Paper for Seventh Asia Pacific Interdisciplinary Research in Accounting (APIRA) Conference
July 26-28 - Kobe, Japan

ENTREPRENEURSHIP IN INSTITUTIONALISED SETTINGS - THE ROLES OF HOSPITAL BENCHMARKING

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Abstract

Purpose - The paper aims to analyse the roles of benchmarking by and of public hospitals in relation to ranking and institutional entrepreneurship.

Design/methodology/approach – Neo-institutional theory informs the study in particular its recent concern with entrepreneurship and strategic change. A qualitative design and method are employed incorporating primary and secondary data. Sources of evidence include: semi-structured interviews, documentation, observation and archival records. Interviews are a primary source and during site visits, 44 interviews were held.

Findings – The study offers evidence of how professionals using and recalculate benchmark data and experiment in a free/relational space that is isolated (protected from intrusion), interactive and inclusive. This free space enables a collective to use performance numbers as a reference for identifying superior practices that remedy difference and inform change. A free space is one where power relations are reworked and hierarchical accountability being pushed a bit sideways.

Originality/value - The extant literature is also still coming to terms with institutional entrepreneurship and change that happens via a collective, especially in mature fields, as well as the conditions that enable this. A lack of attention to micro-institutional change and practices is a major shortcoming in extant studies. The present study deals with micro-institutional change via new practices identified through a collective.

Key words - benchmarking, collective entrepreneurship, free space, hospitals, institutional work, surveyed space

Paper type Research paper

1. Introduction

This paper is about an institutional innovation (a Health Round Table), where accounting (benchmarking numbers) is seen as a key resource that enabled knowledge development and the reconstruction of institutional logics. The issue of how highly institutional settings transform or innovate is an important phenomenon. Institutional perspectives traditionally describe this as isomorphism (Lounsbury, 2008). Lounsbury (2008, p.350) argued that this is a limitation plaguing the management literature, including accounting literature that he claimed has employed dated and caricatured versions of institutional work (see Cooper and Robson, 2006; Cooper *et al.,* 1998 for exception). The role of accounting in institutionalised settings, such as hospitals, has often been described through powerful isomorphic processes that cause institutions to become average (Llewellyn and Northcott, 2005; Kurunmaki and Miller, 2008). Kurunmaki and Miller (2008) discussed this role as managing according to the numbers and creating new calculable spaces. Asdul (2011) described this as a role of governing with numbers at a distance. Decoupling processes are another explanation where isomorphic processes are curtailed and resistance can result (Modell, 2003; 2004). However, these views simplify the issues involved in institutional reproduction and change because they omit systematic attention to the processes and practices that make institutional transformation possible (Lounsbury, 2008; Battilana *et al.,* 2009; Labatut *et al.,* 2012). This is consistent with criticisms levelled at earlier institutional literature, owing to the way in which proactive decisions were underplayed (Abernethy and Chua, 1996). As stated by Abernethy and Chua (1996, p. 597), decisions have to be made explicitly about whom and what one wishes to copy and mimic, and why.

The institutional entrepreneurship literature is presented as a solution to studying institutional change in the context of embedded agency. However, these accounts often emphasise idealised, powerful and heroic individuals, not collectives (Lounsbury, 2008; Batillana *et al.,* 2009; Weik, 2011), macro-processes and homogeneity (Lounsbury, 2008). Where empirical accounts do exist of collectives, they do not sufficiently identify the conditions that make these efforts possible. Much extant literature has become too rigid as the importance of micro-processes via experimentation, trial and error, and changes in practices, are frequently overlooked (Lounsbury, 2008; Marti and Mair, 2009; Ezzamel *et al.,* 2013). In particular, in accounting research, the properties of change agents are taken into account insufficiently. The problem is that the agent is either over socialised, and so acts as an institutional correlate, or is over individualised and acts as a rational agent. Therefore, it is relevant to elaborate on how institutionalised practices and embedded agency can be involved in institutional reproduction. Another body of literature unfolding in institutional work, though often applied to more radical settings (social movements) which introduce free spaces, can enhance our understanding of institutional change. Such places essentially operate without surveillance so that ideas can be

exchanged freely and experimentation can take place (Polletta, 1999; Kellogg, 2009; Zietsma and Lawrence, 2010; Johnston, 2011).

The role of benchmarking - or comparison between entities - in hospitals, presents an interesting way to consider change. Benchmarking is a practice where hospitals are ranked on a series of different indicators, including both financial and non-financial ones. The process mobilises relative targets to judge the efficiency and effectiveness of hospitals. Like other targets, benchmarking is therefore involved in accountability relations where a superior ask explanations from subordinates (Roberts, 1991) and is involved not only in finding the relative performance of different entities, but also involved in developing aspirations and concerns for the future. Benchmarking and targets monitor and survey performance and installs expectations of accountability (Hoskin and Macve, 1986; Mennicken and Miller, 2012). Benchmarking is therefore a description of performance and an expectation of increased performance. In this sense, benchmarking is performative.

The study is positioned in public hospitals and the empirics situated within one of the largest teaching hospitals in New South Wales, Australia. We trace benchmarking in two spaces: free (non-surveyed) and surveyed. The latter is associated with calculations of average and is argued, in some literature, to produce standardisation and average hospitals. We offer insights into how a collective, using a free space, was better able to problematize performance improvement (using numbers as a reference for creating knowledge). Both spaces used accounting (numbers) for making institutional logics more practical and tangible. Additionally, both spaces, connected by accounting, ultimately gave rise to power issues (authority and hierarchy). Llewellyn and Northcott (2005) rightly argued that healthcare is expensive, therefore placing significant pressures on government worldwide. They concluded that hospitals operate with an everyday injunction to please become the average hospital. The case of NSW is found to provide another perspective on this question of institutional transformation of hospital settings, where hybridisation was not so much a concern (as was the case of medical professional development found in Finland by Kurunmaki, 2004 though not in Britain by Kurunmaki and Miller, 2008 and Fischer and Ferlie, 2013) as was the issue of the development of a collective 'free space' constituted by the so-called Round Table. Here, benchmarking data and information were used to commence intuitional changes within hospitals, where differences between hospitals were described and assessed for their relevance and practicality. This created experimentation and knowledge via a process of linking benchmark data with the world of hospital personnel. Typically, benchmark data - like accounting data generally - are produced by moving further and further away from practices and so the 'referent' is quickly lost. In contrast, the Round Table would attempt to reintroduce the complexity of the hospital practices, from which the benchmarked numbers would normally be at some distance.

The research questions centre on the roles of benchmarking by hospitals. The conditions that enabled a collective to problematize performance improvement using benchmarking numbers as a reference to identify superior practices and create knowledge are analysed. The ideas of relational spaces, management techniques and free spaces are interesting in the study of a Round Table. The Round Table itself can be understood - with reservations - as a kind of 'free space' and so the benchmark data are not tools merely for management. They are also the institutionalised brokers that make the activities of the Round Table more than itself; a 'free space' but it draws on key institutional mechanisms that connect the free and the surveyed public space. The remainder of the paper is structured as follows. In the following section, literature informed by institutional work, including accounting which frames the study, is drawn on and a critique is offered. The approach of tracing benchmarking by hospitals into different spaces is discussed. The research design is then accounted for before proceeding to the empirical findings of a field study. The empirics commence with benchmarking by a surveyed space, which is then contrasted with a free space (non-surveyed).

2. Institutional work: collectives, entrepreneurship and institutional innovation

The discussion in this section is focused on institutional work and accounting literature (hospitals that are frequently informed by such work) that frames the study. It is increasingly accepted that pro-active choice can play a role in decisions to change or innovate in institutional settings (Abernethy and Chua, 1996; Brignall and Modell, 2000; Modell, 2003; 2004; Modell *et al.*, 2007). At the same time, there has been a tendency by institutional work to rigidly explain institutional change via isomorphism, macro-processes and homogeneity (Greenwood and Suddaby, 2006; Lounsbury, 2008). Institutional entrepreneurship was presented in a body of literature as helping to explaining institutional change despite embedded agency. However, this literature is often confined to the study of idealised, heroic individuals overlooking collective change efforts (see Lounsbury, 1998; Lounsbury and Crumley, 2007; David *et al.*, 2012 for exceptions). Lounsbury (2008) argued that micro-processes of change, such as new practices and collective entrepreneurship, offer important opportunities to advance the literature, and that accounting provided a crucial context in which to explore these issues.

Institutional work and entrepreneurship

The discussion here highlights how ideas around institutional change and innovation have been under-theorised or narrowly conceptualized. Lounsbury (2008, p.350) was less generous in saying that a somewhat anachronistic understanding of institutional analysis via isomorphism remained pervasive, so limiting the range of its explanatory potential. Of interest in institutional work is the possibility of change and entrepreneurship (Battilana *et al.*, 2009). The key concern expressed by Lounsbury (2008) is that the traditional and possibly caricatured versions of institutional theory, often drawn on in

accounting research, namely address isomorphism (Lounsbury, 2008). Recent developments in institutional theory highlight the need to pay more attention to the relationships between 'macro' institutional norms, logics and micro practices (Lounsbury, 2008; Labatut *et al.,* 2012; Ezzamel *et al*., 2013) I.t has drawn out more clearly the possibility that change agents are not necessarily individuals but collectives (Lounsbury, 1998; Seo and Creed, 2002; Lounsbury and Crumley; 2007; Ansari and Wijen, 2007; Wry *et al.,* 2011), and it has suggested that relational spaces - the idea that space is a site for activities, actors and problematization - may help understand boundaries and practise in new ways (Kellogg, 2009; Zietsma and Lawrence, 2010). 'Free space' (Evans, 1979; Evans and Boyte, 1986; Polletta, 1999) borrowed from theories of social movements, has a direct interest in power as expressed in the Foucauldian point that the 'macro' and the 'micro' can be seen in the moment makes the relation between institution and practice intimate. Likewise, the recent attention to practice also includes an interest in the means by which institutionalised practices are upheld and transformed. This includes interest in technology for management (Labatut *et al.,* 2012).

Fligstein (2001) described institutional entrepreneurship as persons with social skills that motivate others to engage in collective action. Fligstein and McAdam (2010) later asserted that scholars of organizations and social movements were interested in the same phenomenon: collective action. Polletta and Jasper (2001) described collective identity as imagined as well as concrete communities: the discovery of boundaries that are fluid rather than fixed and relational. However, the institutional entrepreneurship literature emphasises idealised or over socialised heroic individuals. Levy and Scully (2007) cast institutional entrepreneurs as modern princes and Morris and Jones (1999) discussed the hero or “great man” model. The motivations for entrepreneurship are presented as wealth creation or the pioneering of new organizations (Levy and Scully, 2007; Czarniawska, 2009; Rindova *et al.* 2009; Weik, 2011; Lockett *et al*. 2012); techniques (such as storytelling and narratives) (Zilber, 2007; Czarniawska, 2009; Nichols, 2010; Wry *et al.* 2011); and the context in which change can happen (Koene, 2006; Child *et al*. 2007) have been discussed. As discussed above, extant studies of institutional entrepreneurship have rigidly centred on heroes, homogeneity and macro-processes. Limited studies address micro change (for exception see Morris and Jones, 1999; Lawrence *et al*., 2002; Dacin *et al.,* 2002; Zilber, 2007; Rindova *et al.,* 2009; Bruton *et al.,* 2010; Labatut *et al*., 2012). The importance of trial and error processes, experimentation and new practices is overlooked (Lounsbury, 1998; Lawrence et al., 2002; Zietsma and Lawrence, 2010). Weik (2011) argued that this overlook led to a neglect of diversity and heterogeneity, variations and practices. Lounsbury (2008) was critical of a lack of attention to the micro via practices. Ezzamel et al., (2013) address this lack of attention by studying budgeting in the education sector where competing logics existed. Labatut *et al*. (2012) argued that the intention behind a recent move to study practices was to go beyond the

deterministic approach in which practice is an unreflective term, associated with black-boxed objects to one of collective action.

There are limited empirical studies on collective institutional entrepreneurships generally, as well as in complex institutionalised and mature settings. This is a problem because the conditions that allow change to happen in these settings therefore remain unexplained (Fligstein, 2001). Some limited conditions are identified in extant studies but they are not exhaustive. For instance, Lawrence *et al.* (2002), when studying a non-profit organization in Palestine, highlighted the collaboration condition. Greenwood and Suddaby (2006) theorised that location within the field (accounting) was important. Battilana *et al.* (2009) suggested that actors must initiate divergent changes and then actively participate in their implementation. Lounsbury (1998) found that discussions of shared experiences helped initiate change alongside a different governance structure. David *et al.* (2012) identified having a clear purpose and altruism as conditions, though for immature fields. Rindova *et al.* (2009) further argued that 'entrepreneuring' required emancipation.

Other gaps in the extant literature stem from empirical limitations. They include the tendency to study institutional entrepreneurship in emerging, immature and less institutionalised fields (Khan *et al.*, 2007; Mutch, 2007; Hardy and Maguire, 2008; Wry *et al.*, 2011; David *et al.*, 2012). Thus, there are opportunities for empirical studies that provide more explanation around how change happens in mature fields (see Greenwood and Suddaby, 2006 for exception). Another issue is a predisposition to change as linear, not an ongoing recursive process (Child et al., 2007; Weik, 2011). Being performative, benchmarking can be understood as a means though which institutions reflect to introduce change and transformation. In institutionalised settings, such change and transformation cannot be assumed to take a linear form. Hospitals have often been understood as sites for struggle between competing logics such as between an economic and a health logic where the former may attempt to push the latter seeks to uphold or create a space for itself. Some evidence suggests that the two logics may form new types of expertise through hybridisation (Kurunmaki, 1999a, 1999b; 2003): found possible in Finland but less so in the United Kingdom (Kurunmaki and Miller, 2008).

3. Institutional work: mundane organisational activities and collective entrepreneurship

The discussion in this section is focused on institutional work and accounting literature (including hospital settings frequently informed by such work) that frames the study. It is increasingly accepted that pro-active choice can play a role in decisions to change or innovate in institutional settings (Abernethy and Chua, 1996; Brignall and Modell, 2000; Modell, 2003; 2004; Modell *et al.*, 2007). At the same time, there has been a trend for extant studies to rigidly explain institutional change via isomorphism, macro-processes and homogeneity (Lounsbury, 2008). Institutional entrepreneurship was presented in neo-institutional literature as helping to explain institutional change despite

embedded agency. Studies are often confined to the study of idealised, heroic individuals, overlooking collective change efforts (see Lounsbury, 1998; Lounsbury and Crumley, 2007; Davis *et al.*, 2012 for exceptions). Lounsbury (2008) argued that micro change via practices and collective entrepreneurship offers important insights and that their study within accounting can advance the literature.

Institutional work and entrepreneurship

Institutional work is the proposition that there is a relationship from practices to institutional rules and norms. Lawrence, Suddaby and Leca (2009, p. 1) explain the perspective as follows:

> The concept of institutional work highlights the intentional actions taken in relation to institutions, some highly visible and dramatic, as often illustrated in research on institutional entrepreneurship, but much of it nearly invisible and often mundane, as in the day-to-day adjustments, adaptations, and compromises of actors attempting to maintain institutional arrangements. Thus, a significant part of the promise of institutional work as a research area is to establish a broader vision of agency in relationship to institutions, one that avoids depicting actors either as "cultural dopes" trapped by institutional arrangements, or as hypermuscular institutional entrepreneurs."

Institutional work is here presented as process. It is work in the sense of continuous activity where it is difficult to separate beforehand whether it develops innovation, coordination, motivation or failure. Work is flux and it is not possible by just watching it to judge what its implication is. Work has potentially many implications and the way work implicate things is in the relations it crafts to entities that help actors to perform their activity. Actors are embedded, but not only, as the quotation says, culturally and normatively. Work is embedded.

The embeddedness of work is not the now dated version of institutional theory where an actor is a cultural dope; where the actor is understood primarily as a set of norms. Embeddedness is not only cultural; it is also material and organizational. Polanyi's (1975) and Granovetter's (1985) classical interpretations of embeddedness are useful here, because they show that any actor is embedded, that is, equipped with relations to others, when they act. Actors' dispositions are not purely personal but related to the resources including technologies made available to them by others. Embeddedness is the ability to become actor; it is not a deficiency to actorhood. The individual person would have but little strength; the embedded person would be stronger. Therefore, there is no necessary contradiction between agency and embeddedness. Callon (1998) extends the argument suggesting that agency should be understood as agencement: an actor is not an individual human being, nor even a human being primarily embedded in institutions, conventions, personal relationships or groups; an actor is 'made up of human bodies but also of prostheses, tools, equipment, technical devices, algorithms, etc.' —in other words is made of an agencement."

Embedded agency is thus not only cultural phenomenon but one defined by the powers which are both made available to individuals and which creates certain 'dispositifs', to borrow a concept from Foucault, for their action. This is the mechanism that can account for institution and practice in one moment. Therefore actors are not individuals, but simultaneously acting out influences from afar in time and space, and localized action. Agencements are collectives and change is accomplished collectively (Lounsbury, 1998; Seo and Creed, 2002; Lounsbury and Crumley; 2007; Wijen and Ansari, 2007; Wry *et al.,* 2011). This includes recent contributions to institutional theory, and interest in the means by which institutionalised practices are upheld and transformed, including such things as technologies for management (Labatut *et al.,* 2012).

Agencements are continuously fragile as their boundaries have to be re-produced in each moment of activity. This potential frailty is hardly present in extant explanations of institutional innovation which respects the heroic individual enormously. Levy and Scully (2007) cast institutional entrepreneurs as modern princes and Morris and Jones (1999) discussed the hero or "great man" model. Alternatively, there may not be any surviving individual entrepreneur or they may play a role for a short period of time only (Czarniawska, 2009). The extant literature offers the motivations for institutional entrepreneurship such as wealth creation, growth (Levy and Scully, 2007; Czarniawska, 2009; Rindova *et al.* 2009; Weik, 2011; Lockett *et al*. 2012); mobilising techniques (such as storytelling and narratives) (Zilber, 2007; Czarniawska, 2009; Wry *et al*. 2011); and the context in which change can happen, such as societal or organizational (Koene, 2006; Child *et al*., 2007).

Agencements are also fragile because it is never just an aggregate of individual characteristics; it is also not methodological individualist! Instead, as Polletta and Jasper (2001, p.298) say, collectives can be imagined and concrete communities: involving an act of perception and construction, as well as the discovery of boundaries that are fluid rather than fixed and relational. Collectives channel words and actions, enabling some claims and deeds and de-legitimating others. But other resources that the collective may need to draw from are not detailed. But this does not mean that agencements are without boundaries, but the boundaries are themselves part of work. In particular with the proposition that some spaces are free and others surveyed, boundaries do exist. Yet these boundaries are relational ones, and defined not a priori as sets of systems that work alongside each other.

Boundaries are relational which means that the composition of actors, technologies and problems can be carried over from one place to another. Here, it is noteworthy that accounting practices can be interpreted as such a mechanism that mediates between spaces. Mediation is, as Latour (2005) pointed out, a transformation, a creation of a link that did not exist previously and thus creating a new relation. When accounting practices mediate, then they identify an object that exist in both places, but take on new roles and therefore equip the spaces differently. The free space mobilises accounting calculations, such as benchmarks, in different ways to their roles in surveyed spaces, and yet, the accounting

calculations make continuity. Mediation is transformation and frailty, but it is also the survival of an object such as benchmarking because it has adapted to relational situations. As such, it mediates and bridges at the same time, and develops an institutional and a transformative capacity simultaneously.

Lounsbury (2008) argued that work is needed to understand where logics (including multiple and competing logics) and new practices come from – and how they relate to each other. However, it remains unclear exactly what these logics are and where in a practice an institutional logic is. Accounting is implicated by Lounsbury (2008) to be important in this investigation but the role of accounting (including the role of accounting in collectives – and whether it is part of a collective or outside the collective) is blurred. Nor is it clear if by paying attention to accounting we can better see what may connect logics. Chapman *et al.* (2009) suggested accounting, organizations and institutions are fundamentally interrelated but the linkage provided by accounting can be made clearer. While research exploring micro-processes (for example Morris and Jones, 1999; Dacin *et al.*, 2002; Zilber, 2007; Bruton et al., 2010; Labatut *et al.*, 2012) offers important potential to push forward our thinking on change, it has yet to show the connection between the macro and micro (or the roles of accounting in connecting these). Labatut *et al.* (2012) argued that the intention behind a recent move to study practices was to go beyond the deterministic approach in which practice is an unreflective term, associated with black-boxed objects to one of collective action.

Entrepreneurship and social movements

There is recent evidence from institutional work that actors innovate by constructing new boundaries (free spaces) that shield them from the sanctions to which they would otherwise be exposed (Zietsma and Lawrence, 2010). This evidence extends ideas by social movement theorists who are open to the possibility that institutions are less monolithic than portrayed. Free spaces as borrowed from theories of social movements has a direct relation to interest in power as expressed in the Foucauldian point that the 'macro' and the 'micro' can be seen in the moment, making the relation between institution and practice intimate. Though free spaces are often associated with rebellion and protest, here they are more organizational (see also Rao and Dutto, 2012; Zietsma and Lawrence, 2010; Kellogg, 2009). This is relevant to the present study because the Round Table can be understood to have free space characteristics.

The free space concept is frequently idealised in extant literature, much like the imagery of powerful entrepreneurs. This literature offers little direction on power relations in free spaces. Despite an apparent freedom to talk and ask questions, we are left uncertain about how free the spaces really are and how freedom is curtailed. The possibility for different types of power relations which would contradict freedom and even the notion of what constitutes power in free spaces remains unaccounted for. For instance, Scott (1990) and Polletta (1999) note that free spaces are domains of power in their

own right but their discussion stops at this. Johnston (2011) discussed the paradox of free spaces as they are usually conceived of as secretive so opposing ideals of freedom. The literature does not yet shed light on the ability of a free space to remain uninfluenced by power relations. Free spaces are thought of as egalitarian as power is removed or reduced but accounts are needed of how this is maintained if achieved. Another interesting issue that is not addressed in extant studies is that despite reported opportunities to construct the new boundaries of a free space which can identify innovations– this does not mean that the innovations will actually be implemented. There is also the possibility that free spaces both enable and coerce.

To overcome some extant limitations discussed above and in order to analyse a benchmarking Round Table in the empirical section of this paper, some characteristics of free spaces are identified and associated effects. The essential characteristic of a free space is the absence of surveillance (Polletta, 1999). Membership is often restricted and there is structural isolation from ruling groups (Fantasia and Hirsch, 1995). Thus, they become secretive places (Johnston, 2011). Also key, is that free spaces are characterised by collectives not individuals, and their boundaries defined not necessarily by geography. Instead, free spaces are relational (Kellogg, 2009), autonomous and egalitarian places based on social relationships (Polletta, 1999). The effect is that participants can relate separately from, or outside of, their daily lives (Fantasia and Hirsch, 1995; Polletta, 1999). Other effects of free spaces include attaining a neutral medium allowing unguarded conversations to take place (Scott, 1990). This means the ability to speak without fear and reprisal, and therefore discuss issues often considered taboo (Gamson, 1996; Johnston, 2011). Consequently, free spaces enable alternative agendas to be developed, and the ability to envisage alternative worlds, giving participants a glimpse of what is possible (Breines, 1980; 1982; Johnston, 2002). The dissemination of knowledge and the ability to experiment (Kellogg, 2009; Zietsma and Lawrence, 2010) are also key effects. The result of structural isolation from ruling groups means that innovative ideas can be developed and actions discovered that resolve common problems (Fantasia and Hirsch, 1995). Another effect is the opportunity to innovate, to change existing practices or develop new ones. How this innovation happens is not yet explained in extant accounts though Kellogg (2009) found that practices were successfully changed when relational spaces (a subset of free spaces with less planning) formed to operate collectively.

4. Research setting

The research settings (Westin Area Health and the Health Round Table Limited) operate within an Australian healthcare context where public hospitals provide the majority of acute care beds. In NSW, public hospitals are accountable to the State Government (via the Department of Health) and to a lesser extent the Commonwealth Government (via the Department of Aged Care). The primary

research setting is an Area Health Service operating in NSW, incorporating one of the largest teaching hospitals in Australia which forms the focus of this study. The secondary entity operates independently of the latter to facilitate strategic benchmarking efforts. The HRT operates as a voluntary consortium of major public teaching hospitals across Australia and New Zealand. Its key aim is to spread innovations in patient care rapidly among hospital members by highlighting differences in performance measures and encouraging face-to-face discussion at Round Table meetings. Membership of the HRT was open to hospitals across Australia and New Zealand, subject to approval by hospital Board's of Directors. Each member organisation nominated its most senior operational executive to serve as a Personal Member of the Round Table.

No direct government funding was received as all activities were supported by membership dues, subscription fees, and corporate sponsorships. The HRT commenced in 1995 and existed as a non-profit organization for sharing problems and identifying solutions. Specifically, the Round Table was formed to: 1. develop opportunities for hospital personnel to learn about how to achieve best practice in their organizations; 2. promote interstate and international collaboration among hospitals (and suppliers of goods and services to hospitals); and, 3. collect and analyse data in order to identify innovations for improving practice (HRT Annual Report, 2010). Documentary evidence revealed that prior to founding the HRT, personnel from Australian and New Zealand hospitals felt they had little or no opportunity to learn about inter-organizational practices (HRT, 2008). The round table ambit was to help members achieve good practice by addressing three key questions:[1] 1.What does superior practice look like? 2. What is the gap between my area health service or hospital and superior practice? and, 3. How can we achieve superior practices? As of 2008, over 3000 separate individuals participated over 8000 times in round table activities since its inception. Interdisciplinary teams from individual hospitals attended round table meetings where these teams formed the nucleus of change management efforts. For example, the job titles of interdisciplinary team attendees from the studied entity for the round table on 'Improving Acute Patients Journeys Through Major Hospitals' included the general manager of surgery, nursing director, the Chief Executive Officer, patient flow manager, nursing director etc.

5. Research method and design

This study employed qualitative research methods and analysis to present its arguments and findings. Much accounting literature in recent decades appealed for research to provide more insight into the design and application of management control systems (for example, Ansari and Euske, 1987; Simons, 1990; Scapens, 1990; Chapman, 1998; Baxter and Chua, 1998; Ahrens and Dent, 1998; Ahrens and Chapman, 2007). Researchers posit that field studies can enhance understanding of how

[1] The HRT Annual Report (2010), Sydney.

accounting systems operate in practice (Scapens, 1990; Ahrens and Chapman, 2006; 2007; Chua, 2007), given that social reality is emergent and subjectively created. Ahrens and Dent (1998) argued that field methods permit an analysis of suggestive themes and counterparts, interpretations and counter-interpretations. Much theory underlying the existing management control and performance measurement literature was informed by conventional functionalist models, often tested utilizing survey methods. Researchers have argued that a field study design enables richer description, depth and detailed realities (Geertz, 1988; Denzin, 1989a; 1989b; Denzin and Lincoln, 2000). Thus, field research methods were conducive to examining the roles of benchmarking practices in the present work.

Sources of Evidence

Data for the present study were collected from both primary and secondary sources. The key time boundaries for this field study were a period of more than a decade of historical data and a 48 month intense data collection period. The collection of substantial and rich qualitative research material over a period of several years allowed the gradual development of research ideas and objectives as well as ongoing analysis of research data (Lincoln and Guba, 1985; Ferreira and Merchant, 1992; Lukka and Kasanen, 1995; Ahrens and Dent, 1998). Interviews were a critical data source as shown in Table 1. Generally, at least three data sources were used, with a minimum of two being primary sources. Secondary sources were supplementary in that they corroborated assessments of primary data. During site visits, 44 interviews were conducted with different research entity personnel

The primary research entity, in the present paper referred to as Westin Area Health (WAH), incorporates one of the largest teaching hospitals in Australia. A second research entity operated independently to facilitate strategic benchmarking which is the Health Round Table (HRT).

Table 1
Primary and secondary sources of evidence

Data Source	Description
Interviews	- 44 persons interviewed of which 12 persons interviewed 3 times - Interview transcripts - Interview notes

Documentation	Examples include: - Confidential and non-financial records including, monthly accounting reports, business plans and manuals. - Official documents including full sets of meeting agendas, supporting documents and minutes of all Committee and Board meetings, financial and budgetary commentaries. - Internal weekly newsletters. - NSW Health Quarterly Hospital Reports. - NSW Health Services Comparison Data Book (Yellow Book] 2011. - Deloitte NSW Department of Health Triage Benchmarking Review October 2008. - Department of Health Performance Management Framework October 2009. - Department of Health – NSW Health's Funding Approach: Equity and Efficiency 2005. - NSW Health System Performance Indicators, August 2003. - Health Round table – Everything you needed to know about the Health Round table. - NSW Health Services Comparison Data Book - Performance Measurement and Performance Management in OECD Health Systems", *OECD Labour Market and Social Policy Occasional Papers*, No. 47, OECD Publishing. http://dx.doi.org/10.1787/788224073713
Observation	Some examples include: - Health Round Table Databases - Observation of Patient Information Management System (PIMS). - Observation of Health Information Exchange (HIE). - Observation of Emergency Department Information System (EDIS) - Observation of Oracle. - Observation of peer hospital Information Systems to promote learning, including Austin Hospital performance dashboards and Alfred Hospital Traffic Light Information System. - Observation of APACHE II performance measurement database. - Observation of Peri natal Database. - Observation of the Australian and New Zealand Renal Health Database.
Archival	Some examples include: - Health Round table Annual Reports 2007 – 2010 NSW Health Services Comparison Data Book (Yellow Book] 1998-2010. - Independent Pricing and Regulatory Tribunal Reports, 2003, 2008, 2010 - Department of Health Annual Reports 1986 – 2010 - National Health Service Publications 1985 – 2005 - Australian Government Services Publications 1985 – 2005

Data were collected from multiple sources and at different levels of analysis. Sources of evidence analysed include: semi-structured interviews, documentation, observation and archival records. An interview protocol was utilized to ensure consistency across interviews and that all key issues were covered. Interviewees were tape recorded and a hand written set of notes taken in the event that the

technology failed. Upon leaving the field, the researcher systematically recorded hand written notes covering such matters as the mood of interviewees, their willingness to discuss the key themes, and the quality of physical assets and infrastructure, etc. Notes and records were maintained while on-site also. The method of interviewing was that the Chief Executive Officer (CEO) and senior managers of the studied entity identified interviewees who had participated in round tables. As mentioned above, interviewees also included the founder of the HRT and General Manager. Access required ethics approval be provided by both the University and the primary research entity's ethics committee (which helped enable access to the HRT). A letter of support was provided by the CEO encouraging personnel to participate in the research. At the time of organizing interviews, this letter of support from the research entity CEO was provided to each interviewee along with details of ethics approval. A semi-structured format was utilized so to gain deeper insights into the real views of interviewees regarding benchmarking roles. The major data source, semi-structured interviews were focused on particular topics and issues, and a general range of open-ended questions to be answered. Interviews were conducted as guided conversations rather than structured queries (see, Denzin, 1989a; 1989b; Rubin and Rubin, 1995; Yin, 2003).

Several methods were employed to mitigate threats to credibility and validity including triangulation, interview validation and detailing (see Denzin, 1978a; 1978b; Llewellyn, 1993, Yin, 1994, Miles and Huberman, 1994; Denzin and Lincoln; 2000; Yin, 2003). Validation methods included cross checking between interviews, document analysis, archival data and observation. Diaries, charts and records of interactions and observations were also documented during this research (see Ahrens and Dent, 1998). This is consistent with ideas that qualitative research can be validated by developing explanations that enable authenticity and plausibility.

Table 2
Description of interviewees

No. Interviewees	Level of Organization	External Interviewees	Total Personnel
No. of interviewees spoken to once	Senior Managerial including Clinical and Administrative [30 Personnel]	The Health Round table [2 Personnel] General Manager and Founder	**32**
No. of interviewees spoken to three times	Senior Managerial and Administrator Level [5 Personnel]		**12**
			44

The researchers conducted all data collection and completed the analysis in order to stay close to the data. The approach to data analysis of interview transcripts was to initially highlight parts

significant in relating with the theoretical framework which guided the research. Primary and secondary sources were then analysed for key themes including differentiating benchmarking roles. Words, paragraphs and sentences from raw interview transcripts were highlighted and coded according to a schema that reflected broad schemes of interest. The next step was to systematically organize the transcripts using the broad schemes where summaries were then created. These summaries contained key arguments and theories for each interviewee including quotations from the interview transcripts. Data were also split according to levels of organizational hierarchy, and administrative and clinical position, as occupied by the interviewee. Following Miles and Huberman (1994), matrixes were used where the researchers entered quotes and paraphrases, and explanations were added in order to get to the essence of interview material. Responses to questions about benchmarking roles were separated. This enabled the researchers to make contrasts and comparisons between roles. Patterns and themes were noted when making contrasts the roles of benchmarking enabling us to follow up any surprises revealed throughout the data analysis stage.

6. An empirical account of benchmarking within surveyed and free spaces: The case of NSW hospitals

The next sections elaborate on the empirical material used to corroborate the research question, commencing with the research method and design followed by the results. The empirics begin with a discussion of the accountability benchmarking role. Numbers were reported to Department of Health (NSW State Government) in order to benchmark hospital performance so to measure accountability (Independent Pricing and Regulatory Tribunal (IPART, 2003)).[2] Public hospitals in Australia are required to report inpatient episodes of care using the International Statistical Classification of Diseases and Related Health Problems to state government, which next forwarded the data to the Australian Institute for Health and Welfare (AIHW) for more analysis. The AIHW then produces an annual summary publication called Australian Health Statistics, which offers national and state averages for each Diagnosis Related Group of inpatient episodes. This type of benchmarking was described in some literature as producing average hospitals (see Llewellyn and Northcott, 2005). The paper then provides evidence related to a strategic benchmarking role. Strategic benchmarking was conducted in off-site arenas away from the day-to-day grind of hospitals. Such benchmarking was

[2] IPART is the independent regulator that determines the maximum prices that can be charged for certain retail energy, water and transport services in New South Wales. To ensure quality and reliability of services, they monitor service delivery, audit suppliers and oversee compliance by certain water utilities and retail energy suppliers. IPART review the pricing of other services and investigate various aspects of industry productivity, competition, performance and planning. Consumer engagement and expert consultation are central components, and this is to maintain ethical transparency, inform and strengthen our decision-making, and ensure genuine impartiality in our determinations and recommendations.

used in an enabling way to identify differences and ultimately superior practices that remedied these differences.

Accountability benchmarking

This section addresses the accountability role of benchmarking. IPART is an independent regulator of hospitals whose role was to maintain decision independence from the NSW State Government and its stakeholders. In doing so, they aimed to be transparent, making their processes as publicly accessible as possible. IPART (2003) discussed ffinancial, activity and quality based numbers as commonly used by the Department of Health to benchmark a hospitals performance. The traditional role of benchmarking by Department of Health was reportedly accountability measurement (IPART, 2003). Where a hospital or service did not achieve the benchmark result, the government can approach the area health service[3] (hospital) with a "please explain" or, in more dire circumstances, it could intervene and take corrective action. Alternatively, when a number highlighted ongoing problems with a poorly run hospital or service, the government may choose to increase its focus on that service. If measurement indicated ongoing problems, it could also lead to micromanaging by government of that service (IPART, 2008). The main sanction that could be imposed by the Department of Health is withholding funding where specific deliverables (measured by system inputs) have not been achieved such as staff not appointed or beds not opened (IPART, 2008).

<u>The accountability benchmarking (surveyed space) role is separate</u>

Accountability benchmarking was considered a separate measurement and reporting process. Extensive data were measured and reported daily, weekly or monthly, a time basis set by the Department of Health. The data collection process was reported by interviewees as being resource intensive and time consuming. The majority of interviewees indicated an acceptance that accountability measurement was a part of hospital life.

> "We collect a large number of key mandatory performance indicators. We are required to do so by the Department of Health and the Centre for Mental Health. Extensive performance measures (such as financial data {by area/cost code/service directorate}, admissions, re-admissions, in-patient focused activity, full time equivalents by funding classification and location, and all accidents/incidents) are directly reportable to NSW Health every month." (Stream Director Mental Health Services).

It was also accepted as having a separate role from innovation measurement and reporting.

> "Nearly every-thing we monitor is mandatory as required by the government (and must comply with national standards). Much of out time and energy is used collecting and reporting this performance data but little of it is used internally." (Stream Director-Allied Health).

[3] In NSW hospitals are grouped into area health services according to geographical location.

IPART (2003) argued that accountability benchmarking was necessary for ensuring that hospitals were meeting public expectations. For example, the waiting time for surgery or an emergency department should allegedly be measured and subject to public scrutiny (IPART, 2003). Argument was presented that this accountability role must be considered a separate one from the desire to influence change or innovate (IPART, 2008) owing to a view that it is not possible to direct change from a distance. IPART (2003) noted that the Department of Health is too remote to develop strategies that sponsor and encourage hospitals to innovate. For instance, IPART (2003) evidence illustrated how the government could decide that hospitals should focus on reducing length of stay for fractured neck of femur patients. Hospitals would then be directed to review their cases and take appropriate action to reduce length of stay. IPART (2003) claimed that human nature and past experience suggested that hospital personnel would likely find reasons as to why their patients were different and therefore the benchmarks inapplicable to them. Alternatively, they try to appear as if their unit was performing better (IPART, 2003). Another argument cited by IPART (2008, p.160) for separating accountability measurement was that clinicians could adopt "gaming" strategies such as trying to avoid very sick or challenging patients or even reclassifying patient conditions.

In view of the above arguments, IPART (2008) concluded that when change was imposed, hospital personnel were less likely to genuinely engage. IPART (2003) also proposed it was self defeating to use accountability measurement for innovation because the numbers were subjected to public scrutiny and therefore political. Argument was made by IPART (2003; 2008) that an organization being forced to change is less likely to use numbers to innovate. Interviewees of this study mirrored descriptions by Llewellyn and Northcott (2005) of clinicians perceiving the government as closed or blinded to the complexities of hospitals, consequently scoping their role to accountability. Innovation was represented as a separate role where managers should compare their performance with peers so to identify opportunities for improvement (IPART, 2003).

Accountability reporting was mainly executed via a management information system. This system, shared by all NSW hospitals (including the studied entity) with the Department of Health, was referred to as the Health Information Exchange (HIE). Interviewees perceived that numbers reported via the HIE fulfilled a separate accountability role.

> "HIE is a straight accountability providing tool. It incorporates the finance ledger, patient information and wait-list information. At least 75per cent of information we collect is sent directly to the department weekly and monthly. Patient information is sent in weekly on a Friday night to the Health department (although we are getting closer to real time data). Financial data is fed from Oracle monthly and wait list information is also fed monthly. We feed Emergency Department information into the department weekly in winter and monthly in summer. This incorporates measures of presentations to emergency, waiting times and cases presented with. Cross patient flow information (information about patient postcodes and

> patients attending other area health services and other Australian States) is also presented. There is also a feed of information about visiting medical officers that is payroll related. We also send payroll information to The Department of Health using about 500 different tables." (Health Information Exchange Manager–Finance and Management Support Unit).

The majority of interviewees indicated in interview evidence an understanding that accountability benchmarking was treated as distinct from that which enabled innovation. This was consistent with other evidence sources (for example, IPART, 2003; 2010). A justification for separating accountability measurement roles was allegedly that the numbers frequently failed to reflect the individual operating conditions (contexts) of different hospitals (IPART, 2003; 2008). This argument was supported by the majority of interviewees who agreed that comparisons made were not valid because contextual conditions were unaccounted for.

> "There is a whole component of the system that we do not use for anything other than funding requirements because it is not right for our context. In fact, there is a lot of data available but it is of no use for improving outcomes and if it does not get used internally. That information does not get used because it is unsuitable for us and does not help me as a manager to manage an Emergency Department." (Manager, Emergency Department).

Another role of accountability reporting was to manage hospitals by exception. Interviewees described how these data resulted in action if necessary.

> "About 70 per cent of HIE data is mandatory, such as finance ledger, activity patient information and waiting times. Much of this data is not very useful. The data are sent directly to The Department of Health and result in action if necessary. Very little of these data are discussed internally with clinical managers unless a real problem is flagged." (Manager, Health Information Exchange and Information Systems Unit).

As discussed above, the numbers were reported via the HIE. This was subsequent to having satisfied associated data quality checks by the 14th day of the month, after the month of the admission.[4] Services were then compared to a benchmark, generally the average for peer hospitals (such as the average available beds within a peer group of hospitals). Policy mandated the frequency of the numbers reported to the Department of Health. The numbers were usually highly aggregate measures. Some numbers were required for every patient, while others were mandatory for certain patient groups only. Examples of data reported and associated definitions are shown in Appendix 1. An illustration is offered of comparisons made across three hospitals in Appendix 2. Accountability measurement enabled public transparency. For example, the NSW Health Services Comparison Data Book,[5] otherwise known as the Yellow Book, included inter-hospital and area health service

[4] These performance indicators are now reported by the Bureau of Health Information in the Hospital Quarterly report. Admitted patient data is extracted from a centralized data warehouse administered by the NSW Department of Health called the Health Information Exchange (HIE).

[5] http://www.health.nsw.gov.au/pubs/2010/pdf/yellowbook_09.pdf (accessed 5.40pm 12/3/2012)

comparisons[6]. The Yellow Book incorporated numbers which provided a basis for comparison between area health services relative to admitted patients, staff and financial information.[7] Thus, in addition to managing by exception, accountability benchmarking enabled the publication of a NSW Health Services Comparison Data Book or the Yellow Book, which existed during the period of investigation, to enhance the transparency of health services" (NSW Health, 2009, p.1). Interview and documentary evidence suggested that benchmarking for innovating was considered a separate role from accountability as discussed below.

Innovation benchmarking in a free (non-surveyed) space

This section presents empirical evidence of how public hospitals freed a space to strategically benchmark. The discussion centres on the conditions under which a collective operated using benchmarking to enable innovation and change as opportunities arose for making practices visible and transferable between hospitals. Many numbers used in the non-surveyed space were the same ones reported to government though they were frequently recalculated. Hospital personnel were then encouraged to look beyond the repaired numbers in order to assign meaning, elaborate, and understand performance difference.

<u>An alternative benchmarking from a different governance structure</u>

The alternative benchmarking role stemmed from a different governance structure which was a non-profit collaborative organization. Participation by hospitals in the field was a voluntary choice. A high proportion of hospitals in the field chose to be members. Membership was open to all hospitals and area health services across Australia and New Zealand, subject to approval by the Board of Directors. Each member organization nominated its most senior operational executive to serve as a personal member of the Round Table. Personal members then elect a Board of Directors which provided administrative governance. The Board met bi-annually to shape the round table agenda and review performance. Activities were funded via biannual membership fees, subscription fees and corporate sponsorships.

There were several prior unsuccessful attempts by Australian hospitals to engage in inter-organizational collaboration and benchmarking. Initial attempts were supposed to receive funding support from government and would therefore have a political constituent. For example, in 1994, the South East Australasian Hospital Benchmarking Consortium was created, involving hospitals from

[6] NSW Health Services Comparison Data Book 2008/2009 December 2010 State Health Publication No: (DPEB) 100560 ISSN: 1836 9863 Demand and Performance Evaluation Branch, NSW Health.

[7] The Department of Health moved from the Yellow Book to the Bureau of Health Information in September 2009 (under the Health Services Act 1997).[7] A key role of the Bureau of Health information is also to publish reports which benchmark performance of the NSW public health system with comparable systems (http://www.bhi.nsw.gov.au/about (accessed 17/03/2012))

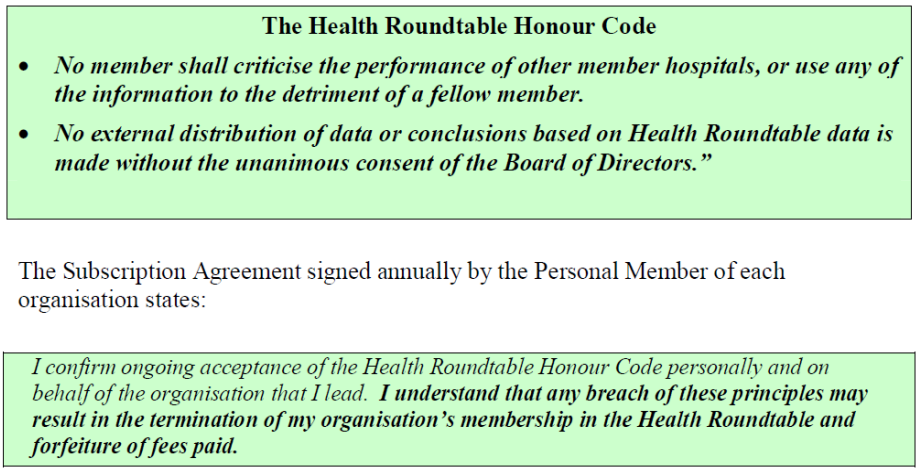
New South Wales, Queensland, Victoria and New Zealand. In 1995, a different intensive collaborative change program was proposed for initiation by the Australian Government which was to involve the Alfred Hospital in Melbourne, Royal North Shore in Sydney and the Royal Brisbane Hospital. Neither initiative could attract funding from government. Next, a National Demonstration Hospital Programs was formed and continued until 2003. Documentary evidence (IPART, 2003) indicated that earlier attempts to benchmark strategically failed to create a place where hospital personnel could feel safe to collaborate, free of day to day hassle and without political intervention (see Inspirit Management Services, 2003). The HRT initiative deliberately accepted no government funding and did not participate in public policy setting. It existed as an innovation clearinghouse for sharing problems and practices. Roles included identifying issues affecting hospitals, analysing benchmarking data among trusted peers, and encouraging innovation and peer support. Another role was reworking the numbers to suit local operating conditions, while searching for differences in data practices and methods. In order for these numbers to enable change and innovation, there was reportedly an understanding that gradual fine tuning of, and recalculating numbers, was required to suit local operating conditions of individual hospitals (HRT, 2008).

The philosophy and confidentiality

The HRT provided an impartial arena related to the organizations (including the research entity) and protected from intruders. This alternative type of benchmarking and sharing of knowledge emphasised innovation and learning, as opposed to accountability (HRT, 2008). Since its inception in 1995, the HRT used numbers including benchmarks to identify best practice and then share insights amongst members to improve or create new practice. Examples of clinical and non-clinical numbers collected by the HRT are provided in Appendix 4.

To ensure a feeling of safety for members, an honour code as shown in Figure 1 was created which required sign off. The information shared with attendees was available subject to agreement with the honour code. No information could be used to harm another participant or the organization they represented. Data provided to the Round Table were freely shared among participating members, but couldn't be disclosed to other organizations, in order to promote frank and open discussions. Acting as an agent of hospitals and under honour itself, the Round Table processed numbers and made comparisons. The research entity retained ownership of all its data and information, including raw data, documents, reports, graphics, etc. At the same time, the HRT owned (on behalf of member hospitals) all documents, databases and analyses produced, based on information supplied by its member hospitals. The members, as a collective, controlled all decisions regarding what was considered appropriate use of the data.

Figure 1
The honour code



Assurance of the confidentiality of the numbers was reported in interview and documentary evidence to build trust. All data submitted by participants were stored in an electronic data base that only members could access. As discussed above, ownership and control of the data belonged to the consortium itself, and no data could be released without permission from every member as a collective.

> "Ownership of the data and control of the data belongs to the consortium itself. Hospitals have an agreement with us." (Managing Director, Health Round Table).

Data confidentiality and security were taken very seriously. To illustrate how seriously the honour code was taken, the General Manager explained whilst being interviewed for this research that during a corruption inquiry into a member hospital [the Campbelltown Inquiry in NSW undertaken by the Independent Commission against Corruption (ICAC)], several government officials arrived unannounced at the front door of his home on Sydney's North Shore, from which the HRT is administered. Officials arrived threatening they would return with search warrants demanding to take possession of benchmarked performance data relating to the public hospitals in his care. He blatantly refused to honour the request, managing to convince them that the credibility of this alternative system depended on trust in data confidentiality (the honour code), upon which the system is built and presumably he felt confident that no incriminating data existed that justified a search warrant.

A collective that attempts to lessen power

A collective was formed based on the premise that knowledge was more easily diffused by groups than individuals. The original intention of forming a collective was mentioned in the following excerpt by the original founder (an interviewee of this study).

> "Individually we can comment on practices that are right or wrong, but collectively we have more knowledge." (Founder and Knight of the Health Round Table).

The diffusion of knowledge by the collective (group) involved giving participants a voice to discuss practice and that in turn required trust.

> "The concept is to trust the group. It is a working group process that engages in a conversation about what is good practice and how do we get there. Since the first ever Round Table meeting was conducted by Rod Carnegie and Bill Kricker, the concept was to collectively use benchmarking for learning. Participants were given ten weeks to identify a problem. There is a general agenda and structure but no one has any idea what the answer will be" (Chief Executive Officer, Health Round Table).

Interviewees of the HRT reported that power was reduced in the free space. Such power reported by interview evidence included hierarchical and political power. In order to facilitate a philosophy of attempting to reduce power, the philosophy was to be separate from government, as noted in the following excerpt by the founder when reflecting on its survival.

> "It's a success because we are non-government. We are separate from government and we get together and say how we run an emergency department." (Founder and Knight HRT).

This helped instil a feeling of protection or at least the freedom to discuss the numbers freely without repercussion. As discussed above, prior attempts by hospitals to strategically benchmark failed because of the presence of a political constituent. Where there was such a presence, it appeared this was construed by hospital personnel as merely an extension of accountability benchmarking.

> "The approach we take is that we are designed to inform our members. The Health Round Table provides a chance to discuss the numbers without having to be accountable. By not being threatening to them it works" (Chief Executive Officer, Health Round Table).

Hierarchical power was also reduced by the collective at least temporarily. For example, the HRT did not differentiate between senior and junior employee status in the hospital organizational hierarchy. Therefore, titles such as Professor or Doctor were removed from name-tags. The Managing Director of the HRT claimed in interview evidence that this meant participants felt they could converse within the collective on the same level.

Relating numbers to practices

As discussed above, a space was sealed off away from hospitals where practices became visible and could be transferred between hospitals. The General Manager (Dr David Dean) was a sociologist with significant organizational improvement and health expertise. He was General Manager of the Round Table since its inception in 1995. Previously he spent ten years as a management consultant with Booz, Allen and Hamilton Company's New York office. Dr Dean designed an approach that used the numbers as a reference for identifying the practices that remedy difference. During interviews, the

General Manager explained this approach was informed by the diffusion work of Everett Rogers[8]. Spreading and diffusing new practices was executed by the HRT in five steps (HRT, 2008).

1. Focus on identifying differences in practices amongst member hospitals to create awareness of alternative practices. This frequently required 3-4 months of designing survey instruments, data collection and developing briefing packages.
2. Assemble experts from each hospital over two days to persuade each other that their approach to an issue produces benefits. The meetings usually involved small groups and plenary discussions as well as brief presentations on key topics.
3. Next, each hospital team was given time to reflect for themselves as to which ideas or practices might be useful.
4. Once a decision is made to try a new idea or practice, the Round Table encouraged the sharing also of implementation materials. They also provided a clearinghouse following the meeting or a medium through which to communicate.
5. The Round Table regularly reviewed performance data to confirm (by gathering evidence) whether the changes implemented lead to any measurable improvements.

The above approach required that the groups formed at Round Table meetings were limited in size. This was to ensure that each participant had an opportunity to speak and listen to the views of others. Thus, participants were seated at Round Tables of six to eight persons. These groupings frequently changed to ensure the cross fertilisation of ideas. Participants were required to collect considerable information from their hospital (or area health service) in advance about a given topic for brainstorming prior to face-to-face meetings. The information was collated and distributed to members prior to the meeting as pre-reading materials. Participants also brought a poster describing a key practice innovation that they could share with their peers from other hospitals.

The numbers informed the conversations. For example, research entity personnel attended one Round Table to discuss coping with changing clinical workforce needs. This entailed reviewing progress and sharing new approaches on how hospitals were coping with issues including: growing workforce shortages, staffing solutions to meet new clinical models of care (such as self care and care at home) and coping with new technologies. The reported numbers indicated that inadequate succession planning and that the supply of ward nurses was insufficient to offset anticipated workforce retirements in the next three years. Evidence gathered at the face-to-face Round Table meeting identified a number of solutions. Solutions included increasing nurse practitioners, the potential for a new role titled ‘allied health clinicians’ to lead outpatient clinics, the introduction of allied health assistants, and opportunities to create a third level health care worker to provide basic personal care and support in therapy. At the meeting, a key innovation involved the creation of a new advanced health practitioner role. This practice involved applying a new structure where an advanced allied health professional worked to full clinical scope while remodelling the geriatric outpatient services layout and systems.

[8] Rogers, E (1995), The Diffusion of Innovations, The Free Press (4th edition).

Another innovation emerged after learning that supply costs were higher than research entity peers. An inter-disciplinary team which attended a Round Table identified issues that remedied the difference, included inefficient use of human resources, capital, space, plant, and difficulties associated with non-standardised rationalised inventory management processes. After verbalising ideas at Round Table meetings, a new practice was identified. The new practice required making four distribution centres that currently serviced four hospitals into two distribution centres servicing four hospitals. Standardised inventory was held by the two distribution centres. Next, cross checking was implemented for specific items such as intravenous and other solutions, as well as washroom paper products. After attending Round Table meetings where implementation strategies were also shared with the studied entity, it was decided that the Director of Finance and Budget would champion the initiative. The implementation team consisted of the Director of Supply Services, Clinical Product Manager, Logistics Manager and Inventory Controller. Consultations were held by the interdisciplinary team with the Directors of Nursing, Directors of Corporate Services, Human Resources Manager and the Health Services Union. No special funding was allocated from the existing budget to support the innovation.

Within maternity, new practices also emerged. Using inpatient data, including length of stay, clinical complications and intervention rates provided twice yearly in HRT benchmarking reports, performance differences were identified. A Round Table discussion for improving pregnancy management and delivery for women with obesity, verbalised practices believed to contribute to remedying difference. A practice entailing a healthy weight tracking tool which helped manage weight gain during pregnancy, as well as making healthy diet and lifestyle choices was shared for application. This tool assisted women at high risk of pregnancy related problems owing to pre-existing obesity conditions. The new practice included assessing the pre-pregnancy Body Mass Index (BMI) which was then discussed with a research entity clinician to determine the weight gain range required for a healthy pregnancy. The patient was given the weigh tracking tool which they took home in order to monitor their weight each day. If patients were tracking too high or low, diet and lifestyle changes should be made promptly. If the patient continued to track high or low, they were required to contact a dietician for assistance. See Appendix 5 for illustration of the pregnancy healthy weight tracking tool.

Another practice learned from a New Zealand peer hospital within the HRT and applied in the general medicine and cardiology session involved daily rapid rounds. This innovation required a daily multidisciplinary meeting, to plan for the day and plan the patient stay. The daily rapid round was a 15 minute meeting to review every patient on the ward. The discussion included working diagnosis, plan for the day and plan for the stay, review of referral status and estimated discharge dates. The rapid round practice had a pre-agreed etiquette which included all personnel standing for the duration of the meeting, the meeting starting and ending on time, all staff being prepared, only one person speaking at

a time, responsibility for follow up tasks being assigned, no pages or phones to be switched on and it was agreed that a minute was assigned to every patient with any longer discussions to be held off line.

Interdisciplinary teams

Consistent with the approach, the research entity sent inter-disciplinary teams of 3-4 persons to the off site venues specified by the HRT in order to have sufficient breadth of expertise and understanding of current practice. This ensured a multi-disciplinary perspective on any given topic, whether it was improving emergency care, cancer care, hip replacement services, or diagnostic test ordering. The conversation was reported in interview evidence as open-ended and yet targeted with the intended benefit of improving patient outcomes. This was noted in the following excerpt:

> "Round Tables are usually a two day format. There are some presentations and fixed plenary sessions where a lot of discussion is encouraged. This is a unique opportunity for talking to occur across hospitals using inter-disciplinary teams. For example, if we are looking at operating theatre performance – surgeons, anaesthetists and senior nurses attend. We also look at system issues. (General Manager of the Health Round Table).

For example, in the following excerpt a management accountant from the research entity explained how listening to a conversation enabled them to identify better practices from a peer hospital (the Austin in Victoria) and then apply them at the studied entity.

> "The best source of sharing information is the Benchmarking Round Table. I attended last year the session on budgeting strategies. We all put our various strategies on the table. Dr David Dean (General Manager of Health Round Table) talked to us and said whether we are inefficient or not in line with other sectors. So, everyone had to report their ideas. One of the things that came out of it was to do with our ordering processes. e have taken them on board to improve our theatre ordering processes here which led to efficiency returns." (Management Accountant).

Interviewees frequently discussed opportunities to meet people in similar roles and share war stories while finding out how different hospitals did things. It reportedly provided a sense of relief, the knowing that peers faced similar issues and challenges. An additional benefit was that personnel brainstormed over several days with a senior member of the executive team. This would not normally transpire in the day to day hustle and bustle of hospital life.

> "The informal networking and sharing of information is a critical part. For example, employees have reported going back to the organization after participation and looking at a whole heap of practices as a result of the discussions." (Managing Director Health Round Table).

The intention was that the conversation continued even after leaving the free space using off-line communication techniques and on-line. The latter included an electronically secure space with forums, blogs, video-conferencing, etc.

> "You can call the other guys up and find out about how they achieved good practice. If a hospital CEO has a query, he can informally talk to other leaders about how to achieve improved performance. It offers a unique opportunity for us to discuss processes, performance and results across hospitals that improve results. The focus is on the patient rather than the organization and what can you do to improve the service to the patient." (WAH Director of Quality).
> "The Round Table offers possibilities for networking so you can call the other guys up and get solutions, what is good practice and how do we get there. We focus on the patient rather than the organization – and ask how you improve things for the patient." (Managing Director Health Round Table).

Small inter-disciplinary teams, accompanied by a member of the executive team, were considered more effective in leading change efforts than having a single individual return to his or her hospital with new ideas or practices. At the end of Round Table meetings, each team was given time to reflect and summarise the key ideas they had listened to and decide whether different practices were appropriate to their setting. Round Table methodologies were designed to engage participants in face-to-face conversations. Interpersonal workshops were conducted over a 48 hour period with a typical work group of 30-40 persons. Follow up workshops and teleconferences were also scheduled. Organised working parties then provided feedback on action taken to fix performance problems as identified at the Round Table forums. The HRT approach and philosophy was to make members aware of differences in practice, rather than impose change. Personnel decided for themselves which practices and ideas were appropriate to implement and when to make these changes within their individual setting. The Round Table viewed its role as promoting change while being designed only to be a tipping point in the overall change process.

The numbers are recalculated

The numbers provided a reference to identify and pin point superior performance and differences in practices among hospitals, as well as providing a common starting point for discussions. It was at this starting point that personnel were asked to focus on the analysis and act on information in an appropriate manner.[9] A point of difference from the surveyed space was that the numbers were frequently recalculated to take into account various contextual factors, such as, age, co-morbidity and source of admission. The recalculation of numbers reported from interview and documentary evidence helped hospitals, including the studied entity, to make more meaningful comparisons. Professionals from member hospitals collaborated and reached consensus on appropriate measurement methodologies. A copy of the verbatim minutes related to a teleconference designed to get clarity and consensus from experts around appropriate definitions and methodologies is shown in Appendix 4.

[9] The HRT (2008), *Everything you wanted to know about the Health Round table*, Sydney.

Documentary evidence[10] suggested that the HRT collected and analysed statistical data on over 2.0 million inpatient episodes using the Australian Refined Diagnosis Related Groups (AR-DRG)[11] classification scheme. While useful for discharging accountability, data reported to government and later made publicly available were almost a year out of date by the time of publication, representing aggregate data across a wide variety of disparate institutions (including aggregate patients with differing levels of disease, differing arrival points, and different departure dates) (Dean, 2007). The HRT identified methodological issues to be addressed before meaningful comparisons could be made (Dean, 2007) because of contextual differences unaccounted for by government (such as differences in patient co-morbidity within an AR-DRG; differences in patient referral processes to hospitals for specialist treatment; differences in funding rules which influence how episodes are counted; differences between states in interpreting national guidelines; differences in community and nursing home care arrangements outside each hospital). The steps taken for recalculation are shown in Figure 2.

[10] Dean, D (2007), Using data mining of inpatient episode data to search for innovative practices across Australia and New Zealand, The Health Round Table Limited, Sydney.

[11] Public hospitals in Australia are required to record inpatient episodes of care for reporting purposes using the International Statistical Classification of Diseases and Related Health Problems.

Figure 2 Repair of numbers via data mining of inpatient episode data to identify innovative practice

STEP 1: Data Analysis Process	**Relative Stay Index Methodology**	**STEP 2: Data Mining to Identify Innovative Practices**
The HRT processes data submitted by member organizations twice yearly: 1. Standardization of raw data. Input data structures for 33 member organizations mapped. Audit files are produced to identify obvious issues of data quality, &discussed with member organizations. 2. Re-grouping of inpatient episode data into AR-DRGs. Classification of inpatient episodes into (AR-DRG) is performed using the Visasys DRGroup software [3]. 3. Data consolidation. Standardized inpatient records from each organization merged into master database for financial year. In 2003/2004, dataset contained over 2.03 million inpatient episode records. 4. Calculating expected length of stay. Each inpatient episode is classified by AR-DR and five other variables (see below) to look up a matching cell in a reference table containing benchmark length of stay data. **5. Calculating a Relative Stay Index (RSI). The actual &expected lengths of stay for all episodes within an AR-DRG are summed, with actual days divided by expected days to yield an index value. An RSI is calculated for AR-DRG, & for individual clinicians, clinical departments, & groupings of AR-DRGs.** 6. Analyzing RSI differences. Data for each organization for each AR-DRGs filtered based on minimum threshold of 300 bed days to reduce chance of spurious comparisons. Charts produced comparing the RSI's for member organization that passes minimum bed day threshold.	Comparison of inpatient episode length using the AR-DRG classification alone obscures possible differences in the underlying co-morbidities &age-groups of patients treated, as well as differences in referral patterns &discharge alternatives. Adjustment made for: **1**. Type of admission (2 values): Planned / Unplanned, with unplanned defined as less than 24 hours notice of expected arrival in hospital. **2**. Source of Admission (2 values): Normal / Other, with "other" defined as a transfer from another institution or a statistical admission due to a change in care status. **3**. Discharge Destination (4 values): Home / Hospital Transfer / Died / Other, with "other" including transfers to nursing homes &statistical discharges due to a change in care status. **4**. Age Group (5 values): 0-14, 15-54, 55-69, 70-79, &80 years &above. **5**. Co-morbidity level (2 values): Low (0-2 diseases) / High (3 or more diseases), determined by the number of separate ICD-10-AM chapters represented in the diagnosis Codes for each episode.	Data mining process analyses differences in RSI rather than raw length of stay to control for possible anomalies in mix of patients &mix of patient flow. For simplicity, all related conditions for a family of ARDRGs combined. The analysis of differences intended to highlight largest opportunities for improvement in bed day usage. Each hospital has a different mix of specialties & volume, items of most interest to each member may differ. A member organization with innovative practices leading to short lengths of stay in one specialty is expected to share insights with other members on request, with assurance that other members will help in areas where lagging. Because of large numbers of inpatient episodes, AR-DRGs, &health facilities to compare, typical tests of statistical significance of the differences of little use. Small differences may be statistically significant due to large number of episodes, but would have little practical value to hospital manager. Some large differences in RSI values may be statistically significant, but of little practical value due to the small number of patients involved. The sheer number of possible differences to evaluate (664 AR-DRGs by 42 facilities = 27,000) suggests hundreds of differences appear to be significant at the .01 level by chance alone. Instead of standard statistical tests, HRT has relied on two-step filtering process to identify AR-DRGs of interest. **1**. Only health facilities with at least 300 bed days of annual activity in an AR-DRG included in RSI comparisons (approximating usage of one hospital bed for a year). **2**. The RSI for at least one of the qualifying health services must be at least 25% below benchmark level for the group as a whole to focus attention on largest opportunities. The AR-DRG classification system has 664 items which group into 409 families of related conditions. Of these, approximately 150 have at least one facility which satisfies the above filtering requirements. The results of the filtering process then reviewed manually.

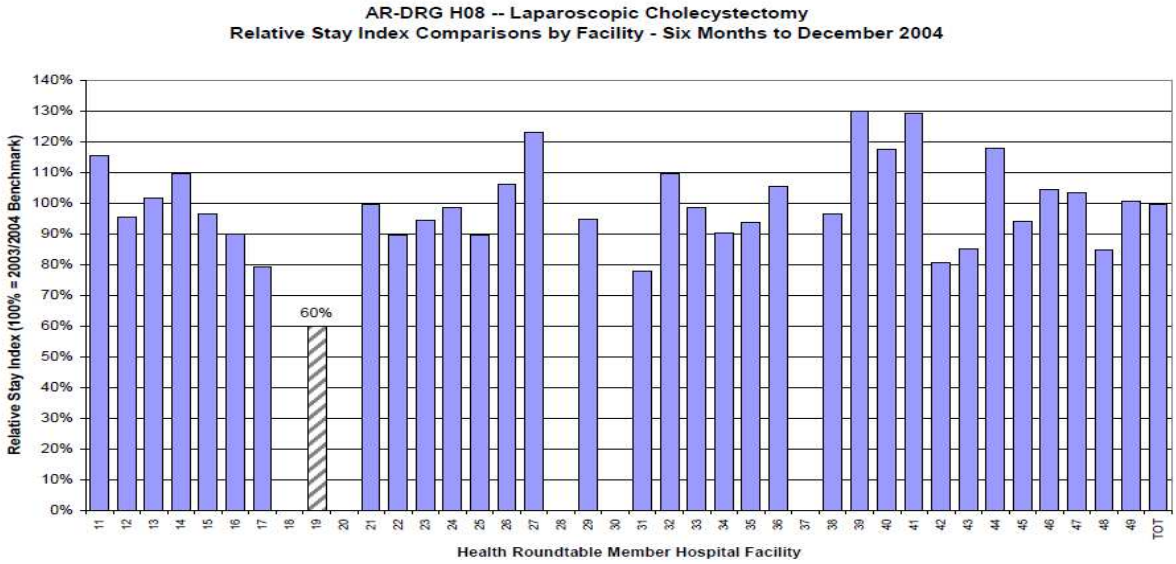
As discussed above, the reported justification for recalculating the numbers was that the DRG system used by government obscured key differences in length of stay by putting different types of patients into the same category (Dean, 2008). To further illustrate, patients who fractured their hips and arrived in hospital as emergency patients were included in the same category as those having elective hip surgery after weeks of pre-planning. Elderly patients with multiple co-morbidities were in the same category as younger, healthier patients. Patients transferred from community hospitals for specialised treatment were in the same category as emergency patients. These differences in type of patient across the member hospitals were adjusted for in order to make meaningful comparisons. To ensure the accuracy and relevance of the information provided by member hospitals, the Round Table met after every data submission, in order to review the methodologies underpinning the numbers and benchmarking processes.

Next a data mining approach was used to highlight innovations in managing patient length of stay using five variables within each AR-DRG: type of admission, source of admission, discharge destination, age group and co-morbidity level. The length of stay for each episode was compared to the HRT group average using each of these variables and a Relative Stay Index (RSI) value was calculated at the AR-DRG, specialty and hospital level. The analytical process reportedly focused on scanning the database for dramatic differences in clinical practices. This approach proved over time to highlight significant differences in practices across many AR-DRGs. To illustrate, Figure 3 shows relative stay comparisons for Laparoscopic Cholecystectomy patients. The results suggested that hospital “19” had an RSI of only 60% of the group average after adjusting for age, co-morbidity, arrival type, arrival source, and discharge destination. The closest peer hospital took almost a third longer to treat and discharge patients and three hospitals took more than twice as long. Hospital“19” used a same-day discharge protocol for the majority of patients undergoing a laparoscopic cholecystectomy (removal of gall bladder). In contrast, most of the other hospitals typically kept the patient in hospital overnight. During a Health Roundtable discussion of these differences, a spokesperson for Hospital “19” outlined the practices thought to remedy the different result:

1. All patients are screened for anaesthetic risk and only those who are classified as low risk are scheduled for same-day release (this is about 55% of all patients)
2. Patients who are candidates for same-day release have the operations in the morning, rather than afternoon
3. The surgical recovery area is scheduled to stay open until 7pm to allow more time for stabilization before sending the patient home
4. Each patient is provided with a special medication kit for pain control on the first night after surgery
5. A hospital staff member telephones the patient on the next day at home to assess progress and answer questions

Figure 3

Relative Stay Comparisons for AR-DRG H08 (Laparoscopic Cholecystectomy) amongst Health Roundtable members for patients discharged between July 2004 &December 2004



The comparisons were used to see how service provision compared with that of peers. In doing so, each hospital could identify areas where performance was different from peers. Members with superior performance were then invited to elaborate upon the practices they felt remedied the differences. After reflection, members were then encouraged to seek explanation of different practices and decide if they could be transferred to their own organizational settings. In conjunction with numbers reported to governments, some internally generated performance numbers were shared. These numbers reflected patient safety practices, operating theatre processes and operational backlogs. Additionally, special Round Table topics required other customised data collection and analysis.[12] Customised data collection incorporated retrospective or prospective surveys, as well as qualitative assessments of activities (HRT, 2008).[13] Comparisons were then made to identify difference and practices that remedied such difference discussed.

[12] The HRT (2008), *Everything you wanted to know about the Health Round Table*, Sydney.
[13] No data were collected that enables individual patients to be identified. Only statistical episode information was collected.

7. The roles of strategic benchmarking in institutional work

The empirical account presented above shows that accounting practices – such as benchmarking – take part in institutional work in a performative capacity. Performativity requires that accounting practices not only take part in describing the world but also in its formation (Espeland and Sauder, 2007; Millo and MacKenzie, 2009). Benchmarking is firstly public benchmarking; the institution of ranking and league tables. They are often considered as performative in the sense that they co-construct the entities that they rank because these entities have a tendency to organise such that they move higher into the ranking. This is partly the effect also suggested by the present study but there is an important caveat namely that it works in two dimensions. One is direct through the effects of coercive and tension-ridden sets of conflicts and searches for control and influence. The other more indirect route is via significant clarification work that happened by making numbers less convincing and in need for transformation. Only then could they become part of a different calculative arrangement whose effects, however, correlated with the ambitions of the direct route.

Surveyed and free space

The two routes can individually be described as two spaces of embedded agency: the surveyed space and the free space. An idealised, and therefore only initial, distinction between these two spaces is presented in table 3. Benchmarking is found in both places; the same data entered the two spaces but accounting practices differed: in the surveyed space benchmarking data followed institutionalised norms, while in the free space the same data were recalculated and related to new or potential organisational practices.

Table 3

Idealised logics of a surveyed and free space

Distinguishing Property	Surveyed space	Free space
Action	Discharges accountability between the hospital and the government. Concerned with general types of effects that allow comparison across hospitals.	Informs, learns from and innovates practice. An inter-organisational space of practitioners that investigate issues and concerns with a view to implementing contextualised practices.
Governance	Government entity with executive and statutory roles of the NSW Minister for Health/Medical Research. Monitor performance of the NSW public health system. Power to intervene in individual organizations (hospitals/Area Health Services) at a distance.	A non-profit organization that neither had nor wanted to have the right to intervene in the organization (hospitals). Created with a gatekeeper (the Managing Director) who led the process but who alone could not diffuse change. Hierarchical power is reduced.
Benchmarking process	Benchmarking driven by pre-set and standardised reporting and comparison between hospitals. Reporting periods clearly specified and ranking clearly articulated.	Benchmarking data starting point for dialogue oriented towards innovation. Recalculation made data useful; calculation always linked to examples of practices to explain differences. Explanations produced by teams adding insight and experience

		to the calculations. Recalculated benchmark data devices to commence dialogue and explanation.
Access and confidentiality	Obligatory space; individualising and hierarchical accountability. Transparency via public Yellow Book containing much information about all hospitals.	Voluntary space; hospital senior managers' gatekeepers for a free space and secrecy installed via Honour Code. Access only by invitation, and recalculated numbers not available to the public to secure confidentiality.
Role of solutions	Numbers reported without identification of the causes. Yet, numbers used for general resource allocation and calculation of DRG prices. Also pressures for improved performance.	Solutions required a link between cause and effect. Causes as actual or potential practices were suggested as options. Subsequent choices about adoption of practices deferred to hospitals. No obligation to choose any particular option.
Role of numbers	Numbers determine rank, average and deviation. They substitute practices and a-contextual. Decoupling a strategy to create distance between the organization and regulator. Practices and numbers seemingly inconsistent yet still mobilised by regulator.	Reworked benchmark data used to identify superior performance or significant improvements. Considerable relationship between numbers and the proposed practices which were presented simultaneously. Analysis added contingencies to the calculations and members participate in evaluating practices.

Table 3 suggests the surveyed space concerns ranking and comparison between hospitals. The action in the surveyed space parallels research that emphasises how accountability is related to calculable spaces (Miller, 1991; 2001), individualising accountability (Roberts, 1991), and rationality, objectivity and authority (Asdul, 2011). This enables action at a distance by comparing results and this form of relative performance has been noted to produce the 'average hospital' (Llewellyn and Northcott, 2005). It is well known that such action may produce resistance in the form of strategies to decouple the hospital from control (Brignall and Modell, 2000; Covaleski and Dirsmith, 1983; Modell *et al*., 2007). It also produces resistance in the form of passive service of reporting rules that are thought to be meaningless. The reporting rule is often considered to be a mere rule rather than a good representation of the hospital's activity; it follows procedure (McKernan, 2007; Mouck, 2004; Porter, 1995). Sometimes, accountability roles incorporate collectives organised as inter-organisational arrangements but then they often meet resistance and produce conflict (Kurunmäki and Miller, 2011).

It is well-known that such coercive isomorphic influence contributes to making hospitals similar and in the end 'average' as they all embark on solving the same problems (Llewellyn and Northcott, 2005). Problematisation happens by comparing hospitals on a series of standardised dimensions which motivates hospitals to act. Since the benchmark data are public, there is greater transparency and hospitals are called forth to account. However, this ranking does not work smoothly because hospitals resist by creating distance. Hospitals suggest that the ranking system does not reveal their operations and the conditions for their activity but use this insight to withdraw from interactions with institutional actors. The surveyed space is therefore neither solely a mechanism to create the average hospital, nor solely a mechanism for decoupling. Decoupling may create what is thought to be distortion of visibility; but it does not efface

central intervention. And financial allocation processes may require certain specified results, but results are found in so many directions that there are choices about which ones to prioritise. Therefore the surveyed space is not one thing; it has many logics.

In the surveyed space, the concern is with the problem of action at a distance. It is seemingly broken down in the surveyed space, but the irony is that central authorities have little minding of this: they change the DRGs and allocation of resources and tasks anyway based on what they have. The strategy to resist by not correcting calculations may be a weak one. The strategy of decupling works only to a degree because its effects return not around the issues that have been decoupled but on other issues arising from other uses of benchmark data. The surveyed space is directly political and conflictual. In the free space, power is much less articulated and present more indirectly. There is no free access to the free space and there is no freedom about how to problematize. This is a managerial agenda and interestingly, it seems to work more effectively than the surveyed space even on the issues pertaining to benchmarking. The Round Table still does institutional work but by inventing new insights and proposition that the general framework of surveyed benchmarking data cannot do.

In a different free space, hospitals add knowledge to calculations, and make numbers speak more clearly about things which then become better known. This makes the hospital singular and less average: different solutions for different hospitals. This action uses and transforms numbers in view of particular concerns, challenges, problems and situations which in turn are re-worked and re-organised to fit a new setting. Here, the numbers underpin actual and potential practices. There are conditions for these numbers; they are made complements by a collective of experts who make them count by recalculating them; there is a collective able to change and transform via experimentation through the numbers, not in spite of them. This collective provides ‘protection’ via an honour code that allows participants to show vulnerability and therefore engagement.

The free space is arguably about experimentation and innovation (Ahrens and Chapman, 2004; Jönsson, 1996; Wouters and Roijmans, 2011) which is favoured by absence from or lack of direct surveillance (Asdul, 2011). This is the condition that would favour people’s interest in speaking up and since no solution is an obligation, no-one can be held accountable to previous statements. In principle, there is no individualising accountability. Instead, benchmark data helps mobilise innovation by two movements. Firstly, they are recalculated to serve more distinct objectives than its fixed format found in the surveyed space acknowledges; recalculation is a process of finding out the knowledge and resources relevant to the experimentation taking place (Jönsson, 1996; Wouters and Roijmans, 2011). Recalculation brings new insights from benchmark data and what are considered more precise conditions are taken into account. This recalculation is understood as necessary because the surveyed calculations are understood as deficient in important respects. Secondly, all calculations are associated with local practices. The calculation and the practice go hand in hand and therefore the possible boundary between benchmark data

and practical work is made less visible (Llewellyn, 1998). The combination of accounting knowledge and practical insight is a new object which can be practiced in a series of ways. It is an experiment because the dialogue will question and develop its forms and effects. It is not only a calculation but also a piece of practice whose boundaries and effects are both part of the innovation. The innovation is part of its evaluation.

This theme follows Zietsma and Lawrence (2010) proposition that actors may innovate not by stepping outside of influences but, rather, by constructing new boundaries that shield them from the sanctions to which they would otherwise be exposed. This draws on the idea of social movement "free spaces" (Gamson, 1996) in which reformers can interact without being observed, and relational spaces (Kellogg, 2009), in organizational groups can experiment with new practices. Zietsma and Lawrence (2010) found that whether within or between organizations or among social movement members, institutional innovation appears to be enabled when boundaries around experimental spaces protect projective agency from institutional discipline. Kellogg's (2009) work which added to our understanding of micro-institutional change by demonstrating that, in the face of resistance by defenders of the status quo, the emergence of relational efficacy, identity, and frames are necessary for change to occur, and relational spaces are at least one route to getting there.

The difference of roles is more the way in which the accounting calculation is related to its references: institutional practices substitute the hospital by the accounting practices and remove the complexity of the situation. In contrast, in the strategic role, accounting practices are complementary with the hospital practices. This means that the calculation is a complement to the practice; the calculation is crafted in such a way that it can travel from one hospital to another along with the practice it helps to investigate and develop. The question is always how a calculation may be a challenge to an example of a hospital practice and gives rise to transforming it and moving it to its new form and place in another hospital. In the accountability role this question is never asked. The intuitional calculation is separated from its practice and returns only in a generalised form.

The roles of accounting practices (benchmarking) in institutional work

Accounting calculations – benchmark data – are involved in institutional transformation because they mediate between 'micro' and 'macro' (Kurunmäki and Miller, 2011). They bring time and space into play since as benchmark data they appear continuously and everywhere; they are continuously part of the equipment that meets people when they act on the world (Callon, 1998; Callon and Muniesa, 2005; Skærbæk and Tryggestad, 2010). The benchmark data do not describe all the concerns that the Round Table puts into them. The precise concerns are found out when the benchmark data are translated, that is when they are attached to specific examples of practice. This operation links benchmark data to actual and possible interventions that roundtable participants can contemplate. This combination of knowledge

about things and the things themselves makes the free space an experimental one. It allows the things (such as a practice) to be described and evaluated at the same time. The power of the benchmark data lies not only in their ability to make things visible; its power is underscored as the practices are understood from the perspective of the benchmark data. This persuades people to make things even more visible or visible in ways that were initially unimaginable. This initially unimaginable space in turn also challenges benchmarking data which can be recalculated to illuminate new ideas and proposed experiments. Since benchmark data literally do not reflect more than a difference between two calculations, they build no direct sense of representation which would make knowledge about the world difficult. Yet, because of the Round Table benchmark data are related to a practice it is possible to develop new knowledge and transport ideas from one place to another as authoritatively illustrated by Sten Jönsson (e.g.Jönsson, 1996; Jönsson and Grönlund, 1988) and which recently has been termed enabling uses of accounting information (Ahrens and Chapman, 2004; Wouters and Roijmans, 2011). This happens in a free space.

To participants the freedom of the free space is freedom from being directly surveyed. There is absence of explicit accountability. It is a place away from one where everything could be seen. Therefore it is also a place where people, in principle, can allow themselves to be vulnerable, experimental and engaged in search. They do not have to have solutions, as managers presenting themselves in the surveyed space have to; they can be more experimental. Benchmark data are institutional mechanisms but they are different from even if likely related to institutional logics (Lounsbury, 2008; Preston, Cooper and Coombs, 1992; Preston, Chua and Neu, 1997); institutional logics may not only repair imperfect calculations (Dambrin and Robson, 2011) but instead they may be mediated by calculations. They are the material mechanisms of mediation (while logics remain immaterial and abstract norms, culture and principles) which link concerns across hospitals to each other. Benchmark data's materiality allows them to circulate into and out of the spaces: they are everywhere; they can travel (Latour, 1986; Robson, 1992). This property makes the benchmark data not only mundane and ordinary but also generally available and understandable; they are framing devices that help to problematize, to make sense of and to develop strategies to reduce their problematical message. Just like ranking systems may perform or react on the objects they purport to describe (Espeland and Sauder, 2007; Kornberger and Carter, 2010), benchmark data perform – motivate, engage, ask questions and bring concerns about – hospitals' future. Benchmark data are related to claims made about a preferred future.

This observation explains institutional change less as battles between institutional logics (Lounsbury, 2008; Lounsbury and Crumley, 2007) and more as negotiation of common representations such as benchmark data and calculations. Such representations are material objects that do not require battles between logics because it is possible for participants to compromise on other things than logics; institutional change does not have to bring hybridisation between two or more logics about (Kurunmäki and Miller, 2011). Cooperation does not have to be 'fundamental' and thus about logics but can be about

immediate concerns (Latour, 2008). Logics are more ex post rationalisations of a complex set of activities and interactions than the causes of institutional transformation. They cannot be causes because they remain immaterial; during Round Table meetings logics were never aired as justifications. Justifications were materially oriented towards the effects on hospital practices of changed institutional work. Institutional work is practical; benchmark data introduce certain broader concerns to work situations but these concerns are not institutionalised as logics. They may be related to a range of different logics but they are not these logics themselves. They bring broader concerns because their existence extends far in time and space; arriving from history benchmark data is part of current work activities across spaces. Therefore, as practice, logics are substituted by materiality that produces large time-space distanciation such as benchmark data. The institutional reproduction of relations between hospitals and governments in surveyed spaces is informed by benchmarking data just as the transformation of hospitals is informed by benchmarking data in free spaces.

Institutional work is made possible by accounting practices as benchmark data. They are practical. They have, however, possibly a stronger role to play than what is usually ascribed to them by institutional theory where it is a small devise to make logics operable and which has a strong degree of interpretive flexibility and bendability to concerns suiting logics (Battilana, Leca and Boxenbaum, 2009; Labatut, Aggeri and Girard, 2012; Lounsbury, 2008). However, in the case of hospitals' institutional work to mobilise benchmarking data, empirical evidence does not give any examples of the role of grand social logics, cultural resources and legitimating conformity; they are empirically absent. What is present are accounting practices that though benchmarking data articulate wider requirements and motivate concerns for change. In practice, benchmarking data have substituted logics. Logics are rationalisations that arrive much later than the practices of institutional change and they become a short hand for many complex developments that have taken place prior to formulating the grand logics. Logics may not be causes but effects; they may be the outcome of a process of simplification where all the complexities of the situation have been dealt with. Logics are therefore too simple to account for change; it is less a cause of institutional work than an effect of summarising the consequences of institutional work (Latour, 1986, pp. 28-29).

Another option is handier: the network does the problematisation in order to improve. The managerial technology is a starting point in problematizing affairs. They do not do this outside the network that mobilises it; the free space does all of it. It is likely that many things happen outside the strategic role; it is likely that discourses of improvement taking place far away in regulators' offices may be different to the discourse of the free space. The problem is that the far away discourses are far away. It they are there, which cannot be known, they have to be there by proxy. What is known is that problematisation takes place in the network; and it is known that the accounting practices, the benchmarking data, inform this problematisation. The benchmark information allows people to be

reflexive; they can ask general question because of the accounting practice. This is how accounting practices induce some degree of performativity; they give voice and structure too certain arguments which, if taken seriously, defines the rationality that can be exercised in the moment. The accounting practice develops a vocabulary that defines the 'world' that is possible to take 'rationally' or 'knowledgeably' into account. This performativity does challenge institutional theory's prioritisation of the broader conditions which it understands as the premises for change. The alternative is to consider the broader 'conditions' as the outcome of practices that have reached a certain stability; a level of black boxing (Latour, 1987; 2005). Then the institutional characteristics understood as logics, culture and mentalities would simply be short hand descriptions of a settlement that, at least for a while, can be understood as stable. In this case, institutional characteristics are descriptive more than causal of practices.

In the case of the Roundtable, people participated voluntarily and yet they had to speak into the problematisation provided by benchmarking data; they had to have a dialogue about examples of hospital practices and they had to not reveal the details of the undertakings. This is not determinism, but neither is it voluntarism. It is network activity; if an actor wanted to be part of network activity this actor has to persuade some others about their concerns; these concerns are then met by others concerns and this is the 'battle ground'. This is neither an autonomous rational person because rationality is defined in the situation e.g. by the framing developed by accounting practices. Rationality is relational. Neither is this a determined action because anyone in principle can influence the course of affairs, in principle it is difficult to know what is determined and what is voluntary because all action is mediated by the actions of any other human and non-human actor. In this case, no one is overly rational; rationality is bounded and framed e.g. by the accounting practice. No one is determined; determination depends on the relationships that develop between human and non-human actors (Joerges and Czarniawska, 1998). The Roundtable shows this relatively clearly: benchmark information made problematisation possible; dialogue developed interest and the contours of solutions; people brought with them a concern for health care. The outcome was propositions of changed practices some of which would be new to the institutional setting including new forms of division of labour between clinicians and nurses; other new practices would just have more quality or productivity.

The only practice that coupled the different spaces together was the accounting practice – the benchmarking system. This is a rewarding starting point for institutional analysis and for the analysis of institutional work (Labatut, Aggeri and Girard, 2012; Lawrence, Suddaby and Leca, 2009). Accounting calculations such as benchmark systems are constitutive and performative in the sense that they motivate and engage action; their capacity to do this is their ability to reach far in time and space – in history and across settings – to make concerns travel since they are material. It is possible to account for institutional reproduction and transformation in a simple way; the grand logics, cultures and mentalities are useful summaries of stabilised and black boxed behaviour but they do not explain transformation (Callon and

Latour, 1981). The managerial technology is an interesting candidate for a more obvious and empirical explanation. Recourse to idealism is problematical. Instead of a gulf between two mentalities, it is noteworthy how accounting practices – the benchmarking data (numbers) – provide an insisting relationship between the accountability and the strategic role. The benchmarking data (numbers) have roles in both spaces and extend the institution to the free space; vice versa the reworking of the benchmarking data helps to develop institutional entrepreneurs. The benchmark numbers (accounting practices) are the mediators that link surveyed and free behaviour.

Thus, ultimately the roles are interrelated. This finding is consistent with Adler and Borys (1996) who hinted at the interrelatedness of coercive and enabling roles. In accounting, Roberts (1991) argued that the search for the possibilities of accountability should be oriented toward reconciling the divide between roles. Roberts (1991, p.367) extended this argument saying the divide between roles of accountability appeared a form of reciprocal denial of what is unavoidable interdependence of action within the organization and between the organizations and the communities in which it operates. The interrelatedness of roles is not in mentalities, cultures or rationalities; it is not in questions about position and status in an institutional context; nor is it in concerns with the heroic individual which can act outside the institutions (Czarniawska, 2009). These explanations point towards a series of dualisms that presume separated worlds. These worlds can be made understandable by attention to the technologically mediating practices (such as numbers) which traverse these roles and thus show their connectedness (Joerges and Czarniawska, 1998). Considering accountability and strategic roles (or spaces) as separate ontological entities makes little sense; they are both present in the same world and only separated by organisation, not by ontology. They are social lives that are differently equipped, and yet linked by mediation via, for example, accounting. This is a rewarding explanation that does not require recourse to abstract and meta-physical notions of separate mentalities, rationalities or cultures.

8. Conclusions and implications

This paper analyses roles of benchmarking by hospitals. Accountability benchmarking had a separate role that enabled transparency, made activities visible and proved they make a difference (see Roberts, 1991). The numbers however exclude contingencies and this role is discussed in some literature as leading to average hospitals. Our findings suggest that accountability benchmarking was primarily a practice of satisfying institutional requirements while recognising that mechanisms for developing and transforming hospitals are separate. For the latter purpose, strategic roles which are more reflexive can co-exist. The strategic role took much of the benchmarking data from the accountability role and made it transforming via recalculation. It was reflexive because it coupled practices with calculations.

Both benchmarking roles were informed by numbers and concerned with improving in two ways. The accountability role is concerned with average and lifting everybody above the average, while the

strategic role views the hospital as a space in need of singular and specified improvement activities. The benchmarking numbers are repaired in the free space to introduce contingencies so practices that accounted for difference could be identified and reformulated. In the accountability role numbers are divorced from practices whereas in the strategic role they were complements to practice. The study shows the numbers (accounting practices) as an enabling or shared resource used by a collective (inter-organizational) effort for innovation.

The conventional dualism between institutional and entrepreneurial behaviours is founded on idealist distinctions between rationalities, mentalities or culture. The present study shows that another mechanism may account for this difference in at least as satisfying ways: the accounting technology! It is found in both benchmarking roles and draws together a series of institutionalised concerns: ultimately a concern for efficiency and effectiveness. The accounting calculation exists as a problematizing device in both spaces. Therefore, it is able to traverse the spaces and bring common rationalities, objectivities and authorities in play even in different ways. The two spaces are different even if they load on parallel institutional legitimation. The accountability role treats accounting numbers as a substitute for practices, while the free space has more equipment and treats accounting numbers as complements to practices.

As with all research, this study is subject to limitation. To mitigate limitations associated with field study and issues of credibility, data were gathered using a longitudinal research design over 48 months. Mitigation strategies were applied to preserve credibility at all stages of the research. It is felt that 48 months in the field did facilitate the study of complex phenomena relating to the roles of benchmarking and contrasting such roles. Another limitation of the research is that owing to confidentiality issues and the Honour Code, the researchers were unable to observe Health Roundtable meetings directly and therefore compelled to rely on other sources of evidence. Opportunities for further research stem from gaining more detailed accounts of how participants of relational spaces experiment and then adapt practices to suit their own unique operating environments when they return to individual hospital. This research analysed conditions that enabled change in a highly institutionalised and mature setting of public hospitals. Future work may identify the conditions in other settings by building on the theoretical and empirical findings of this research.

9. References

Abbott, A. (1988). *The system of professions: an essay on the division of expert labor*. Chicago: The University of Chicago Press.

Abernethy, M.A and Chua, W.F. (1996). A field study of control system "redesign": the impact of institutional processes on strategic choice. *Contemporary Accounting Research*, 13/2, 569-606.

Adler, P.S., and Borys, B. (1996). Two types of bureaucracy: enabling and coercive. *Administrative Science Quarterly*, 41:1, 61-89.

Ahrens, T., and Chapman, C.S. (2002). The structuration of legitimate performance measures and management: day-to-day contests of accountability in a U.K. restaurant chain. *Management Accounting Research*, 13, 131 – 171.

Ahrens, T. and Chapman, C. S. (2004) 'Accounting for Flexibility and Efficiency: A Field Study of Management Control Systems in a Restaurant Chain', *Contemporary Accounting Research*, 21 (2), 271-301.

Ahrens, T., and Chapman, C.S. (2004). Accounting for flexibility and efficiency: a field study of management control systems in a restaurant chain. *Contemporary Accounting Research*, 21:2, 271 – 301.

Ahrens, T., and Chapman, C.S. (2006). Doing qualitative field research in management accounting: positioning data to contribute to theory. *Accounting, Organizations, and Society*, 31, 819 – 841.

Ahrens, T., and Chapman, C.S. (2007). Management accounting as practice. *Accounting, Organizations and Society*, 32, 1-27.

Ahrens, T., and Dent, J. (1998). Accounting and organisations; realising the richness of field research. *Journal of Management Accounting Research*, 9, 1-39.

Allen, P. (1970). Free *space: A perspective on the small group in women's liberation*, New York: Times Chicago Press.

Ansari, S., and Euske, K. (1987). Rational rationalizing and reifying uses of accounting data in organizations. *Accounting, Organizations and Society*, 12/6, 549-570.

Asdal, K. (2011). The office: the weakness of numbers and the production of non-authority. *Accounting, Organizations and Society*, 36, 1-9.

Australian Institute of Health and Welfare (AIHW). (2005). Australian hospital statistics 2003-04. AIHW cat no. HSE 37. Canberra: AIHW (Health Services Series no.23).

Battilana, J., Leca, B., and Boxenbaum, E. (2009). How actors change institutions: towards a theory of institutional entrepreneurship. *The Academy of Management Annals*, 3:1, 61-107.

Baxter, J., and Chua, W.F. (1998). Doing field research practice and meta-theory in counterpoint. *Journal of Management Accounting Research*, 10, 69-88.

Bowker, G. C., and Star, S. L. (1999). *Sorting things out: classification and its consequences*, Cambridge, MA: The MIT Press.

Brignall S., Modell S., (2000). An institutional perspective on performance measurement and management in the 'new public sector'. *Management Accounting Research*, 11 (3): 281-306.

Brown, H.S., Jong, M., and Lessidrenska, T. (2007). The rise of the global reporting initiative (GRI) as a case of institutional entrepreneurship. Corporate Social Responsibility Initiative. *Working Paper No. 36*. Cambridge, MA: John F. Kennedy School of Government

Bruton, G., Ahlstrom, D., and Han-Lin, L. (2010). Institution theory and entrepreneurship: where are we now and where do we need to move in the future. *Entrepreneurship Theory and Practice*, (May), 421-440.

Buckho, Aaron A. (1994). Barriers to strategic transformation, in book Shrivastava, Paul; Huff, Anne S. & Dutton, Jane E. (eds.). *Advances in Strategic Management*, 10, 81-106. JAI Press, Greenwich.

Burns, J. (2000). The dynamics of accounting change: inter-play between new practices, routines, institutions, power and politics. *Accounting, Auditing and Accountability Journal*, 13, 566-596.

Burns, J., and Baldvinsdottir, G., (2005). An institutional perspective of accountants new roles – the interplay of contradictions and praxis. *European Accounting Review*, 14, 725-757.

Callon M., Latour B., (1981). Unscrewing the big Leviathan: how actors macro-structure reality and sociologists help them to do so. *In Advances in Social Theory and Methodology. Towards an integration of micro- and macro-sociologies*, Knorr-Cetina K and Cicourel AV (eds). Routledge and Kegan Paul: London; 277-303.

Callon, M. (1998) 'Introduction: the embeddedness of economic markets in economics' in M. Callon (ed). The Laws of the Market. Oxford: Blackwell/The Sociological Review, pp. 1-57.

Callon, M. and Latour, B. (1981) 'Unscrewing the big Leviathan: how actors macro-structure reality and sociologists help them to do so' in K. Knorr-Cetina and A. V. Cicourel (eds). Advances in Social Theory and Methodology. Towards an integration of micro- and macro-sociologies. London: Routledge and Kegan Paul, pp. 277-303.

Callon, M. and Muniesa, F. (2005) 'Economic Markets as Calculative Collective Devices', Organization Studies (01708406), 26 (8), 1229-1250.

Chapman, C. (1998). Accountants in organisational networks. *Accounting, Organizations and Society*, 23, 8, 737-766.

Child, C, Yu, L. and Tsai, T. (2007) Institutional entrepreneurship in building an environmental protection system for the people's republic of China. *Organization Studies*, 28:7, 1013-1034.

Chua, W.F. (2007). Accounting, measuring, reporting and strategizing – re-using verbs: a review essay. *Accounting, Organizations and Society*, 32, 487-494.

Clemens, E., and Cook, J. (1999). Politics and institutionalisation: explaining durability and change. *Annual Review of Sociology*, 25, 441-466.

Covaleski M.A., Dirsmith M.W., (1983). Budgeting as a means for control and loose coupling. *Accounting, Organizations and Society* 8 (4): 323-340.

Covaleski, M., and Dirsmith, M. (1988). The use of budgetary symbols in the political arena: a historically informed field study. *Accounting, Organisations and Society*, 13, 1, 1-24.

Czarniawska, B. (2009). Emerging institutions: pyramids or anthills? *Organization Studies*, 27:7, 423-441.

Dacin, M. T., Goodstein, J., and Scott, W.R. (2002). Institutional theory and institutional change: introduction to the special research forum. *Academy of Management Journal*, 45: 1, 45-57.

Dambrin, C. and Robson, K. (2011) 'Tracing performance in the pharmaceutical industry: ambivalence, opacity and the performativity of flawed measures', Accounting, Organizations and Society, .

David, R., Sine, W. and Haveman, H. (2012). Seizing opportunity in emerging fields: how institutional entrepreneurs legitimated the professional form of management consulting. *Organization Science*, Articles in Advance April, 1-22.

Dean, D (2007), Using data mining of inpatient episode data to search for innovative practices across Australia and New Zealand, The Health Round Table Limited, Sydney.

Denzin, N. (1978a). *The research act in sociology*. New York, McGraw-Hill.

Denzin, N. (1978b). The logic of naturalistic inquiry, in N.K. Denzin [Ed.] *Sociological methods: a source book*. New York: McGraw Hill.

Denzin, N.K. (1989a). *The research act: a theoretical introduction to sociological methods*. Englewood Cliffs, N.J.: Prentice-Hall.

Denzin, N.K. (1989b). Interpretive Interactionism. *Applied Social Research Methods Series*, 16, California, Sage Publications.

Denzin, N.K., and Lincoln, Y.S. (2000). The discipline and practice of qualitative research, in N.K. Denzin and Y.S. Lincoln (Eds.), *Handbook of Qualitative Research*. Thousand Oaks: CA, Sage Publications, 2nd Edition, pp. 1-28.

Department of Health. (2009). *Annual Report – NSW Department of Health*. November 2009, North Sydney.

Department of Health. (2010). *Annual Report – NSW Department of Health*. November 2010, North Sydney.

DiMaggio, P.J. (1988). Interest and agency in institutional theory, in Lynne Zucker (Ed.), *Institutional patterns and organizations*. edited Lynne Zucker (pp. 3–22). Cambridge, MA: Ballinger.

DiMaggio, P.J., and Powell, W.W. (1983). The iron cage revisited: institutional isomorphism in organizational fields. *American Sociological Review*, 48, 147-160.

Droege, S., and Marvel, M. (2010). Process mechanisms of institutional entrepreneurship. *Journal of Developmental Entrepreneurship*, 15:2, 205-230.
Eisenstadt, S. N. (1980). Cultural orientations, institutional entrepreneurs, and social change: Comparative analysis of traditional civilizations. *American Journal of Sociology*, 85: 840-869.
Espeland, W. N. and Sauder, M. (2007) 'Rankings and Reactivity: How Public Measures Recreate Social Worlds', American Journal of Sociology, 113 (1), 1-40.
Evans, S and Boyte, H. (1986). *Free spaces: The sources of democratic change in America*, New York: Harper and Rowe.
Evans, S. (1979). *Personal Politics*, New York: Vintage Books.
Fantasia, R., and Hirsch, E. (1995). Culture in rebellion: the appropriation and transformation of the veil in the Algerian revolution. Pp. 144-159. *In Social Movements and Culture,* Johnston, H and Klandermans, B (eds). Mineapolis, University of Minnesota Press.
Ferreira, L.D., and Merchant K.A. (1992). A review and evaluation. *Accounting Auditing and Accountability Journal*, 5, 3-34.
Fligstein, N. (1997). Social skill and institutional theory. *American Behavioral Scientist,* 40 (4): 397-405.
Fligstein, N. (2001). Social skills and the theory of fields. *Sociological Theory,* 19 (2): 105-125.
Fligstein, N., and MaAdam, D. (2010). Towards a general theory of strategic action fields. Working Paper Series: Institute for Research on Labour and Employment, UC Berkeley.
Frandsen, A. (2009). From psoriasis to a number and back. *Information and Organization*, 19, 103-128.
Freddi, G., and Bjorkman, W. (eds.) (1989). *Controlling medical professionals: the comparative politics of health governance*. Sage Publications, London.
Gamson, W. (1996). Safe spaces and social movements. in Gale Millerand James A. Holstein (eds) *Perspectives on Social Problems* 8: 27-38. Greenwich, CT: JAI Press 27-38.
Garud, R, Hardy, C. & Maguire, S. (2007). Institutional entrepreneurship as embedded agency: an introduction to the special issue. *Organization Studies*, 28(7): 957-969.
Geertz, C. (1988). *Works and lives: anthropologist's author*. Cambridge, MA: Polity Press.
Giddens, A. (1984). *The constitution of society*. Berkeley: University of California Press.
Granovetter, M. (1985). Economic action and social structure: the problem of embeddedness. *American Journal of Sociology*, 91:3, 481-510.
Greenwood, R., and Hinings, C.R. (1996). Understanding radical organizational change: bringing together the old and the new institutionalism. *Academy of Management Journal*, 21:4, 1022-1054.
Greenwood, R., and Suddaby, R. (2006). Institutional entrepreneurship in mature fields: the big five accounting firms. *The Academy of Management Journal*, 49:1, 27-48.
Habermas, J. (1984). *The theory of communicative action*. vol 1. T McCarthy trans, Bosyon: Beacon Press.
Harrison, S., and Pollitt, C. (1994). *Controlling health professionals*. Open University Press, Buckingham.
Hopper, T., Storey, J. and Willmott, H. (1987) 'Accounting for accounting: Towards the development of a dialectical view', Accounting, Organizations and Society, 12 (5), 437-456.
Hoskin, K. and Macve, R.,K. (1986) 'Accounting and the examination: A genealogy of disciplinary power', *Accounting, Organizations and Society*, 11 (2), 105-136.
Independent Pricing and Regulatory Tribunal of New South Wales [IPART]. (2003). NSW Health – Focusing on Patient Care. Sydney.
Independent Pricing and Regulatory Tribunal of New South Wales [IPART]. (2008). NSW Health - Framework for Performance improvement in health, Sydney.
Inspirit Management Services, (2003). Review: *Using information to drive change in NSW public hospitals: in an independent pricing and regulatory tribunal of New South Wales, NSW Health: focusing on patient care.* Sydney.
Joerges B., Czarniawska B., (1998). The question of technology, or how organizations inscribe the world. *Organization Studies,* 19 (3), 363-385.
Joerges, B. and Czarniawska, B. (1998) 'The Question of Technology, or How Organizations Inscribe the World', Organization Studies, 19 (3), 363-385.
Johnston, H., (2011). States and social movements. Malden, MA: Polity Press.

Jönsson, S. (1996) Accounting for improvement. Oxford: Pergamon.
Jönsson, S. and Grönlund, A. (1988) 'Life with a sub-contractor: New technology and management accounting', Accounting, Organizations and Society, 13 (5), 513-532.
Kellogg, K. (2009). Operating room: relational spaces and microinstitutional change in surgery. *Journal of Sociology*, 115 (3), 657-711.
Koene, B.A.S. (2006). Situated human agency, institutional entrepreneurship and institutional change. *Journal of Organizational Change Management*, 19:3, 365-382
Kornberger, M. and Carter, C. (2010) 'Manufacturing competition: how accounting practices shape strategy making in cities', Accounting, Auditing & Accountability Journal, 23 (3), 325-349.
Kurunmaki, L. (1999). Making an accounting entity: the case of the hospital in Finnish health reforms. *European Accounting Review*, 8:2, 219-237.
Kurunmaki, L. (1999). Professional vs financial capital in the field of health care- struggles for the redistribution of power and control. *Accounting, Organisations and Society*, 24, 95-124.
Kurunmaki, L. (2003). Accountingization v. legitimation: a comparative study of the use of accounting information in intensive care. *Management Accounting Research*, 14, 112-139.
Kurunmaki, L. (2004). A hybrid profession: the acquisition of management accounting expertise by medical professionals. *Accounting, Organisations and Society*, 29:3/4, 327-348.
Kurunmäki, L., and Miller P. (2011). Regulatory hybrids: Partnerships, budgeting and modernising government. *Management Accounting Research*, 22 (4): 220-241.
Kurunmaki, L., and Miller, P. (2008). Counting the costs: the risks of regulating and accounting for health care provision. *Health, Risk and Society*, 10:1, 9-21.
Labatut, J., Aggeri, F. and Girard, N M. (2012). Discipline and change: how technologies and organizational routines interact in new practice variation. *Organization Studies*, 33:1, 39 -69.
Latour, B., (1986). Visualisation and cognition: drawing things together. *Knowledge and Society: Studies in the Sociology of Culture and Present*, 6: 1-40.
Latour, B., (1987). *Science in action, how to follow scientists and engineers through society*. Cambridge,
Latour, B. (2005) Assembling the Social. Oxford: Oxford University Press.
Latour, B. (2008) What is the style of mattes of concern? Amsterdam: Van Gorcum.
Mass.
Lawrence, T. B., Suddaby, R. and Leca, B. (2009) 'Introduction: theorizing and studying institutional work' in T. B. Lawrence, R. Suddaby and B. Leca (eds). Institutional Work.Actors and Agency in Institutional Studies of Organizations. Cambridge: Cambridge University Press, pp. 1-10.
Lawrence, T., Hardy, C. and Phillips, N. (2002). Institutional effects of interorganizational collaboration: the emergence of proto-institutions. *Academy of Management Journal*, 45, 1, 281–290.
Leca, B., Battilana, J., and Boxenbaum, E. (2008). *Agency and institutions: a review of institutional entrepreneurship*. Working Paper.
Levy, D and Scully, M. (2007). The institutional entrepreneur as modern prince: the strategic face of power in contested fields, *Organization Studies*, 28:7, 971-991.
Lincoln, Y.S., and Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA, Sage Publications Inc.
Llewellyn S., Northcott D., (2005). The average hospital. *Accounting, Organizations and Society* 30 (6): 555-583.
Llewellyn, S. (1993). Working in hermeneutic circles in management accounting research: some implications and applications. *Management Accounting Research*, 4, 3, 231-250.
Llewellyn, S. (1998) 'Boundary work: Costing and caring in the social services', *Accounting, Organizations and Society*, 23 (1), 23-47.
Llewellyn, S. (2001). 'Two way windows': clinicians as medical managers. *Organization Studies*, 22, 593-624.
Llewellyn, S. and Northcott, D. (2005) 'The average hospital', Accounting, Organizations and Society, 30 (6), 555-583.
Lockett, A., Currie, G., Waring, J., Finn, R and Martin, G. (2012). The role of institutional entrepreneurs in healthcare. *Social Science & Medicine*, 74, 356-363.

Lounsbury, M. (2002). Institutional transformation and status mobility: the professionalization of the field of finance. *The Academy of Management Journal*, 45:1, 255-266.
Lounsbury, M. (2008). Institutional rationality and practice variation: new directions in the institutional analysis of practice. *Accounting, Organizations and Society*, 33, 349 -361.
Lounsbury, M. and Crumley, E. T. (2007) 'New Practice Creation: An Institutional Perspective on Innovation', Organization Studies (01708406), 28 (7), 993-1012.
Lounsbury, M., & Glynn, M.A. (2001). Cultural entrepreneurship: stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22, 545–564.
Lounsbury, M., (1998). Collective entrepreneurship: the mobilisation of college and university recycling coordinators. *Journal of Organization Change Management*, 11, 1, 50–69.
Lounsbury, M., and Crumley, E., (2007). New practice creation: an institutional perspective on innovation. *Organization Studies*, 28:7, 993-1012.
Lounsbury, M., and Glynn, M.A. (2008). Cultural entrepreneurship: stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22, 545-564.
Lukka, K., and Kasanen. E. (1995). The problem of generalizability: anecdotes and evidence in accounting research. *Accounting, Auditing and Accountability Journal*, 8 5, 71-90.
Lukka, K., Modell, S. (2010). Validation in interpretive management accounting research. *Accounting, Organizations and Society*, 35, 462-477.
McKernan J.F., (2007). Objectivity in accounting. *Accounting, Organizations and Society*, 32 (1–2): 155-180.
Mennicken, A., and Miller, P. (2012). Accounting, territorialization and power. *Foucault Studies*, 13, 4-24.
Meyer, J.W., and Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83, 340-363.
Miles, M., and Huberman A. (1994). *An expanded sourcebook: qualitative data analysis.* Second Edition, Sage Publications Inc, Beverly Hills.
Miller P., (1991). Accounting and objectivity. The invention of calculating selves and calculable spaces. *Annals of Scholarship* 9: 61-85.
Miller P., (2001). Governing by numbers: why calculative practices matter. *Social Research*, 68 (2): 379-396.
Miller, P. (1991) 'Accounting and Objectivity. The Invention of Calculating Selves and Calculable Spaces', Annals of Scholarship, 9 61-85.
Miller, P. (2001) 'Governing by numbers: why calculative practices matter', Social Research, 68 (2), 379-396.
Millo, Y. and MacKenzie, D. (2009) 'The usefulness of inaccurate models: Towards an understanding of the emergence of financial risk management', Accounting, Organizations and Society, 34 (5), 638-653.
Modell S., Jacobs K., Wiesel F., (2007). A process (re)turn?: Path dependencies, institutions and performance management in Swedish central government. *Management Accounting Research* 18 (4): 453-475.
Modell, S. (2000). Integrating management control and human resource management in public health care: Swedish case evidence. *Financial Accountability & Management*, 16, 33-53.
Modell, S. (2001). Performance measurement and institutional processes: a study of managerial responses to public sector reform. *Management Accounting Research*, 12:4, 437 – 464.
Modell, S. (2003). Goals versus institutions: the development of performance measurement in the Swedish university sector. *Management Accounting Research*, 14, 333-359.
Modell, S. (2004). Performance measurement myths in the public sector: a research note. *Financial Accountability & Management*, 20/1, 39-53.
Modell, S. (2005). Students as consumers? An institutional field-level analysis of the construction of performance measurement practices. *Accounting, Auditing and Accountability Journal*, 18, 537-563.

Modell, S., Jacobs, K., and Wiesel, F. (2007). A process (re)turn? Path dependencies, institutions and performance management in Swedish central government. *Management Accounting Research*, 18, 453-475.

Morris, M., and Jones, F., (1999). Entrepreneurship in established organizations: the case of the public sector. *Entrepreneurship Theory and Practice Fall*, 71-91.

Mouck T., (2004). Institutional reality, financial reporting and the rules of the game. *Accounting, Organizations and Society* 29 (5–6): 525-541.

Mouritsen J., (1999). The flexible firm: Strategies for a subcontractor's management control. *Accounting, Organizations and Society*, 24 (1): 31-55.

Mouritsen J., Hansen A., Hansen CØ., (2009). Short and Long Translations. Management accounting calculations and innovation management. *Accounting, Organizations and Society* 34 (6/7): 738-754.

Mutch, A. (2007). Reflexivity and the institutional entrepreneur: a historical explanation. *Organization Studies*, 27:7, 1123-1140.

Nicholls, A., (2010). The legitimacy of social entrepreneurship: reflexive isomorphism in a pre-field. *Entrepreneurship Theory and Practice*, (July), 611-633.

Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16, 1, 145-179.

Parecho, D., York, J., Dean, T., and Sarasvathy, S. (2010). The coevolution of institutional entrepreneurship: a tale of two theories. *Journal Management*, 36:4, 974-1010.

Perkmann, M., and Spicer, A (2007). 'Healing the scars of history': projects, skills and field strategies in institutional entrepreneurship, *Organization Studies*, 28:7, 1104-1122.

Pettersen, I.J. (2004). From bookkeeping to strategic tools? A discussion of the reforms in the Nordic hospital sector. *Management Accounting Research*, 15, 319-335.

Polletta, F. (1999). "Free spaces" in collective action. *Theory and Society*, 28, 1-38.

Polletta, F. (2002).Freedom is an endless meeting: Democracy in American social movements, Chicago: University of Chicago Press.

Porter T.M., (1995). *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton University Press: Princeton, New Jersey.

Preston, A. M., Chua, W. and Neu, D. (1997) 'The Diagnosis-Related Group-Prospective Payment System and the problem of the government of rationing health care to the elderly', Accounting, Organizations and Society, 22 (2), 147-164.

Preston, A. M., Cooper, D. J. and Coombs, R. W. (1992) 'Fabricating budgets: A study of the production of management budgeting in the national health service', Accounting, Organizations and Society, 17 (6), 561-593.

Rao, H., and Dutta, S. (2012). Free spaces as organizational weapons of the weak: Religious festivals and regimental mutinies in the 1857 Bengal Native Army. *Administrative Science Quarterly*, 57 (4), 625-668.

Rindova, V., Barry, D. and Ketchen, D. (2009). Introduction to special forum: entrepreneuring as emancipation. *Academy of Management Review*, 34, 3, December, 477–491.

Roberts, J. (1991) 'The possibilities of accountability', Accounting, Organizations and Society, 16 (4), 355-368.

Roberts, J. (1991). The possibilities of accountability. *Organizations and Society* 16 (4), 355-368.

Robson, K. (1992) 'Accounting numbers as 'inscription': Action at a distance and the development of accounting', Accounting, Organizations and Society, 17 (7), 685-708.

Rogers, E. (1995). *The diffusion of innovations.* The Free Press (4th edition).

Rubin, J., and Rubin, I. (1995). *Qualitative interviewing: the art of hearing data*. Sage Publications Inc, Thousand Oaks.

Scapens, R. (1990). Researching management accounting practice: the role of case study methods. *British Accounting Review*, 23, 3, 259-281.

Schumpeter, J. (1934). *The theory of economic development.* Cambridge, Mass: Harvard University Press.

Scott, J. (1990). Domination and the art of resistance, New Haven: Yale University Press.

Seo, G., and Creed, W.E.D. (2002). Institutional contradictions, praxis and institutional change: a dialectic perspective. *Academy of Management Review*, 27, 222-247.
Simons, R. (1990). The role of management control systems in creating competitive advantage: new perspectives. *Accounting, Organizations and Society*, 15, 112, 127-143.
Siti-Nahiba, A.K., and Scapens, R.W. (2005). Stability and change: an institutionalist study of management accounting change. *Accounting, Auditing & Accountability Journal*, 18, 222-247.
Skærbæk, P. and Tryggestad, K. (2010) 'The role of accounting devices in performing corporate strategy', Accounting, Organizations and Society, 35 (1), 108-124.
Strang, D., and Macy, M. (2001). In search of excellence: fads, success stories and adaptive emulation. *American Journal of Sociology*, 107, 147-182.
The Health Round Table. (2008). *Everything you wanted to know about the Health Round Table.* Sydney, 24.
The Health Round Table (2010) *Annual Report*. Turramurra, Sydney.
Tolbert, P., Robert, D. and Sine, W. (2011). Studying choice and change: the intersection of institutional theory and entrepreneurship research. *Organization Science*, September-October, 1332-1344.
Tracy, J. (1996). Direct action: Radical pacifism from the union eight to the Chicago Seven, Chicago: University of Chicago Press.
Turner, V. (1982). From Ritual to theatre, The John Hopkins University Press: London.
Weber, M., & Secher, H.P. (1962). *Basic concepts in sociology*. Citadel Press, New York.
Weber, W. (1978). In G Roth and Wittich (eds), *Economy and society.* Berkeley, Los Angeles & London: University of California Press.
Weick, K.E. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21, 1-19.
Weik, E. (2011). Institutional entrepreneurship and agency. *Journal for the theory of social behaviour*, 41, 4, December, 466–481.
Whitehead, A. N. (1933), Adventure of ideas, Simon and Schuster: New York.
Wijen, F., and Ansari, S. (2007). Overcoming inaction through collective institutional entrepreneurship: insights from regime theory. *Organization Studies*, Vol 28, 1079-1100.
Wouters, M., and Roijmans, D. (2011). Using prototypes to induce experimentation and knowledge integration in the development of enabling accounting information. *Contemporary Accounting Research*, 28(2), 708-736.
Wry, T., Lounsbury, M., and Glynn, M., (2011). Legitimating nascent collective identities: coordinating cultural entrepreneurship. *Organization Science*, 22, 2, March-April 449–463.
Yin, R. (1994). *Case study research design and methods*. Applied Social Research Methods Services, Volume 5, 2nd ed, Sage Publications Inc, Thousand Oaks, CA.
Yin, R., (2003). *Case study research: design and methods*. Sage Publications Inc, Thousand Oaks, CA.
Zietsma, C and Lawrence, T. (2010). Institutional work in the transformation of an organizational boundary: the interplay of boundary work and practice work. *Administrative Science Quarterly*, 55, 189-221.
Zilber, T., (2007). Stories and the discursive dynamics of institutional entrepreneurship: the case of Israeli high-tech after the bubble. *Organization Studies*, 28:7, 1035-1054

Appendix 1:
Examples of data & associated definitions reported to NSW Health via the Health Information Exchange

EPISODES	DEFINITIONS
Total Episodes	The count of all records with an episode end date in the defined period.
Planned episodes	The count of all recorded admissions with an emergency status of 'non-emergency/planned' or 'regular same-day planned admission'.
Unplanned / other episodes	The count of all recorded admissions with an emergency status of 'emergency', 'urgency not assigned' or 'maternity/newborn'.
Babies born	The count of records with source of referral of 'born in hospital'; it is a subset of unplanned episodes.
Acute episodes	The count of records with episode of care type values of 1 (acute care) and 5 (newborn care) -

CARE TYPES	DEFINITIONS
Acute same day episodes	The count of acute episode records with an episode start date equal to the episode end date.
Acute overnight episodes	The count of the acute episode records with an episode start date earlier (not equal) to the episode end date.
Total acute bed days	The sum of bed days for all acute episodes with an episode end date within the defined period. Total acute bed days for an overnight episode is the difference, in days, between the episode start date and the episode end date, minus the number of episode leave days recorded. Same day episodes count as one bed day.
Average length of stay	The mean of total bed days for all acute episodes with an episode end date in the defined period.

CARE TYPES (Care type – the type of service provided by the hospital. The ten	1. Acute care 2. Rehabilitation care 3. Palliative care 4. Maintenance care 5. Newborn care

possible care types (as defined in the HIE) are:	6. Other care 7. Geriatric evaluation and management 8. Psychogeriatric care 9. Organ procurement – posthumous 10. Hospital boarder

Appendix 2:
NSW Health Services Comparison Data Book 2008/2009 December 2010 State Health Publication No: (DPEB) 100560 ISSN: 1836 9863 Demand and Performance Evaluation Branch, NSW Health. http://www.health.nsw.gov.au/pubs/2010/pdf/yellowbook_09.pdf

Table 1 – AVERAGE AVAILABLE BEDS Health Service Activity 2008-2009 (page 28)

Health Services Activity 2008 -2009

	St George Hospital	St Vincent's Hospital Darlinghurst	Westmead Hospital (all units)	Peer Group
Inpatient Activity				
Beds				
Average available beds	593	335	821	5,970
Bed occupancy rate	90.85	107.64	100.15	
Bed Days				
Total bed days	198,781	129,140	285,129	2,009,791
Inpatient bed days	199,351	129,104	281,705	1,989,599
Non & sub-acute bed days % inpatient bed days	7.29		6.57	6.07

Table 2 – QUALITY OF CARE INDICATORS (RSI) Health Service Activity 2008-2009 (page 29)

Health Services Activity 2008 -2009

	St George Hospital	St Vincent's Hospital Darlinghurst	Westmead Hospital (all units)	Peer Group
Quality of Care Indicators - Efficiency				
Surgery				
Target surgery % treated as day only or ext. day only	43.5	49.8	59.4	52.9
Cancelled surgery bed days	231	284	655	4,233
Length of Stay				
ALOS of acute episodes exc same day	5.6	6.5	5.7	6.2
Relative stay index (RSI) inc same day	1.02	0.97	0.97	
Relative stay index (RSI) exc same day	1.01	0.99	0.98	
Relative stay index (RSI) – medical	1.00	0.93	0.94	
Relative stay index (RSI) – surgical	1.04	1.03	1.01	

Other bed days & acute bed days	7.10	9.98	7.11	8.72

Table 3 – QUALITY OF CARE INDICATORS (Waiting Times) Health Services Activity 2008-2009 (page 19)

Health Services Activity 2008 -2009	Area Health Services						
	CHW	GSAHS	GWAHS	HENAHS	NCAHS	NSCCAHS	NSW
Quality of Care Indicators - Access							
Non hospital type bed days		82,819	39,630	76,547	37,473	64,016	485,819
Waiting Times							
Med & surg. Clearance times (months)	2.9	3.5	3.2	2.7	4.0	2.5	2.9
Med & surg. Average waiting time (months)	2.3	3.2	3.0	2.5	3.3	2.2	2.5
Med & surg. Overdue cat 1 adm. % total cat 1 amm.	2.2	7.0	5.5	8.1	17.2	0.9	6.8
Med & surg. Overdue cat 2 adm. % total cat 2 amm.	20.1.	23.0	15.4	12.8	26.1	11.1	14.9
Med & surg. Overdue cat 3 adm. % total cat 3 amm.	2.2	8.3	4.6	5.8	8.3	3.4	4.4

Appendix 3:
Examples of clinical & non-clinical numbers collected by the HRT

Group	Indicator	Description	Benchmark
Emergency Department	Triage 1 – Time to be seen	Patients seen immediately as % of all Category 1 patients	**100%**
	Triage 2 – Time to be seen	Patients seen within 10 minutes as % of all Category 1 patients	**80%**
	Triage 3 – Time to be seen	Patients seen within 30 minutes as % of all Category 1 patients	**75%**
	Triage 4 – Time to be seen	Patients seen within 60 minutes as % of all Category 1 patients	**70%**
	Triage 5 – Time to be seen	Patients seen within 120 minutes as % of all Category 1 patients	**70%**
	Triage 1 – Time seen to time to ward	Range of time for all Cat 1 patients, highlights median, mean, 25th and 75th percentiles	**25th percentile**
	Triage 2 – Time seen to time to ward	Range of time for all Cat 2 patients, highlights median, mean, 25th and 75th percentiles	**25th percentile**
	Triage 3 – Time seen to time to ward	Range of time for all Cat 3 patients, highlights median, mean, 25th and 75th percentiles	**25th percentile**
	Triage 4 – Time seen to time to ward	Range of time for all Cat 4 patients, highlights median, mean, 25th and 75th percentiles	**25th percentile**
	Triage 5 – Time seen to time to ward	Range of time for all Cat 5 patients, highlights median, mean, 25th and 75th percentiles	**25th percentile**
	Time to Analgesia	Median time of sample of patients receiving narcotic analgesia in ED	**25th percentile**
	Time from Triage to Admission to Ward	Mean of Medians of time from Triage to Admission to Ward	**25th percentile**
	Time Triaged to Time Seen	Median, Mean, 25th and 75th percentile of the time Triaged to time Seen for admitted patients only by Triage Category	**25th percentile**
	Time Seen to Time Admitted to Ward	Median, Mean, 25th and 75th percentile of the time Triaged to time Seen for admitted patients only by Triage Category	**25th percentile**
Waiting List Management	Waiting List Cancellations before admission by Hospital	Number of elective theatre patients on the Waitlist given a planned date (during the survey month) for surgery who had that date cancelled or changed by the hospital BEFORE their admission during the time period per Total number of elective cases actually performed	**25th percentile**
	Waiting List Cancellations after admission by Hospital	Number of elective theatre patients admitted for a procedure, but whose procedure is cancelled (or whose procedure date is changed) by the hospital AFTER their admission during the time period per Total number of elective cases actually performed	**25th percentile**
	Operating Room List Cancellations	Any removal from the Operating Room theatre elective lists during the month for any reason per Final number of patients on Operating Room lists in the month.	**25th percentile**
	Waiting List Cancellations before admission by Patient	Total number of elective theatre patients who cancel, change, alter, or modify their elective procedure date from the date originally agreed with the Hospital PRIOR to admission during the time period	**25th percentile**

Group	Indicator	Description	Benchmark
	Waiting List Cancellations after admission by Patient	Total number of elective theatre patients who cancel, change, alter, or modify their elective procedure date from the date originally agreed with the Hospital AFTER to admission during the time period	**25th percentile**
Intensive Care	Readmission to ICU	Total number of patients returning to ICU within 72 hours per total discharges for period	**25th percentile**
Clinical	Deaths requiring Review	All deaths likely to require review by total deaths	**25th percentile**
	Inpatient Re-presentation to ED	All patients seen as Cat 1, 2, or 3 in ED within 14 days of discharge from hospital per all inpatient discharges.	**25th percentile**
	Urgent Re-presentation to ED	All Triage Cat 1, 2 and 3 patients seen in ED within 24 hours of discharge from the ED per all ED presentations.	**25th percentile**
	Returns to Operating Theatre	Number of patients returning to the Operating Theatre during the same admission per total number of operations.	**25th percentile**
	Cardiac Arrests	Number of patients experiencing a cardiac arrest in ward areas per total inpatient bed days	**25th percentile**
	INR Level < 5	Number of anticoagulation (INR) results found to be above 5.0 per total number of anticoagulation (INR) results	**25th percentile**
	Pressure Ulcers Un-graded	Total number of patients found to have a pressure ulcer (raw figures) per total number of inpatient admissions	**25th percentile**
Workforce	Sick Leave Rate - Nursing	Total number of hours of sick leave by all Nursing Staff in pay periods totalling 4 weeks per total hours paid for all Nursing Staff	**25th percentile**
	Sick Leave Rate - Other	Total number of hours of sick leave by all Other Staff in pay periods totalling 4 weeks per total hours paid for all Other Staff	**25th percentile**
	Resignation Rate - Nursing	Total number of Nursing staff who ceased employment per total number of nursing staff on payroll	**25th percentile**
	Resignation Rate - Other	Total number of Other staff who ceased employment per total number of Other staff on payroll	**25th percentile**
	Workers Compensation Claims - Nursing	Total number of new lost time claims received by the hospital from Nursing Staff per total number of Hours paid for all Nursing Staff	**25th percentile**
	Workers Compensation Claims - Other	**Total number of new lost time claims received by the hospital from Other Staff per total number of Hours paid for all Other Staff**	**25th percentile**

Appendix 4:

Meeting Notes
HRT KPI Review Teleconferences
21 Oct 2005

Participating Hospitals

Auckland DHB	Gold Coast	Royal Hobart
Austin Health	Lyell McEwen	Royal Perth
Barwon	Mater Health	Sir Charles Gairdner
Bayside Health	Melbourne Health	St George
Canberra	Prince of Wales	St Vincent's (Melbourne)
Canterbury DHB	Princess Alexandra	St Vincent's (Sydney)
Capital and Coast DHB	Queen Elizabeth	Townsville
Counties Manakau DHB	Royal Adelaide	Waitemata DHB
Eastern Health	Royal Brisbane	Westmead
Fremantle		

Matters discussed:

1. Scorecard layout
   Changes received well
   Most hospitals report they use PDF reports as well as Excel Spreadsheets
   Note: If printing the Excel Report, turn on "comments" on when printing
   Action:
   Add commentary to the report
   Add yes/no items in the report
   By: HRT (PR)

2. Scorecard distribution
   Action:
   Confirm receipt of balanced scorecards ahead of time
   By: HRT (PR)

3. KPI Forum on HRT Website
   All KPI contact people encouraged to use the forum to keep updated about KPI issues and post any questions. All KPI contacts will be registered on the site. Users will be advised by email of any updates.
   www.healthroundtable.org.au > "Discussions"
   Action:
   Arrange access to KPI forum Check access to posting items in the forum
   By: HRT (PR)

4. KPI 213 Patients on Operating List Cancelled by Hospital
   Need to decide on how to count patients who are brought forward from a future list to fill a vacancy in a current list. Are they cancellations from the list they were on?
   Suggestion: "that a cancellation occurs if a date that was previously advised to a patient is changed for any reason".
   Action:
   Poll member hospitals using Discussion Forum on
   www.healthroundtable.org.au By: HRT (PR)

5. KPI 311 Readmission to ICU within 72 Hours

Review benchmark for return to ICU. Suggestions of an appropriate benchmark are sought from Hospitals.

Action:

Seek input from member hospitals using Discussion Forum on www.healthroundtable.org.au By: HRT (PR)

6. KPI 431 Returns to (Planned & Unplanned) Operating Theatre

Clarify which cases are included in the returns to operating theatre. Some patients have many planned returns (e.g. ECT), and some hospitals are including high-volume simple procedures in the denominator – scopes, etc. Returns to theatre already excludes ECT (advice only - to be included in definition).

Action

Poll member hospitals re

a. tightening the definition of which procedures to include in the main operating suite denominator, excluding ECT, scopes, and other minor procedures, and therefore exclude the returns to theatre for these patients for similar procedures.

b. including returns to operating theatre be limited to within 72 hours of previous procedure to match ACHS definition However, keep the definition open to include planned and unplanned. Finalise at the November Meeting? – for discussion at the November Meeting

c. Should a case be considered a cancellation if moved from a morning list to and afternoon list on the same day? Suggestion is that we include only cancellations where the date changes.

Finalise at the November Meeting

7. KPI 461 Pressure Ulcers Ungraded

One hospital suggested changing pressure ulcers to summer collection instead of winter. Rather than change the reporting of this KPI which it has been suggested be based on a survey, the indicator may be reported in August from any survey conducted in the last 12 months.

8. KPI 621 Percentage payroll costs attributed to Acute Care Type Inpatients

Several hospitals raised the issue of the difficulty in collecting data for this indicator given organisational restructures.

Action: Review and clarify collection on salaries for acute care. Poll Hospitals for input.

By: HRT (PR)

Appendix 5:
Evidence based pregnancy weight tracker