UNIVERSITY OF TECHNOLOGY SYDNEY

BUILDING CAPACITY FOR WORKPLACE GOVERNANCE: EVALUATING A CLINICIAN-LED IMPROVEMENT STRATEGY TO IMPLEMENT AN END-OF-LIFE CARE PATHWAY

UTS: NURSING, MIDWIFERY & HEALTH

ST.GEORGE HOSPITAL

PREPARED BY: ROS SORENSEN, GLENN PAULL, LINDA MAGANN, JAN MAREE DAVIS

DATE: DECEMBER 2008

WITH SPECIAL THANKS TO
JUDITH DONOGHUE

THE ST GEORGE HOSPITAL
TU SOUFFRES CELA SUFFIT

AUTHORS

Ros Sorensen is Senior Lecturer in the Centre for Health Services Management in the Faculty of Nursing, Midwifery & Health and Researcher in the Centre for Health Communication, University of Technology Sydney.

Glenn Paull is Clinical Nurse Consultant, Cardiology, St George Hospital, Kogarah, Sydney

Linda Magann is Clinical Nurse Consultant, Palliative Care Service, St George Hospital, Kogarah, Sydney

Jan Maree Davis is Director, Palliative Care Service, St George Hospital, Kogarah, Sydney

ACKNOWLEDGEMENTS

We wish to thank the clinicians and managers of the six wards of St.George hospital that were the subject of this research and the Hospital executive who generously gave their time and ideas. Without exception, those involved in the research expressed interest in the work and its outcomes and asked to be kept informed of its results. We particularly wish to thank Professor Judith Donoghue for her unstinting support and advice. We acknowledge Kate Introna's enthusiasm as the instigation for the work and thank her for her involvement at the inception of the project. Finally, many thanks to Peter Evans and Kate Dobinson for their tireless assistance with data collection.

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EXECUTIVE SUMMARY

Description of the project

This research was undertaken to assess clinicians' capacity to build a framework for workplace governance based on the implementation of an end of life care pathway. The project arose from the interests of a number of palliative care and specialist nursing clinicians who adapted work already underway in Liverpool, United Kingdom, on end of life care.
The aims of the project were to:

- describe and document the process of implementing an end of life care pathway in an acute hospital setting
- assess the capacity of clinicians to develop governance processes associated with their direct clinical work
- determine the systems needed to support clinicians in this process

The research was conducted from December 2005 to December 2008 as a six -phase project:

- Phase 1: establishing the project
- Phase 2: diagnosis of the problem
- Phase 3: implementing the intervention
- Phase 4: assessing clinicians' and managers' attitudes and practices
- Phase 5: analysis of practice change and examining the organisational environment
- Phase 6: report writing and feedback.

A pre- and post-intervention mixed methodology research design was used.
Sources of data included:

- a pre- and post-intervention medical record review
- survey of treating clinician practices
- survey of hospital managers' views about improving clinical care
- focus groups with nursing staff
- interviews with hospital managers
- observation of clinical and organisational practices
- assessment of policy and performance documents.

The research centred on the implementation of an end of life care pathway in six specialty wards at St George Hospital: cardiology; respiratory; aged care; neurology; renal and oncology wards. A research planning and implementation group led the project with clinician representatives drawn from each of the six wards and the Palliative Care Service, supported by a researcher from the Faculty of Nursing, Midwifery & Health at the University of Technology, Sydney.

In the pre-intervention phase, Phase 2, 411 medical records were reviewed to assess the documented end of life care practice of the treating team (referred to in the findings as Period 1), and 244 in the post-intervention phase, Phase 5, (referred to in the findings as Period 2). Patients included in the review were those for whom death was expected and who had a No Cardiopulmonary Resuscitation (No CPR) order in place. Survey responses were received from 112 clinicians drawn from the medical records included in the pre-intervention audit. Interviews were conducted with 23 corporate, administrative, medical and nursing managers from each of the six specialty areas and the Hospital executive. A series of up to six focus groups were held with nurses in each of the six wards at the beginning of the implementation phase, Phase 3 (July –

December 2005), members of the implementation team were present to discuss the research rationale, method and process. The focus groups continued throughout the intervention period as required (January 2006-March 2007) without the presence of implementation team members.

Findings

Patient demographic data

The average age of the patients was 81.7 years in Period 1 (P1) and 78 years in Period 2 (P2). Of note, 21.2% of patients in P1 and 30.3% of patients in P2 came from a nursing home. The majority of patients had multiple admissions in the preceding 12 months, at times exceeding seven. Very few of the patients had advanced care directives or long-term care plans in place and few patients or their relatives recognised the limitation of treatment in either review phase. In contrast, the great majority of medical, nursing and allied health professionals did recognise treatment limits. Patients and family members were not routinely brought into discussions about the patient's health status as a means to developing an agreed care plan. No CPR orders were commonly instituted close to the patient's death, allowing little time for patients and family members to come to terms with the patient's deteriorating status, to make decisions about appropriate care or to organise their affairs. Limited liaison occurred between the hospital specialist units and feeder nursing homes to coordinate end of life care and support nursing homes to maintain the patient in situ.

Documentation of end of life care

Our findings show that the presence of the pathway dramatically transformed the documented quality of end of life care between P1 and P2. The post-intervention medical record review revealed end of life care pathways were present in 52.9 % of the records reviewed at P2 reflecting a significant change in the quality of documentation of patient management and associated patient care from active treatment to comfort care as a result of the intervention. This included the discontinuation of non-essential medications and change to appropriate end of life medications including analgesics, antiemetics, anticholinergic and sedative medications, in subcutaneous form where appropriate, and the cessation of blood tests, antibiotics, IV fluids and vital signs.

Active assessments of comfort care needs increased during the two review periods, including assessments for pain, agitation, respiratory secretions, nausea and vomiting, skin care, mouth, eye, personal hygiene, bowel, micturition and dyspnoea. In addition, improvement was shown in the attendance to patients' emotional and spiritual needs, specifically:

- the patient being aware of their diagnosis
- the patient being informed they are dying
- the next of kin being aware patient is dying
- religious referrals being made
- the patients' emotional and spiritual needs being identified and spiritual support given
- next of kin being identified
- social work referrals for the family being made
- psychosocial support being provided to the family

Clinician self-assessment of the use of the pathway

Of the random survey of clinicians who participated in the care of dying patients in P1, 68.75% (77) were nurses, 12.5% (14) were medical, and 18.85% (21) were allied health clinicians. The findings of this survey showed little consistency of clinical practice or approaches to care planning and delivery between nursing, medical and allied health clinicians who shared the care of the patient:

- The majority of nurses reported being aware of the pathway and of its content; the majority of medical and allied health clinicians reported that they were not aware of the pathway.
- Nurses reported using a pathway during the care process. This included reference to definitions, assessing when an activity had been achieved and recording any variances. In comparison, the majority of medical and allied health clinicians reported not doing so.
- A majority of nursing, medical and allied health clinicians reported routinely informing patients of their prognosis and what the patient should expect as part of their routine clinical care, with the majority of nurses reporting always keeping the patient informed about their clinical care compared with the majority of medical clinicians who frequently did so, and the majority of allied health clinicians who did not know.
- The majority of all three clinician groups reported that patients routinely got the chance to discuss their care with clinicians. This finding contrasts with the free-text comments by nursing clinicians that patient and family access to medical clinicians was limited, and recommending that systems be instituted to increase patient and family access to medical clinicians for information about their diagnosis and prognosis.

Communicating about care

Most significant were differences in the method by which nursing, medical and allied health clinicians communicated about the care process.

- Medical clinicians reported frequently using informal social methods to find out about medical care required for a patient, nursing clinicians reported always using the patient's medical record and the majority of allied health clinicians reported frequently talking to the patient.
- The majority of nursing clinicians reported always finding out about what nursing care is required from a verbal shift changeover and from the patient's medical record.
- The majority of medical clinicians and allied health clinicians reported finding out about required nursing care from informal discussions with nurses, the patient's medical record and talking with the patient.
- The majority of nursing clinicians reported finding out about required allied health care from the patient's medical record. In contrast, the majority of medical clinicians reported doing so from informal discussions with allied health clinicians and from the patient's medical record, as did the majority of allied health clinicians.

The implications of these findings are that while nursing and allied health clinicians frequently used the medical record as the repository of information for patient care, decision making and related activities, medical clinicians did not. Therefore, the accuracy and currency of the medical record as an up-to-the-minute communication device for patient care activities and for decision making by multidisciplinary clinicians who share care, is called into question.

Reviewing performance

Performance reporting and management emerged as the most problematic finding from the research. Almost no service-derived information was available for clinicians to plan the care of individual patients or for clinical managers to plan the care of populations of patients. Specifically:

- treating clinicians reported that they did not receive performance reports on the resource dimensions of care and the clinical composition of care, such as the extent of involvement of the different health professionals and associated therapeutic and diagnostic data
- clinical quality, patient comments or variance analysis were not available, although some medical clinicians reported receiving information on the length of stay
- unit performance was not benchmarked either internally or externally
- the majority of clinicians reported that they did not meet to review the care process or alter the process of care based on review meetings.

Overall, performance was not reported or managed. The quality of care was largely unknown, as was the case-based volume of resources utilised for this patient case type. Opportunities to improve the quality of care and resource utilisation by case type were therefore foregone.

Improving the care of dying patients

In the free-text section of the survey, treating clinicians identified four main themes requiring attention to improve the care of dying patients:

- greater involvement of patients and families in care planning
- improving clinical care
- educating patients about care
- collaborating on case management.

Specifically, clinicians called for earlier involvement of patients and families and better education about the process, their participation in decisions, reassurance about the diagnosis and prognosis and improved access to medical staff for information. Clinicians' suggestions for clinical care improvement included five main elements:

i) early recognition that the patient was dying in order to initiate timely use of pathway
ii) greater use of the pathway to guide management plan
iii) greater medical involvement and a stronger emphasis on goal-based care
iv) openness about the patient's diagnosis and prognosis
v) increased recognition of the role of palliative care

These findings suggest that clinicians have constructive and practical suggestions about how care for dying people can be improved, although without the benefit of performance information, clinicians and clinical unit managers are unable to strategically direct improvement strategies.

Improved education was advocated for medical staff at all levels of experience and for new graduates about the clinical care planning, clinical team effectiveness and multidisciplinary communication processes for dying patients, including those patients from culturally and linguistically diverse cultures. Suggestions for improved clinical management of this case type included:

- goal-based care
- multidisciplinary review of care and performance

- improved team coordination
- medical leadership and commitment
- more allied health involvement and service planning around dedicated beds
- review of staff - patient ratios
- review of after-hours management
- access to and extending use of the end of life care pathway.

Based on clinicians' recommendations, there is considerable scope to improve multidisciplinary end-of-life care.

Organisational environment

The organisational environment in which the study was conducted was that of significant change, including the merger of area health services, a new network General Manager, new Director of Nursing and numerous transient executive positions across the central network. The findings should be considered within this context.

Our findings suggest that support systems to assist clinicians and clinical managers perform their clinical duties were sub-optimal. Specifically, our research found that:

- The orientation of hospital management was not directed to developing methods of clinical care organisation or clinical process management. Managing budgets and patient flow were the immediate priority of Hospital managers rather than quality of patient care.
- Although reports were prepared centrally on efficiency and effectiveness, the data were at an aggregated level for senior levels of the health service and were not in a format that clinicians could use to review case-type performance, alter care delivery and systematically improve outcomes.
- In terms of the organisation of care, training was available for nurses involved in this research on use of the pathway and nurses were predominantly involved in developing the pathway with medical input from a palliative care specialist. However, no systematic organisation-wide training was offered about pathway development as a method of clinical process management, or more generally about managing patient care in diverse and complex health services that are geographically dispersed.
- Pathways are used in the hospital, although not consistently as a method of clinical process management. The end of life care pathway is a departure from this finding, as the specific focus of this research. The end-of-life care pathway did contain best practice elements including the sequence of therapeutic and diagnostic events, indicators of quality and outcomes and a capacity to record variance, although no capacity for prospective costing was included.
- There were no protocols evident to standardise recording of patient information, and, notwithstanding earlier comments about improvement in the documentation, problems continued to exist relating to the quality of documentation in the medical record of dying patients.
- Patient feedback was not routinely incorporated into the review of clinical care and therefore not used as an indicator of, or trigger for, performance improvement.
- Meetings were generally not held either at the corporate or clinical unit levels of the hospital to review and benchmark performance on patient care dimensions relating to end of life care (NSW Health Department, 2005).
- There was a general absence of incentives to develop systems relating to clinical care management or to encourage improved performance of clinical care.

All specialty areas included in this research outlined a range of initiatives being undertaken to improve the effectiveness and efficiency of clinical care and clinical care processes, however, the initiatives tended to be specialty-specific. They did not link across specialties nor were they strategically coordinated from the administrative management levels of the hospital, with the exception of NSW Health initiative, Jonah, a program to streamline patient discharge. The initiatives being undertaken tended to be fragmented in nature and not a cohesive response to meeting broader Hospital objectives or strategic performance improvement goals.

Managing organisational performance

Of the 26 managers interviewed, 10 were from a nursing background, 7 from medicine, 2 from allied health and 7 from a general management background. The majority (15) were female, aged between 50 and 59 with between 1 and 4 years' experience in their current role. A majority were full-time managers with either a management or clinical degree. A minority (9) intended to upgrade their management qualifications and had a performance agreement in place (5).

The majority reported that they regarded strategic/clinical service support and clinical governance as the role of senior management in improving care. However, the performance criteria that hospital management were required to achieve detracted from managers achieving this role, specifically externally-imposed priorities of patient flow and budget management. We found wide dissonance between managers' reported views of the appropriate role of the hospital and the hospital's actual role, and by extension, the roles that the managers performed. Managers reported widespread dissatisfaction with the performance criteria that the Hospital, and by extension that managers were expected to achieve, and disempowerment in terms of being able to voice their views about the hospital's role, direction or performance or to contribute to a more collaboratively-determined direction.

Current Hospital performance priorities affected the work of managers both positively and negatively. Some complied with the directions about objectives, including measuring results, although many reported ignoring imposed priorities. Perhaps reflecting this level of manager dissatisfaction, misalignment of goals and fragmentation of objectives and activities, managers reported a wide variation in the perceived attributes of effective managers. Trust and collaboration were the attributes advanced as most desirable in hospital leaders, with distrust and dictatorial attitudes proffered as aspects indicative of ineffective managers in the Hospital. Without a level of agreement about what constitutes effective leaders, the organisation will find it difficult to identify leaders with the necessary qualities to motivate frontline staff for greater achievement and to lead by example. In the absence of commensurate clinical process skills to manage complex health services such as St George Hospital, leaders and managers will find it difficult to know where to direct their efforts for best effect.

In this respect, the majority of managers reported that clinical pathways had benefits for both managers and clinicians in managing clinical work, predominantly as a framework to ensure that best practice care was delivered and in reducing variations. Without the benefit of performance reporting and management, mechanisms such as the end-of-life care pathway fulfil only part of their promise – as a care planning tool, but, as our findings suggest, with opportunities for performance reporting and improvement largely lost. The main barrier to the use of pathways was the absence of systems to develop and coordinate pathway use, because of their perceived rigidity and basic nature. However, clinicians expressed confidence that these barriers could be overcome through education and promotion. When asked about the one barrier if removed that

could make respondents' jobs easier, overwhelmingly managers advanced lack of strategic time to consider and plan improvement and change.

Manager expectations

Although corporate and clinical managers agreed on the role of hospital management as improving clinical care and agreed about the imposed priorities for assessing performance, this agreement did not extend to the practical management of patient care and clinical services where clinical and corporate managers managed cost/patient flow and patient care agendas separately. Clinical managers reported little assistance with the difficult negotiation and coordination tasks of clinical care integration as St George and Sutherland Hospitals integrated. Corporate managers' awareness of the need to form a coherent vision of the direction, purpose and priorities of the organisation was hampered by externally-imposed objectives and targets from Area level. Service-wide bullying, misalignment of expectations and a lack of attention to service problem solving were reflected in managers' responses. Also evident were differences in expectations around roles and responsibilities, absence of clinical manager skills, a preponderance of bureaucratic impediments and clinician disengagement from the organisation that detracted managers achieving performance in patient care that both corporate and clinical managers agreed should be a priority.

Conclusion

The research findings clearly demonstrate that clinicians have the capacity to embrace clinical governance principles and develop practices relating to direct patient care, in this case end of life care. However, the organisation does not practically support clinicians in this endeavour. Organisations such as St. George Hospital must comply with policy priorities to reduce or to maintain waiting times to within designated targets; although no method of clinical process management existed through which to do so. The strategies that clinicians and clinical managers should use to systematically achieve such targets were not evident or explicit.

The absence of service systems to support clinicians in this endeavour limits the extent to which they are able to develop a capacity to govern the indirect aspects of patient care. These include:

- performance reporting and review systems
- processes for organising multidisciplinary teamwork
- clinical process management expertise
- clinical service integration
- clinical support systems development and integration
- managing activity, cost, quality and risk objectives simultaneously

Clinicians can develop and implement a method of clinical process management that can improve the quality of patient care, bring consistency to resource use and improve clinician morale. Engaging clinician interest and skills in this way not only develops in-house expertise by which both efficiency and quality targets can be achieved, but also obviates the need to impose efficiency systems such as Jonah, that can become an expensive drain on scarce budgets and staff time if not successful. For this to occur, clinicians, particularly clinical managers, must be given quarantined time to strategically develop clinical process management skills and to apply them organisation-wide. Through such strategies St George Hospital can extend clinical governance principles and practices with a view to improving the Hospital's performance and potentially improving clinician motivation and patient satisfaction.

Recommendations

1. Clinicians and clinical managers use the end-of-life care pathway as a planning and coordinating mechanism in order to:

    - begin care planning, specifically the transition from curative to comfort care, when clinicians become aware that the patient is dying
    - structure early multidisciplinary communication by pooling treating medical, nursing and allied health clinicians' knowledge about the patient's status and prognosis
    - invite patient and family participation in discussions about care options, eliciting patient preferences, assessing options and including the outcomes of such discussions in the patient's medical record
    - develop agreed care goals that can be monitored and reported

2. St George Hospital clinicians work with the community palliative care team to:

    - develop a parallel care planning mechanism in feeder nursing homes with an aim of reducing unnecessary presentations to hospital
    - support continued care of the patient within the nursing home where appropriate

3. St George Hospital clinical managers encourage attendance of clinicians at end-of-life training that:

    - includes an emphasis on the social and emotional needs of dying patients as well as their clinical needs
    - incorporates the family as a client in their own right with needs concerning support, funeral arrangements and grief counselling
    - is directed at all levels of medical and nursing staff and considers the training needs of medical, nursing and allied health clinicians who share the care of dying people and their families and are aware of their role and responsibilities as outlined in NSW Health publication End-of-Life-Care and decision making (NSW Health 2005).

4. St George Hospital corporate and clinical managers acknowledge the work involved in caring for dying patients and their families, and formally incorporate this component of clinical work within day-to-day medical, nursing and allied health clinicians' patient load.

5. St George hospital corporate and clinical managers and clinicians consider using end-of-life care as a model for developing a program of clinical process management across the Hospital for the major clinical specialties and associated case types.

6. St George Hospital managers and specialist clinical unit managers work with the Clinical Governance Unit to:

    - seek information about the performance reporting and management needs of clinicians and clinical managers

- determine indicators of performance and data collection mechanisms, potentially centred on pathways of care, such as the end-of-life care pathway
- provide regular reports on performance of quality of care and resource use, and the processes that constitute each.

7. St George Hospital managers and specialist unit managers work with the Clinical Governance Unit to devise a method of evidence based clinical process management suitable for implementation throughout the Hospital.

8. St George Hospital managers and specialist unit managers work with the Human Resource Management unit to:

- upgrade the clinical process management skills of clinical managers, including considering the mandating of clinical process management skills as essential for both clinical and corporate manager roles
- design and implement recruitment and retention strategies that mandate clinical process management skills as essential for newly-appointed clinical and corporate managers
- initiate performance agreements with corporate and clinical managers based on agreed performance goals, acquiring or upgrading clinical process management skills and upholding agreed behavioural standards.

Limitations

Assessment of direct costs and cost savings was not included in this research.

Further research

Further work is needed to assess the extent of resource consumption and savings associated with the pathway use to complement findings of quality improvement, resource use consistency and clinical process management, particularly as it relates to medical involvement in the pathway process, allied health clinician involvement and organisational attention to the systems that support performance in clinical care as set out in the recommendations above.

CHAPTER 1: INTRODUCTION

A key objective of health care reform, both nationally and internationally, is to actively involve clinicians in the governance of health services. Governance in this instance relates to accountability for the outcomes of care, including the quality of care, patient safety and resource use. In the case of end-of-life care, this accountability extends to including patients in decisions about their care, developing criteria for continuing, withholding or withdrawing treatment, particularly where intervention appears to have diminishing benefit, and managing family stress (Iedema, 1993; Iedema, Sorensen, Braithwaite, Flabouris, & Turnbull, 2005; Iedema, Sorensen, Braithwaite, & Turnbull, 2004; Sorensen, 2006; Sorensen & Iedema, 2006, 2007, 2008, Submitted). Although policy frameworks outline the standard of care desired, there is little evidence to practically guide clinicians to implement such policy objectives in the workplace.

Translating policy into clinical and managerial routines will need to take account of the multiple factors involved in changing workplace cultures and practices. Implementing the multidisciplinary, patient-focussed, team-based models of care outlined in policy implies that activities to improve the quality of care will extend beyond technical clinical factors, to include social and organisational dynamics that impact on how people work together to make decisions about care, how patient care is negotiated and organised between multidisciplinary caregivers, and how the measurement, monitoring and management of performance is integrated between clinical and administrative domains.

Resources dedicated to assist clinicians to implement clinical improvement strategies are often limited, and our interest in undertaking this research stems from the need to assess whether and how clinicians can undertake quality improvement projects as part of their normal day-to-day clinical functions. We sought to investigate how clinical caregivers manage their ongoing priorities together with the multiple factors involved in clinical practice improvement as the basis for developing a workplace capacity for clinical governance, in this case, by implementing an evidence-based end-of-life care pathway in six wards in St George Hospital, a 620 bed tertiary referral centre in southern Sydney, Australia.

The project has three aims:

- to describe and document the process of implementing an end-of-life pathway for patients with terminal malignant and non-malignant conditions across multiple wards in an acute care hospital
- to assess clinicians' self-directed capacity to govern the quality of care for people who are dying
- to gauge the organisation needed to develop a capacity for governance, specifically, the extent to which planning, performance evaluation and accountability processes are integrated between the clinical workplace and corporate management.

The research was conducted between December 2005 and December 2008 with funding from the University of Technology Sydney (UTS) and in-kind support from St.George Hospital and UTS. Our report of the research findings follows. We have structured our report in the following way. Following our executive summary and Introduction in Chapter 1, our method is set out in Chapter 2. Chapters 3 and 4 contain the research results. Chapter 3 is divided into several sections: Section 1 reports on a review of patients' medical records; Section 2 on the analysis of quantitative data of a survey of treating clinician practices; and Section 3 on the analysis of qualitative data of the survey. Chapter 4 is also divided into sections: Section 1 reports on the

organisational environment within which clinical care is delivered; Section 2 on the analysis of quantitative data of interviews conducted with corporate and clinical managers; and Section 3 on the analysis of qualitative data of manager interviews.
In Chapter 5 we draw our conclusions together, based on our analysis and interpretation of the data. The instruments used to collect data are contained in the appendices to the report.

CHAPTER 2: METHOD

Rationale for the work

The research was designed to assess clinician led implementation of an end-of-life care pathway as a means of building governance capacity at three levels in the organisation: the workplace, the clinical unit management and the corporate management levels. The research built upon previous work that had been undertaken relating to end of life care in the acute setting (Davidson P, Introna K, Daly J, Paull G, Jarvis R, Angus J, 2003; Davidson P, Introna K, Cockburn J, Daly J, Dunford M, Paull G et al. 2002; Introna and Davis 2005) and was conducted in six specialty medical wards at St George Hospital; a large 620 bed tertiary referral hospital located in Sydney, Australia. The wards included cardiology, respiratory, aged care, neurology, renal and oncology. Approval to conduct the research was gained from South Eastern Sydney and Illawarra Area Health Service Human Research Ethics Committee – *Southern Section.*

Specifically, the proposal was designed to assess:

- the process through which clinical caregivers respond to local policy objectives and the progressive development of supporting organisational structures and processes to support clinical work
- the process of implementing a pathway in multidisciplinary clinical contexts, including whether and how:
    - criteria (medical, nursing and allied health) are developed upon which to initiate treatment limiting discussions and decisions
    - medical and nursing caregivers disclose prognosis, negotiate differences and build consensus
    - an agreed plan of action is developed that takes account of patient and their family members' values and preferences
- the attitudes and practices of the multidisciplinary care team, unit and corporate managers in implementing the pathway
- the capacity to review the pathway and measure outcomes of care
- the extent to which organisational systems are in place to assist clinicians achieve their clinical care responsibilities.

The research was undertaken in six phases:

- Phase 1: establishing the project
- Phase 2: diagnosis of the problem
- Phase 3: implementing the intervention
- Phase 4: assessing clinicians' and managers' attitudes and practices
- Phase 5: analysis of practice change and assessment of organisational environment
- Phase 6: report writing and feedback

Research design

A pre and post intervention research design was used to assess whether the implementation of an end of life care pathway resulted in improved patient care based on a review of medical records. This included an analysis of the medical records to determine the level of care for people who had died prior to the intervention to implement an end-of-life care pathway, and those who died after the pathway was implemented. In all, 411 medical records were reviewed pre-intervention. The majority of records were obtained in the six months immediately prior to the intervention, i.e. from March to August 2006, but in some cases extended beyond this period so that a sufficient number of patient records could be obtained for the six medical specialty

areas involved in the research. The post intervention review was conducted from March 2007 to March 2008, included all deaths that met eligibility criteria and was concluded when sufficient records were available for analysis and comparison. Two hundred and forty-four records were reviewed in the post intervention period. These reviews were augmented by other data collection methods designed to describe and interpret the environmental context within which patient care was delivered, organised and managed.

Both quantitative and qualitative methods were used in the research. These included:

Quantitative methods

- Medical record review (pre and post intervention audit)
- Survey of treating clinician practices (during intervention)
- Survey of corporate and clinical manager views (obtained from manager interviews during intervention)

Qualitative methods

- Focus groups with treating nursing staff (pre intervention)
- Interviews with Hospital corporate and specialty clinical managers (during intervention)
- Observation of practices (during intervention)
- Document assessment, including policies and performance reports (during intervention).

Table 2.1 outlines the methods and participants involved in the study.

Table 2.1: Methods and participants

Phase	Mixed methods	Pre-intervention	Intervention	Post-intervention
Phase 1	Establishing the project – ethics approval, meetings with hospital personnel			-
Phase 2	Medical record review	411		
Phase 3	Establishing workgroups: Implementation group meetings Specialty unit workgroup meetings		1 2 per unit	
	Intervention workgroups: Specialty unit clinical team collaborations	-	4-6 per unit	
Phase 4	Medical record review			250
	Surveys – clinician attitudes and practices			109
	Interviews – corporate and clinical managers attitudes and practices			26
Phase 5	Analysis of practice change and assessment of organisational environment			1 1
Phase 6	Results feedback: Implementation and clinical group meeting Corporate and clinical managers meeting			1 1

Eligibility criteria

Patients with an expected death and for whom a No Cardiopulmonary Resuscitation (No CPR) order was in place.

Data collection tools

The end of life care pathway was developed by St George Hospital Palliative Care Service staff (Introna & Davis, 2005) based on best practice evidence and the approach developed by Ellershaw et al. in Liverpool, United Kingdom (Ellershaw, Foster, Murphy, Shea, & Overill, 1997; Ellershaw & Ward, 2003; Ellershaw & Wilkinson, 2003). The clinician self assessment survey instrument was validated using research evidence (Maxwell, Sorensen, & Coyle, 2002; Sorensen, Maxwell, Coyle, Zhang, & Patterson, 2003) as was the manager interview schedule (Sorensen, Maxwell, Coyle et al. 2003). The medical record review proforma was developed for this research project.

CHAPTER 3: RESULTS – THE QUALITY OF CLINICAL CARE

We report the results of the clinical care component of the research in this chapter. Included are sections containing data, analysis and interpretation drawn from:

- The patients' medical record
- A survey of treating clinician attitudes and practices
- Interviews with corporate and clinical managers
- An environmental scan

Section 1 A review of patients' medical record: shifting the focus of care

Patient demographic details

The medical records of all patients who had a No CPR order and an expected death during the pre and post intervention phase were reviewed. The review proforma is appended at Appendix 2. These reviews occurred pre- and post-intervention and assessed the extent to which the implementation of an end of life care pathway changed clinical practices for dying patients as documented in the medical record. This section reports on the demographic data relating to the patients' reviewed, the clinical and psychosocial care provided, and the documentation of care activities. Data are based on care activities recorded in the medical records. Table 3.1.1 details the records reviewed for each specialty. In total, 411 patients records were reviewed in period 1 (P1) for patients who had died between 18th May 2001 and 31st October 2005 and 244 patient records for patients who had died following implementation of the pathway from 1st March 2007 to 31st March 2008. The post-intervention data collection ceased after 13 months. These records are drawn predominantly from Aged Care, Neurology, Oncology and Respiratory wards where the majority of deaths occurred and less from Cardiology and Renal wards where fewer deaths were experienced.

Table 3.1.1: Number of patient medical records reviewed by specialty pre and post intervention

Specialty	Medical records reviewed pre (P1) and post intervention (P2)	
Aged Care	P1	53
	P2	89
Cardiology	P1	36
	P2	10
Neurology	P1	50
	P2	26
Oncology	P1	171
	P2	83
Renal	P1	48
	P2	4
Respiratory	P1	53
	P2	32
Total	**P1**	**411**
	P2	**244**

Table 3.1.2 contains information on the median age of patients included in the study for each specialty, and the median number of days from the NFR order until death. The existence of an NFR was an inclusion criterion for the study. The mean age of included patients was 81.7years in Period 1 and 78 years in Period 2, with the median days from NFR to death 4 days in Period 1 and 6 days in period 2. The short time in which

planning around dying occurs may detract from the quality of patient care decision making and ultimately patient care, especially when death is expected.

Table 3.1.2: Age of patients and days from NFR to death

Specialty	Mean age at death (years)		Median days from NFR to death	
Aged Care	P1= 85.83	P2 =86	P1= 6	P2= 6
Cardiology	P1= 83.99	P2 = 81	P1= 2	P2 = 4
Neurology	P1= 83.12	P2= 80	P1= 4	P2 = 6.5
Oncology	P1= 74.33	P2 = 69	P1= 3	P2 = 6
Renal	P1= 78.8	P2 = 76	P1= 5.5	P2 = 11
Respiratory	P1= 84.11	P2 = 79	P1= 4	P = 5
Average	**P1= 81.7**	**P2 = 78**	**P1= 4.08**	**P2 = 6**

Table 3.1.3 contains information on the number of patients from nursing homes. On average, 21.2% of patients came from nursing homes in P1, increasing slightly to an average of 30.3% in P2. A quarter of all patients included in the study were admitted from nursing homes. The greater percentage of patients represented in P2 may be explained by an increase in the proportion of aged care patients in the P2 data collection period.

Table 3.1.3: Patients from nursing homes

Specialty	Nursing home patients at P1 %	Nursing home patients at P2 %
Aged Care	52.8	42
Cardiology	27.8	20
Neurology	18	18.5
Oncology	9.90	8.4
Renal	12.5	50
Respiratory	32.1	21.87
Average	**21.2**	**30.3**

Table 3.1.4 provides details of the number of admission in the previous twelve months, inclusive of index admission (i.e. the admission during which the patient's death occurred), by specialty during the two review periods. The data show that a substantial proportion of patients have at least four admissions before death (P1=29% and P2=24%).

Table 3.1.4: Number of admissions in previous 12 months prior to death

Specialty	Admissions at P1 %		Admissions at P2 %		Specialty	Admissions at P1 %		Admissions at P2 %	
Aged Care	1	34	1	28.4	**Oncology**	1	35.1	1	19.2
	2	28	2	28.4		2	15.8	2	26.5
	3	11.3	3	18.18		3	16.4	3	20.48
	4	5.7	4	15.9		4	7	4	18
	5	11.3	5	4.5		5	5.8	5	6.02
	6	5.7	6	1.14		6	3.5	6	2.4
	7	-	7	1.14		7	2.3	7	1.2
	7+	3.8	7+	2.27		7+	14	7+	6.02
Cardiology	1	41.7	1	20	**Renal**	1	18.8	1	0
	2	25	2	40		2	14.6	2	25
	3	13.9	3	30		3	6.3	3	50
	4	8.3	4	0		4	12.5	4	25
	5	8.3	5	10		5	2.1	5	0
	6	2.8	6	0		6	6.3	6	0
	7	-	7	0		7	-	7	0
	7+	-	7+	0		7+	39.6	7+	0
Neurology	1	58	1	62.9	**Respiratory**	1	54.7	1	31.25
	2	16	2	33.3		2	17	2	34.37
	3	16	3	0		3	9.4	3	15.6
	4	-	4	3.7		4	5.7	4	12.5
	5	4	5	0		5	5.7	5	6.25
	6	-	6	0		6	1.9	6	0
	7	2	7	0		7	-	7	0
	7+	4	7+	0		7+	5.7	7+	0
Total average admissions in previous 12 months	**1**	**39.21**	**1**	**28.7**					
	2	**18.51**	**2**	**29.5**					
	3	**13.16**	**3**	**17.6**					
	4	**6.71**	**4**	**14.30**					
	5	**6.00**	**5**	**4.90**					
	6	**3.43**	**6**	**1.20**					
	7	**1.10**	**7**	**0.80**					
	7+	**11.87**	**7+**	**2.80**					

Patient involvement in their care

Patient preferences recorded via advanced care directives existed for very few patients during either reviews. Where they did exist, they were mostly reported in the Aged Care specialty in both review periods (1.9% and 2.27%), extending to Oncology (1.2%) and Respiratory (3.13%) in P2, as shown in Table 3.1.5. The small increase in advanced care directives may be related to an Advanced Care Directive policy of NSW Health released during the period that the research was undertaken (NSW Health, 2006).

Table 3.1.5: Proportion of patient preferences recorded via advanced care directives

Patient preferences	Period	Aged Care	Cardiology	Neurology	Oncology	Renal	Respiratory	Total %
Advanced care directives	P1	1.9	0	0	0	0	0	0.02
	P2	2.27	0	0	1.2	0	3.13	1.60

Table 3.1.6 shows that the medical records recorded few instances where patients were reported as recognising the limits of treatment (6.10% in P1 increasing to 7.80% in P2). Relatives were more aware in P2 (increasing from 5.10% in P1 to 12.70% in P2). Health professionals, predominantly medical clinicians, were aware of the limits of treatment for the majority of patients (97.10% in P1 and to 95.10% in P2), with the highest awareness of limitation of treatment in Oncology. Few nursing and allied health clinicians were documented in the medical record as recognising treatment limits.

Table 3.1.6: Recognition of treatment limits

Stakeholder	Period	Aged Care	Cardiology	Neurology	Oncology	Renal	Respiratory	Total
Patient	P1	5.7	5.6	2.0	5.8	14.6	3.8	6.10
	P2	4.5	10.0	3.7	9.6	0	15.6	7.8
Relative	P1	3.8	8.3	6.0	4.7	6.3	3.8	5.10
	P2	19.3	0	3.7	8.4	25	15.6	12.70
Health professional	P1	96.2	97.2	96.0	99.4	93.8	94.3	97.10
	P2	94.0	90	96.3	98.8	75.0	90.6	95.10
Medical	P1	96.2	91.7	88.0	94.2	93.8	94.3	93.03
	P2	95.5	90.0	96.3	100	75.0	93.8	96
Nursing	P1	-	2.8	4.0	4.1	2.1	-	2.70
	P2	-	-	-	-	-	-	-
Allied health	P1	-	2.8	4.0	0.6	-	-	1.23
	P2	-	-	-	-	-	-	-

Patients were reported as being aware of their diagnosis in 37.5% of cases in P1, increasing to 42.6% in P2 as outlined in Table 3.1.7. Patients were reported as being informed they were dying 13.4% of the time in P1, increasing to 24.6% in P2, with next of kin reported as being aware in 93.40% of the time in P1, increasing to 99.20% in P2. A small proportion of families were reported as requesting that the patient not be told of their diagnosis of 0.70% in P1, increasing to 1.60% in P2. Religious referrals increased between the two periods. Significantly, patients' emotional and spiritual needs were documented as being identified in 54.10% of cases in P2, compared with 0.70% in P1, with documented spiritual support increasing from 0.98% in P1 to 18.68% in P2. Next of kin were identified in all cases in P1 and P2, with social work referrals made in 70.10% of cases in P2 compared with 59.10% in P1. Psychosocial support was provided to the family in 90.20% of cases in P2 compared with 32.60% in P1, with bereavement pamphlets given in 20.10% of cases compared with 11.70% in P1.

Table 3.1.7: Patient's emotional and spiritual needs attended to

Issue	Period	Aged Care	Cardiology	Neurology	Oncology	Renal	Respiratory	Total
Patient aware of diagnosis	P1	11.3	27.8	4.0	59.6	7.5	30.2	37.50
	P2	17.0	40.0	7.4	75.9	50.0	56.3	42.60
If no, is there a documented reason	P1	53.2	26.9	60.4	22.9	30.0	29.7	23.60
	P2	2.3	0.0	0.0	3.6	0.0	0.0	2.10
Patient informed they are dying	P1	3.8	11.1	2.0	18.7	12.5	11.3	13.40
	P2	3.4	10.0	0.0	50.6	25.0	40.6	24.60
Next of kin aware patient is dying	P1	92.5	86.1	94.9	95.3	97.9	88.7	93.40
	P2	97.7	100.0	100.0	100.0	100.0	100.0	99.20
Family request not to tell patient	P1	0.0	0.0	0.0	1.8	0.0	0.0	0.70
	P2	0.0	0.0	0.0	3.6	0.0	3.1	1.60
Religious referral made	P1	15.1	27.8	18.0	11.1	16.7	9.4	14.40
	P2	26.1	20.0	33.3	13.3	25.0	6.3	19.70
Patient emotional/ spiritual needs identified	P1	3.8	0.0	0.0	0.6	0.0	0.0	0.70
	P2	58.0	70.0	51.9	45.8	75.0	59.4	54.10
Spiritual support given	P1	0.0	2.8	0.0	1.2	0.0	1.9	1.00
	P2	21.6	20.0	25.9	13.3	25.0	6.3	17.20
Next of kin identified	P1	100.0	94.4	98.0	100.0	100.0	98.1	99
	P2	100.0	100.0	100.0	100.0	100.0	100.0	99.60
Social work referral made	P1	54.7	50.0	68.0	57.9	79.2	47.2	59.10
	P2	72.7	50.0	66.7	73.7	100.0	59.4	70.10
Psychosocial support provided to family	P1	32.1	22.2	40.0	31.6	47.9	22.6	32.60
	P2	89.8	100.0	92.6	94.0	100.0	75.0	90.2
Bereavement pamphlet given to family	P1	17.0	16.7	16.0	7.0	20.8	5.7	11.70
	P2	15.9	20.0	18.5	31.3	25.0	3.1	20.10

Care as documented in the medical record

There was an overall increase in the documentation of end of life care in the medical record between P1 and to P2 data collection periods, as detailed in Table 3.1.8. An end of life care pathway was present in 52.90% of the patient records. Palliative care referrals were made in 83.60% of cases during P2, data was not available during P1 pre-implementation phase.

Table 3.1.8: Documentation in the medical record

Document	Period	Aged Care	Cardiology	Neurology	Oncology	Renal	Respiratory	Total
End of life care pathway	P1	Not collected						
	P2	55.1	80.0	69.2	49.4	100.0	28.1	52.9
Not for resuscitation order	P1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	P2	100.0	100.0	100.0	100.0	100.0	100.0	100.0
See by palliative care	P1	Not collected						
	P2	80.9	70.0	61.5	94.0	100.0	87.5	84

Care changed from curative to comfort care in the majority of cases for the six specialty areas, as detailed in Table 3.1.9. Non-essential medications were discontinued in the majority of cases (68.90% in P2 compared with 45.70% in P1). End of life medications were changed to subcutaneous in the majority of cases (88.10% in P2 compared with 46.90% in P1), specifically PRN prescribed analgesics (92.60% in P2 compared with 76.40% in P1); PRN prescribed antiemetics in 45.10% of cases in P2 compared with 21.70% in P1), PRN prescribed anticholinergics in 88.90% of cases in P2 compared with 67.60% in P1 and PRN prescribed sedatives 87.30% in P2 compared with 61.80% in P1). There was an increase in the tests ceased, specifically blood tests (84% in P1 compared with 47.2% in P2), antibiotics (78.30% in P2 compared with 59.10% in P1), intravenous fluids (63.90% in P2 compared with 55.50% in P1) and vital signs (53.30% in P2 compared with 33.3% in P1).

The data clearly show that the change from curative to comfort care was supported by a change in clinical management strategies, specifically, changed approaches to medication, observations and blood tests.

Table 3.1.9: % Change from treatment to comfort care regimen

Care regimen	Period	Aged Care	Cardiology	Neurology	Oncology	Renal	Respiratory	Total
Non essential medications discontinued	P1	49.1	30.6	52.0	42.1	68.8	37.7	**46.72**
	P2	69.3	90.0	88.9	63.9	50.0	59.4	**68.9**
If no, was reason given	P1	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
	P2	5.7	0.0	0.0	2.4	0.0	0.0	**2.9**
Appropriate medications changed to subcutaneous	P1	57.4	20.0	41.5	53.9	47.8	33.3	**46.9**
	P2	86.4	90.0	88.9	90.4	100.0	84.4	**88.10**
PRN analgesics subcutaneous	P1	73.6	61.1	74.0	87.1	64.6	67.9	**76.4**
	P2	89.8	100.0	96.3	94.0	100.0	90.6	**92.6**
PRN antiemetic	P1	26.4	16.7	10.0	25.7	25.0	15.1	**21.7**
	P2	25.0	50.0	44.4	71.0	50.0	31.3	**45.10**
PRN anticholinergic	P1	64.2	36.1	78.0	73.7	64.6	66.0	**67.6**
	P2	87.5	90.0	85.2	90.4	100.0	90.6	**88.9**
PRN sedative	P1	60.4	36.1	48.0	74.3	54.2	60.4	**61.8**
	P2	83.0	100.0	85.2	90.4	100.0	87.5	**87.3**
Blood tests ceased	P1	54.7	38.9	50.0	43.9	58.3	43.4	**47.2**
	P2	85.2	100.0	92.6	81.9	100.0	71.9	**84**
Antibiotics ceased	P1	63.3	44.0	57.1	59.9	75.0	51.0	**59.10**
	P2	73.9	90.0	92.6	80.7	75.0	68.8	**78.30**
IV fluids ceased	P1	64.2	46.9	51.0	56.2	61.9	47.8	**55.50**
	P2	61.4	80.0	77.8	60.2	100.0	59.4	**63.90**
Vital signs ceased	P1	41.5	11.1	40.0	33.3	39.6	28.3	**33.30**
	P2	59.1	70.0	66.7	44.6	100.0	37.5	**53.30**

Documented comfort care assessments increased in the intervention period compared with baseline as outlined in Table 3.1.10. Assessments increased for pain (32% in P2 compared with 4.60% in P1), agitation (29.90% in P2 compared with 3.40% in P1), respiratory secretions (27.90% in P2 compared with 2.40% in P1) and nausea and vomiting (21.30% in P2 compared with 1. 20% in P1).

The increase in the use of comfort care medications corresponded with an increase in assessment.

Table 3.1.10: % Comfort care assessments made with appropriate medication given

Assessment made	Period	Aged Care	Cardiology	Neurology	Oncology	Renal	Respiratory	Total
Pain assessment each shift	P1	0.0	2.8	2.0	7.0	8.3	1.9	**4.6**
	P2	23.9	60.0	40.7	38.6	75.0	15.6	**32**
Patient in pain	P1	30.2	36.1	24.0	60.8	31.3	20.8	**41.60**
	P2	35.2	60.0	33.3	71.1	100.0	40.6	**50.0**
PRN analgesics given	P1	56.6	47.2	62.0	76.0	47.9	50.9	**62.80**
	P2	80.7	80.0	88.9	91.6	100.0	81.3	**85.70**
Agitation assessment each shift	P1	1.9	5.6	2.0	4.7	2.1	1.9	**3.40**
	P2	27.3	60.0	33.3	32.5	75.0	12.5	**29.9**
Patient agitated	P1	67.9	47.2	26.0	59.1	29.2	22.6	**47**
	P2	47.7	30.0	37.0	67.5	100.0	56.3	**54.5**
PRN sedation given	P1	30.2	25.0	26.0	52.6	37.5	26.4	**38.90**
	P2	60.2	40.0	63.0	84.3	100.0	78.1	**70.90**
Respiratory secretions assessment each shift	P1	1.9	2.8	2.0	2.3	0.0	5.7	**2.405**
	P2	31.8	50.0	33.3	25.3	50.0	9.4	**27.90**
Patient had resp. secretions	P1	47.2	25.0	60.0	37.4	29.2	37.7	**39.40**
	P2	46.6	60.0	55.6	51.8	25.0	34.4	**48.00**
PRN anticholinergics given	P1	47.2	22.2	64.0	53.8	39.6	41.5	**48.20**
	P2	64.8	60.0	85.2	69.9	50.0	59.4	**67.60**
Nausea, vomiting assessment each shift	P1	0.0	5.6	2.0	0.6	2.1	0.0	**1.20**
	P2	19.3	40.0	33.3	20.5	75.0	6.3	**21.30**
Patient had nausea and vomiting	P1	7.5	13.9	8.0	13.5	8.3	7.5	**10.7**
	P2	5.7	10.0	0.0	15.7	0.0	3.1	**8.2**
PRN antiemetics given	P1	1.9	5.6	4.0	8.2	2.1	1.9	**5.10**
	P2	11.4	10.0	7.4	42.2	0.0	12.5	**21.30**

Comfort care assessments without medications increased in P2 compared with P1 as detailed in Table 3.1.11, specifically: skin care (41.80% in P2 compared with 3.6% in P1); mouth assessment (31.10% in P2 compared with 1.50% in P1); eye assessment (21.70% in P2 compared with 0% in P1); personal hygiene (23.40% in P2 compared with 1.50% in P1); bowel assessment (64.80% in P2 compared with 1.2% in P1); micturition assessment (62.70% in P2 compared with 10.20% in P1) and dyspnoea assessment (24.20% in P2 compared with 5.80% in P1).

Table 3.1.11: % Comfort care assessments made in the six specialty areas

Assessment made	Period	Aged Care	Cardiology	Neurology	Oncology	Renal	Respiratory	Total
Skin care assessment each shift	P1	5.7	2.8	6.0	3.5	4.2	0.0	3.6
	P2	46.6	70.0	48.1	30.1	75.0	40.6	41.80
Pressure aids provided	P1	64.2	36.1	66.0	39.2	52.1	45.3	47.00
	P2	81.8	80.0	81.5	57.8	100.0	62.5	71.30
Mouth assessment	P1	1.9	2.8	2.0	0.6	4.2	0.0	1.5
	P2	31.8	60.0	37.0	27.7	75.0	18.8	31.10
Eyes assessment	P1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	P2	21.6	40.0	33.3	19.3	75.0	6.3	21.70
Personal hygiene assessment	P1	0.0	0.0	2.0	1.8	4.2	0.0	1.5
	P2	20.5	50.0	37.0	21.7	75.0	9.4	23.40
Bowel assessment	P1	0.0	0.0	2.0	1.8	2.1	0.0	1.2
	P2	72.7	60.0	66.7	62.7	75.0	46.9	64.8
Micturition assessment	P1	7.5	27.8	12.0	8.8	6.3	7.5	10.2
	P2	68.2	80.0	59.3	63.9	75.0	40.6	62.70
Dyspnoea assessment	P1	1.9	22.2	4.0	4.7	2.1	7.5	5.8
	P2	21.6	40.0	33.3	21.7	50.0	21.9	24.20

Summary

The documented standard of clinical care improved dramatically following implementation of an evidence-based end of life clinical pathway. The end of life care pathway has facilitated documentation of care and provided a clinical structure for the change from curative to comfort care. The data show that patients and relatives were more likely to be aware of diagnosis following pathway implementation which triggered an increase of religious and social work referrals to attend to patients' and families' spiritual and psychosocial care. The end of life care pathway is most likely to have contributed to this improvement with the pathway document recorded as present in the majority of medical records reviewed, although completion of the pathway was variable. The type of care provided to patients was more likely to change from curative to comfort care indicating a preparedness on the part of medical clinicians to diagnose dying earlier, change medication to support the comfort of dying people and allow initiation of goal-directed pathway-based care. Assessments of the patient's condition as they died increased dramatically following intervention, drawing the conclusion that during this time patients were more likely to be pain free, less agitated, with less respiratory secretions, nausea and vomiting. Their personal comfort care was likely to have been enhanced following intervention based on the substantial increase in comfort care assessments made and aids provided. The data suggest that greater attention needs to be given to the emotional status of family members as a family member dies.

Section 2 Survey of clinician practices – analysis of quantitative data

The clinicians who treated the patients included in the initial medical record review were surveyed to ascertain their views and practices concerning:

- the clinical organisation of the end of life care process
- patient involvement in their care
- the methods of communication between treating clinicians about the end of life care process
- feedback about performance and performance measurement and
- how the end of life care process was reviewed.

The survey was conducted during the intervention period. In all, 112 clinicians were surveyed, including 77 nursing clinicians (68.75%), 14 medical clinicians (12.50) and 21 allied health clinicians (18.75%), as set out in Table 3.2.1.

Table 3.2.1: Clinicians completing the organisation of care survey

Occupation	Number	Sub-totals	% of total
Nursing (N)		**77**	**68.75**
Casual RN full time	3		
Casual RN Part time	-		
Assistant in nursing	-		
Undergraduate nurse	-		
Trainee enrolled nurse	-		
Enrolled nurse	10		
Registered nurse	34		
Clinical nurse specialist	21		
Clinical nurse consultant	4		
Nurse manager	4		
Other	1		
Medicine (M)		**14**	**12.50**
Intern	2		
Resident	-		
Registrar	4		
Staff specialist physician	8		
Staff specialist surgeon	-		
Other	-		
Allied health (AH)		**21**	**18.75**
Occupational therapist	1		
Physiotherapist	5		
Speech pathologist	2		
Social worker	8		
Dietician	4		
Pharmacist	1		
Other	-		
Total	**112**	**112**	**100.00**

Survey questions are set out below, followed by an aggregation of clinicians' responses. The survey is appended at Appendix 3.

Question 1. Clinical organisation of the care process

1.1 Is there a form in patients' medical records that sequences the tasks and activities required in treating patients of this case type (e.g. end of life care pathway or end of life care plan)?

58.02% of nurses reported that there was a form; 8.04% of medical clinicians and 13.38% of allied health clinicians did not know.

Yes			
N	**M**	**AH**	**Total**
58.02	4.47	4.46	66.96
No/Don't know			
N	**M**	**AH**	**Total**
9.72	8.04	13.38	32.14

1.2 Does the form(s) identify the significant steps to achieve the desired outcomes for patients of this case type?

Consequent to their recognising that an end of life care pathways did exist, 51.79% of nurses knew the pathway sufficiently well to report that it referred to an NFR order, 46.43% to the routine cessation of tests and 56.25% to the type of drugs that should be routinely given, compared to the majority of medical and allied health clinicians who did not know. 30.37% of nurses reported that choice of location of death was included in the pathway, compared with 9.82% of medical clinicians and 15.16% of allied health clinicians, although 14.28% of nursing clinicians thought that the pathway stated the expected length of stay, although this was not included in the pathway

Does the form refer to an agreed guideline/protocol on:	**Yes**				**No/Don't know**			
	N	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**
A Not for Resuscitation (NFR) order being documented	51.79	3.57	4.46	58.93	16.95	8.93	14.28	40.18
The tests that should be routinely ceased?	46.43	3.57	2.68	51.79	22.33	8.93	16.06	47.32
The type of drugs that should be routinely given?	56.25	4.47	3.57	62.5	12.5	8.04	15.17	35.71
The expected length of stay for patients of this case type?	14.28	2.68	.89	17.86	54.47	9.82	17.85	82.14
The choice of location of death	30.37	2.68	3.57	35.71	38.4	9.82	15.16	62.5

1.3 Does the form refer to guidelines/protocols that will be routinely used to treat a patient of this case type?

37.5% of nursing clinicians reported that the form included all stages of care, and, consequent to their not knowing, that there was an end of life care pathway, 8.04% of medical clinicians and 16.06% of allied health clinicians did not know.

All stages			
N	**M**	**AH**	**T**
37.5	2.67	.89	41.07
Most stages			
N	**M**	**AH**	**T**
16.96	.89	1.78	19.64
Few stages			
N	**M**	**AH**	**T**
4.47	.89	-	5.36
No stages/don't know			
N	**M**	**AH**	**T**
9.83	8.04	16.06	33.93

1.4 Do you routinely look at the form during the process of giving care?

Nursing clinicians looked at the form more frequently than medical or allied health staff with 19.64% of nurses reporting that they looked at the form always and 21.43% frequently.

Always			
N	M	AH	**T**
19.64	-	-	19.64
Frequently			
N	**M**	**AH**	**T**
21.43	.89	.89	23.21
Sometimes			
N	**M**	**AH**	**T**
16.07	.89	1.78	18.75
Seldom			
N	**M**	**AH**	**T**
.89	1.78	.89	3.57
Never/don't know			
N	**M**	**AH**	**T**
10.71	8.93	15.16	34.82

1.5 Is there provision in the form for you to record when tasks and activities have not been achieved?

The majority of nursing clinicians reported that there was provision to record tasks and activities that were not able to be achieved (48.21%).

Yes			
N	**M**	**AH**	**Total**
48.21	1.79	.89	50.89
No/Don't know			
N	**M**	**AH**	**Total**
20.54	10.72	17.85	49.11

1.6 I know when a tasks/activity has not been achieved because

The majority of nurses recognised that a task or activity had not been achieved because definitions were contained in the form (37.5%) or from their own clinical knowledge (14.29%).

because:	**N**	**M**	**AH**	**T**
definitions of tasks/activities are contained in the form	37.5	1.78	.89	40.18
definitions of tasks/activities are available in a separate document	.89	-	-	.89
Definitions of tasks/activities are described during in-service training	-	-	-	-
Of my own knowledge of clinical practice and experience	14.29	2.68	-	16.96
I don't know when tasks/activities have not been achieved	8.93	8.04	17.85	41.96

1.7 Do you record when you vary from the sequence of tasks and activities or agreed policies specified in the form?

Nursing clinicians were divided between always recording variances (16.07%), frequently recording variances (16.08%), sometimes recording variances (16.07%), seldom recording variances (26.7%) or never recording variances (17.85%).

Always			
N	M	AH	**T**
16.07	1.78	-	17.86
Frequently			
N	**M**	**AH**	**T**
16.08	.89	-	16.96
Sometimes			
N	**M**	**AH**	**T**
16.07	1.78	.89	18.75
Seldom			
N	**M**	**AH**	**T**
26.7	.89	-	3.57
Never/don't know			
N	**M**	**AH**	**T**
17.85	7.15	17.85	41.96

Question 2. Patient involvement

2.1 Is the patient routinely informed of their prognosis as part of their routine clinical care at the end of life?

A majority of nurses (41.96%), medical (9.82%) and allied health clinicians (8.03%) reported that patients were routinely informed of their prognosis.

Yes			
N	**M**	**AH**	**Total**
41.96	9.82	8.03	59.82
No/Don't know			
N	**M**	**AH**	**Total**
26.80	3.57	9.82	39.29

2.2 Is the patient routinely informed of what they should expect as part of their routine clinical care?

The majority of nurses reported that they frequently informed the patient of what they should expect as part of their routine clinical care (23.42%), compared with those who always informed the patient (17.12%), sometimes informed the patient (18.91%) or never informed them (9%), compared with medical clinicians who frequently (7.2%) or always (3.6%) informed the patient and allied health clinicians who were split between always, frequently or never informing the patient (5.4% respectively).

Always			
N	**M**	**AH**	**T**
17.12	3.6	5.4	26.13
Frequently			
N	**M**	**AH**	**T**
23.42	7.2	5.4	36.04
Sometimes			
N	**M**	**AH**	**T**
18.91	.9	1.8	22.52
Never/don't know			
N	**M**	**AH**	**T**
9.0	.9	5.4	15.32

2.3 Is the patient routinely kept informed about their clinical care?

The majority of nurses reported always (20.53%) informing the patient about their clinical care, compared to the majority of medical clinicians who frequently (8.04%) did so, and the majority of allied health clinicians who never did so or did not know (6.25%).

Always			
N	M	AH	**T**
20.53	3.57	4.46	28.57
Frequently			
N	**M**	**AH**	**T**
.89	8.04	3.57	34.82
Sometimes			
N	**M**	**AH**	**T**
19.65	.89	4.47	25.00
Seldom			
N	**M**	**AH**	**T**
.89	-	-	.89
Never/don't know			
N	**M**	**AH**	**T**
4.46	-	6.25	10.71

2.4 Do patients routinely get the chance to discuss their care with clinicians?

The majority of nurses (41.97%), medical clinicians (5.36%) and allied health clinicians (9.82%) reported that patients routinely got the chance to discuss their care with clinicians.

Yes			
N	**M**	**AH**	**Total**
41.97	5.36	9.82	64.29
No/Don't know			
N	**M**	**AH**	**Total**
26.79	-	8.93	33.93

The next series of questions reports on the methods treating clinicians use to find out about the care of other multidisciplinary clinicians who shared care for the patients reviewed. Nursing clinicians predominantly used the medical record ascertain what medical care was required (38.4%) as did allied health clinicians (11.6%). In contrast, medical clinicians predominantly used informal discussions with other medical clinicians (7.14%), ward rounds (6.25%), medical consultants' individual preferences (8.04%) or talking to the patients (6.25%) to find out what medical care is required.

Nurses predominantly used information transmitted verbally during a shift change over to find out what the nursing care required for a patient (40.19%) and the patient's medical record (40.18%), with a minority (27.68%) using the written clinical pathway. Allied health clinicians used informal discussions with nursing clinicians (7.14%) to find out what nursing care is required, and the patient's medical record (8.93%), compared with medical clinicians who mostly used informal discussions with nursing clinicians (6.25%), the patient's medical record (6.25%) and talking with the patient (8.04%). With nurses' preference for using the medical record, the extent to which medical clinicians refer to nursing entries to augment information gathering prior to patient care decision making was not measured.

Nurses predominantly used the patient's medical record (34.81%) and informal discussions (31.26%) to find out what allied health care is required. Allied health clinicians also used the patient's medical record (12.5%), as well as informal discussions with other allied health clinicians (9.82%). Medical clinicians predominantly used informal discussions with allied health clinicians (8.92%) to find out about allied health care and to the patient's medical record (7.14%). As with nursing care, with the majority of allied health clinicians using the medical record as the main repository of patient-related activities, the extent to which medical clinicians refer to allied health entries to augment information gathering prior to patient care decision making was not measured.

Given medical clinicians' preference for informal verbal communication about patient care, the use of the medical record as a central repository for clinical care documentation comes into question, and the extent to which nurses and allied health clinicians can rely on the medical record as an accurate ongoing record of patient care.

Question 3. Systematised communication about the care process

To what extent do you use the methods listed below to find out what *medical care* is required for a patient of this case type?

I find out what medical care is required through	**Always**				**Frequently**				**Sometimes**				**Seldom**				**Never/don't know**			
	N	M	AH	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**
Informal discussions with medical clinicians	21.44	1.78	6.25	29.46	26.79	7.14	7.14	41.07	14.28	1.78	.89	16.96	2.68	-	-	2.68	3.56	1.79	4.46	9.82
Formal meetings with medical clinicians	7.14	.89	.89	8.93	10.72	2.68	4.46	17.86	16.07	5.36	6.25	27.68	17.87	.89	.89	19.64	16.96	2.67	6.25	25.89
Medical protocols	13.39	-	-	13.39	18.75	1.78	1.78	22.32	16.06	3.57	4.46	24.11	11.61	5.36	2.68	19.64	8.93	1.78	9.83	20.54
Information that is transmitted verbally in ward rounds	20.53	.89	2.68	24.11	26.78	6.25	7.15	40.18	15.18	2.68	3.57	21.43	3.56	.89	.89	5.36	2.68	1.78	4.47	8.93
Referring to consultant/specialist individual preferences	10.71	-	-	10.71	15.18	8.04	1.79	25.0	16.07	2.68	6.24	25.0	8.03	-	2.67	10.71	18.75	1.78	8.03	28.57
The patient's medical record	38.4	1.78	11.6	51.79	17.86	5.35	2.67	25.89	3.56	2.67	.89	7.14	4.46	.89	-	5.36	4.46	1.79	3.56	9.82
My own expertise and experience	18.75	4.46	.89	24.11	30.35	4.47	3.57	38.39	12.51	.89	5.36	18.75	3.58	.89	1.78	6.25	3.56	.89	7.15	12.5
Talking with the patient	23.28	3.58	1.79	28.57	13.22	6.25	3.57	33.04	14.29.	89	8.04	23.21	5.36	-	.89	6.25	2.67	1.78	4.46	8.93
A written clinical pathway	22.32	-	-	22.32	16.96	2.68	-	19.64	15.17	.89	4.46	20.54	8.04	4.47	1.78	14.29	6.24	4.46	12.49	23.21

To what extent do you use the methods listed below to find out what *nursing care* is required for a patient of this case type?

I find out what nursing care is required through	**Always**				**Frequently**				**Sometimes**				**Seldom**				**Never/don't know**			
	N	M	AH	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**
Informal discussions with nursing clinicians	29.47	1.78	7.14	38.39	25.89	6.25	3.57	35.71	8.92	2.68	1.78	13.39	2.67	.89	.89	4.46	1.78	.89	5.36	8.04
Formal meetings with nursing clinicians	16.96	-	-	16.96	11.60	5.35	3.57	20.54	16.06	4.47	4.47	25.00	11.61	.89	.89	13.39	12.49	1.78	9.82	24.11
Nursing guidelines	32.14	-	-	32.14	19.65	.89	.89	21.43	11.6	-	3.57	15.18	3.57	1.78	7.14	12.5	1.78	3.57	13.38	18.75
Information that is transmitted verbally during a shift change over	40.19	-	1.79	41.96	19.65	2.68	1.79	24.11	4.56	2.68	3.57	11.61	.89	2.68	1.78	5.36	2.68	4.46	9.82	16.96
Referring to/knowing the consultant/specialists' individual preferences	8.04	-	-	8.04	23.22	4.47	.89	28.57	17.58	2.68	5.35	25.89	7.15	2.67	1.78	11.61	12.5	2.68	10.71	25.89
The patient's medical record	40.18	1.78	8.93	50.89	16.96	6.25	3.57	26.79	5.36	3.57	1.78	10.71	3.57	-	-	3.57	2.67	.89	4.46	8.04
My own expertise and experience	26.79	2.68	-	29.46	26.78	3.57	.89	31.25	10.72	3.57	7.15	21.43	1.78	1.78	3.56	6.25	2.67	.89	8.04	11.61
Talking with the patient	25.9	1.78	1.79	29.46	25.0	8.04	3.57	36.61	10.71	.89	6.26	17.86	4.47	.89	1.78	7.14	2.67	.89	5.35	8.93
A written clinical pathway	27.68	-	-	27.68	16.97	4.47	-	21.43	13.39	.89	5.35	19.64	5.36	3.58	1.78	10.71	5.35	3.57	11.6	20.54

To what extent do you use the methods listed below to find out what *allied health care* is required for a patient of this case type?

I find out what AH care is required through	**Always**				**Frequently**				**Sometimes**				**Seldom**				**Never/don't know**			
	N	M	AH	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**
Informal discussions with AH clinicians	17.85	.89	9.82	29.46	31.26	8.92	5.36	45.54	15.18	2.68	-	17.86	1.79	-	.89	2.68	1.78	-	2.68	4.46
Formal meetings with AH clinicians	8.04	-	7.13	15.18	16.08	6.25	5.36	27.68	11.61	1.79	1.79	15.18	17.86	4.47	1.78	24.11	15.18	-	2.68	17.86
Use of protocol/guidelines	16.96	-	5.36	22.32	16.96	-	4.46	21.43	15.17	1.78	1.78	18.75	8.93	3.57	6.24	18.75	9.82	3.57	5.35	18.75
Information that is transmitted verbally during a shift change over	27.68	-	3.58	31.25	26.79	2.68	4.47	33.93	7.14	2.68	1.78	11.61	3.57	2.68	1.78	8.04	3.58	4.46	7.14	15.18
Referring to the therapy assessment form	12.5	-	4.46	16.96	16.96	.89	3.58	21.43	9.81	5.36	5.35	20.54	10.72	2.68	-	13.39	18.76	1.78	7.14	27.68
Referring to consultant/specialists' individual preferences	2.68	-	-	2.68	16.97	2.68	1.79	24.11	13.4	3.57	7.14	24.11	12.5	3.57	.89	16.96	20.55	2.69	8.92	32.14
The patient's medical record	34.81	1.78	12.5	49.11	21.44	7.14	2.67	31.25	6.25	2.68	.89	9.82	3.57	-	.89	4.46	2.67	.89	1.78	5.36
My own expertise and experience	23.21	2.68	8.04	33.93	25.0	3.57	6.25	35.71	10.72	2.68	1.78	15.18	5.36	2.67	.89	8.93	4.47	-	1.79	6.25
Talking with the patient	24.11	2.67	6.25	33.04	23.22	6.15	6.25	36.61	9.81	1.78	3.56	15.18	8.92	.89	-	9.82	2.68	-	2.67	5.36
A hospital devised written clinical pathway	19.64	-	.89	20.54	16.96	.89	.89	18.75	13.39	3.57	6.25	23.21	5.36	3.58	1.78	10.71	13.39	4.46	8.92	25.89

In the next series of questions, treating clinicians were asked about the reports they received of performance achieved in caring for patients at the end of their life.

Question 4 Performance measurement

4.1 Are statistical reports* available to you that describe the ward's performance in treating/caring for all patients requiring end of life care.

* *statistical reports = written numerical not anecdotal data, that are regularly produced and describe patterns among patients treated for that period.*

The majority of medical clinicians reported that performance on patients' length of stay was received (6.35%), although nursing and allied health clinicians did not receive reports on length of stay (41.08% and 13.39% respectively), nor on the clinical composition of care (52.69% and 17.76% respectively), the clinical quality of care (44.43% and 17.85% respectively), patients' comments on care (48.22% and 17.85% respectively) or analysis of variance (59.83% and 16.96% respectively). Medical clinicians also did not receive reports on performance of these elements (9.83%, 8.04% 7.15% and 10.72% respectively for the clinical composition of care, clinical quality, patient comments on care and analysis of variance reports).

I receive statistical performance reports on	**Yes receive**				**No, but can access**				**No/Don't know**			
	N	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**	**N**	**M**	**AH**	**T**
The resource dimensions of care (eg length of stay)	10.71	6.35	1.78	18.75	16.96	3.57	3.57	24.11	41.08	2.68	13.39	57.14
The clinical composition of care (eg variation in test and drug usage)	8.03	. 89	-	8.93	8.04	1.79	.89	10.71	52.69	9.83	17.76	80.36
Clinical quality (eg uncontrolled, pain, uncontrolled symptoms, referral to social work/chaplaincy services)	16.08	. 89	-	16.96	6.25	3.57	.89	10.71	46.43	8.04	17.85	72.32
Patient comments on care (positive and/or negative)	17.86	3.57	.89	22.32	2.68	1.78	-	4.46	48.22	7.15	17.85	73.21
Variance analysis reports	1.78	.89	-	2.68	7.14	.89	1.78	9.82	59.83	10.72	16.96	87.5

4.2 Indicate whether your unit's performance is compared with other units in this organisation (internally benchmarked) for each of the dimensions listed below.

The majority of nursing, medical and allied health clinicians either did not benchmark, or did not know if performance on resource usage, composition of care, clinical quality, patient feedback and analysis of variance was benchmarked internally (83.93%, 80.36%, 78.57%, 81.25% and 94.64% respectively) on the dimensions of care outlined in question 4.1 above.

The unit's performance for this case type is benchmarked internally on:	Yes				No/Don't know			
	N	M	AH	T	N	M	AH	T
Resource usage	15.18	-	.89	16.07	53.57	13.39	16.95	83.93
Composition of care	18.74	-	.89	19.64	49.99	13.39	16.95	80.36
Clinical quality	18.74	.89	1.78	21.43	50.0	12.5	16.06	78.57
Patient feedback	16.96	-	.89	18.75	51.79	13.39	16.06	81.25
Variance analysis	3.57	.89	.89	5.36	65.18	12.5	16.95	94.64

4.3 Indicate whether your unit's performance is compared with other organisations (externally benchmarked) for each of the dimensions listed below.

The majority of nursing, medical and allied health clinicians either did not benchmark or did not know if performance on resource usage, composition of care, clinical quality, patient feedback and analysis of variance was benchmarked externally (88.39%, 86.61%, 88.39%, 90.18% and 94.64% respectively).

The unit's performance for this case type is benchmarked internally on:	Yes				No/Don't know			
	N	M	AH	T	N	M	AH	T
Resource usage	9.82	.89	.89	11.61	58.94	11.61	17.84	88.39
Composition of care	11.61	.89	.89	13.39	57.14	11.61	17.84	86.61
Clinical quality	9.83	-	1.78	11.61	58.92	12.5	16.95	88.39
Patient feedback	9.82	-	-	9.81	58.92	12.5	18.74	90.18
Variance analysis	4.47	.89	-	5.36	64.28	11.61	18.74	94.64

Clinicians were also asked a series of questions relating to how the process of care was reviewed for patients receiving end of life care.

Question 5. Reviewing the care process

5.1 Are there periodic formal meeting(s) in which the performance reports referred to in the previous section are utilised to systematically review the care for patients for this case type?

Medical clinicians were split between whether periodic formal meetings were held in which performance reports were reviewed (6.25% answering yes and no/don't know), while nursing and allied health clinicians reported that a meeting was either not held or they did not know (47.32% and 16.95% respectively).

Yes			
N	**M**	**AH**	**Total**
19.65	6.25	1.79	29.46
No/Don't know			
N	**M**	**AH**	**Total**
47.32	6.26	16.95	70.54

5.2 Who primarily attends these review meetings?

The majority of medical clinicians reported that a multidisciplinary group attended review meetings (6.25%), although the majority of nursing and allied health clinicians did not know (41.98% and 15.17% respectively).

Multidisciplinary group			
N	**M**	**AH**	**Total**
24.11	6.25	3.56	33.93
My occupational group only			
N	**M**	**AH**	**Total**
2.68	.89	-	3.57
I don't know			
N	**M**	**AH**	**T**
41.98	5.36	15.17	62.5

5.2 On the basis of these review meetings is the process of care altered with a view to improving patient care?

The majority of nursing, medical and allied health clinicians reported that they never or did not know if the process of care was altered on the basis of these review meetings (38.41%, 5.36% and 16.95% respectively).

Always			
N	M	AH	**T**
8.03	.89	-	8.93
Frequently			
N	**M**	**AH**	**T**
13.40	2.68	1.78	17.86
Sometimes			
N	**M**	**AH**	**T**
8.04	3.57	-	11.61
Seldom			
N	**M**	**AH**	**T**
.89	-	-	.89
Never/don't know			
N	**M**	**AH**	**T**
38.41	5.36	16.95	60.71

Summary

The majority of nurses reported that they were aware of the pathway, understood the basis of its concepts and knew the majority of its components, compared to medical and allied health clinicians, the majority of whom did not know of the pathway and therefore did not use it. Nurses also reported that they were the profession most likely to include the patient in knowing about their care, as were medical clinicians to a limited degree, but it appeared to be less likely that allied health clinicians did so. From these data, we conclude that the improvements made in the clinical care of dying patients reported in the preceding chapter was as a result of nursing care. However, because the pathway was not consistently used to record variances, its use is limited as a research and process improvement tool.

The survey data show that nurses and allied health clinicians rely on the medical record as the main communication device to know about medical and allied health care for patients, although medical clinicians only frequently or did not always use it for this purpose and may therefore not record patient medical care consistently. This calls the completeness of the record into doubt that casts further doubt on whether treating clinicians from all disciplines are basing their patient care decisions on complete and consistent information. The use of informal discussion by all professions as an information transfer and care planning mechanism was high. This finding is important in view of the number of medical, nursing and allied health clinicians who cited increased multidisciplinary planning and review meetings as changes they would introduce to improve care for dying patients.

In terms of performance feedback, only length of stay was reported as received by medical personnel. No data on quality or patient feedback was reported as received by medical clinicians, and no feedback at all was reported as received by nursing and allied health clinicians. Almost no internal or external benchmarking of performance was reported to

occur. With no data available, review meetings also did not occur, with the majority of clinicians confirming that this was the case. Half the medical clinicians surveyed did report that they met, however, the topics discussed are not known. In the absence of meetings, the majority of clinicians reported that care was not changed or they did not know.

The data point to an investment by clinicians in the end of life care process as a procedure, moving from informal interest in improving the care process to a more active and formal process of instituting and embedding specific evidence-based procedures. The data confirm the importance of palliative care principles and practices to underpin the quality of care for dying patients.

Section 3: Survey of treating clinicians – analysis of qualitative data

In addition to closed-ended questions, treating clinicians were asked what changes they would like to introduce to improve care for patients of this case type, or any other comments they would like to make on any issue raised in the survey. Most clinicians took the opportunity to record comments, and we report on our analysis of these comments in this section.

Four main themes arose from our analysis of the qualitative data relating to changes that clinicians would like to introduce to improve the care for dying patients. These themes revolved around:

- the place of patients and families in decision making and reassuring them about the uncertainties they were experiencing
- the capacity of clinicians to come to terms with the human dimension of death to initiate end of life care early and to formalise palliative care principles in end of life care
- the need to educate staff particularly new clinical care graduates and medical staff at all levels, on the specific clinical and social needs of people who are dying, including the implications of cultural differences of caregivers, patients and family members
- the need to establish service systems to support the type of care that clinicians believe patients require

We discuss each of these themes in the next section, including the specific issues raised by clinicians that comprise these themes.

The place of patients and families

Clinicians from the specialty wards where this research was conducted believed that patients and families should have greater involvement in end of life care decision making. Specifically, they believed that patients and families needed to be provided with information about the end of life process and be encouraged to participate in decisions that affect them. Part of this education and involvement would involve clarification of the patient's diagnosis and prognosis and the implications of No CPR orders that can be confusing for patients, relatives and staff alike. Improved access to doctors to answer questions would provide reassurance to patients and families and allow greater involvement in decisions about care options and direction.

Specifically, clinicians in cardiology advanced the view that decisions about care for end stage disease should be made when patients are relatively well. Renal clinicians agreed, going further to advocate for a plan of family involvement. Neurology clinicians advocated for increased family interaction with palliative care specialists while aged care clinicians advocated for more effective means of patient: clinician communication to encourage participation in decision making, if agreed by patients and relatives. Oncology clinicians were concerned at the lack of active patient involvement in decisions about their care, and advocated for the end of life care pathway to be initiated earlier, for relatives to be educated and for patients to have increased access to physicians to ask questions concerning, for instance, prognosis.

The capacity for clinicians to come to terms with death and dying

Nursing clinicians believed that early recognition that the patient is dying would assist in initiating the end of life care pathway earlier and allow timely attention to patient's symptoms and management. These clinicians believed that there was greater scope for use of the pathway in the care of dying people, particularly greater medical involvement. In this respect, nursing clinicians advocated for a greater degree of openness by medical clinicians about patients' diagnosis and prognosis, including avoiding the use of jargon when discussing death and dying with patients and relatives. Importantly, the majority of clinicians who spoke about the role of palliative care as patients die advocated for greater involvement of palliative care specialists.

Specifically, cardiology nursing clinicians expressed concern that patients' problems were not always recognised, or not recognised early enough, for instance pain and agitation, and believed that teams could be more decisive in initiating the end of life care pathway to guide symptom management in end stage disease. Respiratory clinicians urged more initiation of end of life care pathways, supported by renal clinicians who wanted the pathway to start earlier than 48 hours before death. These nursing clinicians advocated increased medical team involvement with the pathway, including documenting the pathway and following up with patients and family members to discuss diagnosis and NFR order. Nursing clinicians believed that medical teams should demonstrate a sound understanding of the clinical, social and emotional issues involved in the process of dying, specifically, the need to repeat and reinforce key points and decisions already taken to patients and family members.

Medical clinicians in neurology raised the role of palliative care specialists and the confusion that their involvement can cause for the primary treating team, advocating for palliative care specialists to have a consultation role rather than a management one. On the other hand, nursing clinicians in aged care advocated for an increase in the visits of the palliative care team and earlier use of the goal-based end of life care pathway to control patients' symptoms. It was in this specialty that nursing clinicians advocated for the multidisciplinary group to be candid with relatives that the patient required end of life care and to provide reassurance in order to avoid 'relatives change (of) mind and … last minute insistence on active management'. Oncology nursing clinicians advocated for greater involvement of medical personnel in palliative care issues i.e. earlier than 48 hours before death initiation of the pathway. These clinicians were concerned that team registrars were often not fully committed to end of life decisions and advocated for greater involvement of

advanced oncology trainees in end of life care, for instance by encouraging greater liaison with the palliative care team.

The need to educate staff about death and dying

Nursing clinicians were of the view that medical staff at all levels and new graduates need education about managing terminally ill patients. Specifics included the ability to diagnose dying, enhancing knowledge about pain relief, understanding team member roles in the end of life process, developing positive attitudes to dying, and improving their communication, pain management, patient care planning and knowledge about No CPR orders and advanced care directives.

Cardiology staff advocated for improved communication between multidisciplinary staff members through multidisciplinary staff meetings. Nursing staff noted that it was often new graduates or enrolled nurses who were allocated to caring for dying patients and that this level of staff needed senior nursing clinician support, particularly recognising patient problems, providing pain management, improving communication between the patient, family and health care team, and the use of natural therapies for dying people. Respiratory nursing clinicians noted the reluctance of some medical specialists to use the end of life care pathway, and renal nursing clinicians wanted more medical staff to be aware of the existence of the pathway. These clinicians believed that doctors of all grades should be educated in end of life care and encouraged to consider the patient's needs holistically, including particularly pain management. They noted the reluctance of some doctors to chart regular pain relief, even when prompted. Nurses believed that doctors needed appropriate training, reassurance and encouragement in managing patients' pain, suggesting education on pain management and attention to the care of dying patients in diverse cultures.

Neurology nursing clinicians supported this call for improved education on the need for and use of the end of life care pathway, as did aged care nursing clinicians who extended this education to a need to change attitudes from those that regarded a dying patient as a 'failure' and to encourage doctors not to 'shrink from it'. These clinicians also called for more education about prioritising care and about the role of palliative care as people died. Oncology nursing clinicians advocated for increased education amongst doctors about treatment and communicating with patients, and extended this education to improving knowledge about palliative care principles for all the multidisciplinary team. They promoted education for relatives and a greater awareness on the part of doctors, nurses and allied health staff about end of life care plans, especially for junior staff. They believed that a better understanding could be encouraged on the part of doctors that the patient was dying, as well as by medical and surgical teams in how to diagnose dying, the safe use of opioids and the need for 'meticulous communication' with families.

The need to establish service support systems

The importance of service systems to support case management for end of life patients was raised by clinicians in all specialty areas. These systems included the importance of goal-based care, multidisciplinary review of care planning and outcomes, coordination and leadership, including the importance of medical commitment to end of life care plans. Greater allied health involvement was advocated, from both nursing and allied health staff. Dedicated beds and areas in which to care for dying patients and their relatives was raised as a need by clinicians, as well as a reduced patient ratio for those caring for terminally ill patients, and the need for improved after hours management of dying patients. Nursing

clinicians advocated for improving the access of clinicians, patients and relatives to the pathway and providing performance feedback on the quality and outcomes of end of life care.

Cardiology nursing clinicians asked for the pathway to be augmented by a section to document goals and their achievement. They noted that 'too many meetings' were held 'without a nominated leader/manager' and called for improved coordination of entries in the medical record to link the care of multidisciplinary groups. Improved allied health referrals were advocated as were the need for clear No CPR orders, a need supported in oncology where the allied health team asked to be made aware of consultants' preferences and for a greater involvement of allied health in the end of life care pathway process. Respiratory nursing clinicians called for a dedicated palliative care area and less patient ratio for nurses caring for dying patients. Renal nursing clinicians noted the apparent uncertainty of after-hours doctors in caring for terminally ill patients. Neurology medical clinicians believed that the care of terminally ill patients should be managed and driven by the primary medical team. Clinicians in this specialty advocated for increased meetings of the multidisciplinary team, including team reviews and increased communication between nurses and doctors. Aged care clinicians called for more guidelines for allied health, nursing and medical staff as well as the patient and family members to assist them to communicate with the team 'on the floor' and to be able to make, and be included in decisions. Oncology nursing clinicians also advocated for daily review of patients by the multidisciplinary group and improved access to end of life care plans by all stakeholders. Importantly, clinicians in all specialties remarked on the absence of performance feedback and their desire to have such information to facilitate improvement in patient and unit performance.

Summary

To summarise this information for ease of reference, we tabulate the themes and issues raised in Table 3.2.2 below.

Table 3.2.2: Changes clinicians would like to introduce to improve care for end of life care patients

Theme	Issue
Patients and families 1. Earlier involvement 2. Education about process 3. Participating in decisions 4. Reassuring about diagnosis/prognosis & No CPR 5. Access to doctors to answer questions	Improved consultation about relatives and patient needs Discussion about NFR orders End of life decisions made by patient when relatively well Plan for family involvement Reassure and education for patients and family members about palliative care Commence pathway earlier Improved access to physicians to answer questions
Clinical care 1. Early decision 2. Initiate ELCP early 3. Attention to symptoms – goal based care 4. Greater use of pathway 5. Greater medical involvement 6. Honesty about diagnosis/prognosis - jargon 7. Pall care role	Improved / earlier recognition of patient problems Team decisiveness in initiating end of life care pathway early Increased medical team involvement in end of life care, specifically reinforcing comfort care plan Importance of openness in effective communication with patients and relatives Greater involvement of registrars in end of life care plan and liaison with palliative care team.
Education 1. Medical staff at all levels 2. New graduates 3. Specifics: diagnosing dying, knowledge (pain relief), team member roles in whole process, attitudes to dying, communication pain management, plan, NFR types 4. Care of dying in diverse cultures	Improved multidisciplinary communication Improved medical and new graduate education about managing terminally ill patients, particularly on specific aspects of care, diagnosing dying, prescribing opioids, patient communication Encourage medical staff knowledge and use of ELCP Improved knowledge of pain management, prioritising care and palliative care Change negative attitudes to death as clinical failure Improved nursing and multidisciplinary team knowledge about palliative care principles Information / education for relatives
Case management 1. Goal based care 2. Multidisciplinary review 3. Coordination, leadership and medical commitment 4. Performance feedback 5. AH involvement 6. Dedicated areas/beds 7. Reduced patient ratio 8. After hours management 9. Access to elcp's 10. Extending p/w use	The pathway to allow documentation of goal / achievement Improved multidisciplinary team planning and review of patients Reduce ineffective meetings and improve leadership and coordination of care Initiate statistical reports on performance Improve allied health referrals and allied health involvement in end of life care planning process Initiate dedicated palliative care area in wards Decrease nurse patient ratio for those caring for dying patients Support after hours medical care of managing terminally ill patients Guidelines for treating multidisciplinary staff on involving patients and families in discussions and decision making Improved access to end of life care plans by all stakeholders

CHAPTER 4: RESULTS - THE ENVIRONMENT IN THE ORGANISATION

This chapter contains three sections. Section 4.1 is a scan of the environment to describe and understand the context in which clinicians deliver care to patients at the end of their lives. Section 4.2 reports on the analysis of quantitative data obtained from interviews with corporate and clinical managers. Section 4.3 reports on the analysis of qualitative data obtained from these interviews.

Section 4.1: Environmental scan

An environmental scan was undertaken to ascertain and describe the organisational environment in which clinicians worked, specifically, the types of supports available to assist clinicians in their patient care roles and clinical managers in their patient care management roles.

Part of our interest in this research was to ascertain the extent to which clinicians engage with clinical governance where clinical work is carried out, that is in clinical units. This research was focused around clinical pathways, as a mechanism through which clinicians could systematically standardise the care routine of patients, taking an end-of-life care pathway as the reference point. We sought advice from the Clinical Governance Unit about the formal processes employed at St George Hospital to manage clinical work generally, and end of life care particularly. We sought information on the orientation of management, the stability of clinical care and the organisation of care and report our understanding of the Hospital environment in respect to organisational support for patient care in Table 4.1.1. The data collection tool is attached in the appendixes at Appendix 5.

Table 4.1.1: The organisational environment

The orientation of management	Attribute present
What is the method of clinical care organisation? • evidence-based multidisciplinary clinical pathway • consensus-based multidisciplinary clinical pathway • individual profession-based protocol • individual practitioner protocols • no method of clinical work organisation discernable.	 √
To what level in the organisation are formal (written) reports disseminated that include both efficiency and effectiveness data? • To the hospital • To divisions • To departments • To the wards • To individual clinicians	 √ √ √
Is there a process within this organisation that reviews the organisation and management of care? • General management • Divisional management • Departmental management • Ward management	 √

The stability of clinical care	
In how many wards were patients of this case type located? • Two wards or less • Between three and seven wards • More than seven wards	 √
The organisation of care	
What training is available within the organisation to inform clinicians about how to manage clinical care? • Staff are routinely released to attend training sessions • Dedicated staff and resources are available to train clinicians on the development and management of multidisciplinary clinical pathways • On the job training (eg in service) is available but there is no provision for relief staff • Off-the-job training is available • No training is available	 √
How many clinicians had formal training in managing clinical care? Nursing, salaried medical staff, visiting medical staff, allied health staff, other • All identified treating clinicians have been trained • At least 50% of treating clinicians have been trained • One or two clinicians have been trained • None has been trained	 √ Nurses
Which clinical disciplines were involved in developing the sequence of care for the case type under review? Nursing, salaried medical staff, visiting medical staff, allied health staff, other • Most staff, heavy involvement • Most staff, brief involvement • Few staff, heavy involvement • Few staff, brief involvement • Little or no involvement	 √ Nurses √ Doctors
Is patient feedback systematically and routinely incorporated in reviews of clinical care of patients in this case type by • Multidisciplinary teams • Clinical management • Medical departments • Nursing units • Allied health units	 √
What attributes does the multidisciplinary clinical pathway contain as the basis for organizing clinical care for the condition under review? • Sequence of sentinel multidisciplinary therapeutic and diagnostic events for the condition under review • Indicators of quality • Indicators of outcomes • Capacity for recording of variances • Capacity for prospective costing	 √
Is there a protocol within the organisation that standardises the recording of patient information? • Single-source recording • Who should document • Legibility of the recording • Sanctions for non-compliance with requirements about documentation	No protocol sighted

Rate the problems with the quality of documentation in the medical record in terms of: • Important information is missing • Illegibility of the record • Clinician making the notation not identified • Unnecessary duplication of recording • Information being recorded that is unnecessary	 Significant problem Minor problem Significant problem Minor problem Minor problem
Within the organisation, are clinical support services and resources located were clinical care takes place? • Clinical pathway coordinator • Clinical information system	 No coordinator No, corporate system. Care spread across multiple wards
If there is a clinical information system, what capability does it have? • Patient details can be downloaded from facility-wide patient master index to Units' own computerized patient files • Patient volumes by case type are continually available • The clinical pathway for the case type is computerised • Variance reports for the case type are able to be produced	 No No No No
Is there a system in place that integrates and informs clinicians about the standard of quality and cost expected for the case type under review, and the actual performance achieved? • Only generic indictors of quality are available • Only DRG-based costs are available • Aggregate patient-level costs are available • Case-specific indicators of quality re available • Individual cost components for the case type are available	 √
To what extent are processes in place for multidisciplinary review of the condition: • Are meetings held • Are meetings convened at times that allow representatives of relevant disciplines to attend • Are meetings organised so that representatives receive advance notice • Are agendas accessible to the extent that representatives agree they have equal rights to contribute • Do representatives receive advance copies of the agenda • Are there standing items for review of clinical care o Review of variances o Results of internal benchmarking o Results of external benchmarking o Reasons for variances o Remedial action needed	 Although medical clinicians were split between whether meetings were held, other treating clinicians indicate that multidisciplinary review meetings are not held
Are there any financial incentives offered to your unit for the following activities? • Use of evidence as the basis for care methods • Multidisciplinary clinical pathways • Incorporating patient feedback into care planning • Multidisciplinary team meetings • Reporting of variances	 No No No No No
How are changes to the method of clinical care decided within the unit responsible for the case type? • The matter is decided by the most powerful person • The matter is decided by the most powerful profession	 Information not obtained

• The matter is decided by the person with formal organisational authority • The matter is decided by the people with the most expertise on the issue in question • The matter is decided by a multidisciplinary forum (i.e. medical, nursing, allied health)	

Within the hospital, two units predominantly provide data: the Casemix section of the Clinical Governance Unit reports on quality and risk, the Finance section on budgets. (Power budgets are now available to NUM's and medical directors with activity and costs; as these devices were not implemented at the time of the research, they have not been included in the analysis.) In terms of information used by the hospital to assess performance, length of stay is the most frequently used, specifically, for the top 10 'inefficient' DRGs.

Program & Product Data Collection reports are prepared for the NSW Department of Health and the Commonwealth Department of Health and Aging yearly with information by patient and ward. Their accuracy is described as 'questionable' and this information is not produced in a form that clinicians can use to review and manage their own clinical performance. Data in this report appears not to be used for performance management purposes within the hospital.

Clinicians do not appear to frequently ask for information about performance, although the Casemix section reports that it can produce special reports, should they be required and requested. Clinicians do ask for costs, e.g. cath lab, but the delay in producing the figures means that decisions may need to be made without the advantage of such information.

As part of the management interviews, both corporate and clinical managers were asked if they were familiar with clinical pathways and whether they were used at St George. We report their responses here. As discussed later in this chapter, 92.3% of managers interviewed were familiar with pathways and 73.1% reported that they believed pathways were used at St George. Managers differed in their knowledge about what types of pathways were used in the organisation. Table 4.1.2 outlines the number of pathways used, in the view of each manager interviewed.
The data show considerable variability in managers' knowledge about how clinical care is organised, including the extent to which clinical pathways are used to organise clinical work and clinical processes.

Table 4.1.2: Managers understanding of the number of pathways used in St George

No of pathways	The number of pathways managers believed were used in St George Hospital
0	1
1	5
2	7
3	3
4	2
5	2

An analysis of the pathways identified by managers reveals that twenty-one different pathways where thought to be in use, including one under development, one being used as a data collection tool, and with three not sustained. These pathways and their current status are reported in Table 4.1.3. The data suggest that managers did not know the extent of pathway use in the hospital.

Table 4.1.3: Clinical pathways that managers interviewed nominated as currently being used and their present status

Pathways used or thought used in the hospital	Current reported status
Stroke	
Respiratory	
Surgery: Post-operative cardiothoracic surgery	not sustained
Orthopaedics (THK, TKR)	used as data collection tool
TASC (Towards a safer culture)	
Women's & Children's Health: Obstetrics (vaginal delivery, Caesareans)	
Febrile children in Emergency Department	
Aged Care	not sustained
Chest pain	under development
Myocardial infarct	
Renal medicine (haemodialysis)	
Haematology	
Anaemia and iron status (nephrology)	
Cancer care	
Prostate cancer	
Cancer patient transfer	
Extended day care service discharge	
CATs	not sustained
Cardiac clinical management	
Cardiology nurse-initiated discharge	
Osteoporotic fracture (diabetes)	
End of life care	
Palliative care	

The data above show that a range of pathways are currently in use covering a range of conditions, including the pathway being used as the basis of this research. Pathways predominate in cancer care and surgical specialties, although a number have not been sustained. These data suggest that, while pathways have been used in some specialty areas for particular conditions, they are not used consistently as a systematised and standardised way of managing clinical work.

Summary

The environmental scan reveals that the orientation of management is not predominantly clinical work. No method of clinical process management appears to be used consistently in the hospital to organise clinical care, nor is performance information consistently and systematically reported in a format that managers and clinicians can use to review and improve delivery of patient care. Although reports are produced, they are predominantly used for performance monitoring at the Department of Health level rather than at hospital, divisional or unit level. Nonetheless, when the need arises, such as the training needed to develop and implement the pathway used for this research, training was available, and staff were routinely released for training purposes.

In terms of skills in clinical process management, some nurses have received training, and clinicians most involved in developing the end of life care pathway were nurses, with Palliative Care medical involvement. The pathway is based on evidence and includes the sequence of therapeutic and diagnostic care for this case type, indicators of quality and outcomes based on achieving goals of care and hence the capacity for reporting variances, although no allowance is made to prospectively cost the pathway. Patient feedback is reported as received in nursing units for this case type, but not in others. No protocols were sighted that standardise the recording of patient information and the medical record review identified inadequate documentation relating to patients end of life care. No coordinator is available to support staff in developing clinical pathways and no clinical information system exists that routinely produces performance data for the use of service clinicians and managers. Generic indicators of quality only were reported to be available.

Although medical clinicians were divided on whether meetings were held to review, for example, end of life care performance, other treating clinicians indicate that multidisciplinary review meetings were not held. No incentives were reported as available to encourage clinicians to develop methods of clinical process management, and no information was obtained on the method through which changes to the current method of clinical care were made. Managers were uncertain if pathways were used as a method of clinical management in St George, although feedback suggests that at least 21 pathways were used to manage particular case types.

Section 4.2: Managing performance – analysis of quantitative data

We interviewed corporate managers of St George Hospital and medical and nursing clinical managers of the specialty wards in which the research was undertaken to gauge the orientation of management to clinical care. The interview schedule was semi-structured with a number of closed and open-ended questions. In this section, we report on the quantitative data derived from the closed questions. Table 4.2.1 outlines participants and demographic details involved in this part of the research, including their professional background, gender, age and length of time working in the organisation. Twenty-six managers were interviewed. They were predominantly female from a nursing background, followed by a medical and general management background. The majority were over 50 years of age, having been at the hospital between one and four years.

Table 4.2.1: Demographic data of managers interviewed

Professional background	Profession no	Female no	Male no	Age no	Years no
Nursing	10				
Medicine	7				
Allied health	2				
General	7				
Gender		15	11		
Age					
30-39				6	
40-49				8	
50-59				10	
60+				2	
Years in organisation					
Less than 1 year					3
Between 1 and 4					15
Between 5 and 9					3
Between 10 and 19					2
More than 20					3
Total	**26**	**26**		**26**	**26**

Managers were asked about the time they spent on management. The majority were employed as full time managers, although a significant number (10 of 26) combined clinical and management activities. The majority had a postgraduate qualification, although most did not intend to upgrade their management qualifications. Five managers reported that they had a performance agreement, only one was able to be obtained. Details on the management activity of respondents are set out in Table 4.2.2.

Table 4.2.2: Management activity of respondents

Time spent on management	No	Number		Number		Number	
		Mgt	Clin	Yes	No	Yes	No
100%	16						
75%	2						
50%	2						
25%	6						
Qualifications							
PG degree		14	12				
UG degree		2	6				
Diploma		1	4				
None of above		9	4				
Intend to upgrade mgt quals?				9	17		
Do you have a performance agreement?						5	21

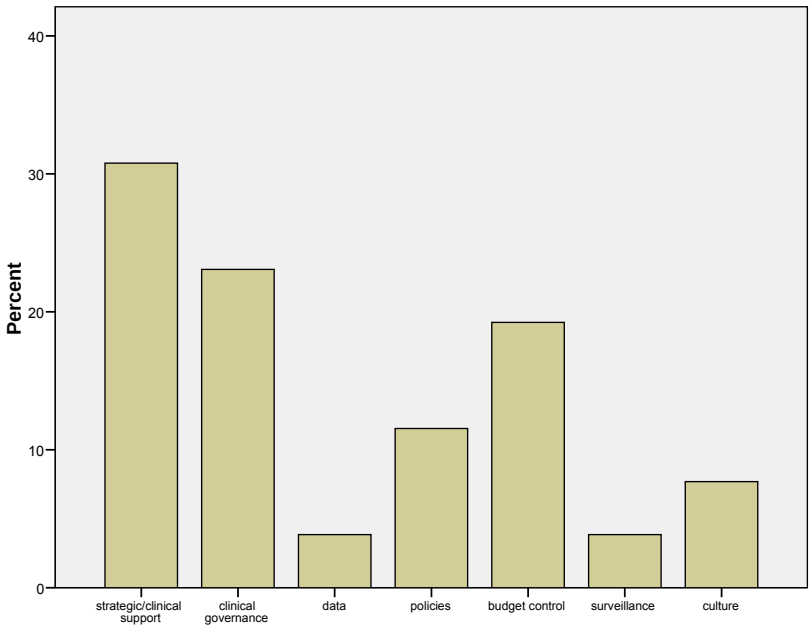
Firstly, managers were asked what criteria hospital management uses to assess performance. Managers, both clinical and administrative, reported that patient flow was the main performance criteria, followed by budget and then by quality and safety as outlined in Table 4.2.3.

Table 4.2.3 Managers' view about hospital management performance criteria

Performance criteria	% of managers who assessed this as a hospital management performance criteria
Patient flow	38.5
Budget	34.6
Quality & safety	19.2
NA or did not answer	7.7
Total	100

Managers were then asked about their views on the role of senior management in improving clinical care. All respondents agreed that senior management does have a role. When asked to detail what this role entailed, the respondents nominated strategic/clinical service support, clinical governance and budget control as senior management's main role, as set out in Figure 4.2.1.

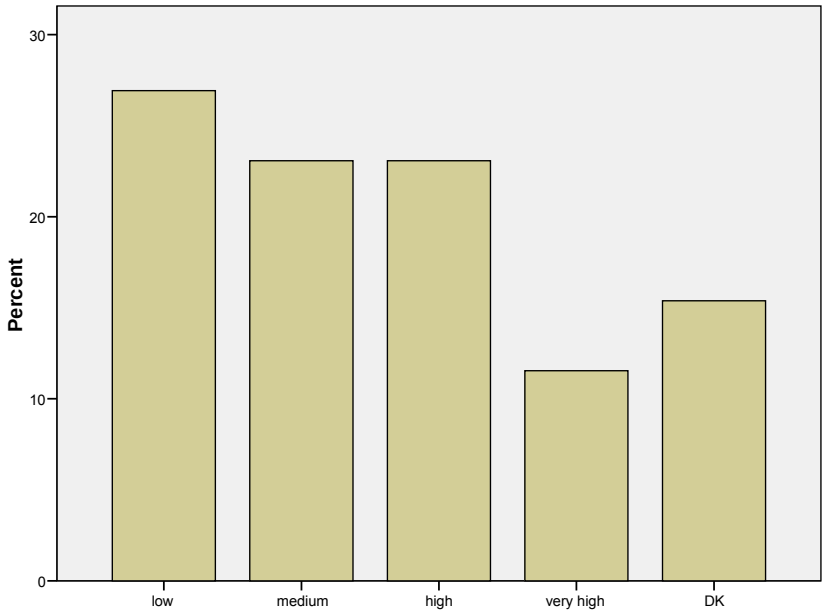
Figure 4.2.1: Respondents' views on the role of senior management in improving clinical care



When asked who respondents regarded as 'hospital management' 35% said they regarded all hospital staff as having a managing role, 38% regarded the hospital executive as management and 11% gave a variety of other answers. Seventy-seven percent (77%) of respondents regarded themselves as part of hospital management, 4% answered in the negative and 19% answered not applicable. This high percentage indicates that the majority of those interviewed accept some level of responsibility for managing the organisation.

When asked how they ranked how supportive they thought hospital management was in improving clinical care, the majority of respondents answered that support was low, although a significant number answered medium to high. Few respondents answered that the support of hospital management for improving clinical care was very high. A number did not know (DK), as detailed in Figure 4.2.2.

Figure 4.2.2: How supportive is hospital management in improving clinical care?



Respondents were asked to detail strategies that hospital management had implemented to improve efficiency and effectiveness, particularly as it related to the direction of health reform that included: evidence-based clinical practice, linkage between clinical practice and resource usage, multidisciplinarity, balancing clinical autonomy and accountability and service integration. Twenty-three percent (23%) identified new models of care, 19% better patient flow and 8% evidence-based clinical protocols as efficiency measures, with 35% of respondents unable to provide an answer. Fifteen per cent responded that evidence-based clinical protocols were an effectiveness measure introduced, with 58% unable to provide an answer. Other efficiency measures identified included data (4%), asset management (4%), strategic planning (4%), conflict resolution (4%), multidisciplinarity (4%), service integration (8%), grass roots change (4%), clinical streams (8%) and governance (4%). Details of the types of improvement activities identified by managers interviewed included those set out in Table 4.2.4.

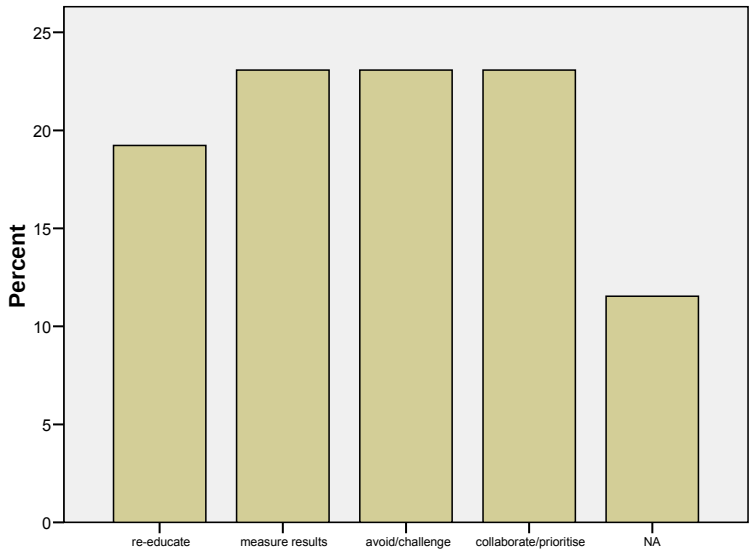
Table 4.2.4: Improvement activities identified by respondents

Types of reform strategies managers reported
Quality, finance and patient risk report
Integration . standardization of processes . service agreements
Stroke standard
Cancer Services quality committee
Standardised meetings
Sharing protocols
Teamwork
Using evidence as a lever
Clinical protocols
Performance committee
Data system in Cancer Services
Chest pain pathway
Accepting responsibility
Developing firm admission criteria
Human resource pathways for systems and processes

As reported in Table 4.2.4 above, when asked about the criteria that hospital management regarded as important when performance of the organisation was being assessed 38% nominated patient flow and waiting times, 37% budget, and 19% quality and safety. The majority of respondents nominated these criteria at the clinical department, division and area level, indicating a consistency of performance criteria throughout the organisation. The majority of respondents (81%) indicated that these criteria affected the way they worked (11% answering they did not affect they way they worked and not applicable 8%). Of those who answered that the criteria did affect their work, 39% indicated that they complied with the criteria by measuring performance, becoming more goal directed in their work, with 12% strategising to achieve objectives and 4% surveilling whether others were responding to the criteria. Some respondents resisted the pressure of such performance criteria but pointed to their effect, including staff shortages (15%) and their time consuming nature (12%) with 4% resisting such performance pressure maintaining that they would 'fight for their corner'.

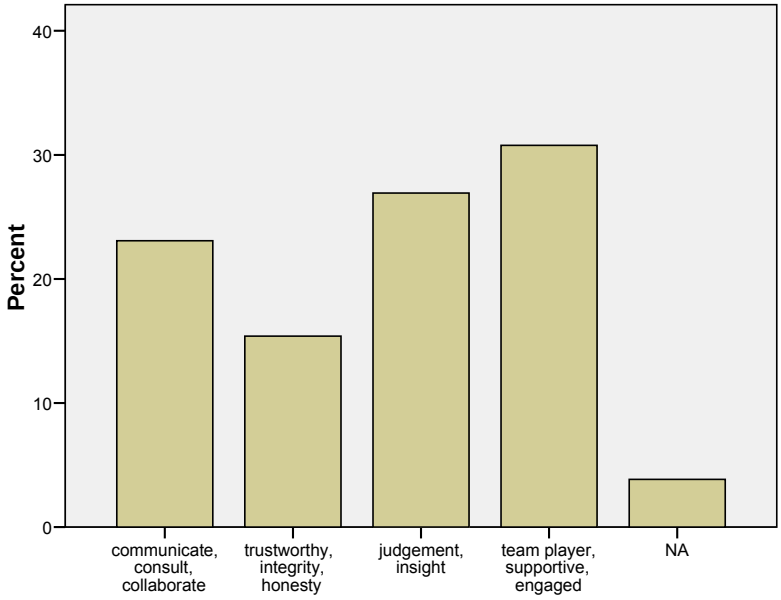
Respondents were asked if there were differences between the criteria used by hospital management and those used by clinicians to assess performance. Eighty-one percent (81%) affirmed there were differences, with 4% indicating similarities (not applicable 15%). When asked what the differences were, 84.5% pointed to clinical outcomes / indicators / treatment used by clinicians as criteria (not applicable 15.4%) that were not used by managers as criteria. When asked how respondents managed the differences, a range of methods were given as detailed in Figure 4.2.3 including that respondents collaborated, avoided and measured results in equal measure, followed by re-education.

Figure 4.2.3: Methods to manage the differences between managers' and clinicians' performance criteria.



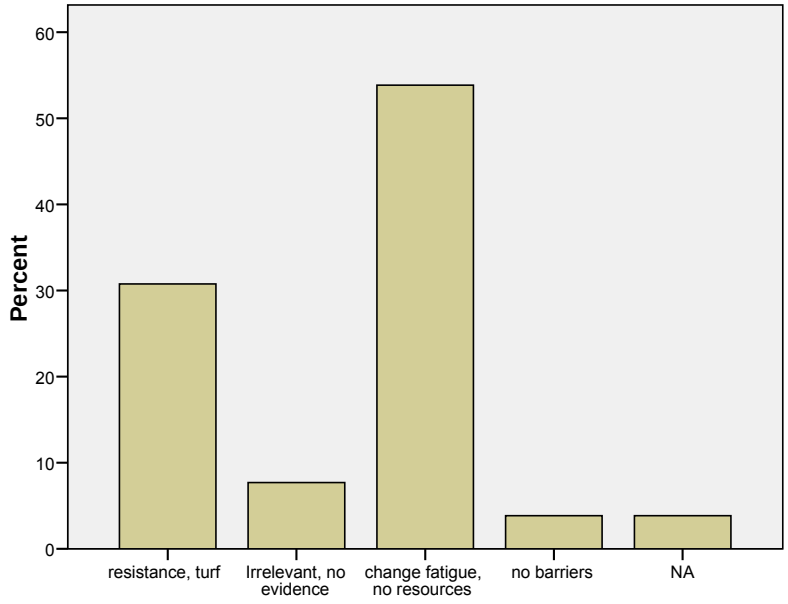
Respondents were asked about the characteristics that distinguished managers who they thought managed effectively and those they thought didn't. Eighteen (18) positive attributes were given and 13 negative. The wide range of responses indicates the indecisiveness of respondents in determining the qualities of leaders and indicating the difficulties in developing consensus about organisational leadership and the fostering of such attributes. The positive attributes have been collapsed into five key categories for ease of reporting and comprehension and are set out in Figure 4.2.4. Being a team player was highly rated as a leadership attribute, followed by having good judgment, being able to communicate and being trustworthy.

Figure 4.2.4: Attributes of effective managers



While most managers gave antonyms of effective attributes for those who they regarded as ineffective, it is worth identifying those that scored highly as ineffective attributes which included: not being engaged (23%); indecisive (15%); inconsistent (12%) and being dictatorial (12%). These attributes are illuminating of the behaviours that managers do exhibit, their effect on others and managers' capacity to engage others and lead organisational change. When asked if respondents had put in place any actions to the five directions of reform identified at the beginning of this section, 85% indicated that they had. The types of actions reported included evidence based protocols and treatment (35%), quality performance and data (19%), clinical streaming/integration (19%) and multidisciplinary care and staff support (11%). When asked if these five directions of reform were a passing phase, important or essential, 73% answered essential, 11% important and 4% a passing phase (don't know 12%). When asked about the barriers to putting actions in place in response to these directions of reform, respondents' answers were in a relatively narrow range as set out in Figure 4.2.5, with change fatigue and lack of resources being identified as the biggest barriers, followed by 'turf wars'.

Figure 4.2.5: Barriers to actions to achieve reform



Attitude to pathways

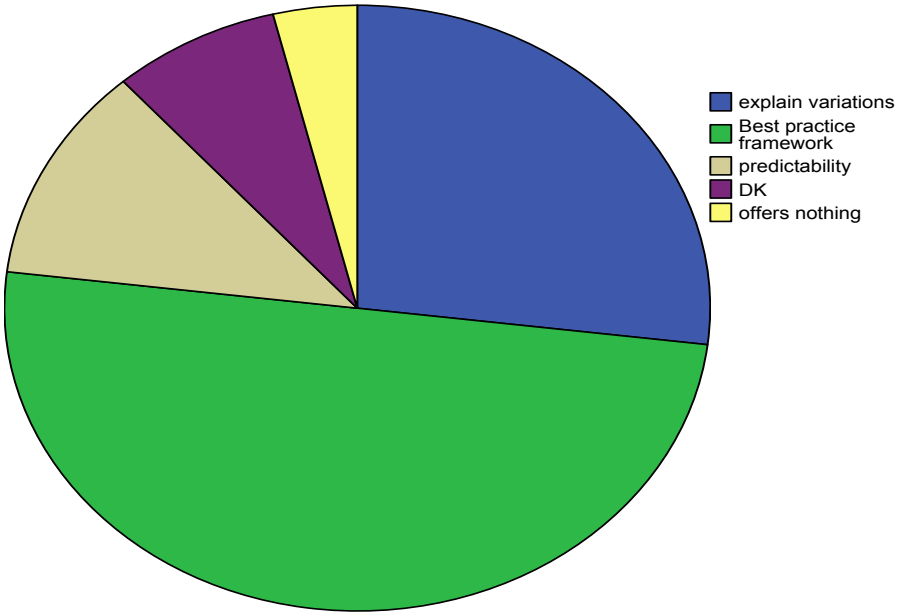
Our aim in this research was to assess clinician capacity for clinical governance via clinician-led implementation of a clinical improvement strategy, specifically an end-of-life care pathway. We therefore sought to identify clinician attitudes and practices in relation to systematic, standardised forms of clinical practice organisation that clinical pathways represent. This section presents data on managers' knowledge of and attitude towards clinical pathways, including strategies and barriers to their implementation. The majority of respondents were familiar with clinical pathways and answered readily that pathways were used in the hospital, as detailed in Table 4.2.5.

Table 4.2.5: Managers knowledge about clinical pathways

Knowledge about pathways	Yes %	No %	Don't know %
Are you familiar with clinical pathways?	92.3	3.8	NA 3.8
Are they used in this hospital?	73.1	7.7	3.8

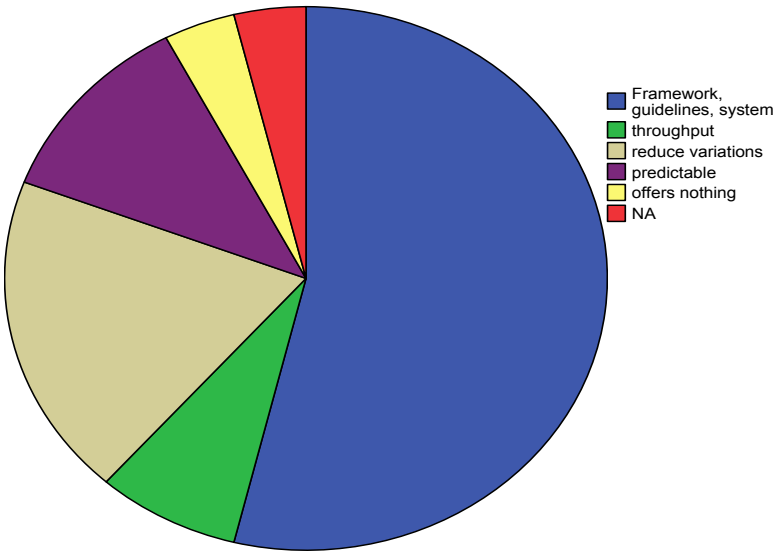
Respondents gave examples of the types of pathways being used with the major categories including the end of life care pathway being assessed through this research (15%), cardiology pathways (19%), surgery (19%), extended day care (11%) and orthopaedics (8%). In the view of respondents, clinical pathways offered benefits to both managers (yes 84%, no 8%, DK 4%) and clinicians (88%, no 8%, DK 0%). The benefits to managers are set out in Figure 4.2.6 and predominantly identified the capacity of pathways to explain variances in care and offering a best practice framework to ensure that appropriate care was being given.

Figure 4.2.6: What do pathways offer managers?



The benefits to clinicians reflect those that respondents believed related to managers and are set out in Figure 4.2.7. They include providing a framework of best practice care and reducing variations, although in different proportions from those reported as of benefit to managers.

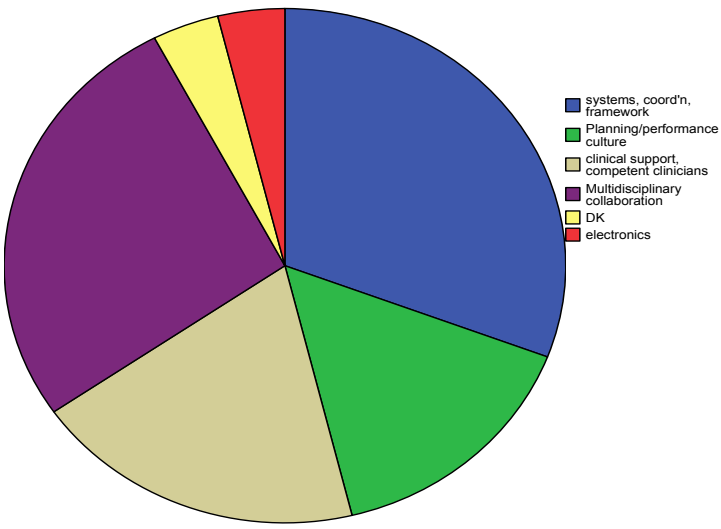
Figure 4.2.7: What do pathways offer clinicians?



A range of structures and processes will need to be in place if pathways are to be implemented more widely in the organisation as a method to organise and manage clinical work. According to respondents, these structures and processes fall into four main categories that particularly relate to the corporate level of the organisation (Figure 4.2.8):

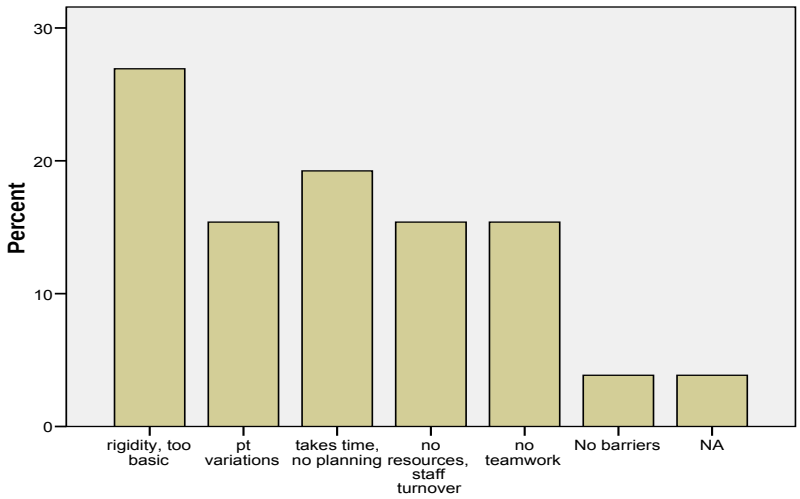
- having the organisational systems established within which to accomplish and evaluate tasks including a culture focused on planning and performance
- multidisciplinary clinician input and collaboration on the type of supportive systems needed and clinicians competent to use pathways
- at the divisional level, clinical structures were reported as important in implementing pathways
- at the ward level, clinician access to resources and, paradoxically, independently-minded clinicians able to make decisions about appropriate patient care.

Figure 4.2.8: Structures and processes needed to implement clinical pathways



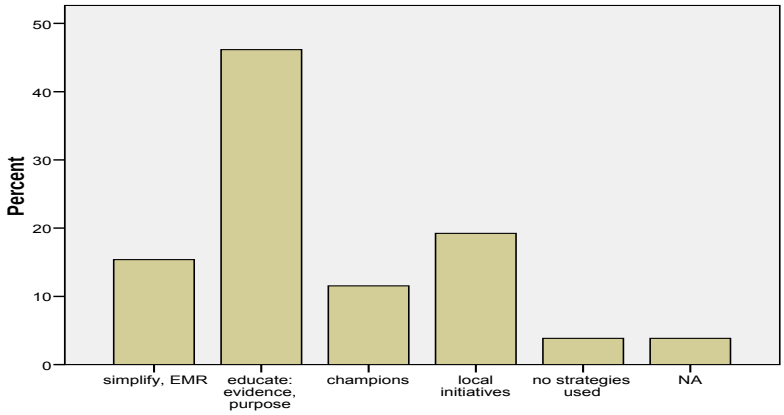
In the view of respondents, the main barriers to implementing clinical pathways and developing the required structures and processes are detailed in Figure 4.2.9. While resistance to the use of pathways based on their perceived rigidity and simplicity was reported as high, the absence of resources, planning and teamwork represented the greatest barrier to this type of clinical practice improvement.

Figure 4.2.9: Barriers to using pathways



Respondents were asked about the strategies used to overcome the barriers reported in Figure 4.2.9. Predominant among these were championing the use of pathways through education to demonstrate the evidence to support pathway use and their purpose, followed by local initiatives and simplifying the use of electronic medical records (Figure 4.2.10).

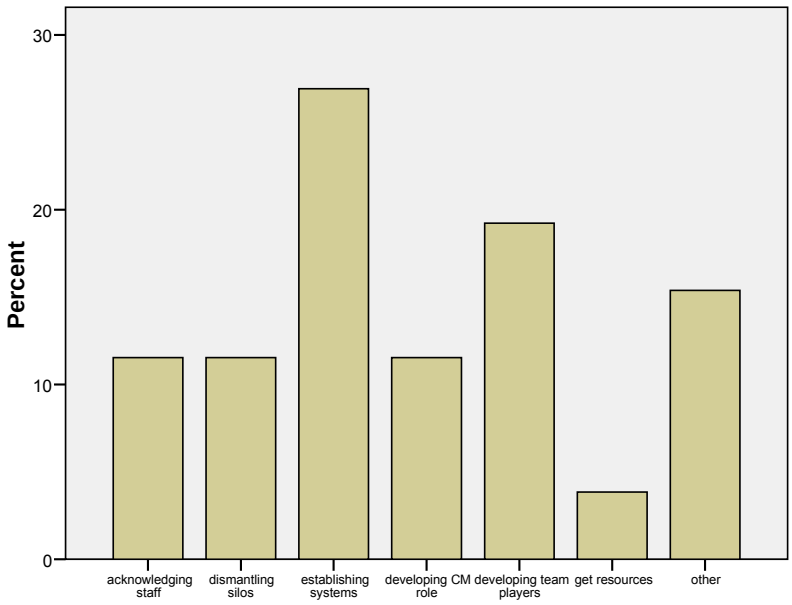
Figure 4.2.10: Strategies to over come barriers to using pathways



Respondents were asked to consider the things that they would like to achieve in their present position, in personal, professional and organisational terms. Twenty-three (23) of the 26 respondents sought to achieve specific goals at the personal level that included satisfaction from their job and a sense of service, and at the professional level, supporting staff and developing others. At the organisational level, developing the systems of care (27%) was followed by acknowledging staff (12%), breaking down the silos (12%),

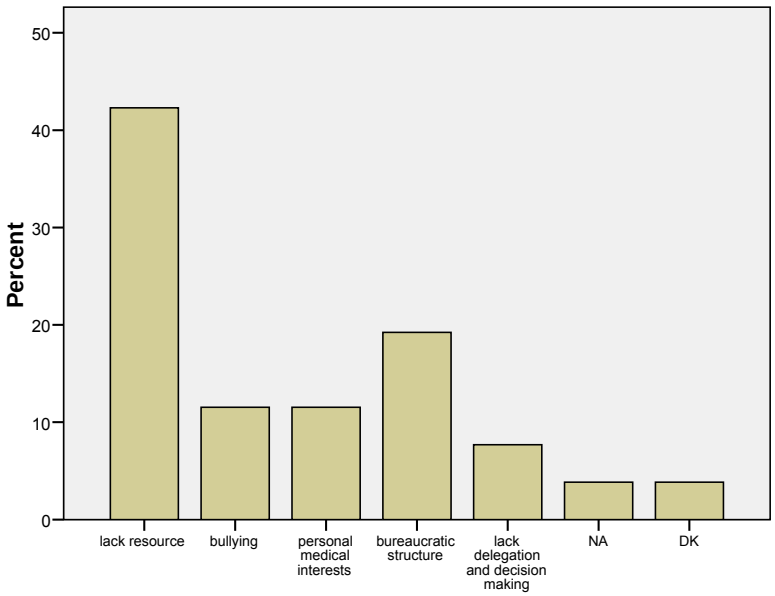
developing team players (12%) that included a learning environment for trainees (8%) and recognising and developing the clinical manager role (12%) (Figure 4.2.11).

Figure 4.2.11: Respondents' desired organisational achievements



When asked about the one barrier that if removed would make their job easier, respondents answered overwhelmingly a lack of resources, including time and money (42%), an inflexible bureaucratic structure (19%) including a lack of delegation and decision making (8%), and, equally, bullying and the personal interests of private doctors (Figure 4.2.12).

Figure 4.2.12: What barrier, if removed, would make your job easier?



Summary

Both general and clinical managers overwhelmingly agreed that senior management had a role in improving clinical care, but that the main performance criteria at all levels of the organisation were patient flow and budget control. While some believed the support that the hospital provided for clinical care improvement was high, the majority believed it to be medium or low. The examples that managers gave about effectiveness and efficiency strategies employed by the hospital in response to the direction of reform were fragmented and inconsistent. Notably, respondents differed markedly on the characteristics of desirable leadership, indicating that developing such a role would be difficult based on the different views of what leadership entailed, getting agreement on leadership characteristics and developing them.

In relation to pathways, managers believed that they were beneficial to both managers and clinicians, and importantly for the same reasons, i.e. as methods to ensure that best practice care was being delivered and as a means to record variances, although as reported elsewhere in this report neither of these activities were being actively pursued. While barriers to the use of pathways were identified based on their perceived rigid and simplistic nature, the absence of resources and systems to support pathway use were also reported. Education was identified as the strategy most likely to overcome such barriers, although developing local initiatives and changing pathways into electronic forms were also reported.

All mangers readily identified personal, professional and organisational goals that they wished to achieve in their position, important among these being personal achievement of job satisfaction and a sense of service. These goals also extended to professional and organisational goals, including to a high degree the systematisation of care, acknowledging staff achievements and contribution, breaking down the exclusionary silos that exist in large health services, developing people as team members, specifically nurturing a supportive learning environment for trainee clinicians, and lastly and importantly, improved development of the clinical manager role.

Section 4.3: Organisational performance – analysis of qualitative data

Managing between the agendas

> The general managers of the hospitals have one agenda, which I'm sure is heavily dictated by Area, whereas the clinical stream leaders, almost certainly, have a different agenda, which is our patient care, patient access, delivery of service, service organisation, that sort of thing, and where those two agendas cross is going to be very interesting.

Clinical Manager

This section reports on the qualitative results of the interviews with corporate and clinical managers at the Hospital. Corporate managers of the health service and clinical managers of divisions and departments were asked a series of open-ended questions about their work environment. The schedule of questions is attached at Appendix 4. Questions included views on:

- the role of hospital management
- the direction of reform
- strategies to achieve organisational objectives

- criteria for effective leadership
- respondents' personal professional and organisational objectives, and barriers to achieving them.

Analysis and interpretation of responses are set out below. De-identified excerpts from respondents' comments have been used to foreground the main themes that emerged from these data. Overwhelmingly, the theme emerging from the data was the need to 'manage between the corporate and clinical agendas', emphasised strongly by clinical managers. We juxtapose the comments of respondents to illuminate the culture of the hospital as it affects performance in the delivery of patient care under headings that include: establishing the context of performance; aligning expectations; problem solving; managing people; developing management skills; disengaging from the work and setting the direction. We present excerpts that most closely represent the concept being discussed, and interpret them in the context of the organisation of care within which clinicians develop the capacity to govern the care they deliver.

Establishing the context of performance

To set the context within which contemporary health services operate, we begin with an excerpt from the General Manager who conceptualised the role of management within the facility, one of only two excerpts that we identify:

> It's about providing leadership, building a team, and providing the leadership to the team to manage performance within the organisation, and clinical performance and therefore care to patients in particular, but also performance in terms of management of human resource performance and financial physical management of resources in order that all of that comes together to support patient care really.

General Manager

A challenge in effectively managing complex health services in this way is getting an agreed view among key managers about organisational objectives to which we turn next.

Aligning expectations

Getting agreement among a disparate, often autonomous and highly professionalised workforce cannot be assumed. In lieu of an agreed direction and strategic priority, corporate managers seek to establish conformity with organisational expectations as corporate managers strive to avoid 'each area (designing) their own policy' and priorities:

> … it's important that each area doesn't design their own policy … that there's some uniformity around the development of protocols and policies, that there's also some evidence to demonstrate that they are following what is considered best practice …. Not that we don't trust each department to do that but there are instances of sole clinicians coming out, 'This is a policy, I used to work at x and this is what we did there' … and unfortunately what can happen is one discipline comes up with a fantastic clinical practice that affects directly another discipline with no consultation ….

Corporate/Clinical Manager

Implementing standards for the development of local policies is difficult in health services that are constituted by independently-minded professionals who are at the frontline of health care and of their specialty, and who make their own assessment of patient need, based on their clinical knowledge and clinical management judgments:

> An interesting example three or four years ago I started a (named) service here. It's totally unfunded, and I took the risk of being instrumental in starting (the) service, because I knew it was new, I knew that (named condition) was being detected earlier at a much more curable stage. The problem is though that took a few resources away from (named clinical services) and that has contributed to some extent to the waiting list problem, but only to a minor extent. The Area's response to our waiting list is, well, you have developed the (named) service, it's never been formally approved. I thought well you wouldn't not have a (named) service, and they are kind of suggesting that because it was brought to Area at present, they might not approve it. Because it is very frustrating when you know what people want, and you know what effective treatments there are, but the area health service would have the audacity to say 'well it should never have been started in the first place'.
> Clinical Manager

A clinical/corporate manager took a more pragmatic view, describing management not so much as setting a direction but as 'facilitating things at different levels'. This approach encompasses individual clinicians, doctors and nurses as also having a management role with implications for the roles and responsibilities of those who work in and manage health services and the training and support they receive in this regard. The manager expressed these views in the following way:

> This concept that we just deliver patient care in some sort of vacuum is a nonsense. We only deliver care because we work in a system and that system has to be managed and we each have a role in managing it. We have people we have to supervise, we have people we have to communicate with, we have our own time we have to manage, we have our own professional development we have to manage, so in a sense we're all managers and each of us has to facilitate with our colleagues up and down a range of activities, like professional development, supervision, teaching, self-assessment, assessment of others.
> Clinical/Corporate Manager

The main objective of the health service, as identified earlier in this section, is efficiency, specifically patient flow and budget efficiency. Preparing quality reports against key indicators and scenarios of patients at risk was a second priority. Peer review has become a lever for corporate managers to utilise to align different expectations between corporate and clinical managers about types and levels of performance:

> … if you want to look at practically how I would do that (manage performance differences) … you say Dr A, B, C, D, E and F – and look, Dr F has got the worst figures and they know who they are, they may not know who their colleagues are but if they know if they're F … they'll pick up their game very quickly. Again, that's not exclusive to medicine but I think that looking at the way they see their practice in comparison to their peers is very important.
> Corporate Manager

A clinical manager saw the issue differently. Clinical managers that were interviewed largely accepted that 'the days are gone where you can do things without having KPI's and outcome measures'. Where they differed was in their objection to the punitive implications of performance management, recognising that achieving objectives may not necessarily be only in the hands of frontline clinicians but in the systems of care needed to support direct clinical work:

> and that gets back to the fact that if you look for example at length of stay, and people are criticised because they have an increased length of stay and they can't get patients in and don't have staff to get tests, they can't clear beds in casualty and you have to look at

> reasons for that – what often happens is that people say 'your length of stay is three days longer than Xs' but what are the mechanisms underlying that?
> Corporate/Clinical manager

In organisations as complex and diverse as large teaching hospitals, identifying barriers to achieving streamlined patient care and devising solutions to address them requires knowledge of organisational and clinical process management and skills to negotiate and resolve conflict and disagreement, and it is to these aspects of health service management that we next turn.

Problem solving

Achieving expected performance levels requires managing the health service as a single entity, identifying barriers to performance and working systematically to remove them. As the clinical manager above indicates, this involves streamlining patient access to the service, to clinical support services for timely tests and ultimately to beds. There appears to be an expectation that clinicians are able to confidently solve these types of problems without direction, assistance or skills in how to structure and negotiate change that was often quite extensive and complex and heightened by a restructure of two large acute facilities. A clinical manager gave an example:

> I had an example today, where (a named manager position) said to my senior nurse manager 'you are over budget in this in wages in (named ward)' and that is because we have beds open that are unbudgeted. (They) said 'you have got beds at Sutherland, beds at St George, make it happen'. Now that is not efficient as far as I'm concerned, to a senior NUM at St George, to say: 'make it happen'. That needs help from the executive level. It doesn't need the executive level to simply say 'you have got the resources - make it happen'
> Clinical Manager

Clinical managers expressed doubt whether corporate managers regarded patient access and patient satisfaction as legitimate service objectives. Clinicians often felt disregarded when raising the importance of such objectives, reflecting the different perceptions of legitimate organisational objectives and performance outcomes that managers and clinicians favour. Clinical managers questioned whether corporate managers appreciated the very real and often incommensurate dilemmas that clinicians had to deal with, with service- and organisation-wide implications. A clinical manager stated it this way:

> We are directed to align our services with the core business of the organisation and we do that constantly, but quite often what the organisation sees as core business is very acute, and that is where we have some problems, whereas we like to see ourselves as being part of the whole continuum of care, rather than just focusing on the acute side of the admission.
> Clinical Manager

Achieving the types of organisational objectives detailed at the beginning of this section will necessitate the management of people, including managing highly skilled, high status individuals with considerable professional autonomy and personal power. Maintaining open communication processes and constructive relationships will be essential for the development of productive collaborative activity. We turn to consider how people are managed in the organisation.

Managing people

Clinicians and clinical managers described the pressure they felt to perform that many attributed to the Department of Health's focus on access block and reducing waiting times. Staff described this approach as 'micromanagement', estimated by one clinical manager as taking between 40-50% of a nursing manager's day. Clinical managers were not averse to improving efficiency, but referred to the concentrated focus on patient flow that diverted attention from other seemingly more critical patient care tasks. One clinical manager described the 'catch 22' approach that this engendered:

> If we don't improve, then we are never going to get the Department of Health off our back. So unless you do it, you will never get any breathing space.
> Clinical Manager

This single focus on patient flow, primarily to reduce emergency department waiting times, resulted in clinicians being unable to make sense of their jobs in terms of resolving activity and patient needs. Problems were often 'solved' by aggression, and bullying was described as much as a feature of the style of some area managers as it was of some medical clinicians and was reported to occur at all levels throughout the organisation. At the time of interview, a corporate manager recounted five charges of bullying against senior medical staff currently being dealt with and described the aggressive pursuit of individual interests as a significant barrier to achieving organisational objectives:

> What I trip over most is people not respecting the views and opinions of other people. There are so many big egos in this place. There are a lot of very senior doctors who just – their egos are so big, they are not team players.
> Corporate Manager

Rather than modelling the type of behaviour likely to engage clinicians and to demonstrate effectiveness, aggressive management methods were reproduced and perpetuated:

> With the amalgamation with the Area Health Service and the pressures and demands that are on senior management - and I don't know if that is from the department or who it's from - but it appears there is a culture of bullying, harassment and intimidation to achieve set outcomes for the area health service.
> Clinical Manager

As the health service restructures from two large relatively independent hospitals into an integrated network, clinical managers need practical assistance in making the transition of staff, systems, practices and patient care activities and we consider next the practical skills required of managers to do so.

Developing manager skills

Corporate managers often lacked the clinical knowledge necessary to help clinicians and clinical managers to identify and solve problems in the organisation of care and with patient care dilemmas. Clinical managers alluded to the rapid change of senior managers in the health service, estimated at seven executive directors in 15 years that truncated and fragmented working relationships, agreed negotiated priorities and organisational improvement strategies. A clinical manager expressed the importance of clinically knowledgeable corporate managers in the following way:

> I think one of the most important things is for managers who work in those areas to understand the clinical aspects and have worked in there, because if you've got that credibility and you know what they're talking about, you have their respect and they will trust your decisions. They know that you've got the best interests at heart for that service, whereas I think if you've got a generic manager who doesn't have that background or hasn't worked in that area then clinicians will have a trust issue with them as well, that they don't belong to that team.
> Clinical Manager

This same issue is reflected in the case of clinical managers, although in reverse. The more traditional collegiate style of medical managers not taking, and apparently not expected to take an active role in managing their clinical departments was not in accord with the management styles and skills needed to actively embrace the implications and practices of cost constrained, quality challenged, risk averse health services. A clinical manager expressed it this way:

> Divisional managers are people who meet to make decisions on the divisional aspects of the management, and then at ward level a NUM or a manager – but there's also department heads, they're clinical people, and they're supposed to have accountability for the medical staff within their department. However, my understanding from observing is that it's a far more collegiate arrangement and that the department head is really just a token, a figurehead, and often doesn't actually adhere to the principles of that position that they should be attending to.
> Clinical Manager

The changing relationships between corporate and clinical managers, the decreasing trust between them and the effect of a clinical management knowledge deficit on the part of corporate managers was described by this Clinical Manager in the excerpt of transcript that preceded that above. The manager details the extent to which they needed to go to convince corporate managers not to close a ward and the time and effort needed to do so - a decision that might reasonably have been expected to be within the clinical manager's area of responsibility:

> As a result, we're not closing a ward. However, that took considerable hours of my time justifying what in my 40 years of nursing experience I knew was wrong. That's about having evidence and being able to demonstrate through evidence that what you're saying is right, but no longer is there trust there to believe what you say. You have to back it up with evidence before they will accept your explanation.
> Clinical Manager

The potential for deskilling of clinical managers through withdrawal of such responsibility and trust becomes evident in the next excerpt. The role of nursing unit manager (NUM) is a central middle manager function in complex health services, managing basic ward-based care and associated nursing resources. Having authority to manage these functions is therefore critical to good nursing care and good health care. Clinical managers at this level need to be able to manage a range of financial, patient and staffing issues, yet one NUM reported that:

> the decision making power at a NUM level is really almost non-existent at the moment. I can't book casual staffing, approve overtime, have delegation for any costs outside general barcoded items …
> Clinical Manager

The following exerpt concerns the need for both clinical and corporate managers to find ways of communicating to identify organisational problems and work collaboratively to solve them in order to improve health services in each clinical specialty area. However, it was not fully appreciate that health service management is an acquired skill and not one vicariously picked up by clinicians and clinical managers:

> You pick up the administrative side stuff as you go, and as you get higher in the hierarchy, you learn more about how a hospital runs. As an intern you have no idea, but by the time you become a consultant you start to understand how a hospital runs.
> Clinical/Corporate Manager

even though the same manager believes that:

> … doctors will need to put in more action or input to get things changing in our health system, so they do need to understand it. .

yet the same manager further believes:

> I'm not sure for the hours the doctor works that they want to spend more time learning about the hospital.

An area of tension identified throughout this research was that of human resources. This functional area of the health service manages recruitment, staffing and performance that are being incorporated into clinical manager roles. The experience of clinical managers in obtaining support and guidance about human resource issues was not positive, as this clinical manager notes:

> … we have had constant problems with human resourcing … management fundamentally should be there to make life a bit easier and to help us facilitate the smooth running of the division and the hospital. Human Resources in the past has often put up more obstacles than solutions to problems.
> Clinical Manager

The difference of perception between clinical and corporate managers about the role of the human resource function in health services and the changing nature of its activities from instrumental to facilitative is evident from this excerpt from a corporate manager:

> there is the perception that HR is actually there to manage for the manager, and so the challenge I have ahead of me, is to have, particularly the clinicians who also happen to be a manager, to actually get them to take responsibility for the management aspects of their role … . and it's actually letting them know that it's actually their responsibility and then establishing what it is they need to actually get them to undertake those responsibilities.
> Corporate Manager

The effort of managing between the agendas, especially when a single agenda dominates that is contrary to the values and interests of the professional workforce, was a common refrain throughout the research, and we turn next to consider the effect of working in an environment of conflict, constraint and concern.

Engaging with the work

Some clinical managers did take an active role in managing their clinical departments. Many expressed the view that staffing shortages impeded their ability to engage with clinical management issues, diverted senior staff attention away from complex medical issues where their expensive expertise is most valuable and prevented engagement with teaching and research activities that medical clinicians in public hospitals value and expect to undertake. A clinical manager expressed it this way:

> To have an environment where people can come and talk to you about issues, for example that was the intern wanting me to come and review a (named) test – when I was working, I never used to ask senior staff to do that sort of thing, but there is no-one else to do it. All you can do when there's shortage of staff and no-one around is be open and try and be there, but in the end it's not particularly effective, having to review simple stuff like that all the time. I just don't see that is improving. I think that is getting worse and there is less people on the ground. … . I know there is an issue with budgeting and all that sort of thing, but they must think people are mad; people who are well trained are not going to sit around doing this sort of thing. They do it because they love it. I wouldn't have taken a job like this if I hadn't wanted to teach and do research, but I can't do most of the things – all I'm doing is acting like a senior registrar, taking calls all the time.
> Clinical Manager

Many of the clinical managers interviewed described themselves as burnt out from work overload and disenfranchised by not being included in management decisions that affected them, their staff and their clinical area. One clinical manager spoke of clinical staff attitudes in this way:

> There is a view that for many years they've been working exceptionally hard to drive and improve patient journey times and that's through ED KPI's, and there's a system view that they need to be providing more clinical hours but I think they're disenfranchised now and I guess not engaged, or less engaged than they were.
> Clinical Manager

Notwithstanding the tight staffing situation alluded to above, there has been a significant increase in the number of young trainee doctors in hospitals in the area. Hospitals need to be geared to provide the training, credentialing and supervision for safe practice, yet, as a clinical manager remarks, health services cannot be certain that this is the case:

> I think all too often we leave a lot of our young doctors to fumble around without adequate supervision. We don't provide a safe working environment for them, for example; we don't have good mechanisms of assuring ourselves of their skills and competencies before we say, 'You're on tonight'.
> Clinical Manager

Clinical managers did not express the view that they expected solutions to be found for them by others. Some saw opportunities for clinical managers with management skills to use them to advantage. Finding ways to work smarter through a specialty strategic plan is the way this manager sees the future:

> If I look at my colleagues, my senior medical staff in my department, they work 65 to 70 hours a week now, that's not adding anything new to that is not that easy. In fact, a lot of the strategic plan is around trying to work smarter and get us some time back, because the huge concern that I have is that we're going to burn out.

Clinical Manager

The interviews with corporate and clinical managers revealed a range of impediments to improving patient care that have been aggregated and compiled below in Table 4.3.1.

Table 4.3.1: Perceived barriers to improving patient care and service performance and their effect

Perceived impediment to performance	**Effect of impediment**
Hospital indicators irrelevant to clinician tasks	No feedback given. Not important clinically. Ignoring indicators
Wrong data	Data collection done on top of existing work. Indicators outdated. Clinicians want other data.
Aggregated activity and financial data	Financial data explained in terms of aggregate cost centre activity, not components of clinical case types that clinicians can manage
Data doesn't match up	DRG data not related to patient case types
Short term contracting	Cannot do longer term strategic or succession planning
External funding of staff positions	Administratively time consuming.
Bogus figures	Conflict over accuracy. Redirection of scarce staff time to rectify
Staffing cuts and slow recruitment	No staff to do incident monitoring
Healing difficult to quantify	E.g. pain relief
Slow staff position regrading	Worker inequity, job insecurity
Red tape and bottlenecks	Absence of delegation cumbersome and time-consuming
No business managers	No longer available for advice about efficiency and costs
Only doctors appointed managers	Doctors unable to manage; conflict for/with nurses as default
No nursing structure in streams	No nursing integration across the two sites
Services don't match up	Opening times of clinical and clinical support services not aligned; cannot streamline patient flow
Instability of restructure	Staff re-applying for positions

These barriers are a point of connection between corporate and clinical managers to review organisational systems and to assess their effectiveness in supporting clinicians to deliver patient care. However, many clinical managers expressed the view that they felt as though they were working in a vacuum. The following clinical manager took an organisational view of how to set direction and gain agreement of stakeholders, expressing it in terms of shared vision:

> I think ultimately the barrier is not everybody's engaged, not everybody's working on the same page and has the same objectives. You use the term 'shared vision' and I have to say I'd probably throw my fingers down my throat if someone said that to me three or four years ago, but it is. For me it's removing the barrier that people currently are isolated in what they do and they don't ultimately understand the message that should be coming down. This is about access to services for a group of people who happen to be our patients.
>
> Clinical manager

The manager went on to express these views in sense-making terms when referring to a successful clinical improvement initiative that they had been part of:

> where we got the most traction is where people actually realised what it was all about. They understood the key message in all of this. It's about patient journeys and effective patient care, and their role in it.
>
> Clinical manager

Clinicians and clinical managers were not against this view. They found, however, that engaging in dialogue with corporate managers didn't always occur at the personal level:

> I can send an email to people …, senior management, and I won't even get back a reply, not even that they got the email …'
>
> Clinical Manager

or at the service level:

> … it's not clear what are the things that are regarded as important any more. …
>
> Clinical Manager

Another clinical manager regretted the absence of direction, especially when negotiating clinical management aspects of the hospital restructure:

> I think that people have tried to keep things going through a lot of difficult times, and there has really been no direction and no-one steering the boat, and I don't know when that happened … .
>
> Clinical Manager

Another clinical manager saw the problem as long-standing:

> There was a time in 1990s, where the hospital actually had a forward plan and performance targets, I suppose which they said in 5 years time what do we want this place to look like. We haven't had that for about 7 or 8 years I suspect.
>
> Clinical Manager

Setting the direction through a forward plan and performance targets is one way to engage corporate and clinical managers to forge a shared vision of the organisation and what they are trying to achieve, and we turn finally to consider how this is envisioned to occur at St. George:

Setting the direction

Senior managers in the organisation are not unaware of the situations they face in assisting clinicians, corporate and clinical managers 'make sense of' the organisation in which they work and the levels of performance that they are expected to achieve. Plans are in progress to hold a joint communication forum where organisational stakeholders can debate and negotiate around a range of issues important to the harmony and effectiveness of the health service:

> (The named previous General Manager) wants us to have a planning day with all the senior clinicians and senior managers. That will be the process that facilitates a lot of what we talk about in terms of values, philosophy, vision, objectives, and how we actually are going to undertake that.
>
> Corporate Manager

Yet, ultimately, it is not hospital managers who have the autonomy to make decisions about health service priorities. Rather, decision making rests with managers at the area health service level who are distanced from the clinical environment:

> We however, also have a corporate entity that we report through to, which is the Area Health Service office, and in terms of strategic direction and key objectives, a lot of the direction setting at a macro level comes from the department through the Area to the senior team, across the network managers.
>
> General Manager

We turn to discuss the implications of the comments and views expressed by the managers interviewed.

Summary

Our qualitative data suggest that, while corporate managers acknowledge the differences between corporate and clinical managers in managing hospital services and the quality of patient care, they do not have the autonomy necessary to work with the health service as a single entity forging agreement, identifying local problems and devising local solutions. Irrespective of the negotiations and agreements made among hospital managers, the strategic direction and key objectives are set at a level outside the hospital and with which the hospital must comply. Clinical managers also understand the top-down imperatives of performance on patient flow and budget, however, the environment in which they find themselves practicing and managing is not one in which they have mastery or managerial control. The majority of clinical managers were uncertain about their management role and retreated to their clinical roles in the face of this uncertainty. The differences between the two types of hospital manager are not irreconcilable, but unreconciled.

Most nursing managers and a number of medical managers displayed confidence in spanning the boundaries between corporate and clinical domains and played a critical role keeping the organisation functioning. However, their difficult jobs ensuring that patient flow targets were met and integrating the services of two large but diverse health services was not assisted by senior hospital managers, either in terms of problem solving, integrating clinical services or negotiating between the key stakeholders about how such integration would occur. Significantly, bullying was reported at all levels throughout the organisation, including from the level of the Department of Health, that sets an example about how problems are solved and that sends a message that uncivil behaviour is condoned.

Our interviews with managers suggest an understanding of the problems they need to solve, however, their priority is managing patient flow on constrained budgets rather than the core business of the organisation, patient care. There is scant acknowledgement by hospital management of the difficulty clinicians and clinical managers' experience in carrying out their clinical functions in an unsupportive environment. This was exacerbated at St.George in the face of a service restructure that has depleted clinicians' goodwill, leaving instead feelings of burnout and detachment from the services they are charged with managing and from the solutions that they themselves must create and implement if patient services are to be integrated, coherent and streamlined. Cooperation and collaboration are not to be expected in this climate. The assumption of many of the clinical managers interviewed that management skills are second nature or are not necessary to managing complex clinical services such as those constituted at St.George assist neither clinicians,

clinical or corporate managers to address the difficult, long term nature of the problems that confront effective service delivery and associated staff morale. The lack of strategic time within which to begin to assess the problems and to work collaboratively towards solutions is a significant impediment to planning and implementing sustainable clinical management practices at St George Hospital.

CHAPTER 5: CONCLUSION

Everything points to one central fact: Clinical activities cannot be coordinated by managerial interventions – not by outside bosses or coordinators, not by administrative systems, not by discussions of 'quality' disconnected from the delivery of it, not by all that constant reorganizing.
Glouberman & Mintzberg 2001:76

The research findings show that use of an end of life care pathway has resulted in significant improvement in the documented care for dying patients, including assessment and symptom management.

In addition, the findings suggest that the pathway has empowered both nursing and medical clinicians. For nurses, the multidimensional nature of the pathway has allowed the development of a structured model of care that addresses the needs of the whole person – their psychosocial, emotional and spiritual care, as well as their clinical care. It has reduced the burden of inappropriate observations, inappropriate tests and inappropriate medication. The pathway provides nurses with a framework within which to structure care activities and decision making, as well as acting as a tool to guide care activities and care decisions. This change in process has assisted clinicians move to systematised, evidence-based delivery of care. Nurses report an enhanced capacity to negotiate with medical staff based on evidence of what care is required and what works for people who are dying and a change in culture about 'the way we do things now'.

Nursing clinicians involved in implementing the project report a similar empowerment process for medical clinicians, as the pathway provides a structure for end of life care, such as medication for symptom management. Medical clinicians appear to use the pathway as an adjunct for clinical experience. It is reported to be of particular support for junior medical and nursing staff and those working with limited support e.g. after hours when more experienced staff are not available.

The evidence-based direction of care that the pathway encompasses has assisted in resolving clinician conflict relating to direction and delivery of care in end stage disease. The pathway has contributed to addressing this conflict by demonstrating that improvement in care is achievable, with the pathway seen as an 'ally' in allowing clinicians to reach desired goals.

The Palliative Care Service calculate that the level of awareness raised by systematising and standardising care for dying people has led to an increase in referrals to the service from around 15% of dying patients prior to the research to around 45% post pathway implementation. Notably, referrals for patients with non-malignant conditions have increased beyond the predominant use of the palliative care service for patients with malignant conditions suggesting wider awareness and acceptance of palliative care principles and practices through the clinical specialties represented in this research. Although the level of referral increase has financial implications for the palliative care service and the Hospital, it is also evidence of a changing awareness about the value of end of life care as a clinical skill. The high proportion of patients from nursing homes signals the need to explore opportunities to develop supportive strategies and cooperative partnerships to assist these facilities to manage end stage disease and end of life care.

We conclude that clinicians do have a capacity for workplace governance based on implementation of a clinician-led improvement strategy in end of life care; accomplished within the context of extensive service restructure, service-wide implementation of patient discharge process, since abandoned (Jonah), transience in nursing executives, high manager turnover and competing priorities.

Notwithstanding these positive conclusions, implementing the end of life pathway has been neither easy nor straightforward with challenges still to be met. The pathway is often present in the patient's file, but documentation is often incomplete, compromising potential benefits to the delivery of care. Further work is required in staff training and evaluation to ensure sustainable compliance with use of the pathway.

Further consideration should be given to the multidisciplinary nature of clinical care and the requirement for consistent processes and collaborative forums for communicating and planning care and evaluating outcomes such as quality, risk and resource use. This level of care deliberation requires support systems, both within and between individual clinical units, to collect and report on data and streamline palliative care referral and consultancy practices. Organisational support services should provide reports on performance to clinical units, assist with training, standardise documentation and facilitate care review processes.

Implementation of the pathway and the associated improvement in clinical care was driven by a clinician implementation group, vigilance by the nurses and nurse managers of the wards in which the pathway was implemented and by clinicians from the Palliative Care Service. The project developed from the commitment of individuals with a shared vision who were concerned about the care of dying people and from ward based nursing clinicians dissatisfied but undirected in their patient care improvement goals.

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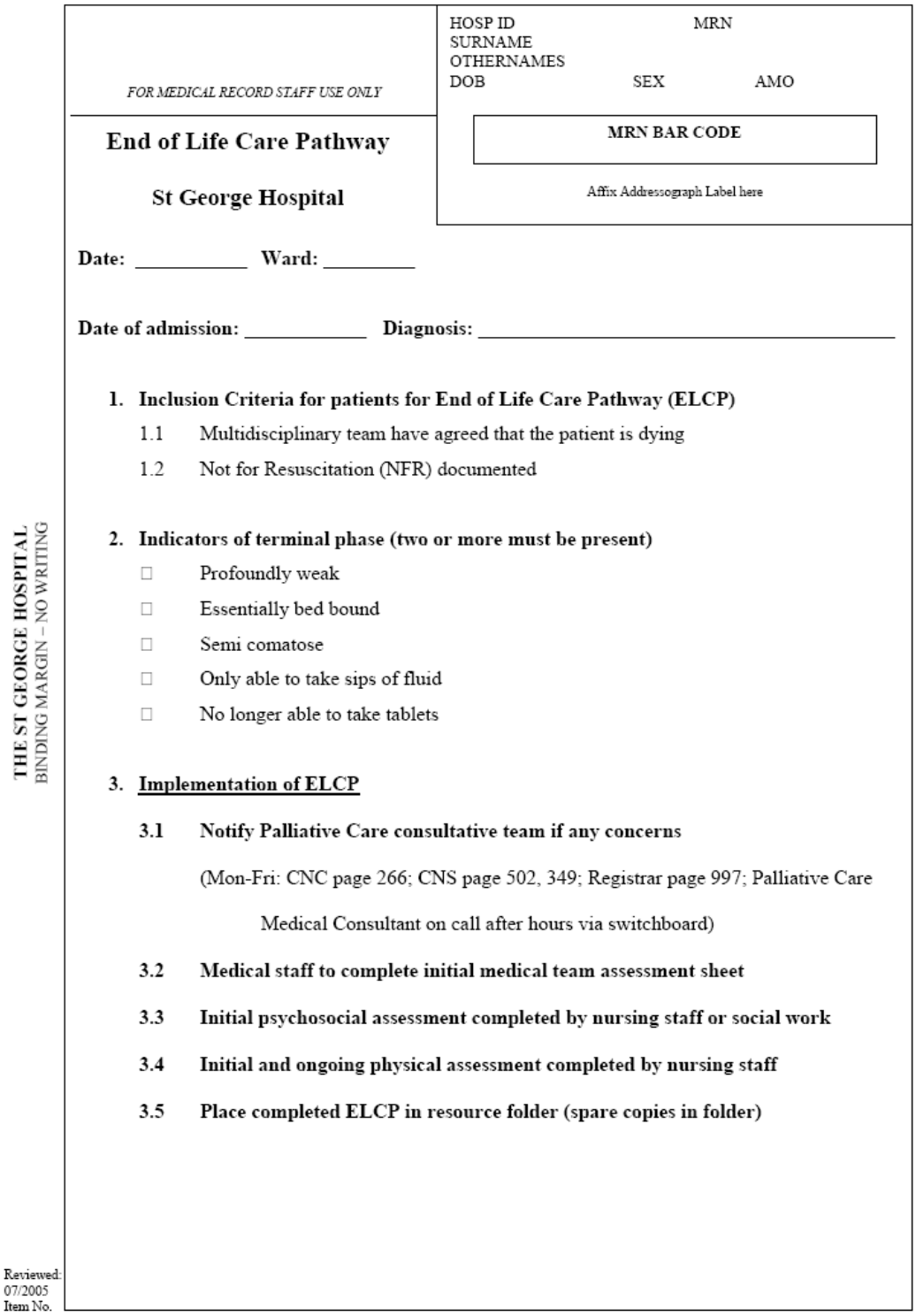
Appendix 1: End of life care pathway



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End of Life Care Pathway

St George Hospital

Date: _____ **Ward:** _____

Date of admission: _____ **Diagnosis:** _____

1. **Inclusion Criteria for patients for End of Life Care Pathway (ELCP)**
   - 1.1 Multidisciplinary team have agreed that the patient is dying
   - 1.2 Not for Resuscitation (NFR) documented

2. **Indicators of terminal phase (two or more must be present)**
   - ☐ Profoundly weak
   - ☐ Essentially bed bound
   - ☐ Semi comatose
   - ☐ Only able to take sips of fluid
   - ☐ No longer able to take tablets

3. **Implementation of ELCP**
   - **3.1 Notify Palliative Care consultative team if any concerns**
     (Mon-Fri: CNC page 266; CNS page 502, 349; Registrar page 997; Palliative Care Medical Consultant on call after hours via switchboard)
   - **3.2 Medical staff to complete initial medical team assessment sheet**
   - **3.3 Initial psychosocial assessment completed by nursing staff or social work**
   - **3.4 Initial and ongoing physical assessment completed by nursing staff**
   - **3.5 Place completed ELCP in resource folder (spare copies in folder)**

End of Life Care Pathway

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End of Life Care Pathway

Palliative Care Recommended Medications

Agitation
Check for reversible cause – pain, urinary retention. Midazolam 2.5 – 5mg sci PRN q2-4hrs. If persistent 2.5-5mg sci q4hrs regularly with an identical PRN dose q2-4 hrs.

Anxiety/Confusion
Lorazepam 0.5mg po / sublingual BD – TDS for anxiety **or** Temazepam 10-30mg po nocte **or** Clonazapam 0.5mg – 2mg po - sublingual BD –TDS for anxiety/ myoclonus.

Confusion/Delirium
Identify any reversible cause.
Initially: Haloperidol 1mg BD po/ sci.
Then 1-2mg po/sci q 2-4hrs PRN.
If refractory consult Palliative Care Team

Constipation
Assessment with PR exam may be required if seeking cause for agitation. Consider Glycerine & Durolax suppositories (may not be appropriate to intervene in terminal phase). If able to swallow, consider prophylactic coloxyl & senna 1-3 tabs BD or TDS to prevent constipation.

Diarrhoea
If faecal impaction with overflow excluded, Immodium 2 tabs q4h PRN / regularly.

Dyspnoea
For opioid naive patient: Morphine 2 - 5mg po or 1-5mg sci q4h. *For opioid treated patient:* Increase current dose by 25 -50%. If breathlessness continues, add Lorazepam 0.5mg –1mg sublingually BD-QID and PRN.

Hiccups
Metoclopramide 10 –20mg QID po/sci, Baclofen 5-20mg QID.
If persists contact Palliative Care Team

Fever
Paracetamol 1g q4h po / prn or Dexamethasone 1 mg po / sci q12h.

Pain Management
For opioid naive patient:
Morphine 2.5mg sci q4h with same dose PRN Q2-4hrs. If pain uncontrolled, increase dose (Q4h) by 25 – 50%. For patients already on oral opioids convert to sci q4hrs. * Caution in renal impairment – change Morphine to Hydromorphone. *If pain remains uncontrolled consult Palliative Care Team.*

Pruritis
Diphenhydramine 25 – 50mg po / IMI q12hr, Hydrocortisone 1% Cream to affected areas q6hr. Dexamethasone 1mg po / sci daily, alone or in combination with above.

Respiratory Tract Secretions
Hyoscine hydrobromide 400 – 800mcg q 2-4 hrs sci if patient unconscious, Glycopyrrolate 200 – 400mcg q2 –4 hrs sci (if patient conscious).

Stomatitis/Mucositis/Oral Thrush
For painful oral mucosa -Xylocaine viscus gargle, Orabase gel topically. To treat oral thrush Nystatin drops 2ml q4hr. To clean mouth - Sodium Bicarbonate Mouthwash QID.

End of Life Care Pathway

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End of Life Care Pathway

Initial Medical Team Assessment *Medical Officer to complete*

*NB: If you tick **No** to goals 2,3,4,or 5 please provide explanation at the end of section*

Goal 1: Patient symptoms are identified *(tick **Yes** if symptom present and **No** if absent)*

Anxiety / insomnia	**Yes** ☐	**No** ☐	Hiccoughs	**Yes** ☐	**No** ☐
Confusion / agitation	**Yes** ☐	**No** ☐	Nausea / vomiting	**Yes** ☐	**No** ☐
Constipation	**Yes** ☐	**No** ☐	Pain	**Yes** ☐	**No** ☐
Depressed mood	**Yes** ☐	**No** ☐	Pruritis	**Yes** ☐	**No** ☐
Diarrhoea	**Yes** ☐	**No** ☐	Stomatitis	**Yes** ☐	**No** ☐
Dyspnoea	**Yes** ☐	**No** ☐	Respiratory secretions	**Yes** ☐	**No** ☐
Fever	**Yes** ☐	**No** ☐	Dry mouth	**Yes** ☐	**No** ☐
Oral thrush	**Yes** ☐	**No** ☐			

Goal 2: **Non essential medications are discontinued** Yes ☐ No ☐

Goal 3: **Appropriate oral medications are changed to subcutaneous route**

Yes ☐ No ☐

Goal 4: **Medications are charted for specific symptoms:** *(if no, give reason below)*

Pain	**Yes** ☐	**No** ☐	Respiratory secretions	**Yes** ☐	**No** ☐
Nausea / vomiting	**Yes** ☐	**No** ☐	Dyspnoea	**Yes** ☐	**No** ☐
Agitation	**Yes** ☐	**No** ☐			

See recommended medication suggestions for pain management and symptom control

Goal 5: **Inappropriate interventions are discontinued** *(if no, give reasons below)*

Blood tests	**Yes** ☐	**No** ☐	Artificial hydration	**Yes** ☐	**No** ☐
Antibiotics	**Yes** ☐	**No** ☐	Routine observations	**Yes** ☐	**No** ☐

Variance *(if answered No to goals 2,3,4,5 – please provide explanation)*

_____

_____

_____

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Name and designation: _____ ***Signature:*** _____ ***Date:*** _____

End of Life Care Pathway

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NO WRITING **3**

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End of Life Care Pathway

Initial Psychosocial Assessment

Initial assessment to be completed within 24 hours of inclusion to ELCP

(may be completed by any member of the team)

Goal 6: **Insight into condition assessed**

Recognition of dying by the: a) Patient Yes □ No □ Unconscious □

b) Family Yes □ No □

Has the patient's choice of location of death been discussed?

Yes □ No □ Unconscious □ If Yes, where?.....

Goal 7: **Religious/ spiritual needs assessment** Religion: .....

Has Chaplain referral been made?	Yes □	No □
Have religious issues been identified?	Yes □	No □
Special needs identified - now, at time of and after death	Yes □	No □

Goal 8: **Communication with family/other**

Primary contact: Name: .....
Phone Number: ..... Relationship to patient: .....

Do family wish to be present at time of death? Yes □ No □

When are family/other to be informed of patient's impending death?

At any time □ Not at night □ Stay overnight □

Has social work referral been made? Yes □ No □

Have the family been made aware of hospital facilities e.g. staying overnight, access to hospital after hours, phone numbers to ward? Yes □ No □

Name and designation: _____ ***Signature:*** _____ ***Date:*** _____

End of Life Care Pathway

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End of Life Care Pathway

Initial and Ongoing Physical Assessment *(completed once per shift by nursing staff)*

"A" = achieved "NA" = not achieved *(if not achieved please give brief explanation in box)*

Date:						
Patient Problem/Focus	**AM**	**PM**	**ND**	**AM**	**PM**	**ND**
Pain **Goal 9:** Patient is pain free • Assessment is based on patient's verbal and non verbal response, including grimacing, groaning • Appears peaceful						
Agitation **Goal 10:** Patient does not display signs of restlessness/agitation • Exclude urinary retention or possible reversible cause • Exclude constipation as possible cause						
Respiratory Secretions **Goal 11:** Patient's breathing is not made difficult by noisy, rattly retained secretions • Repositioning • Glycopyrrolate sci or Hyoscine sci regularly to prevent accumulation of secretions • Gently suctioning at back of throat if sounding congested						
Nausea and Vomiting **Goal 12:** Patient does not vomit or feel nauseous • PRN medication • ? bowel obstruction – contact palliative care team for management						
Skin Care **Goal 13:** Patient's skin is intact • Pressure areas are absent • Pressure relieving aids used • Patient is moved for comfort only • Pressure sore wound care reduced to once daily dressings						
Signature						

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End of Life Care Pathway

Initial And Ongoing Physical Assessment *(completed once per shift by nursing staff*

Date:						
Patient Problem/Focus	**AM**	**PM**	**ND**	**AM**	**PM**	**ND**
Oral Care **Goal 14:** Patient's mouth is clean and moist • Artificial saliva • Regular mouth care attended 1- 2 hourly using water soaked swabs if unconscious • Lanolin to lips • Family members educated and encouraged to participate						
Eyes **Goal 15:** Patient's eyes are moist • Regular artificial tears drops is unconscious and eyes open						
Personal Hygiene **Goal 16:** Personal hygiene is maintained • Sponge in bed as patient and family require • Consider second daily sponge • Invite primary carer to participate						
Bowel Care **Goal 17:** Patient is not agitated due to constipation or diarrhoea • Third daily suppositories are administered to prevent agitation due to constipation						
Micturition **Goal 18:** Patient's urinary continence is managed • IDC inserted for patient comfort and to reduce physical handling • Incontinence pads are checked and changed regularly						
Dyspnoea **Goal 19:** Patient is not dyspnoeic • Fan on face • Reassuring presence • Morphine to decrease respiratory rate to comfortable level • Lorazepam (sublingual) for anxiety						
Signature						

End of Life Care Pathway

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End of Life Care Pathway

Ongoing Psychosocial Assessment

Complete once a shift by nursing or social work staff

Date:						
Patient Problem/Focus	**AM**	**PM**	**ND**	**AM**	**PM**	**ND**
Psychosocial support **Goal 20**: Patient and family are involved in decision making and understand that patient is dying • Inform of measures taken to maintain comfort • Encourage family caring activities as appropriate/individualised to family situation and culture • Facilitate verbal and tactile communication • Assist family with transport/parking, funeral, financial issues						
Spiritual support **Goal 21:** Spiritual support provided • Provide opportunity for expression of belief, fears and hopes • Provide access to religious resources • Facilitate religious practices						
Bereavement Support **Goal 22:** Bereavement support is offered • Bereavement leaflet is given to the family						
Signature						

Date of Death: .....

Family Present: Yes □ No □

Acknowledgements: *Ellershaw, J and the Palliative Care Teams at both the Marie Curie Centre Liverpool and the Royal Liverpool University Hospitals UK (2002), who have pioneered the Liverpool Care Pathway to achieve evidence based high quality standards of care for the dying patient.*
Beth Israel Pathway (PCAD): Marilyn Bookbinder

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End of Life Care Pathway

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Appendix 2: Medical record review proforma

End of life Care Plan Implementation Project - Chart Review

MRN		Ward		Gender	
DOB		Specialist			
Adm Date		COB			
NFR Date		Ward NFR documented			
Date of death		Diagnosis on death certificate			

Is the patient from a nursing home? YES / NO

Number of admissions in the past twelve months

Advanced care directive present – in or out of hospital YES / NO

Recognition for limiting treatment (within seven days prior to death)

Patient YES / NO

_____
_____
_____

Relative YES / NO

_____
_____
_____

Health Professional medical / nursing / allied health YES / NO

_____
_____
_____

Comfort Measures
Were NFR orders documented YES / NO
If more than one NFR order, were they the same YES / NO

_____
_____
_____

Medications reviewed and non-essential discontinued by medical team YES / NO
- If medication not discontinued was reason given. YES / NO

Appropriate oral medications changed to s/c YES / NO

Was PRN medication prescribed subcutaneously
- Analgesic YES / NO
- Antiemetic YES / NO

- Anticholinergic	YES / NO
- Sedative	YES / NO
Were the following interventions ceased	
- Blood tests	YES / NO
- Antibiotics	YES / NO
- IV fluids	YES / NO
- Vital signs	YES / NO
Psychological / insight issues	
Patient aware of diagnosis	YES / NO / UNCONSCIOUS
If no, is there documented reason	YES / NO
Patient informed they are dying	YES / NO / UNCONSCIOUS
Next of kin aware patient is dying	YES / NO
Family / carer request for patient not to be told of prognosis	YES / NO
Religious needs	
Religious representative referral made	YES / NO / NOT REQUIRED
Patients emotional / spiritual needs identified	YES / NO / UNCONSCIOUS
Spiritual support given	YES / NO
Communication with family / other	
Identification of NOK for notification of impending death	YES / NO
- Social work referral made	YES / NO
Ongoing assessment	
Assessment of pain each shift	YES / NO
- Was the patient in pain	YES / NO
- Were PRN analgesics given	YES / NO
Assessment of agitation each shift	YES / NO
- Was agitation a problem	YES / NO
- Was PRN sedation given	YES / NO
Assessment of respiratory secretions	YES / NO
- Were excessive respiratory secretions a problem	YES / NO
- Were PRN anticholinergics given	YES / NO
Was N&V assessed each shift	YES / NO
- Was N&V a problem	YES / NO
- Were PRN antiemetics given	YES / NO
Was skin care assessed each shift	YES / NO
- Were pressure relieving aids provided if required	YES / NO
Assessment of mouth each shift	YES / NO
Assessment of eyes each shift	YES / NO
Assessment of personal hygiene	YES / NO
Assessment of bowel care each shift	YES / NO
Assessment of micturition each shift	YES / NO
Assessment of dyspnoea each shift	YES / NO
Psychological support provided to family after death	YES / NO / NOT REQUIRED
Bereavement pamphlet given	YES / NO

Patient Care Log MRN: ______________________

Date	Name	Designation	Location/ Ward	Other

Appendix 3: Clinician survey

End of Life Care
Clinician Self-Assessment Survey

This survey will be collected on……..

End of Life Care
Clinician Self-Assessment Survey

Dear Colleague,

We ask for about 20 minutes of your time to complete this questionnaire.

Our aim in this questionnaire is to obtain your views about a range of factors that affect the organisation and management of clinical care for patients requiring
end of life care as identified on the following page.

We give an assurance that individuals responding to this questionnaire will not be identified in any reports of the findings, nor will your answers affect your position in the organisation in any way.

Once the information from the survey is collated and analysed, it will be fed back to all those involved in the survey.

If you would like further information about the survey please contact: Professor Judith Donoghue Ph 9350.2184 or 0350.2540

Thank you for your assistance.

Judith Donoghue Professor Acute Care Nursing Research ext. 32184

St George Hospital
31 May 2006

All questions in this survey relate to the organisation of care for patients requiring <u>end of life care</u>

We would like to know a few details regarding your position.

Occupational/ professional background (Please tick as appropriate)

Nursing:	Casual RN Full Time	□
	Casual RN Part Time	□
	Assistant in Nursing	□
	Undergraduate Nurse	□
	Trainee Enrolled Nurse	□
	Enrolled Nurse	□
	Registered Nurse	□
	CNS	□
	CNC	□
	Nurse Manager	□
	Other (please specify)_____	
What shift are you on now?	Full Time Days	□
	Full Time Nights	□
	Rotating Roster	□
Medicine:	Intern	□
	Resident	□
	Registrar	□
	Staff Specialist Physician	□
	Staff Specialist Surgeon	□
	Other (please specify)_____	
Allied Health:	Occupational Therapist	□
	Physiotherapist	□
	Speech Pathologist	□
	Social Worker	□
	Dietician	□
	Pharmacist	□
	Other (please specify)_____	

1. Clinical organisation of the care process

This section elicits your assessment of the organisation of care for **patients requiring end of life care at St George Hospital.**

1.1 Is there a form in patients' medical records that sequences the tasks and activities required in treating patients of this case type (eg end of life car pathway or end of life care plan)?

Yes □ No □ don't know □

If no, please continue to section 2 'Patient involvement' on the following page and ignore questions 1.2 to 1.7.

1.2 Does the form(s) identify the significant steps to achieve the desired outcomes for patients of this case type?

All stages □ Most stages □ Some stages □ Few stages □ No stages □ don't know □

1.3 Does the form refer to guidelines/protocols that will be routinely used to treat a patient of this case type?

Does the form refer to an agreed guideline/protocol on:	Yes	No	Don't know
• a Not for Resuscitation (NFR) order being documented?	□	□	□
• the tests that should be routinely ceased?	□	□	□
• the type of drugs that should be routinely given?	□	□	□
• the expected length of stay for patients of this case type?	□	□	□
• the choice of location of death?	□	□	□

1.4 Do *you* routinely look at the form during the process of giving care?

Always □ Frequently □ Sometimes □ Seldom □ Never □ Don't know □

1.5 Is there provision in the form for you to record when tasks and activities have not been achieved?

Yes □ No □ Don't know □

1.6 I know when a task /activity has not been achieved because **(please tick one only):**

- definitions of tasks/activities are contained in the form □
- definitions of tasks/activities are available in a separate document □
- definitions of tasks/activities are described during in-service training □
- of my own knowledge of clinical practice and experience □
- I don't know when tasks/activities have not been achieved □

1.7 Do you *record* when you vary from the sequence of tasks and activities or agreed policies specified in the form?

Always □ Frequently □ Sometimes □ Seldom □ Never □ Don't know □

2. Patient involvement

This section records how patients receive information about their care.

2.1 Is the patient routinely informed of their prognosis as part of their routine clinical care at the end of life?

Yes □ No □ Don't know □

2.2 Is the patient routinely informed of what they should expect as part of their routine clinical care?

Always □ Frequently □ Sometimes □ Seldom □ Never □ Don't know □

2.3 Is the patients routinely kept informed about their clinical care?

Always □ Frequently □ Sometimes □ Seldom □ Never □ Don't know □

2.4 Do patients routinely get the chance to discuss their care with clinicians?

Yes □ No □ Don't know □

3. Systematised communication about the care process

This question asks the extent to which you use systematised methods to communicate about patient care.

There are three parts to this question, please answer all parts.

3.1 By circling the appropriate response on the scale provided, indicate the extent to which you use the methods listed below to find out what *medical care* is required for a patient of this case type.

1. Always 2. Frequently 3. Sometimes 4. Seldom 5. Never DK. Don't know NA. Not applicable

I find out what *medical* care is required through:							
▪ informal discussions with medical clinicians	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ formal meetings with medical clinicians	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ medical protocols	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ information that is transmitted verbally in ward rounds	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ referring to consultant/specialist individual preferences	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**

▪	the patient's medical record	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪	my own expertise and experience	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪	talking with the patient	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪	a written clinical pathway	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**

3.2 By circling the appropriate response on the scale provided, indicate the extent to which you use the methods listed below to find out what nursing care is required for a patient of this case type.

1. Always 2. Frequently 3. Sometimes 4. Seldom 5. Never DK. Don't know NA. Not applicable

I find out what *nursing* care is required through:							
▪ informal discussions with nurse clinicians	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ formal meetings with nurse clinicians	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ nursing guidelines	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ information that is transmitted verbally during a shift change over	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ referring to/knowing the consultant/specialists' individual preferences	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ the patient's medical record	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ my own expertise and experience	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ talking with the patient	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ a written clinical pathway	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**

3.3 By circling the appropriate response on the scale provided, indicate the extent to which you use the methods listed below to find out what allied health care is required for a patient of this case type.

1. Always 2. Frequently 3. Sometimes 4. Seldom 5. Never DK. Don't know NA. Not applicable

I find out what *allied health* care is required through:							
▪ informal discussions with allied health clinicians	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ formal meetings with allied health	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ use of protocol/guidelines	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ information that is transmitted verbally during a shift change over	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ referring to the therapy assessment form	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ referring to the consultant/specialists' individual preferences	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ the patient's medical record	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**

▪ my own expertise and experience	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ talking with the patient	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**
▪ a hospital devised written clinical pathway	**1**	**2**	**3**	**4**	**5**	**DK**	**NA**

4. Performance measurement

This section records your assessment of the types of statistical reports that are available to you to monitor the performance of the clinical unit

4.1 Are statistical reports* available to you that describe the ward's performance in treating/caring for all patients requiring end of life care

**Statistical reports = written numerical not anecdotal data, that are regularly produced and describe patterns among patients treated for that period.*

I receive statistical performance reports on:	**Yes receive**	**No but can access**	**No**	**Don't know**
▪ the resource dimensions of care (eg length of stay)	☐	☐	☐	☐
▪ the clinical composition of care (eg variation in test and drug usage)	☐	☐	☐	☐
▪ clinical quality (eg uncontrolled pain, uncontrolled symptoms, referral to social work/ chaplaincy services)	☐	☐	☐	☐
▪ patient comments on care (positive and/or negative)	☐	☐	☐	☐
▪ variance analysis	☐	☐	☐	☐

4.2 Indicate by ticking the appropriate box, whether your unit's performance is compared with other units in this organisation (internally benchmarked) for each of the dimensions listed below.

The unit's performance for this case type is benchmarked *internally* on:	**Yes**	**No**	**Don't know**
▪ resource usage	☐	☐	☐
▪ composition of care	☐	☐	☐
▪ clinical quality	☐	☐	☐
▪ patient feedback	☐	☐	☐
▪ variance analysis	☐	☐	☐

4.3 Indicate by ticking the appropriate box, whether your unit's performance is compared with other organisations (externally benchmarked) for each of the dimensions listed below.

The unit's performance for this case type is benchmarked *externally* on:	Yes	No	Don't know
▪ resource usage	□	□	□
▪ composition of care	□	□	□
▪ clinical quality	□	□	□
▪ patient feedback	□	□	□
▪ variance analysis	□	□	□

5. Reviewing the care process

This section records your assessment of the review process.

5.1 Are there periodic formal meeting(s) in which the performance reports referred to in the previous section are utilised to ***systematically review*** the care for patients of this case type?

Yes □ No □ Don't know □

5.2 Who primarily attends these review meetings? **Please tick ONE only**

- multidisciplinary group □
- members of my occupational group only □
- I don't know □

5.3 On the basis of these review meetings is the process of care altered with a view to improving patient care?

Always □ Frequently □ Sometimes □ Seldom □ Never □ Don't know □

6. Improving the care process

This section asks for your view on how the clinical management of patients of this case type can be better managed and improved.

6.1 Which of these ways of *managing* do you think would improve care for this case type?

	Compared with current methods, I think there should be:			
	Much more	Some more	No more	Less
Multidisciplinary team meetings	□	□	□	□
Multidisciplinary clinical pathways	□	□	□	□
Variance analysis	□	□	□	□
Statistical comparisons	□	□	□	□
Patient involvement	□	□	□	□

Other (please state)				
Other (please state)				

6.2 What changes would you like to introduce to improve care for patients of this case type?

.....

.....

The questionnaire is now complete.
Please use this space to comment on any issues raised in the survey.

Appendix 4: Management interview schedule

Date:

Position

Area/General Manager	□	
Executive Medical Director	□	
Divisional Medical Director	□	Clinical area …….
Executive Nursing Director	□	
Divisional Nursing Director	□	
Nursing Unit Manager	□	Ward ……..
Administration	□	
Allied Health Director	□	

Gender

Female	□
Male	□

Age

20-29	□
30-39	□
40-49	□
50-59	□
60 and over	□

Length of time in current position?

Less than 1 year	□
1-4 years	□
5-9 years	□
10-19 years	□
More than 20 years	□

1. Proportion of time spent on management

Proportion of time on management	……%
Proportion of time on patient care	……%
Research	……%
Teaching	……%
Other …….	……%
Total	100 %

Highest qualifications in management

Postgraduate degree	□
Postgraduate diploma	□
Undergraduate degree	□
Diploma	□
Certificate	□

In-house short courses □
None □

3. Highest clinical qualification

Postgraduate degree □
Degree □
Diploma □
Other…….. □

Do you intend to upgrade your management qualifications?
Yes □ No □

Do you have a performance agreement?
Yes □ No □

If so, please provide a copy.

The Acute Care Nursing Research Unit at St George Hospital and UTS are investigating the effectiveness of clinical pathways in health care reform. As part of this study, we are interested in how organisational performance is assessed within this organisation and the strategies that are used for managing and improving clinical care.

In particular, we are interested in studying the role of senior health service management in improving the efficiency and effectiveness of clinical care.

Role of area management in improving clinical care

1.1 Is there a role for area management in improving clinical care?

Yes □ No □

1.2 If yes, what does this entail?

Strategies of hospital management to improve clinical care

2.1 On a scale of 1 to 5 (1 being low and 5 being high), can you rank how supportive you think area management is in improving clinical care

1 2 3 4 5

2.2 On a scale of 1 to 5 (1 being low and 5 being high), can you rank how supportive you think St George hospital management is in improving clinical care

1 2 3 4 5

2.3 The direction of health reform comprises a range of elements designed to improve effectiveness and efficiency in health care. Among others, these include:

Evidence-based clinical practice,
Linkage between clinical practice and resource usage,
multidisciplinarity,
balancing clinical autonomy and accountability and
service integration

Can you detail strategies in this direction that area management has implemented in this hospital to improve efficiency or effectiveness?

Assessing the performance of the hospital

A hospital's performance can be assessed using both formal indicators (such as those in the business plan) or through informal indicators (the signals that senior management gives about what is important).

What things does area management regard as important when performance of this organisation is being assessed?

3.2 What things does DoH management regard as important when performance of health services is being assessed?

What things does hospital management regard as important when performance is being assessed?

Is that the same or different for streams?
What things should hospital management regard as important?

Is that the same or different for streams?

Effect of performance assessment on working environment

4.1 Do the indicators that you have nominated affect the way you work?
Yes □ No □

(If yes, can you give examples of how they affect your work environment?)

Criteria used by clinicians to assess performance

Are there differences between the criteria used by area and hospital management and those used by clinicians to assess performance?
Yes □ No □
(If yes, what are the differences?)
What methods do you most often use to manage these differences?

Attributes of effective managers

List managers who you consider manage effectively, and those who you consider don't. List the characteristics that distinguish the two groups.

Actions in response to changing directions in health care

Changing directions in health care comprise a range of elements designed to improve effectiveness and efficiency. Among others, included are:

Evidence-based clinical practice,
linkage between clinical practice and resource usage,
multidisciplinarity,
balancing clinical autonomy and accountability and
service integration.

7.1 Have you put in any action as a response to these directions of change?

Yes □ No □

(If yes, can you give examples of the actions you have put in place?)

7.2 Taking these elements as a whole, which of the following statements best describes the way you see this direction of change.

It is a passing phase	( )
It is important but not a priority at this time	( )
It is essential and we are doing something about it now	( )

What are the barriers to putting actions in place to achieve change?

Views about clinical pathways as a way to manage clinical work

8.1 Are you familiar with systematic methods of clinical work management, eg clinical pathways? Yes □ No □

8.2 Do clinical pathways offer anything to managers? Yes □ No □

8.3 Do pathways offer anything to clinicians? Yes □ No □

Are the barriers to using systematic methods to manage clinical work? (If so, what are they?)

8.5 What strategies do you use to overcome these barriers?

Your priorities

9.1 What are your priorities to achieve in this position?

9.2 What is the one barrier that if removed, would make your job easier?

Appendix 5: Organisational environment assessment proforma

The organisational environment

The orientation of management	
What is the method of clinical care organisation? evidence-based multidisciplinary clinical pathway consensus-based multidisciplinary clinical pathway individual profession-based protocol individual practitioner protocols no method of clinical work organisation discernable.	
To what level in the organisation are formal (written) reports disseminated that include both efficiency and effectiveness data? To the hospital To divisions To departments To the wards To individual clinicians	
Is there a process within this organisation that reviews the organisation and management of care? General management Divisional management Departmental management Ward management	
The stability of clinical care	
In how many wards were patients of this case type located? Two wards or less Between three and seven wards More than seven wards	
The organisation of care	
What training is available within the organisation to inform clinicians about how to manage clinical care? What training is available within the organisation to inform clinicians about how to manage clinical care? Staff are routinely released to attend training sessions Dedicated staff and resources are available to train clinicians on the development and management of multidisciplinary clinical pathways On the job training (eg in service) is available but there is no provision for relief staff Off-the-job training is available	

No training is available	
How many clinicians had formal training in managing clinical care? Nursing, salaried medical staff, visiting medical staff, allied health staff, other All identified treating clinicians have been trained At least 50% of treating clinicians have been trained One or two clinicians have been trained None has been trained	
Which clinical disciplines were involved in developing the sequence of care for the case type under review? Nursing, salaried medical staff, visiting medical staff, allied health staff, other Most staff, heavy involvement Most staff, brief involvement Few staff, heavy involvement Few staff, brief involvement Little or no involvement	
Is patient feedback systematically and routinely incorporated in reviews of clinical care of patients in this case type by Multidisciplinary teams Clinical management Medical departments Nursing units Allied health units	
What attributes does the multidisciplinary clinical pathway contain as the basis for organizing clinical care for the condition under review? Sequence of sentinel multidisciplinary therapeutic and diagnostic events for the condition under review Indicators of quality Indicators of outcomes Capacity for recording of variances Capacity for prospective costing	
Is there a protocol within the organisation that standardises the recording of patient information? Single-source recording Who should document Legibility of the recording Sanctions for non-compliance with requirements about documentation	
Rate the problems with the quality of documentation in the medical record in terms of:	

Important information is missing Illegibility of the record Clinician making he notation not identified Unnecessary duplication of recording Information being recorded that is unnecessary	
Within the organisation, are clinical support services and resources located were clinical care takes place? Clinical pathway coordinator Clinical information system	
If there is a clinical information system, what capability does it have? Patient details can be downloaded from facility-wide patient master index to Units' own computerized patient files Patient volumes by case type are continually available The clinical pathway for the case type is computerised Variance reports for the case type are able to be produced	
Is there a system in place that integrates and informs clinicians about the standard of quality and cost expected for the case type under review, and the actual performance achieved? Only generic indictors of quality are available Only DRG-based costs are available Aggregate patient-level costs are available Case-specific indicators of quality re available Individual cost components for the case type are available	
To what extent are processes in place for multidisciplinary review of the condition: Are meetings held Are meetings convened at times that allow representatives of relevant disciplines to attend Are meetings organised so that representatives receive advance notice Are agendas accessible to the extent that representatives agree they have equal rights to contribute Do representatives receive advance copies of the agenda Are there standing items for review of clinical care Review of variances Results of internal benchmarking Results of external benchmarking Reasons for variances Remedial action needed	
Are there any financial incentives offered to your unit for the following activities? Use of evidence as the basis for care methods	

Multidisciplinary clinical pathways Incorporating patient feedback into care planning Multidisciplinary team meetings Reporting of variances	
How are changes to the method of clinical care decided within the unit responsible for the case type? The matter is decided by the most powerful person The matter is decided by the most powerful profession The matter is decided by the person with formal organisational authority The matter is decided by the people with the most expertise on the issue in question The matter is decided by a multidisciplinary forum (i.e. medical, nursing, allied health)	