of ‘evidence’ I review international research and contemporary LCP literature to inform the nature and strength of the LCP as an evidence-based integrated care pathway. Under the heading of ‘context’ I describe the culture of the organization and three hospital wards selected to pilot the LCP; explore leadership styles and their influence on the success and sustainability of practice change; and describe the methods of evaluation of the LCP pilot. Under the heading ‘models of facilitation’ I describe the PD processes, skills and attributes I used in my role facilitating the LCP pilot project. A positive outcome of the success of the LCP pilot has been the devolvement of additional human resources to support the wider dissemination of the LCP across the DHB region.

In Section Five I provide an overall summary of the implementation of the LCP to illustrate the reasonableness of utilizing PD methods and the PARIHS framework to structure change and development of practice. The PARIHS framework (Rycroft-Malone, 2004) provided practical guidance in navigating the complex and unpredictable interplay and interdependence of many factors during the implementation of the LCP pilot in three wards of an acute care hospital in NZ. Evidence, context and facilitation are key elements in the successful implementation of evidence in practice. In particular, the case study identifies context and facilitation as the mediators of the success of the LCP pilot. This research paper provides change agents in health services with an inside perspective of the complexities of context and facilitation when implementing evidence in real-time practice. More specifically, this research paper provides future LCP facilitators in NZ with an account of implementing the LCP in the context of a NZ hospital.

Background: The Origins of a New Zealand LCP Project

The New Zealand Palliative Care Strategy (NZPCS) (Minister of Health, 2001) is the first government report of its kind in NZ and is widely acknowledged as the foundation document for the development of palliative care services nationally. The vision of the strategy is that:

All people who are dying and their family/whanau who could benefit from palliative care have timely access to quality palliative care services that are culturally appropriate and are provided in a coordinated way.

(Minister of Health, 2001, p. vii)

As a result of the NZPCS (Minister of Health, 2001) additional funding was devolved to DHBs to achieve the first priorities of the NZPCS that included ensuring “that essential services are available for all dying people and that at least one local palliative care service is available in each DHB” (Minister of Health, 2001, p. vii).

At a local level, the hospital I work in was one of only four hospitals in NZ to have an established HSPCT at the time the NZPCS (Minister of Health, 2001) was published. Locally, the additional funds provided by the government were accessed to inform the development of

our Palliative Care Strategy (Hewitt, 2005). One of four key result areas identified in this strategy was to achieve improved access and equity to palliative care services based on the identified needs and informed choices of patients. One of eight supporting objectives for this key result area was to improve clinical care through the development and implementation of clinical pathways. In particular the LCP was identified as an emerging best practice model of care from the UK: “It is recommended that the Liverpool End-of-Life pathway for the dying patient be implemented across the ... DHB settings ... with the aim of promoting best practice standards for the dying patient” (Hewitt, 2005, p. 38). This recommendation led to the creation of a part-time PCNS – part-time LCP Project Coordinator to work within the HSPCT. I was appointed to this position in November, 2005.

Perhaps one of the most significant impacts the LCP has made within the health care system is its influence at managerial, organizational and national policy levels. If palliative care is to be incorporated into mainstream health care systems, then demonstrable outcomes of care are essential for quality assurance and commissioning in those services.

(Ellershaw, 2007, p. 367)

The structure of the research paper and the background to utilising practice development and the PARIHS framework to implement the LCP has been outlined in this introductory section.

Section Two: The Liverpool Care Pathway (LCP)

Transferring the Hospice Model of Care of the Dying to Other Care Settings

The modern hospice movement was championed by Dame Cecily Saunders in 1967 with the opening of St. Christophers Hospice in London (UK). The driving force of the hospice movement was the desire to transform the experience of dying patients. Hospice describes a model of care that is focused on the holistic care of dying patients and their families/whanau. The philosophy that underpins hospice care is that death is a normal part of life and that all dying people deserve to be free from pain and treated with respect and compassion. “Hospices care for the whole person, aiming to meet all their needs including physical, emotional, spiritual and social” (Ashurst, 2007, p. 168). It is this model of excellence in the care of the dying that Dr John Ellershaw and a group of like-minded colleagues strove to transfer to the hospital setting.

Towards the late 1990s Dr. John Ellershaw, a consultant in palliative care medicine at the Royal Liverpool University Hospital Trust (RLUHT), staff from the Marie Curie Hospice Liverpool in the UK, and a team of professionals, who worked locally across hospice and hospital settings, began to consider how they might transfer the hospice model of best practice in care of the dying to the hospital care setting. The aim of developing a tool to guide generic HCPs to care for dying patients was to prevent unnecessary suffering in the last days and hours of life because of a lack of recognition of dying and delivery of timely and appropriate care (Ellershaw, 2007; Ellershaw & Ward, 2003; Ellershaw & Wilkinson, 2003). An ICP framework was identified as a way of empowering generic workers in different care settings to follow best practice while also providing a structured, standardised approach to the delivery of evidence-based care to dying patients and their families (Ellershaw & Wilkinson, 2003). “Care pathways are frameworks that help standardize and review quality of care and ensure that clinical care is based on the latest evidence and research” (Kelsey, 2005, p. 50). The ICP

developed to transfer the hospice model of care of the dying into other care settings became known as the LCP.

The evidence that informs the LCP as a model of excellence in care of the dying was retrieved from book reviews, specialist journal searches, abstracts from conferences, review of patients notes, and the clinical experiences and expertise of staff (Ellershaw & Ward, 2003; Ellershaw & Wilkinson, 2003). Only a small amount of contemporary literature is directly related to the care of dying patients (Ellershaw & Ward, 2003). In addition, “most of the evidence for care of the dying does not rate highly on recognized scales of evidence, having no rigorous controls” (Fowell, Johnstone, I. Russell, D. Russell & Finlay, 2006, p. 845). The nature and strength of the evidence informing the LCP is explored in more detail in Section Four.

The LCP was awarded National Health Service (NHS) Beacon status in the UK as an innovation in practice that demonstrates the delivery of high quality care (NHS Beacon Programme, 2001). This national recognition informed the inclusion of the LCP in an NHS initiative to improve the quality and organisation of palliative care in the UK. The National Institute of Clinical Excellence guidance for ‘Improving Supportive and Palliative Care for Adults with Cancer’ (2004) also recommend the use of the LCP as a multidisciplinary tool to develop, coordinate, monitor and improve care:

The Liverpool Care Pathway for the Dying Patient has the capacity to promote the educational and empowerment roles of specialist palliative care services. It provides demonstrable outcomes of care to support clinical governance, and should reduce complaints associated with this area of care. The initiative gained NHS Beacon status in 2000 and has recently been incorporated in phase three of the Cancer Services Collaborative to facilitate its dissemination and evaluation across the NHS.

(p. 119)

The Transferability of the LCP

The LCP has undergone constant review since its inception a decade ago. At the time of my research, Version 11 was the most recent version of the LCP. Four different LCPs are available – one for each context of care of the dying: hospital, rest home, hospice, and the community. The LCP is a multidisciplinary document which enables doctors, nurses, and other allied HCPs, such as chaplains and kaitiaki, to document their assessment of patient and family/whanau need and the care and support provided. The LCP is not prescriptive. HCPs retain their clinical freedom to provide the care they feel is appropriate for individual patients within the evidence-based framework. To maintain the integrity of the LCP document, the LCP Central Team asks that the ‘goals of care’ in the LCP remain the same (Ellershaw & Wilkinson, 2003). However, the prompts informing each goal of care can be adapted to meet the needs of the collaborating centre’s local population in consultation with their key stakeholders, just as the symptom management guidelines can be realigned to local practice and availability of medications. In our case, this included adapting the LCP to acknowledge the organisation’s commitment to honouring the principles of the Treaty of Waitangi and modifying the symptom management guidelines.

Four criteria are listed on the front of the LCP to facilitate the diagnosis of dying. These include the patient is bedbound; semi-comatosed; only able to take sips of fluid; and no longer able to take tablets. Although it is suggested that a dying patient may meet two or more of these four criteria, it is important to recognize that these cannot always be generalised to patients with non-malignant disease and that the mode of dying is individual to each patient. Multiprofessional discussion and agreement by the team is required for a diagnosis of dying to be made and for the patient to be commenced on an LCP. The body of the LCP document has three discrete sections incorporating 18 ‘goals of care’ addressing the physical, psychological, social, spiritual, religious, cultural and emotional needs of dying patients and their families/whanau.

The first section is an initial assessment inclusive of goals 1-11. It is recommended that the initial assessment is completed at the time a patient is commenced on the LCP. The

interventions under the goals are meant as prompts to assist the HCP to assess whether the goal has been achieved or not. When a goal has not been achieved, this is documented as a 'variance'. The analysis of variances informs quality improvement by identifying the ongoing educational needs of HCPs and resource utilisation. Central to the initial assessment is the review of current medications, discontinuing of non-essential medications and interventions, and the anticipatory prescribing of medications for the management of pain, nausea and vomiting, respiratory tract secretions, restlessness and agitation, and dyspnoea. Symptom management guidelines negotiated with our Palliative Care Consultants are attached to the adapted version of the LCP to guide the anticipatory prescribing of medications to manage these five end-of-life symptoms in a way that neither hastens or postpones death. These also serve to keep both prescriber and administering HCP safe in their practice. Communication with the patient and their family/whanau is also documented in the initial assessment, along with their recognition that the patient is dying and that they are all aware of the plan of care.

The mid-section provides a template for the documentation of the assessment and provision of ongoing care. This section emphasises the importance of regular patient assessment to ensure optimum symptom control is maintained and timely action taken if there are any variances to achieving this. In particular, control of the five main symptoms experienced by dying patients and the comfort care provided by nursing interventions such as mouth care, bowel care, bladder assessment and communication with patient and family/whanau are documented.

The final section includes goals 12-18 that guides the documentation of care after death. These focus on the care and support of family/whanau members immediately after death and ensures that any special requests regarding care of the body/tupapaku are respected and, wherever possible, met.

Prior to implementing the LCP in any area it is recommended that at least 80% of the staff in that area are educated on how to utilise the LCP as an alternative form of documentation (Ellershaw & Wilkinson, 2003). Providing LCP education is more than teaching HCPs how to complete a new form of documentation. It is also an opportunity for specialists in palliative

care to elicit and address the fears and concerns of generalist staff who provide the majority of care to dying patients (Minister of Health, 2001). Implementing the LCP is an opportunity to acknowledge the care provided by generalists whilst providing them with evidence-based end-of-life care knowledge and skills that include breaking bad news, communication skills and the assessment and management of symptoms, to support their practice. “Fundamental to the implementation of the LCP is education led by specialists in palliative care” (Ellershaw, 2007, p. 365).

Summary

The stellar rise of the LCP as a new innovation for improving the care of dying patients and their families/whanau has captured the attention of the world. I feel it is important to recount my experiences as an LCP Project Coordinator for a hospital-based LCP pilot in NZ to allow others to benefit from the lessons I have learned. The possibilities exist for hospitals, hospices, rest homes and community care settings in NZ to implement the LCP in practice and to make a positive contribution to the international benchmarking of end-of-life care in their particular context.

Registering with the LCP Central Team in the UK, negotiating with local key stakeholders to adapt the hospital version of the LCP to our local context of care, and identifying the wards to pilot the LCP were valuable first steps of the LCP project. I was fortunate to have the support of the organisation and my colleagues in the HSPCT. I began to appreciate that “being able to write about or explain change is a different process than actually being able to expertly facilitate change in others” (Davidhizar, Giger & Poole, 1997, p. 22). In spite of the PCON, HSPCT and my personal commitment to implementing the LCP as a tool to improve the care of dying patients across our DHB region, the reality of the cure-oriented hospital setting was that care of the dying was not a high priority, suggesting there would be significant barriers to the uptake of this evidence in practice. Ellershaw (2002) forewarns facilitators that although implementing the LCP appears straightforward, “the practicalities of achieving this are seismic” (p. 619).

If it was straightforward, the production of ‘evidence’, perhaps in the form of guidelines followed by an education or teaching package, would lead to

an expectation that practitioners would automatically integrate it into their everyday practice. But we know that this is not the case, and often practice lags behind what is known to be current best practice.

(Rycroft-Malone, 2004, p. 297)

It was clear that as the LCP Project Coordinator I would need to understand how best to “free practitioners to act in new ways” (McCormack, 2002, p. 6). PD approaches are a way to bring about change to the context of practice. The following section will describe these approaches and their application in the context of achieving real-time practice change. The PARIHS framework (Rycroft-Malone, 2004) is proposed as a guide to successfully implement evidence in practice.

Section Three: Linking Practice Development Methodology and Models of Implementing Evidence in Practice

Introduction

My previous academic work in tools for clinical leadership and PD at Victoria University of Wellington, NZ, resonated with my practice experience and informed my decision to explore PD methodology as an approach to the implementation of the LCP in the context of a tertiary hospital. The term ‘practice development’ has been widely used in health care to describe individual and organizational development, and change processes. Until recently there has been little consensus about what PD means, or what it involves (McCormack, Manley & Garbett, 2004). I advance a literature search beginning with the primary search term ‘practice development’ and offer the definition of PD that underpins the PD methodology described in my paper. I link PD approaches to models of implementing evidence in practice. The PARIHS framework (Rycroft-Malone, 2004) is then identified as the most reasonable model to inform the implementation of the LCP in three wards of a large tertiary hospital.

Practice Development Methodology and Models of Implementing Evidence in Practice

Commonly scribed barriers to implementing evidence in practice include “accessibility of research findings, anticipated outcomes of using research, organisational support to use research findings, and support from others to use research” (Dracup & Bryan-Brown, 2006, p. 358). Even though there is a surplus of research articles in contemporary literature describing barriers to implementing evidence in different practice contexts, there remains a lack of robustly evaluated conceptual models for guiding the implementation of evidence in practice. When the search terms “evidence based practice” AND “implementation models” are entered into the databases CINAHL and MEDLINE, the search yields only eight and two articles respectively. Fortuitously, one of these 10 articles (Carr, Lhussier & Wilcockson, 2005) recounted the authors’ experiences of implementing the LCP in two distinct care settings.

Carr et al. (2005) identified barriers to implementing the LCP such as time, expertise, leadership and communication. The implementation process described occurred in an improvised, rather than a systematic manner, which reflects the complex and messy process of practice change. Although the strategies of buying in specialist time and buying out generalist time are relevant to my ongoing LCP project work, they are outside the scope of my research paper.

A literature search in CINAHL, MEDLINE and the Cochrane Library database of systematic reviews using the search term “practice development” yielded a phenomenal 2,788 and 731 and 62 articles respectively, demonstrating the wide use of the term in health care. I retrieved one systematic review from the Cochrane Library database (Foxcroft & Cole, 2000) which is referred to later in this section. I narrowed my search for PD literature by limiting the dates from January 1996 to July 2007 and using the search terms “practice development” AND “concept analysis” in CINAHL and MEDLINE, in search of literature underpinning the contemporary development of the term PD. This search yielded 75 and three articles respectively. Several key authors were identified in this search, many of whom had also contributed their combined expertise and experience in improving and transforming health care services to the contemporary text ‘Practice Development in Nursing’ (McCormack et al., 2004). The text describes “how practice development is approached and the impact it has on individuals, teams and organizations” (McCormack et al., 2004, p. vii). This collection of interrelated contemporary PD articles has been referred to extensively in my research as an academic tome of theory and concept development that underpin contemporary PD methodology. As methodology precedes methods, understanding PD processes helped me as a facilitator of change to implement the LCP in practice.

Two definitions of PD are presented in McCormack et al (2004). The definition I have chosen is representative of the swinging of the theoretical pendulum away from the traditional focus on ‘evidence’ as the main element for successful practice change, toward the contemporary “focus on changing the culture and context in which care is delivered” (McCormack, Manley, Kitson, Titchen & Harvey, 1999, p. 256). The following definition of PD informs the

deliberate and intentional use of PD processes to change the context and culture of care of dying patients in an acute care hospital as described in Section Four of my research:

Practice development is defined as a continuous process of improvement towards increased effectiveness in patient-centred care. This is brought about by helping healthcare teams to develop their knowledge and skills and to transform the culture and context of care. It is enabled and supported by facilitators committed to systematic, rigorous continuous processes of emancipatory change that reflect the perspectives of service users.

(McCormack et al., 2004, p. 34)

In an attempt to demystify the complexity of PD, I have described three PD approaches that are linked to implementing evidence in practice – alongside PD, technical PD and emancipatory PD. ‘Alongside PD’ was first described by Walsh and Moss (2007) in the context of PD in NZ to describe how facilitators of change balance competing organisational pressures while continuing to respect the journey of other key stakeholders. Alongside PD describes the reality of clinically governed practice change by acknowledging the importance of political and clinical stakeholders in the achievement of sustainable practice change. “Involvement with work derived from policy initiatives seemed to be something of a double-edged sword ... the fact that such initiatives were perceived as being imposed could be problematic” (McCormack & Garbett, 2003, p. 321).

The second of the three approaches is ‘technical PD’. Technical PD describes a more traditional ‘top-down’ (Haines & Jones, 1994; McCormack, 2002; McCormack & Garbett, 2003; McCormack et al., 2004) approach to practice change where the facilitator imparts technical knowledge informed by research evidence with the expectation that the stakeholder will incontestably change their practice and patient care would improve as a consequence. Haines and Jones (1994) promoted a conceptual model for the implementation of research findings and are referenced in a number of the articles retrieved (Brown & McCormack, 2005; Harvey & Kitson, 1996; Kitson, Ahmed, Harvey, Seers & Thompson, 1996; Kitson et al., 1998; Manley & McCormack, 2003; McCormack et al., 1999; McCormack, Kitson, Harvey, Rycroft-Malone, Titchen & Seers, 2002). Although Haines and Jones’ (1994) linear

conceptual model favoured robust research-based evidence as the key to achieving successful practice change, they identified that top-down and traditional didactic approaches did not seem to be “an effective way of changing practitioners’ behaviour” (p. 1490). They concluded that it was unlikely that any one approach to implementing research findings into practice would be effective. This ‘top-down’ approach is often associated with clinically governed practice change and, like alongside PD, can fuel resistance among staff who feel that change is being imposed on them (Walsh, McAllister & Morgan, 2002). Implementing evidence in practice using a technical PD approach places the emphasis on the robustness of the evidence, and in doing so denies the influence of different levels of evidence and contextual factors. Although favored in early research utilisation models (Funk, Tournquist & Champagne, 1989; Haines & Jones, 1994), we now know that the result of this deductive approach to implementing evidence in practice is recompense in its failure to achieve sustainable practice change (Funk et al., 1989; Kitson et al., 1998; McCormack et al., 2004).

The final approach is ‘emancipatory PD’ (Manley & McCormack, 2003; McCormack et al., 2004). In the context of emancipatory PD, emancipation refers to liberating the individual or group from the organisational constraints that are intuit in disempowering them from challenging the status quo to deliver care differently (McCormack et al., 2004). This ‘bottom-up’, inductive approach to practice change “fosters ownership and ... empowers practitioners” (Wigan, Caren & McKenzie, 2007, p. 23) by taking account of “the context within which people are working and acknowledges the importance of individual interpretations of events as an integral part of the change process” (Kitson et al., 1996, p. 432). Even though it was outside the scope of the paper, Foxcroft and Cole’s (2000) review of ‘Organisational Infrastructures to Promote Evidence Based Nursing Practice’, retrieved from the Cochrane Library, identified eight conceptual models promoting research utilisation in nursing (Burrows & McLeish, 1995; Funk, et al., 1989; Goode, 1992; Horsley, 1978; Jack & Oldham, 1997; Kitson et al, 1996; Stetler, 1994; Titler, Kleiber & Steelman, 1994). One of these, Kitson et al. (1996), expanded on the findings of Haines and Jones (1994) to include emancipatory PD processes such as “the way in which contextual issues are accommodated and how staff are involved in the process of change” (Kitson et al., 1996, p. 436).

The work of Kitson et al (1996) led to the development of the PARIHS framework (Rycroft-Malone, 2004). The non-linear, multidimensional PARIHS framework is the culmination of the ongoing development and refinement of some of the previously identified authors of contemporary PD literature, the majority of whom have a background in nursing which is reflected in their understanding of the “complex, demanding and often messy undertaking” (McCormack et al., 2004, p. 141) of research implementation in health services. In the PARIHS framework “evidence is characterized by research evidence, clinical experience, patient experience, and local data/information: context by culture, leadership, and evaluation: and facilitation by purpose, role, and skills and attributes” (Rycroft-Malone, 2004, p. 301-302). A further search of CINAHL and MEDLINE databases using the search term ‘PARIHS framework’ yielded 19 and eight articles respectively. Five of these articles (Brown & McCormack, 2005; Ellis, Howard, Larson & Robertson, 2005; Rycroft-Malone, 2004; Sharp, Pineros, Hsu, Starks & Sales, 2004; Wallin, Estabrooks, Midodzi & Cummings, 2006) provide information and insight into how the PARIHS framework can be used to structure change and develop practice.

The PARIHS Framework

Since its initial publication in 1998, the PARIHS framework (Table 1) and the three key elements, evidence, context and facilitation, have been the subject of ongoing concept analyses, development and structural scrutiny (Brown & McCormack, 2005; Ellis et al., 2005; Harvey et al., 2002; McCormack et al., 1999; McCormack et al., 2004; McCormack et al., 2002; Rycroft-Malone, 2004; Rycroft-Malone, Harvey et al., 2004; Rycroft-Malone, Seers et al., 2004; Sharp et al., 2004; Wallin et al., 2006).

Table 1. Elements of the ‘Promoting Action on Research Implementation in Health Services’ (PARIHS) framework¹

Elements	Sub-elements	
	Low	High
1. Evidence		
1.1 Research	<ul style="list-style-type: none"> • Poorly conceived, designed, and/or executed research • Seen as the only type of evidence • Not valued as evidence • Seen as certain 	<ul style="list-style-type: none"> • Well conceived, designed, and executed research, appropriate to the research question • Seen as one part of a decision • Valued as evidence • Lack of certainty acknowledged • Social construction acknowledged • Judged as relevant • Importance weighted • Conclusions drawn
1.2 Clinical experience	<ul style="list-style-type: none"> • Anecdotal, with no critical reflection and judgment • Lack of consensus within similar groups • Not valued as experience • Seen as the only type of evidence 	<ul style="list-style-type: none"> • Clinical experience and expertise reflected upon, tested by individuals and groups • Consensus within similar groups • Valued as evidence • Seen as one part of the decision • Judged as relevant • Importance weighted • Conclusions drawn
1.3 Patient experience	<ul style="list-style-type: none"> • Not valued as evidence • Patients not involved • Seen as the only type of evidence 	<ul style="list-style-type: none"> • Valued as experience • Multiple biographies used • Partnerships with healthcare professionals • Seen as one part of a decision • Judged as relevant • Importance weighted • Conclusions drawn
1.4 Local data/information	<ul style="list-style-type: none"> • Not valued as evidence • Lack of systematic methods for collection and analysis • Not reflected upon • No conclusions drawn 	<ul style="list-style-type: none"> • Valued as experience • Collected and analysed systematically and rigorously • Evaluated and reflected upon • Conclusions drawn
2. Context		
2.1 Culture	<ul style="list-style-type: none"> • Unclear values and beliefs • Low regard for individuals 	<ul style="list-style-type: none"> • Able to define culture(s) in terms of prevailing values/beliefs • Values individual staff and clients

¹ Reproduced with the permission of Jo Rycroft-Malone.

	<ul style="list-style-type: none"> • Task driven organization • Lack of consistency • Resources not allocated • Well integrated with strategic goals 	<ul style="list-style-type: none"> • Promotes learning organization • Consistency of individual's role/experience to value: relationship with others; teamwork; power and authority; rewards/recognition. • Resources – allocated human, financial, equipment • Initiative fits with strategic goals and is a key practice/patient issue
2.2 Leadership	<ul style="list-style-type: none"> • Traditional, command and control leadership • Lack of role clarity • Lack of teamwork • Poor organizational structures • Autocratic decision-making processes • Didactic approaches to learning / teaching / managing 	<ul style="list-style-type: none"> • Transformational leadership • Role clarity • Effective teamwork • Democratic-inclusive decision-making processes • Enabling /empowering approach to teaching / learning / managing
2.3 Evaluation	<ul style="list-style-type: none"> • Absence of any form of feedback • Narrow use of performance information sources • Evaluations rely on single rather than multiple methods 	<ul style="list-style-type: none"> • Feedback on individual; team; system performance • Use of multiple sources of information on performance • Use of multiple methods: clinical; performance; economic; experience evaluations
3. Facilitation		
3.1 Purpose	<ul style="list-style-type: none"> • Task 	<ul style="list-style-type: none"> • Holistic
3.2 Role	<ul style="list-style-type: none"> • Doing for others • Episodic contact • Practical /technical help • Didactic, traditional approach to teaching • External agents • Low intensity – extensive coverage 	<ul style="list-style-type: none"> • Enabling others • Sustained partnership • Developmental • Adult learning approach to teaching • Internal / external agents • High intensity – limited coverage
3.3 Skills and attributes	<ul style="list-style-type: none"> • Task / doing for others • Project management skills • Technical skills • Marketing skills • Subject / technical / clinical credibility 	<ul style="list-style-type: none"> • Holistic / enabling others • Co-counseling • Critical reflection • Giving meaning • Flexibility of role • Realness / authenticity

In the PARIHS framework (Table 1) the factors informing each of the sub-elements are delegated either as 'high' or 'low' on a continuum. The framework authors propose that factors that are at the 'high' end of the continuum have a positive influence on the successful

implementation of evidence in practice, and factors that appear at the 'low' end of the continuum are less likely to result in the successful implementation of evidence in practice.

Theoretical and retrospective analysis of four studies (Kitson et al., 1998) led to a proposal that the most successful implementation seems to occur when evidence is scientifically robust and matches professional consensus and patients' preferences ('high' evidence), the context receptive to change with sympathetic cultures, strong leadership, and appropriate monitoring and feedback systems ('high' context), and, when there is appropriate facilitation of change, with input from skilled external and internal facilitators ('high' facilitation).

(McCormack et al., 2004, p. 121)

The PARIHS framework identifies the interplay and interdependence of many factors that resonate with the reality of the complexity of practice change in relation to the evidence and best practice for particular clinical contexts. In the following section (Section Four) I will demonstrate that when factors at the 'low' end of the continuum for context and facilitation are present, they coincide with the slower uptake of evidence in real-time practice. Conversely, when the factors of context and facilitation are 'high', evidence is more successfully implemented in practice. Implementing the LCP in three wards of an acute care hospital provides the context for articulating these findings alongside the reasonableness of utilising PD methods and the PARIHS framework to structure change and development of practice.

Section Three described a number of database searches that identified the contemporary literature that informed the development of PD approaches and the PARIHS framework.

Section Four: A NZ Hospital LCP Pilot: A Descriptive Case Study of Implementing Evidence in Practice

Introduction

This special project differs from the norm, in that I had the role of implementing the LCP in my workplace. The material in this document is presented with the permission of the DHB. Exploring the strategies used in this quality project in my hospital is part of my role, therefore no approval from an ethics authority was required. However, an ethical stand has been used. To demonstrate the systematic processes utilised in the execution of this real-time practice change I have listed discrete sets of implementation strategies, participants and outcomes/feedback (Table 2) and three broad evaluation strategies, participants and outcomes/feedback (Table 3). Although both lists are presented in chronological order as far as possible, many of the strategies happened concurrently rather than in set blocks of time. The interrelated and interdependence of both implementation and evaluation strategies requires constant attendance. The implementation and evaluation strategies cited (Table 2 and Table 3) are described in the case study and linked to the corresponding elements and sub-elements listed in the PARIHS framework (Table 1). This correlation stimulates recognition of change and development complexities and brings consideration to this as a robust method for working between theory and implementation of evidence in practice.

Table 2. Implementation Strategies for the LCP Pilot Project

Implementation Strategies	Participants	Outcomes / Feedback
Register with LCP Central Lead Team (UK)	Waikato DHB PCON LCP Project Coordinator	Waikato DHB acknowledged as international collaborators Access gained to LCP documentation, resources and implementation plan
Organisational buy-in sought for LCP project	Chief Executive Officer (CEO) Health Waikato	Endorsement letter from CEO to LCP Central Lead Team (UK)

NZ experience of implementing LCP shared via pre-arranged visits	LCP Facilitator - Arohanui Hospice (NZ) Part-time LCP Facilitator/ part-time PCNS – Middlemore Hospital HSPCT	Shared locally adapted resources Need for dedicated time and human resource identified Facilitated support network with NZ LCP facilitators
Project charter written and submitted to PCON	LCP Project Coordinator; HSPCT	19 key stakeholders identified Benefits /barriers identified KPIs identified
Upheld principles of the Treaty of Waitangi - participation, protection, partnership	Te Puna Hauora (Maori Health Unit)	LCP document adapted to meet the cultural needs of Maori
Chaplaincy Team buy-in sought	Hospital-based chaplaincy team	Unanimous support given for LCP project Collaboration on developing a 'How to Cope With Bereavement' brochure
Adapt local end-of-life symptom management guidelines	Palliative Care Consultants HSPCT	Locally agreed symptom management guidelines to facilitate safe prescribing of appropriate medications in a way that neither hastens nor postpones death
Adapt LCP document to meet the needs of local population	LCP Project Coordinator HSPCT	Locally agreed LCP document adapted to meet the needs of local population
Consultation/collaboration re: standards for legal hospital documentation	Publications Committee Clinical Records Committee Medicines and Therapeutics Committee	Change in documentation approved for use in hospital clinical notes
Identifying wards for LCP pilot	Statistics department HSPCT and PCON	Identified wards with highest numbers of patient deaths
Medical buy-in sought from wards with highest numbers of patient deaths to pilot LCP – Technical PD approach during Grand Rounds and medical meetings	Consultants from 1x medical ward Consultants from 1x oncology /haematology /palliative care ward	Medical Consultants agree to pilot LCP in two wards Haematologists vacillate but don't hinder LCP pilot Oncologists unanimously agree to pilot
Buy-in sought from Clinical Nurse Managers (CNMs) One-on-one and group meetings Emancipatory PD approach Alongside PD approach	CNMs Clinical Nurse Educators (CNEs)	CNMs agree to pilot LCP and to facilitate joint staff education sessions Intensive education planned for two weeks immediately prior to pilot start date CNMs agree to pay some staff to attend LCP education in their own time Additional LCP education sessions negotiated for permanent night staff Agreed $\geq 80\%$ staff to attend pre-LCP education

Base Review Audit	Staff from pilot wards identified by CNM to do audit 20 sets of most recently deceased hospital patient notes – randomly selected LCP Central Lead Team (UK)	Results of pre-LCP proforma audit of documentation of care of the dying in last 48 hours of life collated by LCP Central Team (UK)
Strategies for successfully engaging staff Education plan advertised in pilot ward staff areas Emancipatory PD approach Alongside PD approach Succession planning	Ward staff from all three pilot wards – nurses and allied health professionals (social workers, chaplains, receptionists etc)	Enabling role of LCP Project Coordinator made transparent Buy-in gained from ward staff Staff familiar with care of dying share experiences with staff who are less familiar with death/dying Myths about care of the dying (medications, euthanasia etc) exposed >80% staff attend education from two wards / 55% staff from one ward LCP nurse champions volunteered from two wards – allocated by CNM from ward with low education attendance
LCP pilot commenced on pre-agreed day Ongoing support via daily visits to pilot wards Monday-Friday for first 2 weeks, then twice weekly.	Pilot wards LCP Project Coordinator	Additional education sessions provided for ward with 55% pre-LCP education attendance Staff in wards with >80% staff educated report ↑ confidence in delivery of care to dying patients / family/whanau
Post-LCP implementation audit	Same ward staff who participated in Base Review audit First 20 LCPs from pilot wards audited	Results of post-LCP implementation proforma audit forms of documentation of care of the dying in last 48 hours of life collated by LCP Central Team (UK)

Table 2 is a compilation of the strategies, participants and outcomes of a systematic approach to PD and provides a visual account of the multiple factors involved in the successful implementation of practice change. Implementation strategies are a series of parallel journeys, not a linear process, and often need to operate at several different levels at one time. “Key factors contributing to success included a systematic approach to practice development, ward leadership, attention to organisation of patient care and the valuing of core nursing skills” (Pemberton & Reid, 2005, p. 34).

Table 3. Evaluation Strategies for the LCP Pilot Project

Evaluation Strategy	Participants	Outcomes / Feedback
Reflective practice	LCP Project Coordinator; medical and nursing staff from pilot wards; LCP Network Nurse Group; Te Puna Hauora staff; chaplaincy team; HSPCT.	Reflection-in action and reflection-on- action by LCP Project Coordinator Effective engagement with key stakeholders Democratic decision-making Facilitated insight by uncovering myths Clarification of values and beliefs Collaboration, consultation and emancipation Facilitated a move away from technical, task-oriented end-of-life care Facilitated cognitive dissonance and motivation for change Empowerment
Feedback (to and from)	All key stakeholders	Buy-in and ownership Key stakeholder contributions valued and respected Transparency Minimised resistance Consultant groups unanimously agree to continue using LCP Nurses report increased confidence and knowledge in delivery of care of dying Chaplaincy team report greater involvement in support of dying patients and their family/whanau Dying patients remain under the care of their admitting team Fewer referrals to HSPCT for management of uncomplicated end-of- life care
Clinical audit	Staff from pilot wards completed audits Hospital clinical notes from deceased patients pre- and post- LCP implementation Pre- and post-audit results presented in tandem to consultants from pilot wards; ward staff, HSPCT; PCON; Chaplains;	Data collated by LCP Central Lead Team (UK) contributed to international database Post-LCP audit demonstrated a significant improvement in the documentation of care of the dying Consultants and ward staff unanimously agree to continue using LCP PCON agree to continue LCP project Regional 2006-2010 LCP implementation plan accepted by PCON Community Liaison LCP Facilitator employed Additional nursing resource employed in HSPCT for 8mths to facilitate fulltime LCP Project Coordinator

My combined role as a PCNS and the LCP Project Coordinator is central to describing PD processes and the relevance of the PARIHS framework to this ‘special project’. As a novice to project work at an organisational level, and with no previous experience of using the LCP in practice, I approached the LCP project heavily reliant on my decades of hospital-based nursing experience and my previous knowledge of tools for clinical leadership and PD (referred to in Section Three). Davidhizar et al. (1997) state: “Whether novice or experienced, most health care professionals find implementing change difficult” (p. 22). My previous roles in the organisation included two years as the clinical nurse educator (CNE), preceded by three years as an expert level staff nurse, both roles in the inpatient setting of malignant disease. As the CNE I provided education to nursing staff hospital-wide as part of the organisation’s service requirements for the management of central venous access devices and syringe drivers. McCormack and Garbett (2003) identified as crucial to success developing:

a complex social network within an organization, learning the ‘language’ that different stakeholders use in order to negotiate with them ...establishing credibility with a range of colleagues ... [and] ... a deep understanding of the practice context.

(p. 324)

The Nature and Strength of the Evidence Informing the LCP

Knowledge from clinical experience became less important when the emphasis shifted toward informing practice with research-based evidence in the 1970s and 1980s. “Historically, decisions about patient care were based primarily on the clinical expertise of practitioners who had evolved from novice to experts” (Dracup & Bryan-Brown, 2006, p. 356). However, it is now proposed that “optimal decision-making is based on empirical data, clinical acumen, and individual patients’ characteristics” (Dracup & Bryan-Brown, 2006, p. 356). The PARIHS framework (Table 1) embraces this paradigm shift by articulating that the nature and strength of evidence is informed by research findings, clinical experience, patient experience and local data/information. Rycroft-Malone (2004) proposes that by positioning the factors that inform each of these sub-elements of evidence on a ‘high’ to ‘low’ continuum, the overall nature and

strength of the evidence, in this case the LCP, can be assessed and potential weaknesses in the evidence identified:

Successful implementation is more likely to occur when research and clinical and patient experience are located toward high ... High includes whether, for example, the research (qualitative or quantitative) is well conceived and conducted and whether there is consensus about it. In the case of clinical experience, high is experience that has been made explicit and verified through critical reflection, critique, and debate. Patient experience is high when patient narratives and experiences are seen as a valid source of evidence. Finally, local data/information that have been systematically collected and evaluated are located toward high and could be considered in decision-making processes at an individual and organisational levels.

(p. 298)

The starting place for this case study is to understand the nature and strength of the evidence informing the LCP as a model of excellence in the care of the dying. Research in end-of-life care, contemporary LCP literature and the primary LCP text (Ellershaw & Wilkinson, 2003), and used to explore the sub-elements of research, clinical experience, patient experience and local data/information proposed in the PARIHS framework.

Research in Care of the Dying

In the PARIHS framework (Table 1), several factors describe aspects of research that are proposed to improve the likelihood of the successful implementation of evidence in practice. The conception and design of the LCP was in response to the enquiry of specialists in the field of end-of-life care in the UK who identified the need to transfer the hospice model of the care of dying patients and their families, to other care settings (Ellershaw & Wilkinson, 2003). The major findings of an internationally renown controlled trial “to improve end-of-life decision making and reduce the frequency of a mechanically supported, painful, and prolonged process of dying” (SUPPORT Principal Investigators, 1995, p. 1591) in the United

States were the confirmation that there were serious shortcomings in the care of hospitalised patients who were dying, and that a more proactive individual and societal approach was needed to improve the experience of dying patients. The findings of the SUPPORT Principal Investigators (1995) have influenced policy makers in palliative care worldwide. “Physicians, nurses, policy makers, and members of the public share the same evidence base, and this reality is changing the dynamics of power and accountability in hospitals” (Dracup & Bryan-Brown, 2006, p. 356).

In addition, several UK government documents were published (Department of Health, 1995; 1998; 2000) that in part addressed the delivery of end-of-life care in hospitals and its impact on dying patients, their families/carers, and HCPs. The relevance and importance of these findings indicated the need to improve the care of dying patients and their families and are summarised in the following statement from the NHS Cancer Plan:

Too many patients still experience distressing symptoms, poor nursing care, poor psychological and social support, and inadequate communication from health care professionals during the final stages of illness. This can have a lasting effect on carers and those close to the patient who often carry the burden of care. The care of all dying patients must improve to the level of the best.

(Department of Health, 2000, p. 66)

The vision of the NZPCS (Minister of Health, 2001) is aimed toward timely access to culturally appropriate, quality palliative care services for all dying people in NZ. The recommendations of NZ’s National Health Committee ‘Care of the Dying’ project, conducted over a two-year period from January 1997, are included in the NZPCS (Minister of Health, 2001) and “provide clear specifications of services that should be available to people who are dying, settings in which it would be most appropriate for these to be provided and the service providers who would be available to provide them” (Minister of Health, 2001, p. 21).

Internationally and nationally the social construction of research clearly recognises there is a need for the care of dying patients and their families/whanau to improve. A review of the

findings in contemporary LCP literature (Duffy & Woodland, 2006; Ellershaw & Murphy, 2005; Fowell, Finlay, Johnstone & Minto, 2002; Hardy, Haberecht, Maresco-Pennisi & Yates, 2007; Hinton & Fish, 2006; Jack, Gambles, Saltmarsh, Murphy, Hutchinson & Ellershaw, 2004; Mellor, Foley, Connolly, Mercer & Spanswick, 2004; Taylor, 2005; Taylor & Randall, 2007) corroborates Ellershaw and Wilkinson's (2003) claim that "the LCP is one tool that can help to meet the requirements of the clinical governance agenda, providing demonstrable standards and outcomes of care for (dying) patients" (p. 143). The LCP is well conceived and has been specifically designed to empower generalist HCPs to provide quality end-of-life care to all dying patients and their families/whanau, regardless of place of care.

Clinical Experience

The clinical experience and expertise of Dr John Ellershaw (Palliative Care Consultant), Dr Chris Ward (Consultant Cardiologist) and staff from the RLUHT and Marie Curie Hospice Liverpool informed the initial development of the LCP (Ellershaw & Ward, 2003; Ellershaw & Wilkinson, 2003). A literature search in CINAHL and MEDLINE databases using the search term "Liverpool Care Pathway" yielded 54 and 30 articles respectively. The relative newness of the LCP in contemporary literature is reflected in the number of articles published from January 2005 to the present time - approximately 85% of the articles in CINAHL and 73% of the articles in MEDLINE. Many of these articles report the early clinical experiences of HCPs from hospital, hospice, community and rest home settings (Carr et al., 2005; Gambles, Stirzaker, Jack & Ellershaw, 2006; Hinton & Fish, 2006; Hockley, Dewar & Watson, 2005; Jack, Gambles, Murphy & Ellershaw, 2003; Jack et al., 2004; Lhussier, Carr & Wilcockson, 2007; McNicholl, Dunne, Garvey, Sharkey & Bradley, 2006; Swart, van Veluw, van Zuylen, Gambles & Ellershaw, 2006; Watson, Hockley & Dewar, 2006). There is consensus that the LCP improves the documentation of the care of dying patients and their families (Keane, Taylor & Clarke, 2007; Shah, 2005). Jack et al. (2003) report nurses' perceptions of the LCP in the acute hospital setting as improving symptom control "with examples of a confused picture in drug selection and dosage before the LCP ... [and] ... an increased confidence and knowledge to care for dying patients" (p. 380).

Few studies report the concurrent implementation of the LCP across more than one care setting of a region (Fowell et al., 2002; Keane et al., 2007; Taylor, 2005; Lhussier et al., 2007). Lhussier et al.'s (2007) article provides valuable new information on strategies that inform the wider dissemination of the LCP, something that I am particularly interested in given the large population and geographical area of our DHB region.

There are some limitations in the early LCP literature. Most notably, these include the co-authorship of many papers by those involved in the initial conception and development of the LCP, and in the case of Jack et al's (2003) report on nurses' perceptions of the LCP – they noted that the sample group were palliative care network nurses. Girard (2006) reminds us that “although experience is valuable, conclusions about care that is given can reflect the bias of the practitioner” (p. 182).

Patient Experience

Patient experience is important if the notion of patient-centred care is to be respected. Dracup and Bryan-Brown (2006) state: “The concept of evidence-based practice often appears antithetical to patient-centred care, even though patients' preferences are supposed to be a critical component of any decision” (p. 357). A pre- and post-implementation questionnaire in the Netherlands in two hospitals, two rest homes and two home care settings revealed that nurses and relatives perceived the total symptom burden of the patient was lower after the implementation of the LCP (Ellershaw, 2007). Although there are few studies evaluating the LCP in relation to dying patients, it is early days and the next 10 years should see the results of research into patient experiences being reported. Whilst acknowledging the ethical and moral sensitivities inherent in palliative care research and collecting the experiences of dying patients, Fowell et al. (2006) remind us that the potential to improve the experience of dying patients informs “a pressing need to explore effective research methods that can yield robust results to inform our care of these patients” (p. 845).

Local Data/Information

Local data/information has been systematically collected and evaluated using a standardized proforma audit tool provided by the LCP Central Lead Team in the UK, or modified versions based of some, or all, of the outcome measures listed in the LCP Central Lead Team's proforma audits and/or the LCP document itself. Pre- and post-LCP implementation audits of the documentation of the care of dying patients report quantative data from small sample sizes - usually 20 sets of patient notes in each pre- and post- audit arm (Duffy & Woodland, 2006; Ellershaw & Murphy, 2005; Hardy et al, 2007; Hinton & Fish, 2006; Jack et al., 2004; Mellor et al., 2004; Taylor, 2005; Taylor & Randall, 2007). The results of these pre- and post-LCP audit comparisons all demonstrate an improvement in the documentation of care of the dying with the use of the LCP. The LCP is a new initiative and I anticipate that the data and information collected and analysed to date will form the base for future research into the clinical effectiveness of the LCP and analysis of reported variances. The construction of this body of LCP knowledge is a paradigm of the evolution of research in the specialty of palliative care: "Much of the (palliative care) research undertaken to date has been limited and fragmented, with small scale single centre, descriptive studies being the norm" (Ellershaw & Wilkinson, 2003, p. 145).

Context

In the PARIHS framework, 'context' is one of three elements to consider when implementing evidence in practice and is described as "the environment or setting in which people receive healthcare services, or in the context of getting research into practice, the environment or setting in which the proposed change is to be implemented" (Rycroft-Malone, 2004). The sub-elements of 'context' proposed in the PARIHS framework (Table 1) are described as culture, leadership and evaluation. "The elements within context coalesce to enable change or to act as barriers to research utilization" (McCormack et al., 2002, p. 101). The complexity of implementing the LCP in the broader context of an acute care hospital is informed by the variety of contexts within contexts, cultures within contexts, styles of leadership within each context and multiple methods of evaluation and feedback. The 'contexts' of care of the dying

described in this case study are those of the hospital (organisation) and three wards within the hospital.

Contemporary literature identifies that a higher proportion of people with malignant and non-malignant disease die in public hospitals than at home, or in hospices, rest homes or other institutions (Araújo, da Silva & Francisco, 2004; Ellershaw & Ward, 2003; McDonnell, Johnston, Gallagher & McGlade, 2002; Ministry of Health, 2001; Office of National Statistics, 2003; Robinson, 2004; SUPPORT Principal Investigators, 1995). HCPs who work in acute care hospitals are, therefore, at the forefront of caring for dying patients and their families/whanau. It was advantageous to know that the emergent core business of contemporary acute care hospitals is toward diagnostic and treatment interventions with the intention of achieving cure for patients with malignant and non-malignant diseases. There is authority in the unstated belief underpinning the cure-oriented focus of acute care hospitals, which is the belief that death is seen as a failure (Araújo et al., 2004; Dunn, Otten & Stephens, 2005; Kyba, 1999; O’Gorman, 1998; Prior & Poulton, 1996). Although this contemporary belief counters my clinical experience working in an acute care hospital, an appreciation of this tacit belief enabled me to anticipate the potential for this to be one of the most significant contextual barriers to implementing the LCP. There is a recognition that practice change can occur when the ‘context’ is receptive to change (McCormack et al., 2002; Rycroft-Malone, Harvey et al., 2004).

Transparency in the process of selection of pilot sites is important to the initial success of any LCP project. The selection criteria for piloting the LCP in an acute care hospital documented in Ellershaw and Wilkinson’s (2003) primary text included wards that had a high mortality rate, “where it was felt that the LCP would have greatest impact, and where the HSPCT already had a high profile” (p. 123). These two primary criteria served as a useful guide in the selection of pilot wards in our LCP project. To affect a win-win for the LCP pilot other strategically considered criteria were wards where staff were more familiar with the common medications used in the management of end-of-life symptoms; the proximity of pilot wards to each other; inclusion of the ward where the HSPCT (who were facilitating the LCP project) had direct admitting rights; and my collegial network and previous clinical experience.

Two adjacent hospital wards were selected initially – one medical ward with a focus on the care of patients with non-malignant disease, and one cancer ward with a focus on malignant disease and where, in the absence of an inpatient hospice, the HSPCT had direct admitting rites. Fortuitously, the consultant group from the medical ward had recently begun to audit their patient deaths and, impressed by the potential of the LCP to facilitate audit of patient deaths, asked to have two medical wards included in the LCP pilot. This brought the total of wards selected to pilot the LCP to three. The enthusiasm of the medical consultants was seen as an auspicious start for the LCP project. The close proximity of all three wards to each other made joint pre-LCP implementation education sessions for nursing staff possible, which in turn minimized the use of human, time and equipment resources. Understanding the culture of the organization and the wards was the next step in planning the implementation of the LCP pilot. “In terms of dealing with the kinds of contextual factors that may come into play when developing practice, it could be argued that a key activity is planning for, and anticipating, the problems that may arise” (McCormack, 2002, p. 6).

Culture

In the current fiscal environment of healthcare in NZ, employing an LCP Project Coordinator and allocating resources such as time and equipment to facilitate a practice change aimed at improving the care of dying patients and their families/whanau demonstrates the organisation’s commitment to the LCP. A significant outcome of the NZPCS (Minister of Health, 2001) has been the devolvement of government health funds to DHBs for the development of a service framework made up of a network of local and specialist palliative care services. Our Palliative Care Operations Network (PCON) was one of the first to be set up in NZ. The purpose of the PCON is to ensure that the recommendations of the NZPCS (Minister of Health, 2001) are implemented in the most optimal way to meet the needs of dying patients and their families/whanau across the DHB region. The DHB’s Palliative Care Strategic Report (Hewitt, 2005) recommended the implementation of the LCP as an initiative that fitted the strategic goals of the organisation to promote “best practice standards for the dying patient within the Hospice philosophy” (p. 38) in hospital, hospice, rest home and

home-based care settings across the region. Consequently, the LCP is clinically governed practice change and comes with the risks inherent when staff perceive practice change as being imposed on them (described in Section Three). Practice development approaches are useful for bringing about receptiveness to change within contexts and cultures of care.

The cancer ward had already demonstrated a receptiveness to change by becoming one of several 'practice development units' (Walsh, M., & Walsh, A., 1998) in the hospital. In the cancer ward, staff reported being pleased that the LCP was clinically governed practice change because to them it was an acknowledgement of the change in direction of care required by staff caring for dying patients and their families/whanau in the acute hospital setting. Statistically, staff from the cancer ward dealt with more 'death and dying' than their colleagues from the medical wards. This is supported by the evidence that this ward consistently has a high number of patient deaths per annum (n=110), compared, for example, to the number of patient deaths in the medical wards per annum (n=60-70). This, together with the fact that patients under the care of the HSPCT are frequently admitted to this ward, meant the nurses were also more familiar with the principles of palliative care, including the acceptance that dying is a normal process and that evidence-based end-of-life care aims neither to hasten or postpone death. The staff are familiar with the medications used to control terminal symptoms and have developed appropriate communication skills to support patients and their families/whanau through the dying process. When the initiative is a key practice/patient issue the likelihood of the successful implementation of the LCP in practice is high. The culture of the cancer ward was marginally complicated by the combined patient populations of haematology and oncology. Prognosticating death and dying for haematology patients can be difficult because they often recover from the brink of death several times throughout the course of their illness, therefore few haematology patients with end-stage disease are appropriately referred to palliative care services (Joske & McGrath, 2007; McGrath, 2001; McGrath & Holewa, 2007). However, a national qualitative research study of nursing insights by McGrath and Holewa (2007) reported "the varying professional perspectives, rather than the unique circumstances of haematology, create the difference between services that do or do not integrate palliative care" (p. 79). "Several diverse [and

possible conflicting] cultures can operate within an organisation or institution and different norms reflect implicitly different values or worldviews” (McCormack et al., 2002, p. 97).

The diagnosis of dying is made much less frequently in patients dying from non-malignant disease and is in part attributed to the fact that it is easier to prognosticate death and dying for patients with malignant disease, than it is for patients with chronic non-malignant disease (Gott, Ahmedzai & Wood, 2001). The medical wards averaged 60-70 deaths per annum – almost half of those that occurred in the cancer ward. The difficulties experienced by medical staff in diagnosing dying in patients with end-stage non-malignant disease, including when to discontinue interventions such as artificial nutrition and hydration, are well documented in the literature (Gott et al., 2001; Davidson et al., 2003; Ellershaw & Ward, 2003; Ellershaw & Wilkinson, 2003; Ersek, 2003).

The values and beliefs of nurses are influenced by the clinical practice of those with the power and authority to prescribe the care. Gagan and Hewitt-Taylor (2004) identified that with any change of practice the “power relationships between professions as well as within professions must be taken into account” (p. 1218). The nurses in these wards described a task-driven culture of care that included taking and recording vital signs, maintaining fluid balance charts and turning the patient regularly up until the time of their death, even when they recognised that these tasks were no longer appropriate. The nurses continued these nursing interventions for several reasons. They believed they were providing the care that was expected and, therefore, could not be held accountable for the patient’s death, and that the dying patient’s family/whanau could see they were doing everything possible to prevent the patient’s death. An emancipatory PD approach empowered medical and nursing staff in this group to reflect on their current practice and to consider changing the way they cared for dying patients and their families/whanau. McCormack et al. (2002) suggest “that the culture of a practice context needs to be understood if meaningful and lasting change is to be achieved” (p. 97).

Care of dying patients was not a high priority for nurses in the medical wards and the evidence based care being recommended by the LCP differed significantly in several key areas to the care they were currently providing. Time and workload pressures were cited as reasons for

their poor attendance at pre-LCP implementation education sessions, even when the offer of being paid to attend in their own time was made. In contrast, care of the dying was a key practice/patient issue for the nurses in the cancer ward. They easily achieved the target of having at least 80% of staff educated prior to the start date of the LCP pilot. “We are only just beginning to really understand the role that contextual factors can play in facilitating or inhibiting the research implementation process” (Rycroft-Malone, 2004, p. 299).

Leadership

Describing the characteristics that inform leadership styles is central to understanding the powerful effect ‘leadership’ has on the harmony of an organisation or team, the motivation of individual members, job satisfaction, and whether change is actively embraced (Scott & Caress, 2005). The characteristics informing the differences between transactional and transformational styles of leadership are described in the literature (Girven, 1996; Howatson-Jones, 2004; Scott & Caress, 2005). Transactional nursing leaders demonstrate a traditional, autocratic approach to the day-to-day running of their wards through the allocation of workloads, delegation of responsibilities and the management of staff and budgets (Howatson-Jones, 2004) and are believed to hinder the empowerment of staff in relation to practice change. On the other hand, transformational nursing leaders are inspirational and enable and empower their staff to feel valued as contributing leaders in their own right (Howatson-Jones, 2004; McCormack et al., 2002; Scott & Caress, 2005). Transformational leadership encourages democratic decision-making processes and is proposed to support the successful implementation of practice change. Both leadership styles were encountered within the pilot wards. The organisation supported and enabled me to lead the LCP project, and although the role is largely autonomous, a monthly progress reporting process ensured I felt valued and supported by the organization.

Where a transactional leadership style prevailed, the LCP was delegated to one or two senior members of staff, rather than staff championing the LCP because of their belief in the practice change. This in turn had a downstream affect that directly impacted on the success of the LCP when these ‘delegated’ champions left and were not replaced. Where nursing staff were

encouraged to self-register their interest in championing the LCP in their ward, greater numbers of the staff volunteered and have remained active in this role, increasing the success and sustainability of the LCP in their practice setting.

Evaluation

Multiple methods of evaluation and feedback were used before, during, and at the completion of the LCP pilot. These included clinical audit, variance analysis, feedback from the LCP nurse champions, ward staff and consultant groups, and reflective practice. “There are a number of ways that data from the LCP can be analysed and collated to set standards and inform best practice” (Ellershaw & Wilkinson, 2003, p. 141). Verbal feedback was requested from every member of staff at the completion of their LCP education. Doctors were asked for their opinion on whether they saw a place for the LCP in their practice. Nursing staff were asked to name one thing they remembered, or that stood out for them, about the LCP. This provided the opportunity for staff to express their understanding of the LCP, as well as having any concerns or misunderstandings addressed. One example of this was when a nurse expressed her concern that the LCP was a form of euthanasia. On closer examination, it transpired that the nurse had fears about administering morphine. This enabled me to work more closely with this person in their practice setting, and her colleagues in the group also reassured her that they would support her in her practice. Frequent visits to the pilot wards to ask if there were any patients on an LCP provided further informal education opportunities. Barrett et al. (2005) report that feedback from staff involved in practice change “led to early identification of obstacles and ensured project coordinators understood that an evaluation assisted in maintaining the momentum of change” (p. 12).

A base review audit of the documentation of the delivery of end-of-life care in 20 sets of randomly selected deceased patient’s notes from the hospital was undertaken in line with the recommendations of the LCP Central Lead Team in the UK. This information was not shared with staff in the pilot wards until the post-LCP implementation audit had been completed, and both sets of data were available. This was a strategic decision, to prevent staff from feeling that they were being criticised. Rather, the results of the pre- and post-LCP implementation

audits provided comparative data that, when presented together, demonstrated the effectiveness of the LCP in a positive way, as well as identifying gaps in the knowledge, training and resources of the group, as opposed to singling out individual wards or people. These audit results were presented to a number of key stakeholders, including the PCON, the HSPCT, consultant groups, chaplaincy team and nursing staff from the LCP pilot wards. The ability to demonstrate an improvement in the documentation of the care of dying patients and their families/whanau led to further resources being allocated by the organisation to continue the wider dissemination of the LCP across the DHB region.

Models of Facilitation

Aligned to the PARIHS framework (Table 1) and the success and sustainability of the LCP pilot project are the purpose of facilitating this change in practice, and the skills and attributes I bring to the role of LCP Project Coordinator. I state the proposed purpose of the facilitation of the LCP project, followed by a critical reflection on my role, skills and attributes and their effect on the implementation of the LCP in practice.

It is proposed that a facilitator has a key role to play in not only affecting the context in which change is taking place but also in working with practitioners to make sense of the evidence being implemented.

(Rycroft-Malone, 2004, p. 300)

Purpose

The purpose of facilitation here was to engage with consultants and ward staff around the question of how dying patients and their families/whanau are cared for in hospital with the purpose of ensuring symptoms such as pain, nausea and vomiting, terminal restlessness and secretions are managed according to the best available evidence to ensure the timely delivery of quality end-of-life care. This includes addressing the psychosocial, cultural and spiritual needs of patients and their families/whanau. It was proposed that implementing the LCP would ensure that staff are skilled in the assessment and management of terminal symptoms and are more confident in caring for dying patients. Dying patients and their families/whanau would benefit from improved multidisciplinary communication and care, and the wards would

be recognized as areas of excellence in care of the dying in the organisation. To ensure a change in practice is sustainable requires greater consideration in terms of changing the culture of care, than merely introducing a new form of documentation.

The Role of Facilitator

Having a dedicated project leader working with colleagues in the practice context appears to be critical to the success of implementation projects (Rycroft-Malone, Harvey et al., 2004). In McCormack and Garbett's (2003) study of the characteristics, qualities and skills of practice developers they report one participant's description of 'keeping plates spinning' as "a person maintaining the impetus of a particular project by dividing their attention between a number of elements (the spinning plates) and trying to attend to them all as and when required" (p. 321). I had identified 19 'spinning plates', or key stakeholder groups, when compiling the LCP project charter. Balancing stakeholder demands in the LCP project required a degree of alongside PD, as described in Section Three.

In the pre-pilot planning stage, I was concerned that the hierarchal authority inherent in my role as a PCNS and LCP Project Coordinator might mobilise resistance to the LCP if staff thought I was being critical of their care of the dying by imposing practice change. If not addressed, levels of trust and previous history can get in the way of successful engagement (Wright & Titchen, 2003). "Drive, enthusiasm and credibility rather than superiority" (Rycroft-Malone, Harvey et al., 2004, p. 919) were identified as important for the role of project lead by participants in a study that scrutinised the elements of the PARIHS framework. Successfully engaging with staff "is central to human interaction where the object is to: understand another, develop a relationship, communicate effectively, solve a problem, or bring about change" (Walsh, Lawless, Moss & Allbon, 2005, p. 125). Using Walsh et al.'s (2005) 'building effective engagement tool' (BEET) facilitated personal reflection, learning and professional growth that empowered me to develop techniques to engage constructively with key stakeholders and ward staff with whom I had previously worked. The cornerstones of successfully engaging staff in the LCP pilot were maintaining the integrity of the project, transparency, and an emancipatory PD approach.

In facilitating the LCP pilot, I aimed to be an ‘enabler of’, as opposed to ‘doing for,’ key stakeholders to achieve sustainable practice change.

The doing role is likely to be practical and task-driven, with a focus on administering, supporting and taking on specific tasks where necessary. In contrast an ‘enabling’ facilitator role is more likely to be developmental in nature, seeking to explore and release the inherent potential of individuals.

(Harvey et al., 2002, p. 581)

A critical part of pre-LCP implementation involved a sustained partnership with stakeholder groups to adapt Version 11 of the ‘Hospital LCP’ to meet the needs of our local population and reflect the protocols, procedures and guidelines of the organisation. Once this was achieved, buy-in was sought from the medical consultants from the pilot wards using traditional didactic presentations during grand rounds and medical meetings. I adapted the content of each presentation in anticipation of meeting what I had previously ascertained about the needs and priorities of each consultant group. I emphasised the criteria for diagnosing dying, the pharmacological end-of-life symptom management guidelines, and the measurable outcomes that facilitate audit in the medical presentation. For the oncologists and haematologists, the pharmacological end-of-life symptom management guidelines, aim to keep the patient under the care of their admitting team, and expectation that the pilot wards would be recognised across the organisation as providing a model of excellence in end-of-life care were emphasized. ‘Top-down’ approaches to implementing practice change really are a double-edged sword (McCormack & Garbett, 2003). On the one hand, Rycroft-Malone, Harvey et al.’s (2004) exploration of the factors that influence the implementation of evidence into practice found that “it was most important to have the support of the consultants for ideas to be accepted and changes to be made” (p. 919). On the other, Stancic, Mullen, Prokhorov, Frankowski and McAlister (2003) state that “although physicians may prefer didactic presentations because of the opportunity to spend time with colleagues, the lecture format was consistently found to produce the lowest level of behaviour change in physicians’ practices” (p. 166). In my experience, this technical PD approach was successful in getting the buy-in of

the consultants and has not detracted from achieving changes in medical practice that are aligned with the goals of care in the LCP.

Combined education sessions were arranged for the nursing and allied health staff from the three pilot wards. I deliberately structured these to facilitate critical reflection and discussion about the ways in which care of the dying was currently being prescribed and delivered. Critical reflection can “uncover many factors influencing (staff) behaviour and can lead to insight and therefore to change” (Walsh et al., 2002). Personal and cultural beliefs about the care of dying patients were also shared, and the evidence-based recommendations of the LCP discussed. Paget (2001) explored the relationship between reflective practice and clinical outcomes and found “the role of the facilitator was highlighted as an important factor in enabling practitioners to transform their reflections into change in practice” (p. 213). This ‘bottom-up’, inductive approach to practice change “fosters ownership and ... empowers practitioners” (Wigan et al., 2007, p. 23) and is described in Section Three as emancipatory PD. Taking account of the context in which staff were working and acknowledging the low priority of care of the dying for some helped me to understand the poor attendance of a particular group of staff. Despite failing to achieve the minimum of having 80% of staff educated in their area pre-implementation (achieved 55%), I agreed to commence the pilot. I have since learned that providing extensive additional education sessions did little to improve the buy-in of these staff and this ward continues to struggle with the change of practice to this day. Those areas who committed to achieving the 80%-plus staff attendance had the highest rates of successful implementation of the LCP in practice.

Skills and Attributes

Facilitators of practice change require a wide repertoire of skills and attributes (Garbett & McCormack, 2002; McCormack & Garbett, 2003; McCormack, Wright, Dewar, Harvey & Ballantine, 2007; Rycroft-Malone, 2004; Titchen, 2003). “Reflection-in-action” and “reflection-on-action” (Schon, 1983) during every encounter I had with key stakeholders and after every pre-LCP education session enabled me to be flexible and to change the methods of

facilitation I used to fit with the knowledge and level of buy-in demonstrated by key stakeholders.

Utilising ‘critical companionship’, described by Titchen (2003) as the use of “personal qualities, professional behaviour and skills, and the ability to blend different kinds of knowledge and skills with use of self, through professional artistry” (p. 33), enabled me to get alongside nurses to gain insight into some of the cultural values and beliefs that informed current end-of-life care. Facilitating sensitive discussions about the major issues that emerged, including the use of morphine and discontinuing artificial hydration and nutrition at the end-of-life, has enhanced the knowledge, skills and confidence of nurses, particularly in the non-malignant settings.

It would appear that the process of a specialist resource coming to the clinical area and working in tandem with the generic team enhances both knowledge and confidence and supports the transfer of this new knowledge into clinical practice.

(Ellershaw & Wilkinson, 2003, p. 115)

Good communication skills, knowledge of the project inside and out and remaining open to learn from those I was educating are skills and attributes that are woven throughout the descriptive case study, demonstrating the interrelatedness of the factors of the PARIHS framework.

Outcomes of the LCP Pilot

Utilising PD approaches and the PARIHS framework has enabled me to understand and articulate the interplay and interdependence of the evidence, context and models of facilitation while implementing the LCP in real-time practice in three hospital wards. The LCP pilot was concluded after two months, once the target of 20 LCPs from across all three wards had been reached. However, there were varying degrees of successful implementation. In my experience, three key elements and the sub-elements articulated in the PARIHS framework are

relevant to the health care setting and are indicative of the potential for the successful implementation of evidence in practice. My research demonstrates that there is no question that overall the nature and strength of the evidence informing the LCP is 'high' (Table 1). Patient experiences are in the very early stages of being evaluated and should be considered in the context of the LCP as a relatively new initiative.

The most successful implementation occurred where the context, culture and leadership of the wards were 'high' (Table 1). Familiarity with the main aspect of the practice change, care of the dying, also contributed to achieving a greater degree of success of the pilot. Where context, culture and leadership were 'low', the success of the LCP has taken longer to achieve and the staff have required ongoing education, support, and encouragement which is a tax on limited resources. As LCP Project Coordinator, I was responsible for the models of facilitation used to implement the LCP pilot. A combination of models of facilitation was used to facilitate the change in practice. I believe allowing one of the wards to commence the pilot on time with the other two wards was an error of judgment and contributed to the slower uptake of the LCP in practice. The combination of technical, emancipatory and alongside PD approaches was used to facilitate contextual and cultural change. This has shown that although a technical PD approach is less likely to result in sustainable change, the combination of all three PD approaches complement each other within the complexity of real-time practice change.

The post-implementation audit of the first 20 LCPs completed showed a marked improvement in the documentation of the care of dying patients and their families/whanau across the three pilot wards, when compared to the hospitals pre-LCP base review audit. The consultant groups gave very positive verbal feedback of their experiences using the LCP and unanimously agreed to continue its use. In one case, a medical consultant had attempted to use the LCP for a dying patient under their care in an 'outlying' ward and was disappointed to find that the staff were unaware of the LCP. All consultants were keen that the LCP be more widely disseminated throughout the hospital as quickly as possible. The consultants who piloted the LCP are documenting "Start on Liverpool Care Pathway" in the patient's clinical notes at the time they diagnose dying. Patients on the LCP are remaining under the care of

their own team, with the HSPCT receiving fewer requests for 'take-over' care of dying patients from these wards. The nurses in the pilot wards report feeling more confident and knowledgeable about caring for dying patients. Sustainability has been achieved through the LCP Network Nurse Group of champions from each of the wards. This group meet monthly to discuss their LCP experiences and members have made a commitment to train new staff to their ward in the use of the LCP.

Not only was permission given by the PCON to continue the dissemination of the LCP throughout the hospital and across the DHB region, additional resources have been allocated to facilitate this. These include a second part-time PCNS with a dual Community LCP Liaison role, and the secondment of a Staff Nurse from one of the pilot wards to replace me in the HSPCT to enable me to work full-time on the LCP project. To date, 23 months into the project, six inpatient wards encompassing over 40% of the total number of hospital deaths are successfully using the LCP.

Section Four described the successful implementation of a special project utilising PD approaches and the PARIHS framework. Although non-linear and complex, the success and sustainability of implementing evidence in practice are underpinned by systematic processes.

Section Five: Conclusion

The LCP is a new innovation for improving the care of dying patients and their families/whanau. There is great potential for the LCP to standardise care of the dying and facilitate the national and international benchmarking of end-of-life care (Ellershaw & Wilkinson, 2003). I am reassured that the research, clinical effectiveness and local data/information informing the nature and strength of the evidence informing the LCP are high. Patient experiences will be evaluated and reported over the next 10 years, and I expect they will further strengthen the patient-centredness of the LCP approach to the delivery of end-of-life care. Although the evidence is strong, the practicalities and complexities of successfully implementing the evidence-based LCP in practice are seismic. Walsh and Moss (2007) warn us about the “Number 8 wire mentality” (p. 83) – a ‘let’s just fix it’ attitude – of kiwis (New Zealanders) in NZ. The use of the LCP as a ‘quick-fix’, in the absence of organisational support, or consultation and collaboration with staff, has contributed to the unsuccessful implementation of the LCP in some care settings. Although currently there is a focus on evidence-based practice in health care, evidence presented in the absence of considering context and facilitation will not achieve meaningful and sustainable practice change. Successful implementation of research into practice is “a function of three core elements – the level and nature of the evidence, the context or environment into which the research is to be placed, and the method or way in which the process is facilitated” (Kitson et al., 1998, p. 149). Careful, deliberate and systematic attention must be paid to all three core elements if the LCP is to be successfully implemented in practice.

I found the interrelatedness of PD processes and the elements of context and facilitation much easier to understand in the reporting of a case study in real-time. Context is informed by culture, leadership and evaluation. The case study demonstrates how every care setting has a different culture, informed by multiple values and beliefs of the individuals who work there, in addition to the social, political, fiscal, and historical influences of key stakeholders and the ever-changing nature of healthcare. “The context in which healthcare practice occurs can be

seen as infinite” (McCormack et al., 2004, p. 130). Emancipatory and alongside PD approaches are respectful ways of working that facilitate inclusion of, and collaboration with, all key stakeholders. Leadership has a strong influence on culture and receptivity to change. A transactional approach to leadership is not conducive to valuing and empowering staff and is more likely to mobilise resistance to change. On the other hand, transformational leaders “inspire staff towards a shared vision of some future state” (McCormack et al., 2002, p. 98-99). The influences of these different leadership styles on the successful implementation of the LCP in practice are implicit in the case study. Evaluation is defined by multiple sources and methods of audit and feedback. Evaluating the impact of the LCP in real-time practice provided project sponsors and key stakeholders with the impetus to disseminate the LCP more widely, and assess and address aspects of practice that were impinging on the success of the LCP. The diversity of contexts and models of facilitation mean the process of change is neither linear, nor time-dependant.

The purpose of facilitation, and the role, skills and attributes of the facilitator are not to be underestimated. My role as LCP project coordinator has played a part in the successful implementation of the LCP in two hospital wards, while also having an effect on the partial success in a third ward. As it transpired, setting education targets and maintaining them was important, such as the recommended 80% of staff in each ward participating in LCP education before implementing it in practice. The experience of providing low intensity, extensive coverage led to an expectation of ‘doing for’ staff, and has informed future pre-LCP implementation education planning to avoid an recurrence of this situation. On reflection, adult learning approaches to teaching and high intensity, limited coverage were central to enabling HCPs to change their practice.

In writing this research paper, I was able to critically review the evidence informing the LCP, reflect on how the LCP pilot unfolded, gain a greater appreciation of the scope of factors informing successful practice change, and understand why some styles of facilitation are more successful than others. This research paper provides an inside perspective of the complexities inherent in implementing evidence in real-time practice. More specifically, this research paper will provide future LCP facilitators in NZ with an account of implementing the LCP in

the context of a NZ hospital. Highlighting PD processes and the relevance of the PARIHS framework alongside real-time practice change has been a positive learning experience that has prepared me for the dissemination of the LCP on a regional basis. Utilising PD and the PARIHS framework to implement practice change will continue to stimulate recognition of change and development complexities and bring consideration of these as robust methods for working between the theory and implementation of the evidence-based LCP.

Closing Reflections

The issue I identified as central to this research paper was implementing evidence in practice. A critical, systematic review of the contemporary literature in each of the three key areas of my research – LCP, PD, PARIHS framework – contributed to my understanding of why implementing evidence in practice is not always successful and in doing so, I achieved my objective to identify a ‘how to’ model for successfully implementing evidence in practice in a sustainable way.

The LCP literature review confirmed my personal clinical experiences of caring for dying patients and validated my beliefs about the death and dying experiences of families/whanau and HCPs in the acute hospital setting. The LCP is a tool that validates ways of providing care to dying patients and their families/whanau that are currently being mirrored in tacit aspects of nursing care. Some examples are where nurses document ‘withheld’ against non-essential medications on the drug chart, while asking their medical colleagues to convert analgesic, anti-emetic and sedative medications to alternative subcutaneous routes when their dying patient is no longer able to swallow tablets; nurses describe the moral distress of seeing dying patients overloaded with artificial hydration at the end-of-life and the distress the increasing moist, noisy breath sounds of the patient cause families/whanau, knowing that these will negatively impact on the families/whanau memories of their loved one’s death; and nursing decisions to abandon temperature, pulse, blood pressure and respiratory rate recordings when they recognize the patient with advanced disease is near death. HCPs report how empowered they feel by the LCP because it reflects their clinical experiences as well as

those of patients. My experience has been that when the evidence reflects the reality of practice, the process of implementing evidence in practice is made easier, and that HCP's are more receptive to the research informing the evidence when this occurs.

I was appointed to the role of LCP Project Coordinator on the strength of my clinical credibility within the organisation. I recognised skills, attributes and strategies I had developed in previous senior clinical roles when I saw them described in PD literature. Understanding the advantages and disadvantages of PD approaches enabled me to utilize my own skills more effectively to successfully engage staff at each stage of the project. The description of the systematic use of implementation and evaluation strategies (Table 2 and 3) give a clearer picture of the scope of the LCP pilot project described in my research. The juxtaposition is that implementing evidence in practice is complex because of the messy nature of change, but in my experience the approaches informing the process are quite straightforward when the theory is directly applied to practice. The PARIHS framework is an excellent example of theory that needs to be directly applied to real-time practice change to produce a clearer, more complete understanding of its use as a model for guiding the implementation of evidence in practice.

I have refined the process of implementing the LCP in practice as a direct result of developing this knowledge. Being in a position to apply this knowledge in real-time practice has been incredibly valuable. The result has been the successful and sustainable wider dissemination of the LCP in hospital, rest home, community and rural hospital settings in the Waikato district since the completion of the LCP pilot. One of the most significant indicators of the successes I have achieved as LCP Project Coordinator, with the support of the HSPCT and our PCON, has been evidenced by the level of national interest in how we have achieved so much success implementing the LCP in a meaningful and sustainable way. I presented the DHB's LCP Project to medical and nursing delegates at the 'Hospice Palliative Care New Zealand' meeting, as part of the 'Australia and New Zealand Specialist Palliative Medicine' (ANZSPM) conference, in Wellington on May 11, 2007, and have subsequently received several invitations to present the project to policy makers throughout NZ. This includes a recent presentation to Capital and Coast DHB's (CCDHB) palliative care education day in

Wellington; an invitation from a representative of NZ's Ministry of Health to present the LCP as an innovation in improving patient outcomes to a meeting of representatives from Cancer Networks in Wellington in November 2007; and a request to duplicate the CCDHB presentation at Auckland DHB's Palliative Care Network meeting in March 2008.

I am confident my research will provide future LCP facilitators in NZ with a guide to utilising PD approaches and the PARIHS framework as models for 'how to' successfully implement this framework of evidence-based, best practice care of the dying into NZ care settings.

References

- Araujo, M. M. T., da Silva, M. J. P., & Francisco, M. P. C. B. (2004). Nursing the dying: Essential elements in the care of terminally ill patients. *International Nursing Review*, 51, 149-158.
- Ashurst, A. (2007). Palliative care: Hospice services. *Nursing and Residential Care*, 9(4), 167-169.
- Barrett, C., Angel, J., Gilbert, M., Bouras, C., Thompson, K., & Singleton, E. (2005). Systematic processes for successful, sustainable practice development. *Practice Development in Health Care*, 4(1), 5-13.
- Billings, D. M., & Kowalski, K. (2006). Bridging the theory-practice gap with evidence-based practice. *The Journal of Continuing Education in Nursing*, 37(6), 248-249.
- Brown, D., & McCormack, B. (2005). Developing postoperative pain management: Utilising the promoting action on research implementation in health services (PARIHS) framework. *Worldviews on Evidence-Based Nursing*, 2(3), 131-141.
- Burrows, D. E., & McLeish, K. (1995). A model for research-based practice. *Journal of Clinical Nursing*, 4, 243-247.
- Carr, S. M., Lhussier, M., & Wilcockson, J. (2005). Buying in specialist time or buying out generalist time for practice development. *Practice Development in Health Care*, 4(4), 171-179.
- Davidhizar, R., Giger, J. N., & Poole, V. (1997). When change is a must. *The Health Care Supervisor*, 16(2), 21-25.
- Davidson, P., Introna, K., Daly, J., Paull, G., Jarvis, R., Angus, J., et al. (2003). Cardiorespiratory nurses' perceptions of palliative care in nonmalignant disease: Data for the development of clinical practice. *American Journal of Critical Care*, 12(1), 47-53.

- Department of Health. (1995). *The Calmine-Hine report. A policy framework for commissioning cancer services in England and Wales*. London: HMSO.
- Department of Health. (1998). *A first class service - quality in the NHS*. London: HMSO.
- Department of Health. (2000). *NHS Cancer Plan - A plan for investment, a plan for reform*. London: HMSO.
- Dracup, K., & Bryan-Brown, C. W. (2006). Evidence-based practice is wonderful...sort of. *American Journal of Critical Care*, 15(4), 356-358.
- Duffy, A., & Woodland, C. (2006). Introducing the Liverpool Care Pathway into nursing homes. *Nursing Older People*, 18(9), 33-36.
- Dunn, K. S., Otten, C., & Stephens, E. (2005). Nursing experiences and the care of dying patients. *Oncology Nursing Forum*, 32(1), 97-104.
- Ellershaw, J. E. (2002). Clinical pathways for care of the dying: An innovation to disseminate clinical excellence. *Journal of Palliative Medicine*, 5(4), 617-621.
- Ellershaw, J. E. (2007). Care of the dying: What a difference an LCP makes! *Palliative Medicine*, 21, 365-368.
- Ellershaw, J. E., Foster, A., Murphy, D., Shea, T., & Overill, S. (1997). Organisation of services. Developing an integrated care pathway for the dying patient. *European Journal of Palliative Care*, 4(6), 203-207.
- Ellershaw, J. E., & Murphy, D. (2005). The Liverpool Care Pathway (LCP): Influencing the UK national agenda on care of the dying. *International Journal of Palliative Nursing*, 11(3), 132-134.
- Ellershaw, J. E., & Ward, C. (2003). Care of the dying patient: The last hours and days of life. *British Medical Journal*, 326, 30-34.
- Ellershaw, J. E., & Wilkinson, S. (2003). *Care of the dying. A pathway to excellence*. Oxford: Oxford University Press.

- Ellis, I., Howard, P., Larson, A., & Robertson, J. (2005). From workshop to work practice: An exploration of context and facilitation in the development of evidence-based practice. *Worldviews on Evidence-Based Nursing*, 2(2), 84-93.
- Ersek, M. (2003). Artificial nutrition and hydration. *Journal of Hospice and Palliative Nursing*, 5(4), 221-230.
- Fowell, A., Finlay, I., Johnstone, R., & Minto, L. (2002). An integrated care pathway for the last two days of life: Wales-wide benchmarking in palliative care. *International Journal of Palliative Nursing*, 8(12), 566-573.
- Fowell, A., Johnstone, R., Russell, I., Russell, D., & Finlay, I. (2006). Reported symptoms in the last days of life: The need for robust research. *Palliative Medicine*, 20, 845-846.
- Foxcroft, D. R., & Cole, N. (2000). Organisational infrastructures to promote evidence based nursing practice (Publication no. CD002212). Retrieved 31/05/07, from Cochrane Database of Systematic Reviews 2000:
- Funk, S. G., Tournquist, & Champagne. (1989). Application and evaluation of dissemination model. *Western Journal of Nursing Research*, 11(4), 486-491.
- Gagan, M., & Hewitt-Taylor, J. (2004). The issues for nurses involved in implementing evidence in practice. *British Journal of Nursing*, 13(20), 1216-1220.
- Gambles, M., Stirzaker, S., Jack, B., & Ellershaw, J. E. (2006). The Liverpool Care Pathway in hospices: An exploratory study of doctor and nurse perceptions. *International Journal of Palliative Nursing*, 12(9), 414-421.
- Garbett, R., & McCormack, B. (2002). A concept analysis of practice development. *Nursing Times Research*, 7(2), 87-100.
- Girard, N. J. (2006). Show me the evidence. *Association of Operating Room Nurses Journal*, 84(2), 181-182.
- Girvan, J. (1996). Leadership and nursing. Part 2: Styles of leadership. *Nursing Management*, 3(2), 20-21.
- Goode, C. (1992). Research utilisation: An organisational process that enhances quality of care. *Journal of Nursing Care Quality*, 27-35.

- Gott, C. M., Ahmedzai, S. H., & Wood, C. (2001). How many inpatients at an acute hospital have palliative care needs? Comparing the perspectives of medical and nursing staff. *Palliative Medicine*, 15, 451-460.
- Haines, A., & Jones, R. (1994). Implementing findings of research. *British Medical Journal*, 308, 1488-1492.
- Hardy, J. R., Haberecht, J., Maresco-Pennisi, D., & Yates, P. (2007). Audit of the care of dying in a network of hospitals and institutions in Queensland. *Internal Medicine Journal*, 37, 315-319.
- Harvey, G., & Kitson, A. (1996). Achieving improvement through quality: An evaluation of key factors in the implementation process. *Journal of Advanced Nursing*, 24, 185-195.
- Harvey, G., Loftus-Hills, A., Rycroft-Malone, J., Titchen, A., Kitson, A., McCormack, B., et al. (2002). Getting evidence into practice: The role and function of facilitation. *Journal of Advanced Nursing*, 37(6), 577-588.
- Hewitt, J. (2005). *Waikato District Health Board Palliative Care Strategy*. Hamilton: Waikato District Health Board.
- Hinton, V., & Fish, M. (2006). A care pathway for the end of life in a renal setting. *EDTNA/ERCA Journal of Renal Care*, 160-163.
- Hockley, J., Dewar, B., & Watson, J. (2005). Promoting end-of-life care in nursing homes using an 'integrated care pathway for the last days of life'. *Journal of Residential Nursing*, 10(2), 135-152.
- Horsley, J. A. (1978). Research utilisation as an organisational process. *The Journal of Nursing Administration*, 8(7), 4-6.
- Howatson-Jones, I. L. (2004). The servant leader. *Nursing Management*, 11(3), 20-24.
- Jack, B., & Oldham, J. (1997). Issues in research. Taking steps towards evidence-based practice: a model of implementation. *Nurse Researcher*, 5(1), 65-71.
- Jack, B. A., Gambles, M., Murphy, D., & Ellershaw, J. E. (2003). Nurses' perceptions of the Liverpool Care Pathway for the dying patient in the acute hospital setting. *International Journal of Palliative Nursing*, 9(9), 375-381.

- Jack, B. A., Gambles, M., Saltmarsh, P., Murphy, D., Hutchinson, T., & Ellershaw, J. E. (2004). Enhancing hospital nurses knowledge of palliative care: A network nurse programme. *International Journal of Palliative Nursing*, 10(10), 502-506.
- Joske, D., & McGrath, P. (2007). Palliative care in haematology. *Internal Medicine Journal*, 37, 589-590.
- Keane, B., Taylor, A., & Clarke, J. (2007). Meeting the needs of patients in the last days of life. *Kai Tiaki Nursing New Zealand*, 13(2), 12-14.
- Kelsey, S. (2005). Managing patient care: Are pathways working? *Practice Development in Health Care*, 4(1), 50-56.
- Kitson, A., Ahmed, L. B., Harvey, G., Seers, K., & Thompson, D. R. (1996). From research to practice: One organisational model for promoting research-based practice. *Journal of Advanced Nursing*, 23, 430-440.
- Kitson, A., Harvey, G., & McCormack, B. (1998). Enabling the implementation of evidence based practice: A conceptual framework. *Quality in Health Care*, 7(3), 149-158.
- Kyba, F. C. (1999). Improving care at the end of life: Barriers, challenges and resources. *Texas Nursing*, 73(8), 6-9.
- Lacey, P. (2005). A checklist for innovation. *Practice Development in Health Care*, 4(3), 121-123.
- Lhussier, M., Carr, S. M., & Wilcockson, J. (2007). The evaluation of an end-of-life integrated care pathway. *International Journal of Palliative Nursing*, 13(2), 74-81.
- Manley, K., & McCormack, B. (2003). Practice development: Purpose, methodology, facilitation and evaluation. *Nursing in Critical Care*, 8(1), 22-29.
- McCormack, B. (2002). Developing practice: Individual and organisational responsibilities. *Australian Journal of Advanced Nursing*, 20(1), 6-7.
- McCormack, B., & Garbett, R. (2003). The characteristics, qualities and skills of practice developers. *Journal of Clinical Nursing*, 12, 317-325.

- McCormack, B., Kitson, A., Harvey, G., Rycroft-Malone, J., Titchen, A., & Seers, K. (2002). Getting evidence into practice: The meaning of 'context'. *Journal of Advanced Nursing*, 38(1), 94-104.
- McCormack, B., Manley, K., & Garbett, R. (2004). *Practice development in nursing*. Oxford: Blackwell.
- McCormack, B., Manley, K., Kitson, A., Titchen, A., & Harvey, G. (1999). Towards practice development - a vision in reality or a reality without vision? *Journal of Nursing Management*, 7, 255-264.
- McCormack, B., Wright, J., Dewar, B., Harvey, G., & Ballantine, K. (2007). A realist synthesis of evidence relating to practice development: Findings from the literature analysis. *Practice Development in Health Care*, 6(1), 25-55.
- McDonnell, M., Johnston, G., Gallagher, A. G., & McGlade, K. (2002). Palliative care in district general hospitals: The nurse's perspective. *International Journal of Palliative Nursing*, 8(4), 169-175.
- McGrath, P. (2001). Dying in the curative system: The haematology/oncology dilemma, part 1. *The Australian Journal of Holistic Nursing*, 8(2), 14-21.
- McGrath, P. D., & Holewa, H. A. (2007). Description of an Australian model for end-of-life care in patients with haematologic malignancies. *Oncology Nursing Forum*, 34(1), 79-85.
- McNicholl, M. P., Dunne, K., Garvey, A., Sharkey, R., & Bradley, A. (2006). Using the Liverpool Care Pathway for a patient. *Nursing Standard*, 20(38), 46-50.
- Mellor, F., Foley, T., Connolly, M., Mercer, V., & Spanswick, M. (2004). Role of a clinical facilitator in introducing an integrated care pathway for the care of the dying. *International Journal of Palliative Nursing*, 10(10), 497-501.
- Minister of Health. (2001). *The New Zealand Palliative Care Strategy*. Wellington: Ministry of Health.
- Minister of Health. (2005). *The New Zealand Cancer Control Strategy: Action Plan 2005-2010*. Wellington: Ministry of Health.

- National Institute for Clinical Excellence. (2004). *Improving supportive and palliative care for adults with cancer*. London: National Institute for Clinical Excellence.
- NHS Beacon Programme. (2001). *NHS Beacons Learning Handbook: spreading good practice across the NHS*. Petersfield: NHS Beacon Programme.
- Office of National Statistics. (2003). Version]. Retrieved 21/05/06 from http://www.statistics.gov.uk/downloads/theme_health/Dh1_36_2003/DH1_2003.pdf.
- O'Gorman, S. M. (1998). Death and dying in contemporary society: An evaluation of current attitudes and the rituals associated with death and dying and their relevance to recent understandings of health and healing. *Journal of Advanced Nursing*, 27, 1127-1135.
- Paget, T. (2001). Reflective practice and clinical outcomes: Practitioners' views on how reflective practice has influenced their clinical practice. *Journal of Clinical Nursing*, 10, 204-214.
- Pemberton, J., & Reid, B. (2005). A systematic approach to the improvement of patient care. *Nursing Times*, 101(24), 34-36.
- Prior, D., & Poulton, V. (1996). Palliative care nursing in a curative environment: An Australian perspective. *International Journal of Palliative Nursing*, 2(2), 84-90.
- Robinson, R. (2004). End-of-life education in undergraduate nursing curricula. *Dimensions of Critical Care Nursing*, 23(2), 89-92.
- Rycroft-Malone, J. (2004). The PARIHS framework - a framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care Quality*, 19(4), 297-304.
- Rycroft-Malone, J., Harvey, G., Seers, K., Kitson, A., McCormack, B., & Titchen, A. (2004). An exploration of the factors that influence the implementation of evidence into practice. *Journal of Clinical Nursing*, 13, 913-924.
- Rycroft-Malone, J., Seers, K., Titchen, A., Harvey, G., Kitson, A., & McCormack, B. (2004). What counts as evidence in evidence-based practice? *Journal of Advanced Nursing*, 47(1), 81-90.

- Schon, D. A. (1983). *The reflective practitioner: How practitioners think in action*. New York: Basic Books.
- Scott, L., & Caress, A. (2005). Shared governance and shared leadership: Meeting the challenges of implementation. *Journal of Nursing Management*, 13, 4-12.
- Shah, S. H. (2005). The Liverpool Care Pathway: Its impact on improving care of the dying. *Age and Ageing*, 34(2), 197-198.
- Sharp, N. D., Pineros, S. L., Hsu, C., Starks, H., & Sales, A. E. (2004). A qualitative study to identify barriers and facilitators to implementation of pilot interventions in the Veterans Health Administration (VHA) Northwest Network. *Worldviews on Evidence-Based Nursing*, 1(2), 129-139.
- Stancic, N., Mullen, P. D., Prokhorov, A. V., Frankowski, R. F., & McAllister, A. L. (2003). Continuing medical education: What delivery format do physicians prefer? *The Journal of Continuing Education in the Health Professions*, 23, 162-167.
- Stetler, C. B. (1994). Refinement of the Stetler/Marram model for application of research findings to practice. *Nursing Outlook*, 42(1), 15-25.
- SUPPORT Principal Investigators. (1995). A controlled trial to improve care for seriously ill hospitalised patients: The study to understand prognoses and preferences for outcomes and risks of treatment (SUPPORT). *Journal of American Medical Association*, 274, 1591-1598.
- Swart, S., van Veluw, H., van Zuylen, L., Gambles, M., & Ellershaw, J. E. (2006). Dutch experiences with the Liverpool Care Pathway. *European Journal of Palliative Care*, 13(4).
- Taylor, A. (2005). Improving practice with the Liverpool Care Pathway. *Nursing Times*, 101(35), 36-37.
- Taylor, A. J., & Randall, C. (2007). Process mapping: Enhancing the implementation of the Liverpool Care Pathway. *International Journal of Palliative Nursing*, 13(4), 163-167.
- Titchen, A. (2003). Critical companionship: Part 1. *Nursing Standard*, 18(9), 33-40.

- Titler, M. G., Kleiber, C., & Steelman. (1994). Infusing research into practice to promote quality care. *Nursing Research*, 43, 307-313.
- Wallin, L., Estabrooks, C. A., Midodzi, W. K., & Cummings, G. G. (2006). Development and validation of a derived measure of research utilisation by nurses. *Nursing Research*, 55(3), 149-160.
- Walsh, K., Lawless, J., Moss, C., & Allbon, C. (2005). The development of an engagement tool for practice development. *Practice Development in Health Care*, 4(3), 124-130.
- Walsh, K., McAllister, M., & Morgan, A. (2002). Using reflective practice processes to identify practice change issues in an aged care service. *Nurse Education in Practice*, 2, 230-236.
- Walsh, K., & Moss, C. (2007). Practice development in New Zealand: Reflections on the influence of culture and context. *Practice Development in Health Care*, 6(1), 82-85.
- Walsh, M., & Walsh, A. (1998). Practice development units: A study of teamwork. *Nursing Standard*, 12(33), 35-38.
- Watson, J., Hockley, J., & Dewar, B. (2006). Barriers to implementing an integrated care pathway for the last days of life in nursing homes. *International Journal of Palliative Nursing*, 12(5), 234-240.
- Wigan, K. D., Caren, B. A., & McKenzie, T. (2007). A structured approach to changing practice. *Journal of Community Nursing*, 21(1), 23-25.
- Wright, J., & Titchen, A. (2003). Critical companionship part 2: Using the framework. *Nursing Standard*, 18(10), 33-38.