Illusions of Team Working in Health Care

Viewpoint Paper

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Abstract

Purpose: The ubiquity and value of teams in healthcare are well acknowledged. However, in practice, healthcare teams vary dramatically in their structures and effectiveness in ways that can damage team processes and patient outcomes. This paper highlights these characteristics and extrapolates several important aspects of teamwork which have a powerful impact on team effectiveness across healthcare contexts.

Design/methodology/approach: We draw upon the literature from health services management and organisational behaviour to provide an overview of the current science of healthcare teams.

Findings: Underpinned by the Input-Process-Output framework of team effectiveness, team composition, team task, and organisational support are viewed as critical inputs that influence key team processes including team objectives, leadership and reflexivity, which in turn impact staff and patient outcomes. Team training interventions and care pathways can facilitate more effective interdisciplinary teamwork.

Originality/value: The paper argues that the prevalence of the term 'team' in healthcare

makes the synthesis and advancement of the scientific understanding of healthcare teams a challenge. Future research therefore needs to better define the fundamental characteristics of teams in studies in order to ensure we can accumulate findings based on real teams, rather than pseudo-like groups.

Keywords: *Teams, teamwork, team effectiveness, collaboration, team processes, patient safety, errors.*

Background

The imperative for effective intra and inter-team collaboration has become increasingly prioritised in healthcare policy both nationally (Darzi, 2008) and internationally (Joint Commission, 2009). This is because a large body of research evidence suggests that effective teamwork in healthcare is associated with reduced medical errors (Manser, 2009), increased patient safety (Firth-Cozens, 2001), as well as improved worker outcomes such as reduced stress (Carter and West, 1999), intent to stay at work (Abualrub et al., 2012), and job satisfaction (Buttigieg et al., 2011). Other studies have also found that the quality of teamwork in healthcare is related to patient mortality in hospitals (West et al., 2001), more streamlined and cost effective patient care (Ross et al., 2000), reduced physician visits and hospitalisation rates (Sommers et al., 2000), lower staff absenteeism and turnover, more effective use of resources and greater patient satisfaction (West et al., 2011).

Most healthcare organisations operate in a complex context of conflicting demands and objectives, multi-faceted and often highly challenging daily tasks, a demanding external environment, and a highly diverse body of professional clinical staff (Ramanujam and Rousseau, 2006). Therefore, as patients' progress along the care pathway, the delivery of effective healthcare very much depends on the careful collaboration and interchange of information between various individuals, organisations, occupational groups, multidisciplinary teams, and allied health services. Whatever changes are occurring in healthcare systems both nationally and internationally, it is important to reflect on why effective healthcare teams are so important in health service delivery, and how team processeswe can be improved to ensure we are delivering high quality and safe patient care. The fact is that healthcare teams are very often ineffective with research showing that 70% of medical errors can be attributed to poor teamwork (Studdert et al., 2002). Organisations

therefore need advice on how to develop authentic and effective teamwork which facilitates a culture for safety and quality, rather than relying on the dangerous illusion that simply labelling a group of healthcare professionals a 'team' will produce the coordination, clear role allocation and powerful shared responsibility the notion of 'teamwork' implies.

A Typology of Healthcare Teams

Despite the prevalence of healthcare teams, when we look more closely at their nature and characteristics, there are many notable divergences and complexities that should be recognised. A useful typology for describing teams proposed by Hollenbeck et al. (2012) enables teams to be characterised on three underlying dimensions. Firstly, teams differ on *skill differentiation*. Traditionally healthcare teams were unidisciplinary (for example, a team of paediatric nurses working on a hospital ward), meaning that team members held very similar functional knowledge and conducted similar clinical tasks. However, healthcare teams are now increasingly interdisciplinary. Interdisciplinary teams comprise members from different functional and clinical backgrounds working towards shared goals, in order to fulfil complex and interdependent tasks which require varying degrees of specialist skills and medical knowledge.

Secondly, healthcare teams can be distinguished on the dimension of *authority differentiation* (Hollenbeck et al., 2012), which describes the extent to which all team members are involved in team decision making processes. Healthcare teams with high levels of authority differentiation have clearly allocated leadership roles, which tend to be occupied by the most senior status member of a team. However, the prevalence of entrenched hierarchies and deep rooted conflict amongst professionals in healthcare (Leape and Berwick, 2005), means that decision making is often faulty, undermining high quality and safe care.

Unidisciplinary teams on the other hand tend to have lower authority differentiation, given the more equal status held by respective team members.

The third teamwork dimension proposed by Hollenbeck et al. (2012) is *temporal stability*. Whereas some healthcare teams maintain a relatively stable team composition over time (such as a multidisciplinary team members working together over several years), other teams may be formed temporarily to act as a 'one shot' team (to conduct a highly novel surgical procedure for example), and therefore team members may never work together again. Teams with higher levels of temporal stability have the opportunity to develop effective team processes, given the familiarity that develops between members of the team.

Thus, when researching and managing healthcare teams, it is important to pay attention to the structural dimensions of skill differentiation, autonomy differentiation and temporal stability and how they impact upon team functioning and performance. For example, research with staff nurses in 32 hospitals in England found that teamwork and autonomy were highly related, and that nursing autonomy was associated with increased job satisfaction and more positive perceptions of quality of care (Rafferty et al., 2001). Temporal stability is also crucial for the development of shared mental models and effective interpersonal team processes, which in turn affect care processes (Richardson et al., 2010). Thus, healthcare researchers and practitioners cannot afford to neglect such important structural features of healthcare teams.

Key Debates in Teams Research

The use of teams to deliver health care has become commonplace in the English National Health Service (NHS), with recent findings from the NHS National Staff Survey suggesting that over 90% of staff report that they work in 'a team' (Care Quality Commission,

2010). However, this creates challenges for researching real teams, as only around 40% of staff report that their team has *clear shared objectives, works closely and interdependently,* and *reviews its effectiveness on a regular basis* – all fundamental features of what defines a team in the first place (see Figure 1; West et al., 2012). Without these 'real team' characteristics in place, a team exists in name only. Such pseudo team entities not only deviate from theoretical definitions of real teams in the literature, but can also be associated with potentially detrimental outcomes in practice. Indeed, members of pseudo teams report witnessing higher levels of errors, incidents and near misses, experience more harassment, bullying and abuse from staff and patients, and report lower levels of well-being and higher stress than members of real teams (West et al., 2012). So how can we be clearer about teamwork in healthcare both theoretically and in practice?

The Science of Teams in Healthcare

The most widely accepted framework for conceptualising teams is the Input-Process-Model (IPO) of team effectiveness (Cohen and Bailey, 1997). This framework proposes that team inputs (such as team composition, the team task, resources, and organisational support) have an influence on team outputs (such as error rates, quality of care, patient satisfaction, and team member well-being) via the interactions or team processes that take place between team members. Over the years, a number of both generic and context specific IPO models of healthcare team effectiveness have been published in the literature (e.g. Lemieux-Charles and McGuire, 2006). Based on our own research, below we outline what we consider are the three most important inputs and processes for predicting performance of healthcare teams (see Figure 2).

Inputs

Team task - All teams require a team task. If a task is insufficiently complex that it could just as well be conducted by an individual working in isolation, then a team is not necessary in the first place. In fact, assigning teams to overly simplistic tasks can be detrimental to organisational performance, given the process losses that are inherent in working groups (e.g. social loafing, diffusion of responsibility). Healthcare teams therefore should be used for relatively complex tasks that require some degree of task interdependence – in short, that require teamwork. Task interdependence defines the extent of task driven interaction among team members; in other words this is the degree to which team members depend on one another for both individual and team task completion. Task interdependence is not only determined by the characteristics of the team task itself, but also by the extent of discretion that team members exercise in establishing the level of interaction and cooperation required for effective performance (Shea and Guzzo, 1987). Team members therefore must decide to behave together interdependently - to work as a team.

Team composition – Teams must be composed of individuals who together have the appropriate knowledge, skills and abilities (KSAs) to complete the team task successfully. For example, an effective community mental health team requires a diverse pool of KSAs from various professional groups (e.g. psychiatrists, clinical psychologists, psychiatric nurses, social workers, occupational therapists) who collectively form a multi-professional team. If any one of these required disciplines is missing from the team composition, decision making processes are likely to be dysfunctional, and in turn, patient care will suffer. Conversely, if the team is too large, and there are multiple occupiers of the same specialist role, team members may compete for power or withdraw their participation from the team. Team size should therefore be appropriate for the team task demands, and should typically not exceed 8 to 12 members (West, 2012).

Organisational Support – Crucially, at the organisational level, the context within which healthcare teams are embedded must support team-based working. Team, rather than individual, efforts should be acknowledged through a reward system which encourages team members to work collaboratively and recognises their task interdependence.

Processes

Team Objectives – Teams are fundamentally defined by their shared objectives. Therefore, a key team process involves team members agreeing upon a number of specific team objectives which will guide teamwork behaviour. Team objectives are critical as they give team members the incentive to combine their efforts and collaborate closely. Research has shown that primary care teams with clear goals performed better on patient-perceived quality and patient satisfaction than those without (Goñi, 1999). Poulton and West (1999) also found that clarity of and commitment to team objectives was the best predictor of manager ratings of team effectiveness of primary health care teams. However, our own research consistently shows that it is common for team members to be unclear about exactly what the objectives of the team are, thereby making interdependent working more difficult. Objectives should be clear, challenging, agreed upon, measurable, and limited to no more than six to eight in number (West, 2012)

Leadership - Evidence suggests that leadership makes a significant difference to the performance of healthcare teams. However, given that entrenched professional tensions, status incongruities and boundary disputes are typical in interdisciplinary teams, it is no surprise that leadership is often poor (Ovretveit, 2002). In an analysis of nearly 300 healthcare teams (including primary health care teams, cancer teams, and community mental health teams), West (2003) concluded that when there was conflict about leadership within

the team, both team processes and outcomes were negatively affected. Just one tenth of community mental health teams and one third of primary health care teams reported having a clear leader. Conversely, leadership clarity was associated with high levels of participation, clear team objectives, commitment to excellence and support for innovation, which in turn consistently predicted team innovation in patient care.

Reflexivity – Reflexivity is the extent to which teams regularly take time out to define what it is they are trying to achieve, how well they are working, what they need to change, and then making adjustments accordingly (Widmer et al., 2009). Reflexivity is crucial for healthcare teams, as it enables them to reflect upon the suitability of their objectives to ensure that these are aligned with patient needs and emerging organisational challenges. Empirical evidence has shown that reflexivity in healthcare teams is an important determinant of effective team functioning (Carter and West, 1998). Given that reflexive teams build self-awareness, they are also more likely to recognise areas that need attention and development, and implement necessary improvement plans (Tjosvold et al., 2004). However, in a study of 250 health care team members, Wiles and Robison (1994) found that only a quarter of teams reported holding regular team meetings, with the remainder of teams only meeting if there was a specific problem to be resolved. Team leaders' responsibility is therefore to ensure regular team reflexivity, given the clear associations with improved individual and organisational outcomes in healthcare (West et al., 2012).

Interventions to Promote Teamwork in Healthcare

A common method for enhancing the effectiveness of teamwork in healthcare is the provision of team training. Examples include the 'TeamSTEPPS' (Team Strategies and Tools to Enhance Performance and Patient Safety) program developed by the Agency for

Healthcare Research and Quality (AHRQ) in the United States which focuses on developing four team competencies; communication, leadership, mutual support and situation monitoring (Baker et al., 2010); the Aston Team Facilitation Programme (ATFP; Aston Organisation Development, 2003) which is widely used in the NHS; and the more generic SBAR (situation, background, assessment, recommendation) tool which can lead to improved team communication and patient safety (Leonard et al., 2004).

A specific intervention which has also been linked to improving interdisciplinary teamwork is care pathways. Care pathways are defined as *'a complex intervention for the mutual decision making and organization of care for a well-defined group of patients during a well-defined period'* (Vanhaecht et al., 2010, p.118) In a systematic review of 27 studies, Deneckere et al., (2012) concluded that care pathways can promote various facets of team working including team communication, team relations, inter-professional documentation and staff knowledge. Such high-performance work systems impact organisational performance by strengthening action and interpersonal processes, including coordination and communication (Gittell et al., 2010).

Future Research Agenda

Based on research evidence that highlights the detrimental impact of pseudo team working on outcomes, future research into healthcare teams should first endeavour to better describe team samples according to the fundamental characteristics of real teams (West and Lyubovnikova, 2012). Such characteristics are crucial if health care staff are to effectively combine their diverse professional perspectives, coordinate efforts and share knowledge in order to deliver highly complex clinical tasks; yet they are very often neglected in healthcare teams research to date. Further, given that healthcare delivery is embedded in a complex multi-team system that requires both inter-team and inter-team working (Bleakley, 2012), future research should not only focus on effective collaboration *within* teams, but also

between teams. Healthcare professionals are often members of several teams concurrently, making the concept of multiple team membership (O'Leary et al., 2011) increasingly relevant to future healthcare research.

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Figure 1: Characteristics of Real and Pseudo Healthcare Teams

Pseudo Teams	**Team Characteristics**	**Real Teams**
Healthcare team members work largely on their own, with little requirement to interact or communicate with each other	Interdependence	*Healthcare team members work closely together in a tightly coordinated way*
The objectives which healthcare team members report their team is working towards are largely disparate and/or unknown	Shared Objectives	*Healthcare team members share several common objectives which are clear and agreed upon in the team*
Healthcare team members rarely meet together to exchange information and reflect on performance, resulting in little or no innovation in care processes	Reflexivity	*Healthcare team members regularly and systematically review their performance and adapt future team objectives and care processes accordingly*

Figure 2: An IPO Model of Healthcare Team Effectiveness

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