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Organisational configuration for innovation: the case of palliative care

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Abstract

This paper reports the development and testing of an organisational configuration to support the management and delivery of innovative patient care practices in multidisciplinary palliative care teams in Australia. This is part of an ongoing research project seeking to understand how palliative care organisations, a complex and dynamic environment, manage multidisciplinary patient care teams to enable produce innovative responses to changing patient requirements. Results reported here describe the development of a theoretical configuration for these organisations, based in a range of literature, that is tested at interview in three palliative care organisations. Previous results of the research are then presented in discussion to demonstrate their relationship to configuration. It is suggested that understanding configuration is a first step in understanding these innovative organisations.

Keywords

Innovation Healthcare

Introduction

This paper deals with the description and testing of a configuration for organisations that innovate in complex, dynamic environments. Evidence from three case study organisations is presented. These are palliative care organisations and their focus is the relief of distress, regardless of the cause, during the end of life process of patients and accompanying patient-based carers. The context of this report on supporting innovation, and the ongoing Australian research that produced it, is therefore neither economic nor industrial but a specific type of care delivery. Accordingly, a definition of innovation derived from the literature and appropriate to this environment is provided.

Innovation

The discourse on innovation is frequently economically based. Writing on the need for a framework for understanding company development Nyström (1980, 1) noted that "Few areas of economic debate are characterized by as much agreement as the role of innovation for economic development" and defines innovation as "radical, discontinuous change". Moss Kanter (1984, 20) noted that "Ideas for reorganizing, cutting costs, putting in new budgeting systems, improving communication, or assembling products in teams are also innovations.". Scherer (1984, 8) also wrote on this theme, specifically quoting Schumpeter's (1934) definition of innovation, "the carrying out of new combinations" in the context of technological innovation. The act of innovating was often referred to in terms of new ideas, of commercialising one or more ideas so that they can be exchanged for something of economic or competitive value (Ahmed, 1998).

Within this economically based discourse innovation was referred to in a number of different ways. Zaltman et al (1973, 14) discussed earlier references to innovation and established a social theme, noting that, "the distinguishing characteristic of an innovation is that instead of being an external object, it is the perception of a social unit that decides its newness". Burns and Stalker (1979) described the organisation and management of innovation as the result of a number of social processes within organisations and Drucker (1985, 67) described innovation as "the effort to create purposeful, focused change in an enterprise's economic or social potential.".

Within the healthcare literature innovation is generally referred to in terms of a small number of broad fields: healthcare technology (Moskowitz, 1999; Wyke, 1994); clinical practice and nursing practice (Forchuk and Dorsay, 1995; Tolson, 1999); and the management of healthcare bureaucracies and institutions (Fottler, 1996; Glouberman and Mintzberg, 2001a). However, even in the healthcare literature, it could not be said that the writing on innovation represented anything more than a small percentage of the whole. The palliative care literature and the literature on death and dying appear to offer an almost total lack of writing about innovation or innovative practices. In this paper innovation is viewed as defined in terms of exchanging ideas for the creation of a non-commercial value directly related to the care and wellbeing of people and the definition of innovation used in this paper then becomes,

the effort to create purposeful, focused change in an enterprise's social potential, after Drucker (1985). Drucker (1985, 72) also wrote, "But when all is said and done, what innovation requires is hard, focused, purposeful work" that required "diligence, persistence, and commitment.". While it may be said that these are characteristics found in a number of workplaces they are the key, almost overpowering, characteristics of multidisciplinary patient care teams and team members in palliative care.

Palliative Care

Palliative care is an environment where multi-profession teams work collegeately with patients who are dying and with the patient-based carers who support them so that the primary issue becomes and remains patient comfort (Meyers, 1997). Palliative care is delivered by multidisciplinary teams (McDonald and Krauser, 1996) that comprise a number of disciplines including nursing, medicine, pharmacology, physiotherapy, occupational therapy, social work, spiritual care, grief counselling and administration. In this environment people are the centre, not diseases, and care results from the understanding of the causes of distress (Barbato, 1999). Successful provision of palliative care is dependent upon understanding the causes of distress, whether the cause is physical, emotional or spiritual; known or unknown (McDonald and Krauser, 1996; Higginson, 1999; Witt Sherman, 1999). The patient's end-of-life state and central role in efforts to manage that state makes the patient a participatory member of the palliative care team who maintains a level of autonomy and control in relation to the other team members (McDonald and Krauser, 1996, McGrath, 1998).

The arrival of a patient at an end-of-life experience requiring palliative care brings the certainty that life will end, generally within a relatively short period of time. This single fact aside, uncertainty is the basis of the end-of-life experience (Davison and Hyland, 2003). In addition to this each patient is experiencing the endof-life on two distinct levels, the conscious and the unconscious, and the depth of the experience at each level varies from patient to patient (Kearney, 1992). Palliative care is an uncertain, dynamic environment with a certain conclusion. Prior to arriving at that certain conclusion it is the uncertainty that directs all attempts to provide care. For the professions involved, this creates a working environment requiring ongoing work-based learning, governed by an uncertain direction of care that must follow a trajectory of need, of which the patient is the major informant (Henkelman and Dalinis, 1998). The palliative care environment is one of multi-causal uncertainty. This is addressed with individualised care for patients and their personally based support systems, using cross-functional, collaborative, multidisciplinary teams that include the patient and patient-based carers.

Organisational Configuration

Mintzberg (1989) describes seven basic organisational configurations: Entrepreneurial; Machine; Professional; Diversified; Innovative; Missionary; and Political. . Mintzberg was chosen as a useful source of information for the research for three reasons: 1) Mintzberg is a credible source of theory and cases on the management of organisations; 2) Among Mintzberg's work on the management of organisations is a small body of work on hospital management (Mintzberg, 1997; Glouberman and Mintzberg, 2001a; Glouberman and Mintzberg, 2001b) and on collaborative approaches (Mintzberg et al, 1996); and 3) Among his work on hospital management Mintzberg has transitioned his work on organisational configurations (Mintzberg 1989) to hospitals (Glouberman and Mintzberg, 2001b). Each of Mintzberg's (1989) organisational configurations was compared to the palliative care literature reviewed for the Australian research. When indicated as appropriate Mintzberg (1989) was also compared to the general healthcare literature. The result was a theoretical configuration for a palliative care organisation.

Nothing approaching Mintzberg's (1989) Entrepreneurial organisation configuration appeared in the palliative care literature reviewed. Entrepreneurial organisations commonly exist in dynamic, relatively simple environments, with power centralised in one individual at the top of the organisation. They have few staff, little formalised activity and make "little use of planning procedures or training routines" (Mintzberg, 1989, 115). By contrast, palliative care organisations operate in dynamic and uncertain environments (Henkelman and Dalinis, 1998; Pierce, 1999; McDonald and Krauser, 1996). Power is distributed among patient carers (McDonald and Krauser, 1996), formal training is evident (Witt Sherman, 1999) and, given the widespread use of professionals and the nature of palliative care itself, much activity is formalised (Lewis et al, 1997; Rasmussen and Sandman, 1998).

Mintzberg's (1989) Machine organisation configuration was also not reflected in the palliative care literature reviewed. Machine organisations offer little discretion in decision making, where palliative care organisations utilise decision making in distributed multidisciplinary teams (McDonald and Krauser, 1996; Witt Sherman, 1999). Machine organisations exist in a relatively simple and stable environment and palliative care organisations work in and with environments that are dynamic and uncertain (Henkelman and Dalinis, 1998; Pierce, 1999; McDonald and Krauser, 1996). However, Mintzberg's (1989) Machine configuration appeared to have some relevance to the healthcare management literature and this is addressed in the following section.

According to Mintzberg (1989) the Professional organisation is found in complex, relatively stable environments that require processes that must be learnt over long periods and can produce standard outcomes, although the processes themselves are often too complex to be standardised in their application. The professionals within these organisations derive their authority from their expertise and have discretion available in the application of their skills and knowledge. Coordination of effort can be tight within professional disciplines but is not so good between the disciplines because of innate rivalries between professions. As noted above, palliative care organisations operate in dynamic, relatively complex environments. They contain mixtures of clinical professionals. The focus of palliative care organisations and all members of those organisations is singularly the active delivery of multilevel care to improve the quality of life for people who are dying and to support relatives and friends as they transit the end of life experience (McDonald and Krauser, 1996; Bottorff et al, 1998). Palliative care organisations use multidisciplinary teams to understand manifold causes of distress (Barbato, 1999; Meyers, 1997; McDonald and Krauser, 1996; Higginson, 1999; Witt Sherman, 1999). The employment of a primarily professional workforce, carrying out complex work that is controlled by the professionals gave the appearance of Minbtzberg's (1989) professional organisation. However, the multidisciplinary nature of the team operations and the good communications and information exchanges between the disciplines precluded a substantial fit between the suggested type and the palliative care literature.

With regard to Mintzberg's (1989) Diversified organisation configuration, once again there did not seem to be a parallel in the palliative care literature reviewed. Diversified organisations were described as "a set of semi-autonomous units coupled together by a central administrative structure. The units are generally called *divisions* and the central administration, the *headquarters*." (Mintzberg, 1989, 155). Divisions were self-sustaining entities with their own operational goals. This configuration did not fit with the palliative care literature reviewed. The literature reported holistic organisations (McGrath, 1998), using multidisciplinary teams operating across what would often be called discipline-based boundaries (McDonald and Krauser, 1996; Lewis et al, 1997; Rose, 1997) and where the organisation and each team shared the same operational and organisational goals.

As for Innovative organisations, according to Mintzberg (1989, 199), "Sophisticated innovation requires a very different configuration, one that is able to fuse experts drawn from different disciplines into smoothly functioning ad hoc project teams.". Innovative organisations were found in complex, relatively dynamic environments where the requirement was for flexibility in structure so that different forms of expertise could be drawn together quickly to address problems and situations directly. These organisations employed people with high levels of knowledge and skill and used these as a foundation for the ongoing development of skills and knowledge relevant to the work. The use of multidisciplinary teams in the complex, dynamic environment of palliative care, where it is common to quickly deploy mixed groups of professionals in response to particular situations, was reminiscent of Mintzberg's (1989) Innovative organisation. Palliative care organisations work with persistent uncertainty, driven by factors surrounding the central focus of their work, ethics and philosophy, the patient (Henkelman and Dalinis, 1998; Pierce, 1999; Lewis et al, 1997; Higginson, 1999). In palliative care, decision making is at times decentralised to individual patient care teams and these teams include any person relevant and available to assist in fulfilling the patient's needs (McDonald and Krauser, 1996). This includes family and friends of the patient (Lewis et al, 1997; Rose, 1997). The need to address the patient's situation on more than one level, for example clinically, socially and consciously, and to frequently reassess the situation (Rose, 1995) means that patient care team membership must also be reassessed as frequently and changed when necessary. The degree of fit between Mintzberg's (1989) Innovative configuration and the palliative care literature was considered substantial.

The Missionary organisation was described as having, "a very special culture—a richly developed and deeply rooted system of values and beliefs that distinguishes a particular organization from all others." (Mintzberg, 1989, 221). Within these organisations, the identification between the organisation and the people who work there was, according to Mintzberg (1989), so strong that it could be used as a mechanism for coordinating activities, in place of the direct supervision that is found in machine organisations for example. The organisation's mission was paramount here. Three characteristics of palliative care organisations suggested that the configuration for Mintzberg's (1989) Missionary organisation was perhaps appropriate. 1) The singular focus of palliative care organisations (McDonald and Krauser, 1996); 2) the distinctive nature of palliative care and palliative carers, who involve themselves in an holistic care that attempts to, on as many levels as possible, return control to the patient (McGrath, 1998); and 3) the unique niche that palliative care occupies within healthcare systems (McGrath, 1998; Higginson, 1999). These factors indicated that the degree of fit between the suggested configuration and the palliative care literature was substantial.

In Mintzberg's (1989) Political organisation configuration he noted that all organisations contained conflict and therefore politics. This was followed by opinions about the likelihood of the level of politics being quite high in professional and innovative organisations, because of the distribution of power that is based in professional expertise rather than the authority of management. This, accordingly, indicated that this configuration could be considered as likely in palliative care organisations. The idea was supported, at least in terms of a climate that may encourage politicisation, in some parts of the palliative care literature reviewed. McGrath (1998) described experiences of conflict between a hospice and its healthcare bureaucracies during hospice establishment, caused by conflicting views of purpose. In describing barriers to competent palliative care in the United States, Henkelman and Dalinis (1998) noted that a politicised internal environment could be created by external contingencies, for example the medication of terminally ill patients and the perception of a hastened death, and provide ongoing uncertainties for palliative carers. Whether or not this politicised environment would maintain itself without external influences was not indicated in the palliative care literature. The palliative care literature did not report, apart from the examples given here, a politicised environment. This lead to the conclusion that the degree of fit between the Political organisational configuration and the palliative care literature was minimal.

The comparison of the palliative care literature and Mintzberg's (1989) organisational configurations produced some degrees of fit between the two. From the comparison conducted it was possible to draw a conclusion that the configuration of palliative care organisations could be expected to be a hybrid of Mintzberg's (1989) configurations, as seen in Table 1. Figure 1 reflects the suggested configuration.

Configuration	Fit	Degree
Entrepreneurial	NO	Nil
Machine	NO	Nil
Professional	YES	Moderate
Diversified	NO	Nil
Innovative	YES	Substantial
Missionary	YES	Substantial
Political	YES	Minimal

Table 1 Suggested Fit

Figure 1 Suggested Configuration

Impact of the Healthcare Environment on the Suggested Organisational Configuration

While it was not the purpose of this paper to investigate the healthcare management environment there is an interface between this and palliative care organisations. This being the case, and bearing in mind the ability of organisations to be shaped by their environments (Mintzberg, 1989; Burns, 1963), it is important to have an understanding of the healthcare environment. Fortunately this understanding can also be expressed in terms of Mintzberg's (1989) typology of organisational configurations, specifically machine organisations. There are aspects of the description of Machine organisations that are reflected in the healthcare management literature. Mintzberg (1989) described Machine organisations as structured for control, generally found in simple and relatively stable environments, with large operating units. Among the examples offered were government organisations needing to demonstrate a regulatory framework internally and externally, and the regulators themselves. In Australia both of these examples match the publicly funded healthcare bureaucracies (New South Wales Health Department, 1999; New South Wales Health Council, 2000). However the healthcare literature reviewed for the research described an environment that is neither simple nor stable. Rather, the literature described an environment in change being driven by increasing patient demands on the quality and availability of healthcare and rising healthcare costs (New South Wales Health Department, 1999; New South Wales Health Council, 2000). Healthcare management roles and delivery systems are changing (McConnell, 1996), requiring changes to healthcare delivery capabilities (Heller et al, 2000) and paradigms (Henderson, 1995). This environment did not at first seem to match Mintzberg's (1989) requirement for a Machine organisation.

However, Mintzberg, (1989) also noted that machine organisations can be capable of stabilising their environment. Publicly and privately funded healthcare bureaucracies described in the literature seem to be attempting to do exactly this with three broad strategies. These are generally headed clinical governance (Wright et al, 1999; Firth-Cozens, 1999), evidence-based decision making (Cowling et al, 1999) and vertical integration (Newhouse and Mills 1999; Byrne and Walmus, 1999). The other interesting parallel between Mintzberg's (1989) machine organisation configuration and the reviewed literature was the concept of machine organisations becoming the instruments of individuals or small groups of external influencers who come to dominate them. In Australia the publicly funded healthcare bureaucracies are instruments of the various Federal and State governments of the day. These bureaucracies are responsible to ministers of the various governments for the application of healthcare policy and the regulation of healthcare delivery (New South Wales Health Department, 1999; New South Wales Health Council, 2000). The minister of government also appoints and removes the senior manager in each healthcare bureaucracy.

It seemed then that the public policy and regulatory environments within which palliative care organisations operated were governed by bureaucracies that were configured and behaved, to a large extent, as Mintzberg's (1989) machine organisations. While this was not a direct concern of the research, it provided some understanding of the context for palliative care with regard to the governing healthcare bureaucracies generally. It also indicated that on the palliative care side of the interface with healthcare bureaucracies there may need to be a unit, a section, or an area that operated as something of a machine organisation in order to translate policy, performance measurement targets and results and funding demands or requests between the two. Therefore it was determined that the suggested fit between the literatures would be modified as in Table 2. Figure 2 reflects the modified suggested configuration.

Configuration	Fit	Degree
Entrepreneurial	NO	Nil
Machine	NO	Minimal
Professional	YES	Moderate
Diversified	NO	Nil
Innovative	YES	Substantial
Missionary	YES	Substantial
Political	YES	Minimal

 Table 2 Modified Suggested Fit



Testing the Suggested Configuration

Testing the suggested configuration involved conducting a number of structured and semi-structured interviews in the case study organisations. Case Study 1 acted as the pilot and participated in structured interviews as the interview questions and sequences were tested. Case Study 2 and 3 participated in semi-structured interviews. Interviews were carried out under the umbrella of existing ethics clearances obtained from each case study organisation for the research. Teams and managers were briefed verbally about the research and interviews. These were then supplied with an information sheet describing the research project, notifying them that neither participation nor non-participation would affect their employment, informing them that having volunteered they could withdraw at any time without penalty, and giving contact details for the researcher, an organisational representative and counsellor. Interview participants volunteered for the interviews and signed a participation note acknowledging that they were informed participants. Interviews were audio taped and transcribed within 24 hours. Names of participants were not mentioned or recorded. During interviews the researcher kept notes on which discipline or profession was speaking at any time and this was transcribed. All data is kept securely by the researcher and no member of the case study organisations views any data, whether transcripts or interview notes.

Following the literatures reviewed, a combination of characteristics relevant to the suggested configuration was developed. The majority of these characteristics were tested using structured and semi-structured interviews with the senior palliative care professional in each of the three case study organisations. Data regarding a small number of characteristics came from other structured and semi-structured interviews conducted with management teams and multidisciplinary patient care teams in the three case study organisations, regarding the topics of organisational capabilities, organisational levers and individual behaviours within the teams. This involved eleven interviews. These supplied the data regarding characteristics 5, 6 and 10 and part of the data for characteristic 7. Responses at interview are reported here under the heading of each characteristic.

1. Specialists and professionals with high levels of skill and knowledge, who had undertaken long periods of training prior to working in palliative care, would be employed.

This was common to all case study organisations. Members of disciplines involved in multidisciplinary patient care teams commonly train for a number of years before entering palliative care. The following periods were reported: Doctors train for at least seven years after completion of their medical degree. Since the nineteen eighties nurses have had a three year university degree and commonly do not come to palliative

care until they have matured in the profession. Social workers, physiotherapists and occupational therapists undertake a three or four year university degree and, again, generally practice in other places until maturing in the profession prior to working in palliative care. It was noted that sometimes an individual nurse or allied health worker, for example occupational therapy or physiotherapy, would come to palliative care work earlier in their careers than the majority would.

2. Work would often be complex.

This was common, again, to all case study organisations. Palliative care, as noted at the beginning of this paper, is complicated by the number of potential drivers of distress in each patient, and patient-based carers, and by the fact that the manifestation of the symptoms of distress may not have an immediately obvious relationship to the cause or causes.

3. Staff would be grouped functionally for administrative purposes but allocated to multidisciplinary teams, sometimes at short notice, for particular situations or projects.

The staff in the care delivery component of each case study organisation are grouped functionally (by discipline). The head of each discipline is responsible for that discipline's contribution to the care delivery process. The disciplines noted were medicine, nursing, physiotherapy, occupational therapy, social work, spiritual care and grief counselling. In each case study there was a management team consisting of the heads of the disciplines that was responsible for maintenance of multidisciplinary operations. The composition of multidisciplinary patient care teams was mandated in part and situational in part. Each patient had two disciplines permanently allocated; medicine and nursing. Otherwise, the allocation of disciplines to a patient was described as completely dependent upon the patient's situation at any given time. With regard to medicine and nursing it was said that nursing was in the permanent foreground, with regard to the patient, and medicine was in the background except for two occasions; a formally scheduled consultation, generally on a daily basis, and a crisis situation, which could occur at any time. In the latter, the presence of the medical component of the multidisciplinary patient care team, in front of the patient, was noted as driven by the patient's situation.

4. The great majority of work tasks would require collaborative effort.

This characteristic was described as existing and in use in each case study organisation. Work tasks were described as necessarily collaborative because of the need to attend the whole of the range of drivers of the patient's and patient-based carers' situations. This was described as accomplished through formal weekly multidisciplinary meetings and frequent informal communications.

5. A primary coordinator of collaborative effort would be, at times, informal communication between staff members on teams.

The existence and use of this characteristic was acknowledged in the interviews conducted in all case study organisations organisation regarding organisational capabilities, levers and individual behaviours. These interviews contained a number of references to the frequency of informal communication and its use as a driver of collaboration in multidisciplinary patient care teams. Informal communications were often described as integral with collaborative practices and the frequency of this type of communication was also described as resulting from two imperatives: the need to communicate changes in a patient's situation as soon as possible and the need to communicate observations made across discipline boundaries.

6. Professionals would have a requirement to sustain levels of skill and knowledge using ongoing training within disciplines or other specialist or professional groups as well as to transfer knowledge and information between disciplines, teams and individuals.

This characteristic was common to the case studies. All professionals undertook ongoing professional development training within their discipline. As well, weekly formal multidisciplinary team meetings were used to transfer information and knowledge between the disciplines, as were shift changes, and more frequent informal meetings occurred for the same purpose. Each of the case studies specifically and consciously attempted to recruit professionals that they viewed as "learners", although it was acknowledged that they were not always successful. For example, in each case study organisation there was a standard interview question that sought to ascertain what, if any, studies a prospective professional employee was undertaking over and above training required for normal progression in the particular discipline. It was stated that this was an indicator of willingness to learn and openness to collaboration.

7. Decision making autonomy would accompany professionals to the multidisciplinary teams and authority would often be sourced in professional experience.

This was the case in each case study organisation. In interviews with multidisciplinary teams it was noted that professionals who might be expected to rank at or near the top of a clinical hierarchy in an acute hospital were willing to defer to the experience of other disciplines, depending on the patient's situation. Two examples of this were given. The first involved a doctor new to palliative care deferring some decision

making to nurses or allied health workers who had long service in palliative care when the situation involved an assessment of the causes of distress that originally manifested themselves as a pain management problem. The second involved deferring a part of the decision making process, information gathering from a patient, to another discipline or perhaps a non-clinician who was particularly trusted by the patient or patient-based carers, perhaps because they shared a common first language. However, when senior palliative care professionals in each case study organisation were interviewed they noted that the final responsibility for all decisions made ended with the doctor. This being the case each senior professional explained that there was a permanent level of tension in decision making and its results because of the need to sometimes defer as described above.

8. Senior managers could commonly be found working in the multidisciplinary patient care teams. That senior managers worked in the multidisciplinary patient care teams was common in all case studies, although the level of involvement with the teams differed between the case studies from frequent to sometimes depending on other roles undertaken by particular senior managers. For example, in two of the case studies the senior social worker also worked at a local acute hospital and was senior in the discipline there also. So time and availability became issues. In another example the senior doctor in one case study organisation also spent time instructing medical students and doctors in acute hospitals in palliative care practices. At times, then, it was not common for senior managers to work in multidisciplinary patient care teams.

9. There would be a broadly based singular focus on the purpose of the organisation, expressed as the organisation's mission. The existence of this focus would be used as tool for indoctrination of new staff and, at times, as a coordinating mechanism for work tasks.

This characteristic was described as existing and in use in one case study organisation. In two of the three case study organisations it was noted that the organisation's Mission statement played little or no part in the common understanding and ethos of the organisation, although it was given a role in indoctrination. However, it was noted that this did not affect the ethos and shared purpose found within these organisations. In the third case study it was noted that the Mission statement played a large part in establishing and maintaining the ethos and that there was a group of volunteer staff that presented to various groups on achievement against the Mission.

10. The organisation would be politicised and operating in a politicised environment.

The characteristic was said to exist within each case study. It was stated that the multidisciplinary patient care teams displayed similar interpersonal and discipline-based conflicts to any other team that the senior professionals interviewed had experienced anywhere else in healthcare. It was noted that this was, at times, regardless of common focus or goals. In the interviews with multidisciplinary teams, two in each case study, regarding individual behaviours the issue of conflict within the teams was acknowledged under the heading of managing ambivalence. The common solution stated was face-to-face communication as soon as possible. The operating environment of the case study organisations was highly politicised for two primary reasons: 1) The environment was created by State owned and operated healthcare bureaucracies and healthcare in Australia is a political issue. 2) The euthanasia debate that arose from time to time invariably brought palliative care into the spotlight for at least part of the debate.

11. A section of the organisation would be structured and operate differently because it would be the section that interfaced with the healthcare bureaucracies and regulators.

It was noted that each case study had more than one regulator. Commonly, there was the State Department of Health, then the owning organisation. As well, each case study organisation is and must be accredited. Regulators were described as having requirements based generally on quantitative data. Data provided to the standards certifying authority was described as a mixture of quantitative and qualitative. As to the management of these interfaces, it was described by the case study organisations as conducted by a group that stood away from the multidisciplinary teams and patient care.

Discussion and Conclusions

It appears then that, with some small qualifications, interviews have confirmed that the case study palliative care organisations are configured primarily as innovative organisations that maintain their focus with a fundamental ethos that is recognised and shared by management and staff. These organisations are professionally based, contain a level of politics and, in a small part, reflect the regulators and State owned bureaucracies to which they report. The description of the characteristics of configuration provides two pictures. The first is a picture, almost an overview, of the configuration of the organisation's internal and external working environments. This is comprised of the following characteristics:

2. Work would often be complex.

4. The great majority of work tasks would require collaborative effort.

5. A primary coordinator of collaborative effort would be, at times, informal communication between staff members on teams.

10. The organisation would be politicised and operating in a politicised environment.

The second is a picture of the configuration of resources to suit those environments:

1. Specialists and professionals with high levels of skill and knowledge, who had undertaken long periods of training prior to working in palliative care, would be employed.

3. Staff would be grouped functionally for administrative purposes but allocated to multidisciplinary teams, sometimes at short notice, for particular situations or projects.

6. Professionals would have a requirement to sustain levels of skill and knowledge using ongoing training within disciplines or other specialist or professional groups as well as to transfer knowledge and information between disciplines, teams and individuals.

7. Decision making autonomy would accompany professionals to the multidisciplinary teams and authority would often be sourced in professional experience.

8. Senior managers could commonly be found working in the multidisciplinary patient care teams.

9. There would be a broadly based singular focus on the purpose of the organisation, expressed as the organisation's mission. The existence of this focus would be used as tool for indoctrination of new staff and, at times, as a coordinating mechanism for work tasks.

11. A section of the organisation would be structured and operate differently because it would be the section that interfaced with the healthcare bureaucracies and regulators.

However, the link from characteristics to innovation is not direct. The existence of consciously configured resources begs the question of how these resources, configured as they are for the described working environment, are to be supported and deployed in practice and to what end. An answer to this question comes from other results of the Australian research.

Davison and Hyland (2003) describe a number of organisational capabilities necessary for palliative care organisations: managing knowledge; managing information; multidisciplinary operations; collaborative operations; managing technology; and managing change and its effects. Davison (2003) has described a number of organisational levers used by palliative care organisations to influence and facilitate characteristic behaviours: Collaboration to integrate resources and access information and knowledge. Balance in team diversity and team and discipline identities. Common languages to enable the translation and transfer of information and knowledge between disciplines within teams and across teams and between team members and patients and patient-based carers. Absorptive capacity to enable learning and the sourcing, acquisition and exchange of information and knowledge. Diversity in the management team to facilitate multidisciplinary operation of a complex and dynamic patient care process. Conflict to enable debate and the creation of organisational schema from diverse knowledge and experiences. Power Sharing to maintain the centrality of the patient and to enable multidisciplinary decision making and access to competence. Davison and Sloan (2002) have described a number of behaviours found within multidisciplinary patient care teams: Use organisational artefacts such as role credibility of professional carers to enable rapid creation of trust and enculturation of the patient and patient-based carers appears to facilitate inclusion in, and maintenance of, a socially stable structure and culture. Address values based issues to generate meaning from the palliative experience. Understand the patient's situation as a basis for care, accomplished via the inclusive, supportive exchange of knowledge and information across all boundaries. Work in teams to provide multidisciplinary input to care. Collaborate in the generation of knowledge and information via interproject and situational learning, to enable utilisation of contextually sensitive knowledge and information within and between patient care teams. Manage ambivalence to reduce the obstacles to care that can occur in multidisciplinary, collaborative teams. This Australian research has confirmed these capabilities, levers and behaviours at interview with palliative care management teams and multidisciplinary patient care teams, eleven interviews in all.

It could be said that in this evolving picture of the management of innovative practices in multidisciplinary patient care teams in palliative care a number of interlinked components are appearing. The first is an understanding of the configuration of the external and internal working environments followed by an appropriate configuration of resources, resulting in an organisational configuration focused on innovation. The development of such a configuration has been described here. Second is the availability of an

appropriate set of organisational capabilities that ensure an ability to manage innovative care delivery. Third is a set of organisational levers that is capable of influencing the internal environment and the characteristic behaviours of care providers. Fourth is a set of enabled behaviours that are capable of delivering innovative practices.

What becomes apparent though is the primary need to understand the characteristics of configuration as a foundation for other components. This understanding positions the observer and practitioners to understand the how and why of the other components and the environments within which they must operate.

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