Innovative health care delivery teams: learning to be a team player is as important as learning other specialised skills

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Effective health care delivery teams: learning to be a team player is as important as learning other specialised skills

Theoretically, free flowing team work depends on at least three aspects of team life: functional diversity, social cohesion and superordinate identity. Although we do not disagree with the ideal perspective, we also argue for a strong need to understand multidisciplinary and cross-functional barriers for achieving team goals in the context of health care. These barriers include a strong medically dominated business model, historically anchored delineations between professional identities and a complex organisational environment where individuals may have conflicting goals. In addition, the complexity is exacerbated by the differences *between* and *within* health care teams. We will illustrate the differences by presenting the case of an Operating Theatre Team. We conclude that becoming a team member requires team membership skills. Whilst we recommend some ideas for acquiring these skills, further research is needed to assess effectiveness and influence of team skills training on optimising multi-disciplinary interdependence in the health care environment.

Introduction

In a rapidly changing environment, teams are commonly used as vehicles for health care delivery changes. These are often multidisciplinary teams, each discipline delivering a discrete unit of care or service. In theory this is an efficient and effective method of care and service delivery. In practice, the use of multidisciplinary teams requires team members to develop and maintain high levels of interdependency to enable communication and generate and share information and knowledge. Hence, team members must not only be competent practitioners within their disciplines, they must be competent practitioners as team members; a different set of skills entirely.

While members of multidisciplinary teams have developed and applied different sets of discipline-based skills that are relevant to their work, they have also developed and applied different sets of skills related to their requirements as team members in a certain environment. For this paper, the operating theatre team environment was chosen because it consists of interdependent professional groups: doctors and nurses are jointly responsible for the overall health care of patients. Whilst interdependency between these professions is evident, historically, doctors have greater jurisdiction over the work processes in which nurses work

and conflicts between professional groups occur. Both professions have longstanding traditions with well-developed professional boundaries and a claim for the social value of their work (Tryce and Beyer 1994).

By using a case study of a multidisciplinary operating room team, we demonstrate that, unlike membership in a discipline, membership itself does not automatically equip individuals to be members of multidisciplinary teams. We argue that at least as much effort is required to adapt team membership skills to working environments as is required to adapt technical or discipline-based skills to various occupational specialisms. Further, we argue that a failure to learn how to become a functioning multidisciplinary team member will sub-optimize team performance and innovation.

Multidisciplinary teams

Multidisciplinary teams are described in the literature as collaborative by requirement (Jassawalla and Sashittal, 1999; Reese and Sontag, 2001; Coopman, 2001; Sethi et al, 2001; Whyte and Brooker, 2001; Fitzgerald, 2002; Hermesen & Ten Have, 2005). The management of collaborative efforts in and by these teams involves the management of multiple factors. Reese and Sontag (2001) suggest a number of these factors, including: knowledge held by team members about other members' disciplines; overlap of the roles of individual members; different values of members; the different theoretical perspectives of individual members; different perceptions of occupational esteem; and, workload equity. Mintzberg et al (1996) note the importance of social and organisational connectivity when making optimal use of collaborative efforts of groups of people who share accountability for work processes and outcomes.

Reese and Sontag (2001) and Coopman (2001) also appear to agree on the necessity to actively manage communication between the disciplines. Coopman (2001) notes two other important factors to be managed. The first is the need to manage the potential for fragmentation between disciplines, reflecting Mintzberg's (1997) concerns over this matter as it affects the management of healthcare efforts in the United States. The second is the opportunity for struggles over autonomy, raising the connected issues of trust and ambivalence as discussed by Lewicki et al (1998), and reflecting Milligan et al's (1999) note about the historic and ongoing tension between medicine and nursing over power, autonomy and authority. In addition, Atwal & Caldwell (2006) identified the dominance of medical

power as a barrier for teamwork. Furthermore, they found that differing perceptions of teamwork and different levels of skills acquisitions to function as a team member can inhibit multidisciplinary interactions (Atwal & Caldwell, 2006).

Whilst there is an abundance of literature describing the requirement for teamwork and some literature describing barriers for working in teams, little is known about exactly how cross-functional or multidisciplinary teams can successfully operate. Sethi et al (2001), describe factors affecting the ability of cross-functional product development teams to innovate as required and notes that one of the keys to the successful operation of these types of teams, at the project level, is *balance*. According to these authors an appropriate balance must be struck on a number of fronts, all affecting the ability of the team to innovate. Among these are 1) functional diversity; 2) social cohesion; and 3) superordinate identity, described below.

Functional diversity

Functional diversity is described as referring to “the number of functional areas represented on the team whose members are fully involved in the project.” (Sethi et al, 2001, 77). An increase in functional diversity is seen as creating an increase in views and opinions, although there is a warning about the information overload and failure to resolve differences that could accompany high levels of diversity. However, several authors provide a qualified conclusion that functional diversity does not impact innovativeness. Their qualification is based in an admitted ignorance of where the border between too much and too little diversity might be. Eagleson et al (2000) suggest that, at least in management teams, the level of diversity is a function of the context of the team’s operation and not something that is, or should be, necessarily a managed thing. Other authors regard functional diversity, when combined with demographic diversity, as requisite for the success of multidisciplinary team operations (Crossan et al, 1993; Reese and Sontag, 2001; Coopman, 2001) and management team operations (Schoenecker et al, 1995; Simons et al, 1999; Eisenhardt et al, 1997). In health care, functional diversity is inherent in occupational identities and often determined by educational background. Generally, it is assumed that whoever obtained highest qualification also bears the function of team leadership. However, this is changing within professions as functions are becoming more specialised and diverse there is a need for greater interdependence between occupations (Fitzgerald, 2002; Atwal & Caldwell, 2006).

Social cohesion

Social cohesion, “refers to the strength of interpersonal ties among team members.” (Sethi et al, 2001, p.75). These authors consider it necessary for the team to generate a level of social cohesion to facilitate the basic functioning of the team. While seen as a normal part of the development and operation of cross-functional teams, or multidisciplinary teams, this concept also comes with a warning connected to the ability of overly strong social ties to lead to groupthink, obviating the reason for the team. Bernthal and Insko (1993, p.66) describe groupthink as, “a concurrence seeking tendency that leads to poor decision making in groups.” and divide cohesion into two forms, task cohesion and social cohesion. According to Bernthal and Insko (1993), task cohesion is based in the value team members place on demonstrating task competence as a member of an effective team while social cohesion is based in the value team members place on social relationships within the team. Whyte and Brooker (2001, p 27) also discriminate between social and task cohesion, stating that:

Team members may find themselves torn between the collective ideals of the team and their professionally induced values. Conversely, professionals may find that team membership enhances their professional identity by articulating their unique contribution to team objectives. The former scenario is essentially one of conflict, which may lead to increased levels of stress and decreased motivation to collaborate in the work of the team, whereas the latter may motivate healthcare professionals in a more positive manner.

Coopman (2001) makes the point that high levels of task cohesion are positively correlated with high team effectiveness while Bernthal and Insko (1993, p.81) write, among their conclusions, that “these findings imply that the likelihood of groupthink tendencies is lowest when social-emotional cohesion is low and task-oriented cohesion is high.”

In the health care context, medical dominance can be a barrier for communication expressed by clearly delineated surgical jurisdictions (Atwal & Caldwell, 2006; Kippist and Fitzgerald, 2006), i.e. by nature there is little task cohesion OR social cohesion between superiors and subordinates. Furthermore, feeling subordinate is quite “protective” for some nurses, enhancing the delineations between team members, by, for example, not “daring” to question (Fitzgerald, 2002). Nevertheless, recent research found that when dealing with emergencies, high levels of social cohesion and task cohesion are evident, resulting in excellent teamwork (Fitzgerald & Lum, 2006).

Superordinate identity

Superordinate identity, according to Sethi et al (2001, p.75),

...refers to the extent to which members identify with the team (rather than merely with their functional areas) and perceive a stake in the success of the team.

It is important to strike a balance between a team member's functional identity and an identity with the cross-functional team. The value of a cross-functional team, indeed the reason a cross-functional team is assembled, is the access to diverse information, knowledge, skill and opinion located in the functional areas and provided through team members. However, if a cross-functional team member retains a heavily functional identity then integration is difficult to achieve in cross-functional settings because "people from different functional areas hold biases and stereotypes toward one another" (Sethi et al, 2001, p.75).

The corollary to this is when a cross-functional team member develops an identity with the cross-functional team that is so strong it shuts down or severely limits access to the knowledge, information and opinion available from the member's functional area, once again obviating the reason for the team.

In the context of health, functional identity of surgeons is strong as a result of surgical specialisation (Fitzgerald & Lum, 2006). For example, a cardiac surgery team now includes highly trained specialist nursing staff, specialised anaesthetic staff, perfusion technicians and other expert support staff. Having a highly specialised cell within a larger (operating room) team poses problems in terms of functional diversity, social cohesion and perceived functional identity. The cell can be ostracised because general communication is deemed to be not relevant to them. At the same time social cohesion and functional identity within the group can be so strong it forms a barrier for anyone else to enter.

Hence, a balance between functional diversity, social cohesion and superordinate identity is needed for a team to reach its potential to be innovative and learn from each other. In addition to these factors, team members also require a sense of affiliation and devotion to the team. It is therefore recommended that team members are engaged with decision making practices and form part of the decision making network.

Decision-making nexus

Decision making is an enabler of collaboration and a facilitator of commitment when shared by the multidisciplinary healthcare team (Coopman, 2001). Faulkner, Schofield and Amodeo (1999) note that decision making falls naturally within the scope of a multidisciplinary healthcare team's work. Salipante (2002) accords shared decision making, along with planning and responsibility, a role in realising the potential of the multidisciplinary team and notes that, in the healthcare setting described, patients and patient-based carers are participants

Ancona and Caldwell (1992), describing similar situations, note that these opportunities would, however, be sub-optimised unless the teams had the ability to understand the information processing needs of the work and match it with an appropriate capability. This requirement is part of the team's need to leverage information and knowledge from other groups, after coming to an understanding of what information and knowledge is required. Tasi (2001) writes that knowledge transfer within organisations is a socially based function where units are interdependent. In this networked environment the links between organisational units are fundamental to learning by and within the units. Also important to learning, according to Tasi (2001), is a unit's position within the network and the ability of the unit to absorb the necessary information and knowledge. For example, in palliative care the multidisciplinary patient care team is at the operational centre of the organisation, with links and access to each contributing discipline (Hermesen & Ten Have, 2005). This central location is likely to enhance the new practices of units because of the access to information and knowledge from contributing units and, at the same time, allowed contributors early, often immediate, access to new operational knowledge. Tasi, (2001, p.997) noted:

Indeed, innovative ideas are often at the nexus of inter-unit links. To foster innovation, information and knowledge should be deliberately distributed. A network of inter-unit links provides channels for distributing information and knowledge in such a way as to stimulate and support innovative activities.

Close links between these units remain important. For example, the channels between a multidisciplinary team and its related units (disciplines) are short and direct. The multiple roles of heads of discipline as managers and multidisciplinary team members apparently help to ensure this. However, as previously stated, the operating room is an environment where the balance between distinct functions, social cohesion and superordinate identities can be

problematic. In this environment the transfer of new knowledge and associated learning required to innovate is dependent upon absorptive capacity of all individual team members.

Absorptive capacity

Tasi (2001, p.998) describes absorptive capacity as an organisational unit's ability to "assimilate and replicate new knowledge gained from external sources" and adds that the definition also covers the unit's ability to apply knowledge opportunistically. Cohen and Levinthal (1990), writing specifically on absorptive capacity and its relationship with learning and innovation, note that access to outside knowledge is critical to the innovation process at any level. Cohen and Levinthal (1990) describe absorptive capacity as a collection of abilities central to an organisation's efforts of renewal and crucial to the application of these abilities is prior knowledge of related fields. Absorptive capacity (Cohen and Levinthal, 1990, pp.128, 133) includes the ability to "evaluate and utilize outside knowledge, the ability to recognize the value of new information, assimilate it, and apply it" and "knowledge of who knows what, who can help with what problem, or who can exploit new information".

In addition, the literature suggests that multidisciplinary teams contain a functional and demographic diversity that is established by the context. A primary component of these diversities, mentioned by a number of authors (Reese and Sontag, 2001; Coopman, 2001; Whyte and Brooker, 2001; Duncker, 2001), is knowledge. Cohen and Levinthal (1990) note that the diversity of the knowledge held by individuals within groups, provided communication is sufficient, enables the creation of novel linkages and relationships, which these authors call innovation. Sethi et al (2001) state that the creation of novel linkages and relationships is a fundamental reason for creating a cross-functional team.

Cohen and Levinthal (1990) and Tasi (2001) make the point that even if an innovative unit's position within an organisational network is optimised with regard to accessing necessary outside information, a sub-optimised absorptive capacity means that the positioning becomes sub-optimised. It seems then that the issue of balance applies also to the relationship between access to outside knowledge and the ability to recognise and utilise it. Further, the balance can be decreed by policy directives, where compliance with policy is mandatory, especially in the face of patient safety. Recently, NSW Health (2005) issued such a policy directive for patient identification: correct patient, correct procedure and correct site.

These relationships, between management and teams and between teams and disciplines, and then between team members who are members of more than one team simultaneously, also provide the frequent contacts necessary to produce strong ties between teams, as described by Nelson (1989) and Hermesen and Ten Have (2005). One of the results of the frequency of contact is that it is useful in overcoming the politicisation of relationships within groups (Nelson, 1989). Another important result of strong ties is that they enhance the transfer of complex knowledge between groups (Hansen, 1999). Cohen and Levinthal (1990, p.133) wrote:

an organization's absorptive capacity is not resident in any single individual but depends on the links across a mosaic of individual capabilities.

In summary, according to existing theory, the ideal team environment provides clear and undisturbed communication between different multidisciplinary and cross-functional team members to achieve superordinate goals that distribute equal accountability across all team members. However to accomplish an ideal team environment, we argue that multidisciplinary teams in health care do not necessarily possess skills to achieve optimal teamwork, which require a balance between functional diversity, social cohesions and superordinate identity to acquire a level of interdependency.

Methodology

An organizational anthropological approach was used to study interdependence within a healthcare team. The anthropological approach is based upon the “doing” of ethnographic fieldwork by means of participant observation (Bate 1997). Organizations are perceived as a cultural phenomenon with their own cultural values and norms that prescribe the behavior of employees. Although the method of ethnography is not without its critics, mostly related to bias (Amabile, Patterson, Mueller and Wojcik, 2001; Trom, 2000), this method has been widely used in health management research. It is seen as a way of accessing beliefs and practices allowing these to be viewed in the context in which they occur and aiding the understanding of behaviours of the actors.

A total of six months of participation and 30 interviews were conducted with doctors and nurses who are team participants in hospital areas such as operating rooms, intensive care units and ward areas in a large teaching hospital in Australia. Convenience sampling was

applied. The researchers used semi-structured interviews and participant observation. The interviewees included surgeons, anaesthetists, nurse managers, and nurse clinicians. Each interview was audio-taped and transcribed verbatim.

An ethnographic diary was kept, where incidences were recorded. Notes were compiled in the form of keywords, stories and minutes of meetings. Discussions post meetings were also noted down and coded. Some notes were transcribed from audio taped recollections and reflections of the researchers of incidences that had occurred. Careful distinctions were made during observations between behaviour prescribed by rules or norms and *actual* behaviour or what people ‘really’ do. Ethnographic portraits were used as illustrations and interviews were used to give voice to the actors operationalizing the team behaviours.

QSR N-Vivo® software was used to aid detailed coding and analysis of the collected research material, facilitating the interpretation process. Through the analytic phase of the project, the research material was found to cluster around a number of core themes. To ensure consistency within each theme, codebooks were developed that included detailed descriptors of each theme, inclusion and exclusion criteria, and exemplars from the research material. All data were themed and coded using a progressive comparative analysis and reflection. Progressive comparative analysis (Fitzgerald, 2002) is a constantly reviewing of data to expand provisional codes and to develop concepts, clusters of relationships, commonalities and differences between professional identities (Boeije, 2002; Fitzgerald, 2002). Reflection is a systematic thinking about linkages and interconnections between actors, and was used to identify and understand underlying conventions that govern situations in which doctors and nurses find themselves (Fitzgerald, 2002).

We recognise that observational ‘objectivity’ is problematic. Our perceptions of the issues under investigation cannot claim *exclusive* privilege in the representation of those issues. However, to ensure that diverse perceptions were reflected in the research material, at least two interviewers were present at each interview. Furthermore, regular meetings were held to provide the research team with a forum in which to discuss the research material and their interpretations. These meetings provided us with important opportunities to create, check, and recreate meaning from observations and impressions, constantly reflecting on our own biases.

The multi-disciplinary operating theatre team

In the context of health care teams, task specialization synergy is only a part of team performance outcomes. Although in an operating theatre team task specialization is vital, team member interactions to achieve their goals in confluence is an important competence for operating team performance. This requires managing fragmentations between and within professional and occupational groups; managing autonomy; and, balancing functional diversity (skills), social cohesion between occupational cultures and superordinate identities.

Managing fragmentations

Clear distinctions between team members in an operating theatre can lead to distinct professional behaviour. These behaviours can include work power and self-importance displayed by professional autonomy and authority and perceived accountability for the work done. For example, we observed that many (but not all) doctors differentiate themselves from others, intentionally or not, by displaying behaviour that sets them apart, usually above others, by exhibiting a superiority of status. In the operating theatre these displays of behaviour demarcate the medical profession from others. In addition, these behaviours also represent a strong demarcation within the medical profession itself.

The roots of this image lie in the socialisation into the profession, where normative behaviour is encouraged through rule-like ceremony at functions not accessible to anyone who is not part of the profession. For example, several doctors in the operating theatre commented on their status being higher than that of anyone else in the health industry and that this was reinforced by members within the profession. One surgeon commented:

“I know I have a fair bit of influence around here and I use it when I want to.”

Another doctor commented on the reinforcement of self-admiration from within the profession

“Of course we are societal models, that is drummed in as soon as you set foot in university.”

The above statements indicate two of the sources for demarcation of medical identity, socialisation into the profession at university and the position of doctors within the division of

labour in the hospital. Whilst the first source of demarcation begins to construct the professional identity in a way that is implicitly (and explicitly) in a hierarchical relation to other healthcare professions and occupations, the second element continuously reinforces a hierarchical division of labour with the medical profession at the top of the hierarchy. Furthermore, these “sanctimonious myths of the inherently superior qualities of themselves as professionals, of their knowledge and their work” (Friedson, 1988:116) are enhanced by how others see the medical profession. There is a well documented, strong societal admiration for doctors, often accompanied by an uncontested acceptance that what doctors say and do is honourable and just, ethically, morally, and in terms of knowledge and skill (Abbott, 1988; Freidson, 1970, 1988, 1977; Illich, 1990; Illich, Zola, McKnight, Caplan, & Shaiken, 1992). Hence setting themselves apart is also enhanced by societal perception of the superiority of doctors. This would explain why doctors may find it difficult to become part of a team characterised by equality and commonality.

As expressed by doctors themselves during interviews, the major difference between surgeons, and other health care workers lies in the function or work they do, the importance of that function, the level and forms of knowledge the function requires, the accountability for the function and who evaluates that function. One surgeon explained the difference of approach to work between different occupational groups as follows:

“ You have to be, as a surgeon, obsessive compulsive. The problem is you cannot afford mistakes, you cannot afford lapses, because you don’t get a second bite and the difficulty that we have as a group, as a profession, is the other people working in the organisation that are not having that degree of obsessiveness. ”

This comment indicates the assumption of non-transferability of function and responsibility. This together with the implicit rejection of sharing of tasks, and associated responsibilities, also reinforces the distance between and demarcation of (and within) professional teams. Evident in this passage is the maintenance of boundaries by way of comparison to other professions. Implicit in the above comment is the self-actualisation of the members of the medical profession reinforcing their own professional identity constructs by comparing themselves to other professionals. Another doctor for example, stated that:

“There are a lot of nurses out there that just see nursing as a job and not as a lifestyle, like doctors do, whereas doctors are doctors 24 hours a day and even when you get home you have a moral obligation to your neighbour to help them if you are needed.”

This passage indicates inter-professional distance based on the assumption of distinct moralities: the medical engagement is portrayed as being a moral one that doesn't tend to end when interaction with the organisation ends, and the engagement of other healthcare occupations are portrayed as being contractual and finite. In terms of team building, constructing professional identity in this way not only sets up distance between professions, it sets up an unbridgeable paradigmatic divide. One major consequence of boundary construction on the basis of distinct moralities, may be that the required development of collaboration and cooperation across professions is constrained, because paradigmatic differences will influence the division of labour and daily routines.

Behaviour of doctors is strongly and outwardly normative in the sense that doctors differentiate themselves from others as a collective (Abbott, 1988; Freidson, 1970, 1988, 1977; Illich, 1990; Illich et al., 1992). The presence of a strong occupational culture may explain some of the barriers for cross functional and multi disciplinary team work on the basis of equality and shared accountability. However, within the operating theatre there is also noted division between surgeons and other doctors, such as anaesthetists.

Divisions within the medical profession

Our research found identity strongly expressed differences between surgeons and anaesthetists and also between contracted visiting medical officers (VMOs) and medical staff employees (staff specialists). This differentiation into groups may be a natural functional distinction, that is to say that the outwardly normative medical profession is made up of smaller functional and integrated categories each with its own normative behaviour. One staff specialist stated:

“There are two types of doctors, there's the ones that think they are better than everyone else and there are the ones who feel that they're human beings, just like everyone else.”

This comment from a doctor indicates there are differences between individuals' behaviour toward others, both outside and within the profession. This doctor admits to at least two categories, the elite and the human. The shift within the profession away from behaviours of elitism was reinforced by a doctor who tells:

"I think now the spectrum is broader, before that is how we all used to be, because... the bulk of people were like that and you were encouraged to be like that through the college system. The outward shows of what the college does and how we view ourselves, with gowns and tapes and caps, ... and you get to wear big golden medallions around your neck if you voted to be the head of something. It's very sort of feudal, like the lord of the manor and you have all these outward gold glittery signs of your power. That still exists, that is what our college meetings are like, but there is a group of us who refuse to go to those ceremonies because we don't see the value in them and refuse to dress up in those outward signs because they don't really reflect anything. Yes, the culture of doctors is broadening, but most of us still have strong influences from that old system, because that is the way we were brought up."

This doctor clearly reflects upon the meaning of ritual and artefacts associated with her profession and socialisation into the profession reinforcing normative behaviour. Societal power is a covert professional prerogative, which is clearly communicated to newcomers in the profession, but within the profession (at college meetings) these signs of power are much more overt, through additional artefacts, such as the "gold glittery signs of power".

Although the societal prerogatives are readily accepted, internal professional powers are a source of conflict. Some of these conflicts within the profession are exacerbated by those differences in power between different specialties. An anaesthetist commented:

"For example I have to spend my Tuesday with a surgeon who really believes we are there to serve them...we are almost only just above the nursing staff to them, you know they have the scrub staff and we are all in theatre to serve them"

Again this doctor is comparing himself with others in (less powerful) occupations. By doing this he confirms a hierarchy of status which places the medical profession above the nursing

profession, but also within the medical profession, where this anaesthetist indicates that his group of doctors are hierarchically placed below the surgeons.

Thus far we have demonstrated that outwardly doctors in the operating theatres appear to be homogenous with a clear and distinct identity. However, the real extent of this surface homogeneity is less clear. The ideas, feelings and beliefs differed significantly amongst the members of the profession indicating an unexpected high level of fragmentation. Where multidisciplinary teams are used to drive renewal of work, managing fragmentations between and within professions can be problematic.

Authority scuffles

In the operating theatre, on the surface surgeons hold exclusive decision-making power in regards to scheduling patients for surgery. However, when observing management of space and time practices, operational issues, bed management hospital wide, availability of team members, interruptions due to unplanned surgery and other logistical issues, affect decision-making power greatly. Regularly, surgeons display their discontent with the order of the emergency list and wish to operate on their patient first. Nurses were observed to use logistical issues to control the behaviour of some surgeons in relation to emergency surgery queues. When the order of operating cases on the emergency list was challenged by a surgeon who wished to do his patient first, the researchers overheard a theatre nurse say to the surgeon:

“I understand you want to do your patient now ... but the instruments will not be ready for another hour. You will just have to wait”

She later confessed she “just wanted him off her back” explaining there were more pressing patients to be done first and no time to explain. This is a clear example of reversal of power and an attempt to equalise felt inequities within a team working toward superordinate goals that extends beyond the wants and needs of one surgeon.

Another example of reversal of power is where the nurse manager refuses to provide a nursing team to a surgeon when his operating time has finished and the nurses are meant to be going home. The surgeon often tries to convince the team to stay back and places members of the team in the difficult position of refusal to “help out”, knowing the patient will have to

return another day for the operation. This form of coercion is not uncommon, however managers in the operating theatre may refuse to accept the overtime incurred, especially if the situation has arisen from surgeon's poor theatre list planning. Surgeons are observed to retreat into acceptance, though reluctantly and sometimes very vocally, that even if they feel they are the power in the operating room, they cannot work it alone and need others to assist in performing the operation. Those "others" are not necessarily under his command or at his disposal.

Power reversal can also take place between nurses and surgeons in the operating room, especially when nurses have gained highly specialised knowledge by working with a specific surgeon or in a specific medical field for a length of time. Often the surgeons will hesitate operating without these specialist nurses in attendance, especially on complicated cases, and amongst peers, these nurses are jokingly referred to as the "surgeon's security blankets". These specialist nurses have considerable influence over the running of the theatre list, the instruments used, the patient care provided and the behaviour of the surgeon towards other nurses and support staff in the theatre. For example, it was highly unusual for a particular surgeon to arrive in the operating theatre at the agreed commencement time of 0800. To the surprise of many, this particular day the surgeon arrived on time. When questioned about this surprising cooperation of the surgeon, the instrument nurse stated:

"Well, I told him if he is late the whole deal is off and that I would not be prepared to give him my time if he was going to be late again."

This comment underwrites that there is, in certain instances, a transposition of power across professions at the individual level that affect daily routines. This acceptance of the transposition by the surgeon lies in the specialist skill the nurse possesses. The surgeon has such high regards for this nurse that he made an effort to respect her request to be on time and assist with the team effort.

Another perceived challenge to medical professional power is mandated policy and standardization of practice. For example, surgeons have a requirement to adhere to standards set and endorsed by the college of surgeons. Some specialists are critical of this control and see it as a constraint in that it jeopardizes their autonomy and authority. One surgeon commented:

“ It (some form of external control) is slowly increasing and it’s becoming more and more. For example in my specialty there’s a national audit, so that every procedure that you do will have to be documented and recorded in terms of outcome, so that we know that we match nationally and internationally.”

When asked why this would be a problem and it being suggested this may be a good thing, especially for the patients, the surgeon replied:

“Sure, there’s a need for it but it’s like constantly being watched and having to justify what you’re doing.”

The above comments indicate the changes to individual control and power over the quality of work produced. However, this control is the responsibility of the individual colleges within the profession, which indicates doctors have to adapt to changes decreed, governed and evaluated by their professional body. They indicate that, although there is a rational explanation, auditing is a form of decline in individual autonomy and authority, which may be seen as an element of identity erosion in the medical profession. Standardisation of practice indicates a decline in the authority to ordain what is right for individual patients and is therefore rejected by many. One surgeon stated:

“Nobody tells me what to do, I have the authority to make my own clinical decisions and my individualised care cannot be standardised”

Nevertheless, other doctors agree that some standards must be set not only to protect doctors in their practice medico-legally, but also because defined standards of care assure best-practice based on evidence rather than treatment according to individual’s doctor opinion, as was (and is) often the case.

The above clearly illustrates the difficulties encountered in a multidisciplinary team required to constantly improve through innovative practices, where not only fragmentation between and within professions proves to be problematic, there is also an inherent struggle for autonomy and authority when making organisational decisions. For a multidisciplinary team to be effective, diverse functional diversity, the state of inter- and intra professional cohesion

and superordinance of identity need to be balanced. This requires skills beyond task competencies. One way of balancing skills, professional fragmentations and authority is to build a team by combining educational sessions, where close interaction is encouraged.

Dialogue between and within professions may break down some of the boundaries surrounding them. However, organising combined training was met with much opposition of particularly surgeons. During our fieldwork there was much discussion about the need for more specialist training of nursing staff in the operating rooms strongly agreed by both surgeons and nurse managers. When the nurse managers in the operating theatre sought support from the surgeons to give up some surgery (operating) time for this training, several suggestions were discussed and these included surgeons being part of the training scheme and having input into nurse skills training. However, when a prominent surgeon (who eventually joined the committee several weeks after discussion had commenced) participated in the discussions and negotiations, he supported the need for this training, but eradicated all suggestions on the table and cautioned that surgeons' work could and would not be affected by the training time of nursing staff. This example is significant in that it indicates doctors' construction of professional identity by erecting and reinforcing boundaries between themselves and other professions. These boundaries are hierarchical and place limits on the development of teamwork and collaboration between occupational members. The idea of training together to achieve greater outcomes that would benefit all parties was shortly thereafter shelved.

Our observations reveal that in a context of increasing teamwork and collaboration for renewal and improvement, many team members reproduce demarcated identities, perhaps to avoid a sense of erosion of their profession. For example, in the operating theatre environment, doctors see themselves as a separate entity, comparing themselves with other professionals, where the surgeons are of higher status, higher authority and higher autonomy than others.

The above discussion indicates even though doctors' identity is partly constructed or based around their relations with others, it is done so in a way that results in them setting themselves apart from others as an elite. This is largely, though unevenly, endorsed by how others see doctors. This affects the formation of cross functional and multidisciplinary teams in an operating theatre that includes other professionals, who are relatively less powerful. However,

we also observed that some (often younger) individual doctors have professional relationships with other members of the healthcare team on a basis of equality. These interpersonal relationships, based on parity and trust, are vital for learning to work *within* a team.

Learning to work within a team.

Social learning and collaborating with highly skilled nurses has led to social change between the professional groups of doctors and nurses. A nurse explained the reason for this change and noted:

“I think nurses going to university has been a huge thing, I mean we studied alongside some of these people, except we were in different faculties but we liaised with them in the cafeteria at uni, or we did clinicals together.”

The above comment indicates the importance of socialisation between individuals across the professions. This started at grass roots, when both were still in training. Socialisation, inclusion and association help in firming relationships of trust and interdependence, both important ingredients for collaboration. Furthermore, university training and professionalisation has not just earned nurses the right to express their increased skills and knowledge, but also the right to transfer this knowledge to others both within their profession as well as to doctors. One nurse stated:

“even if they do not like it, I tell them what I think. I have gained my own knowledge and experience, even if this is not recognised as scientific enough..... I give my opinion but ultimately it is the skin of their nose..., not mine”

The above comment indicates there are remaining identity issues with nurses about their knowledge and skill. Perhaps this is an indication that the nursing identity, although changing rapidly, is still anchored in history with issues such as subordination to doctors, doctors’ explicit and scientific knowledge, their specialised skill and their attitudes. Medical dominance is not only characterised by doctors seeing *themselves* in a hierarchically superior position in the social organisation of the hospital, but also by others, like nurses, behaving in subordinate ways towards them. This would indicate that professional need help with recognising that being “part” of a team, doesn’t necessarily mean that a person is effective within that team.

Discussion

Where multidisciplinary teams are used to drive renewal of work, managing social cohesions between and within professional groups is problematic and social fragmentation on the basis of professional membership can be dysfunctional. Membership of a team doesn't automatically equate with capability for renewal of processes and innovation in a changing environment. For this, team members need to learn about how to become an effective team member.

Professional groups are expected to work in unison with one another, working together to improve patient care by adapting to cross functional and multi disciplinary work practices, and by sharing and communicating about issues in health care to innovate. This confluence of different occupational groups is supposedly built upon mutual respect and equality. Professional identities are changing as a result of health reform and these changes impact upon the socialisation between professions in the workplace.

However, we cannot assume that different professionals have the ability to adapt in the same way or at the same rate. For example, it was shown that the younger generation of doctors adapt to current trends more easily than the older generation doctors. Apart from generational differences, there were also entrenched issues surrounding professional authority, autonomy and sovereignty. Nevertheless there seems to be a slow recognition of difficulties encountered within and across cross functional teams.

For example, in an attempt to address a patient safety issue, The Royal Australian College of Surgeons developed a universal protocol for preventing wrong site, wrong procedure and wrong person surgery (RACS, 2003). This protocol was adapted by NSW Health in 2005 into a policy directive rolled out NSW wide (NSW Health, 2005). Some of the principles articulated are directly related to reducing barriers for team work and finding a better balance for working cross functionally. The principles include: the collective goal achievement of safe practice; collective responsibility for safety of the patient; active involvement and effective communication among ALL members of the surgical team; the inclusion of the patient as a team member and a dispute resolution policy that addresses areas such as communication between clinicians, failure to communicate critical information and decision-making practices. The literature, as far as we can determine, does also not deal with decreed team

formation achieved through a mandated policy directive as a strategy to create cross functional and multidisciplinary teams in a highly crystallized professional environment. Mandating policy to improve communication between professions seems extreme, but may be necessary to achieve true team outcomes such as equity and shared accountability

An interesting characteristic of some multidisciplinary teams is that they operated interdependently with the disciplines that resource them. This is an interesting relationship because, at least in terms of learning, it enables the disciplines to supply externally accessed information and knowledge directly into team operations and it enables team members to supply locally derived information and knowledge through the disciplines to specific external environments.

Changes that have been observed are changes in work practices, changes in association and affiliation with the profession, changes in status, changes in autonomy, authority and sovereignty and generally a change toward more collaboration between professions. All these changes are happening in a situation where there are partitioned professions with discrete identities. This is why we are left to ponder to what extent those past, seemingly fixed characteristics of professions, and fixed identities associated with that, hold back the intended outcomes of health reforms?

Ethnographic observations both confirmed and contrasted some of the findings and were used as illustrations to make sense of the behaviours of diverse occupational identities and the role of management, in particular, the management of inter-dependence in terms of the adaptability of professional identities and subcultures. Professionals' paradigms are shifting from one of autonomy and **in**-dependence to collaboration and **inter**-dependence of occupational groups, toward confluence between groups, without eroding professional identity.

There is now a greater need for managers or administrators to provide clear and undisturbed communication between different multidisciplinary and cross-functional team members to achieve a superordinate goal that distributes equal accountability across all team members.

Theoretically, free flowing team work depends on at least three aspects of team life: functional diversity, social cohesion and superordinate identity, which were proven to be

complex in an operating team environment, explaining the difficulty encountered in work teams. At the same time, the team building literature assumes individuals have natural abilities to become effective team members, and does not specifically identify the need for some individuals to learn team membership skills. In some areas of healthcare, medical professional identity clearly assumes authority over work processes that, at the same time, are reinforced by the safety of subordination of other professionals. By pointing out these difficulties, the authors identified that team membership is a skill that cannot be assumed. Multidisciplinary team membership is a competence to be learned.

A better understanding of functional roles and jurisdictions, early introduction to the notion of multidisciplinarity, team management skills as well as a greater involvement with organisational decision making are some starting strategies to optimize team work. Some recommendations for learning team skills in the healthcare environment should include the assessment of team readiness. For this research needs to be undertaken to assess functional diversity, social cohesion and superordinate identity in health care teams. Some interviewees suggested that combining professional training from the onset, will improve absorptive capacity. This strategy would naturally dilute the strongly bounded medical professional identity and provide an opportunity for closer working relations.

In this paper we have outlined that whilst there is an increasing requirement for interdependence between and within multidisciplinary teams, we shouldn't expect individuals to possess the skills to become a team player. To develop this learning potential, there is a strong need to better understand multidisciplinary barriers for achieving organisational goals in health care, including medical dominance, hierarchical division of labour, a high complexity of the organisational environment and disparity of goal congruence between and within health care teams. Some starting strategies were discussed and further research is needed to operationalize skills development to create innovative health care delivery teams.

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