Effective team working in health care

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Introduction

Team working in health care is a taken-for-granted good. Teams of people must work interdependently to provide high quality care for patients. They have to combine their varied expertise to deliver the best possible care. Uni-professional, lone practitioner working cannot deliver the care patients need to the same extent as multi-professional team working. Teams of health care practitioners working together is therefore the context of health care in both developing and developed countries. The vast majority of health care staff work in teams and deliver care in teams. In this chapter, we explore this taken-for-granted assumption and argue that, though team working is vital for high quality health care, the quality of team working in this sector is often poor. Such poor team working leads to errors that harm both staff and patients; injuries to staff; poor staff well-being; lower levels of patient satisfaction; poorer quality of care; and higher patient mortality. We describe how team working and equally importantly team based working as an organisational form can be developed within and across organisations to ensure continually improving, high quality and compassionate patient care.

We begin by asking 'what is a team?' Our definition of team working is based on the research on team working across sectors (not just health) and across countries. It has some important implications for the way we then address questions about team working in health care. We ask why work in teams in health care? Drawing on research evidence across health care sectors we show the relationships between team working and health care outcomes and how these are powerfully mediated by the quality and extent of team working in health care organisations. We also provide evidence to show that the quality of team working in the English NHS is, for the most part, poor with consequent dangers to patients and relative ineffectiveness of the system.

Such an analysis begs questions about how to improve team working and team based working in health care and we draw on a range of evidence from research conducted over the last 30 years to answer these questions. In particular, we identify the central importance of team objectives and team leadership to team effectiveness. But there are specific challenges for team working and team

based working in health care, because of the complexity of the context and the historical legacy of separate professional development and status hierarchies. We explore how these challenges can be overcome, arguing that ensuring effective team working in health care is as critical to performance as dealing with infections in hospitals and medication errors in primary care. Finally, we conclude by reinforcing the fundamental importance of good team working to the delivery of high quality, continually improving and compassionate care and urge practitioners and policy makers to take account of the prescriptions we offer in this chapter.

Why have teams in health care?

Humans have worked in teams over at least 150,000 years to cope with complex tasks, whether herding prey into canyons, or performing complex surgery. Homo Sapiens developed hunting techniques that involved groups cooperating and herding animals such as wild horses into narrow gorges where they could be easily slaughtered Harari (2014). We have developed the skills of team working as a species because, quite simply, by combining skills and delineating differentiated roles we accomplish more than we possible could working alone . Health care is complex, whether it involves treating a patient with diabetes, dealing with accident and emergency cases, providing supports for severely depressed adolescents, supporting frail and elderly patients, or ensuring the delivery of nursing care on a busy ward. The level of complexity requires team working. That complexity also implies the probability of error and errors can lead to patient harm and death (Sharit, 2006). Below we consider the research evidence on the value or otherwise of working in teams at the level of individual team members, team level outcomes (particularly in relation to patient care), and at the organisational level (is more widespread team working in health care organisations associated with better outcomes for patients?).

Individual Level Outcomes: Health care is a stressful sector to work within. Nurses are the most stressed group in the UK working population, according to the Health and Safety Executive in 2014 - http://www.hse.gov.uk/statistics/causdis/stress/ This alarming observation reveals how the service delivery and organisation of caring for people in society, incurs damage to the very people who provide that care. Does team working make a difference? Carter and West (1999) showed that team working was associated with lower stress levels among health care workers as a result of greater role clarity, social support and being buffered by their teams from negative organisational factors. Moreover, Richter, West & Dawson (2011), in a meta-analysis of 35 studies of the implementation team working in health care, found an overall positive effect on employee satisfaction and well-being. The effects in health care were significantly larger than those found in 23 studies in non-

healthcare environments. The research suggests that this is dependent on the quality of team functioning. In a study of 400 health care teams (Borrill, West, Shapiro, & Rees, 2000), researchers found that quality of team functioning was associated with lower team member stress levels. Team functioning was measured as clarity of team objectives, levels of participation of team members in decision making, emphasis on quality of task performance, and support for innovation within the teams. Buttigieg, West, and Dawson (2011) gathered data from 65,142 hospital staff in the NHS in England and found that those working in well-structured teams had the highest levels of job satisfaction. Again, levels of social support and role clarity appeared to account for these differences.

A consistent, though happily reducing phenomenon within the English NHS, is violence against staff by patients, carers or other members of the public. There is evidence that violence is less likely to be perpetrated against staff working in well-functioning teams (Borrill et al, 2000; Buttigieg et al., 2011; Carter & West, 1999). One explanation for these findings is that the positivity of effective teams, influences patients and carers via emotional contagion. This in turn builds confidence and positivity in the affective environment, thereby reducing the likelihood of hostility and frustration.

Team Level Outcomes: Does effective team working lead to better patient care and patient outcomes? A recent review of the literature (West & Lyubovnikova, 2013) suggests that team working in health care is associated with a range of patient outcomes. This review echoed the conclusions of earlier review that concluded that good team working reduced errors in patient care and improved quality (Firth_Cozens, 2001) and a review of team working in intensive care settings. The latter review concluded that working in teams can significantly reduce the level of error and promote learning and quality improvement in intensive care units (Richardson, West, & Cuthbertson, 2010).

But quality of team working matters. There is evidence also that poor team working leads to medical errors while good team working prevents them. Nembhard & Edmonson (2006) found that medical errors were often a result of poor team working and status hierarchies. Such hierarchies are associated with reluctance on the part of lower status team members to challenge the decisions of more senior team members, even when they believe those decisions to be wrong. In an analysis of 193 critical prescribing incidents (Lewis & Tully, 2009), one third were attributed to team related problems such as hierarchies, prescribing etiquette (failure to challenge) ignoring hospital regulations and neglecting best practices in the interests of team relationships. Team working in

health care should not be a taken-for-granted good; it is the quality of team working that counts in ensuring high quality care.

Research also shows that quality of team working predicts the extent to which teams develop and implement innovation in health care – introducing new and improved treatments for patients and new and improved methods of delivering care. Fay et al. (2006) found in two samples of health care teams (66 and 95 teams respectively) that multidisciplinary teams did produce higher quality innovation than less diverse teams, but only when the teams functioned effectively. Effective team working included clear team objectives, high levels of team member participation in decision making, commitment to high quality work, and practical support for innovation.

In a study of community health teams over a six year period in Sweden, Jansson, Isaccsson and Lindhom (1992) found that where team working was introduced, regions reported reductions in emergency visits. Again, quality of team working was important and accessibility and continuity of care were particularly important factors. Similar findings emerged from a study of community mental health teams in England. Jackson, Sullivan and Hodge found positive effects 12 months after the introduction of teams upon both treatment and service rates.

Organisational Level Outcomes: Recent research has begun to examine the impact of team working in health care by examining the extent of team based working in organisations and exploring the relationships with outcomes such as patient satisfaction, quality of care, efficiency of use of resources, innovation, staff engagement and well-being and (in the acute sector) patient mortality.

A study of the links between Human Resource Management practices in hospitals (West et al., 2001) found that the extent and quality of team working had a significant negative relationship with patient mortality = the more and better the team working, the lower the levels of patient mortality. Where more than 60% of staff reported working in teams, mortality was 5% lower than expected and this result held after controlling for the number of doctors per 100 beds, GP facilities per 100,000 population, and local health and socio-economic profiles. An analysis of the NHS staff survey data over 8 years suggested that quality of team working in health care organisations (across primary care, mental health care, ambulance services, and acute care) was associated with patient satisfaction, quality of patient care, efficiency of use of resources, staff absetneeisn, staff turnover and financial performance (West, Dawson Admasachew, & Topakas 2011. Studies of team working in

primary care In the United States suggest greater use and higher quality is assocated with reduced reduced hospitalisation and physician visits (Soomers, Marton, Barbaccia, & Randolph, (2000).

Overall, the research suggests that team working and team based working in health care have positive outcomes for staff, for patients and for organisations. But a consistent finding is that quality of team working is important and that there is a need to clarify in health care both what is meant by the concept of 'team' and what constitutes effective team functioning or team working. Calling a group of people who work in health care a team is not a guarantee that their combined efforts willl prove beneficial for patients, as the research above confirms. What then is a 'team'?

What is a team?

When our ancestors formed teams, they did so for a purpose. There was a task to be accomplished that was best confronted by individuals working towards a shared goal. Herding the horses into the gorge in order to kill them and feed the community was a clear task. Similarly, in surgery for fractured neck of femur, a group of individuals work together to carry out the task; or a primary care team screening the local population for cholesterol levels; or a mental health team providing support and treatment for drug addicts; or a team of ambulance staff ensuring good first responder services for people in a defined geographical area. The assumption that teams are a good thing is supported by these examples. But increasingly in health care the term 'team' is applied to all sorts of groupings where it is somewhat difficult to identify what the task is. Do all the nurses working on a ward over the course of a week constitute a team? What is their collective task? Does a committee that meets regularly to review patient complaints constitute a team? Are they working together, as a team, to fulfil a task or do they simply sit in a room, have some discussions and make decisions that the most expert of them could have done more effectively working alone? Are the 16 members of the board of a hospital a team and to what extent are non-executive members part of the team? And does it matter if we call all sorts of health care entities teams, whether they correspond to a definition or not?

If we consult the wider literature (not just in health care) on what we mean by a team, key characteristics include that teams have a clear task, shared objectives, the necessary authority, autonomy and resources to have a good shot at completing the task; team members work interdependently and have to rely on each other's task performance to enable individual and shared success (goal interdependence and task interdependence) (Hackman, 20XX; West, 2012). Team members see themselves as part of the team and have expectations therefore about how other

team members will behave (e.g., backing them up when workloads are high, being cooperative); team members have relatively clear roles in the team and understand the roles others in the team play in achieving the task; and, in organisations, others are aware of the team as an entity. In practice, effective teams are rarely any bigger than 10-15 people and, to function most effectively, have the minimum number of members necessary to complete the task. The ideal maximum is probably around 6 to 8 members. At a minimum, teams should have a clearly stated task, clear objectives, relatively clear roles, work interdependently and members should meet regularly to review and (consequently) adjust their performance.

A standard definition of a team is: 'A team is a relatively small group of people working on a clearly defined, challenging task that is most efficiently completed by a group working together, rather than individuals working alone or in parallel; who have clear, shared, challenging, team level objectives derived directly from the task; who have to work closely and interdependently to achieve those objectives; whose members work in distinct roles within the team ; and who have the necessary authority, autonomy and resources to enable them to meet the team objectives.' (Woods & West, 2014, p. 423).

In practice, in our work in the English National Health Service, we encounter the use of the title 'team' for many entities that abrogate many of these definitional requirements. We repeatedly encounter 'teams' whose members are not clear about their team's task; who do not have clear team objectives; they do not agree on who their fellow team members are; do not understand others' roles; and these teams do not have the authority, autonomy or resources to complete their work effectively. Moreover, some teams do not sufficiently (if ever) take time out to review their performance and adjust their work accordingly in order to improve. Too often team boundaries are unclear – team members are not clear who is and is not a member of the team. Increasingly complex tasks and environments have led to the growth in requirement for multi-disciplinary team working which has contributed to an already confused picture of 'the team' in many organisations. In our work in health care organisations we find many individuals who perceive the boundaries of the team differently from their colleagues and certainly from their line management. This confusion leads to less effective decision making and communication which inhibits the team's ability to achieve its aims and objectives.

This is not to require that the term 'team' only be applied to some academically stipulated narrow range of entities – it is to recognise that 'teams' are created to perform a task that individuals

working alone could not achieve (or at least not so effectively); that teams are entities where people work interdependently towards shared goals; and where there is clarity among team members about their roles and the roles of others in the team. And there appear to be serious consequence of varying team working from these fundamental properties which endanger both patients and staff.

In a large scale study of team working in health care, involving responses from 62,000 staff from 147 hospitals in the English NHS, Lyuobvnikova, West, Dawson and Carter (in press) distinguished between what we called 'real' teams and 'pseudo' health care teams. Respondents were asked whether they worked in a team and, if so, did their team have shared objectives, did team members work interdependently and did they meet regularly to review their performance in order to improve this performance. These three criteria, we argued, are fundamental to team work – without one of more of them, the entity is not truly a task performing team – it is simply a co-acting group. The results revealed that individuals who reported working in real teams, in comparison with those working in pseudo teams, witnessed fewer errors in the previous three months that could have harmed patients or staff. They also reported fewer work related injuries (needle-stick and back injuries for example) and work-related illnesses and were less likely to be victims of violence and harassment. Perhaps not surprisingly, they were also less likely to be considering or intending to leave their current employment.

Of course other factors might account for these findings, so the analysis controlled for background and demographic factors such as age, gender, organizational tenure, occupational group of the respondent and patient contact. The research also took account of hospital size and whether the hospital was a 'teaching' hospital, given that teaching hospitals might have more advanced medical practices and technologies that could influence the research outcomes. The research also took account of the extent to which staff members felt valued and trusted in their work as a proxy measure of general affect towards the organization. Moreover, staff sickness absence was significantly lower in these hospitals, indicating considerable financial savings also for the organisations where real team working was well-developed.

What might account for these findings? We suggest that pseudo teams are more dangerous because their members will see themselves as working independently with more distinct discrete roles, and lack understanding about how their work is interrelated with that of their colleagues. Work is likely to be duplicated unnecessarily and team members are less able to understand and adapt to the needs of their team colleagues in carrying out their tasks. Mistakes are likely to happen because of lack of clarity about team roles and responsibilities. Lack of shared objectives will be associated with

more confusion over the focus of the team's work. Pseudo teams also fail to take time out to review and improve their performance so collective learning is inhibited, and errors are more likely (West & Lyubovnikova, 2013; Lyubovnikova & West, 2013).

Most strikingly, in those hospitals with higher proportions of staff reporting that they worked in real teams, patient mortality levels were significantly lower. The relationship was such that 5% more staff working in real teams would be associated with 40 deaths per year (assuming this was a causal association), in the average hospital equivalent to 5,880 across the entire sample. The research showed that around 9% of staff reported not working in a team, around 40% were categorised as working in real teams and a substantial 50% as working in pseudo teams. By extension, if the percentage of staff working in real teams could be increased by 25%, and the relationship with mortality was direct and causal, this would be associated with a reduction of just under 30,000 hospital deaths per year.

Even without such speculation, the results clearly suggest there is considerable valuable work to be done to ensure that health care staff are working in teams with the basic structural and process characteristics of what is meant by a team and that this lack of effective team working is damaging to quality of care.

This research makes a strong case for developing healthcare team working with these basic characteristics but it is worth reinforcing though that within these fundamental properties, there can be considerable variation.

Variations in team working

Hollenbeck, Beeersma, and Shouten, 2012 identify three important dimensions along which teams vary: skill differentiation, temporal stability and authority differentiation. We consider each of these in turn below.

A team of paediatric nurses working together in a ward of children suffering from whooping cough will have relatively low skill differentiation whereas a multi-disciplinary community mental health team offering early intervention for people with acute mental health problems will have higher skill differentiation (psychologists, psychiatrists, social workers, psychiatric nurses all working in the team). And we have good evidence of the value of high skill differentiation in health care where the task requires this (Edmondson, Roberto, & Watkins, 2003; Xyrichis & Ream, 2008).

Temporal stability is low in a surgical team that works together just for one day but high for the community mental health team we described. The advantage of stability is that it enables the team

to develop 'shared mental models' of their work, enabling them to work more effectively together (Hackman, 2002; Mathieu, Heffner, Goodwin, Salas and Cannon Bowers (2000). Moreover, there is evidence that stability leads to team psychological safety in health care teams, leading to higher levels of innovation and less of a risk of errors (Edmondson, 1996, 1999).

Authority differentiation refers to the extent to which team members have different status that inhibits the open exchange of ideas, opinions and contributions. If senior medical staff, for example, seek to exert authority by imposing their decisions and opinions, safety, high quality decision making and innovation will all be jeopardised (Leape & Berwick, 2005; West, 2012). There is considerable evidence that health care teams are more effective where there is mutual respect, responsiveness, empathy and communication among team members, irrespective of professional group or any other characteristics (Smith & Cole, 2009).   It is clear also that effective teamwork is characterised by a constantly swirling mix of changes in leadership and followership, dependent on the task at hand or the unfolding situational challenges. Of course, there is still a formal hierarchy with dedicated positions but the ebb and flow of power is situationally dependent on who has the expertise at each moment. The literature on team work demonstrates that shared leadership in teams consistently predicts team effectiveness, particularly but not exclusively within health care (Aime *et al.,* 2013; Carson *et al.,* 2007). Yet many teams in health care are characterised by unhelpful status hierarchies and professional rivalry that lead to failures detrimentally affecting patients, sometimes with fatal consequences as successive reviews have shown (Berwick, 2013; Francis, 2013).

Another model that has proved useful in our work with health care teams is Casey's teamwork framework (Casey 1993). Casey argues that the way in which team work is organised should be determined by two features: the task need for interdependence and the amount of complexity and dynamism in the environment. High levels of both need for interdependence and environmental complexity and dynamism create challenges for teams which require more sophisticated levels of team working which enable teams to innovate.Low levels of need for both interdependence and environmental complexity and dynamism create team tasks which require little more than basically effective inter-personal relationships such that , these entities could even be termed work groups rather than teams. In practice we believe that the establishment of different levels of skill differentiation and temporal stability should be a result of the task and environmental need for effective team working. More attention needs to be given to the design of teams to reflect these features in health and social care settings.

We have established that team working in health care cannot be a taken-for-granted good. Much depends on the quality of team working. If we want to create high quality team working delivering high quality and continually improving and compassionate care, how do we do it?

Key factors in ensuring high quality health care team working

Nurturing effective team working in health care requires attention to five key domains: team task and objectives, team member roles and interactions, quality improvement and innovation, leadership and reflexivity. Each is considered in turn below.

Task and objectives: We need to create teams when there is a task that can best be undertaken by teams. So the starting point is defining the task. Appropriate team tasks have the following characteristics: they are complete tasks rather than a narrow component; the task creates varied demands that require interdependent working by people with differing skills; the task requires innovation and quality improvement; team members are enabled to grow and develop through working on the task; and they have a high degree of autonomy - they have the freedom to decide how best to do the task within sensible limits. The more of these characteristics a task exhibits, the more appropriate it is for a team. Two examples are conducting surgery for people who have broken hips; providing treatment and support for young people with learning disabilities and emotional difficulties in collaboration with their carers. Team members are particularly motivated and more likely to work well as a team if they are able to articulate a clear inspiring statement about the purpose of the team's work e.g., To positively transform the quality of life of people with learning disabilities through constantly improving and compassionate support in a way that positively transforms their quality of life (for an example).

Such tasks and associated mission statements must then be translated into clear objectives. Clarity of objectives of health care teams is the most consistent predictor of team performance across many studies (West & Anderson, 1996; Goni, 1999; Poulton & West, 1999; Borrill, et al., 2000; Cashman, Reidy, Cody, & Lemay, 2004; Dixon-Woods et al., 2013). Yet few health care teams in our experience take the time to set clear objectives. Team objectives (and individual objectives) should be clear and specific, challenging, agreed, measureable and they should identify reliable measures to provide the team with regular and timely feedback on its performance. This is not simply empty management rhetoric. The research cited above shows that those health care teams that have such objectives and ensure they seek feedback on performance deliver safer and higher quality health care than other health care teams. Team objectives should be limited in number (around 5-7) and include providing

high quality care; continually improving that care; ensuring that it is delivered compassionately; ensuring the well-being, growth and development of team members; and ensuring that working relationships and practices with other teams within the organisation are of high quality and continually improving. And the team's objectives should be aligned with and derived from the organisation's overall objectives. (For a fuller discussion of these requirements for team objectives see chapter 6 in West, 2012).

Team member roles and interactions: Team working is at heart about how individuals interact, cooperate, engage and 'dance' teamworking together to make significant progress towards achieving team objectives. It is about interaction, information sharing and influencing decision making. It is dependent on shared understanding of tasks; clarity about what role each person will play; effective listening, questioning and disagreeing; and trust. These interactions are crucial to effective team performance. Team members have to interact sufficiently frequently to be effective as a whole team and too often people rely on impoverished mechanisms for interaction such as emails and telephone calls rather than face-to-face interaction. Team members must play a full role in decision making. After all they are part of the team because they have skills that are necessary to complete the task. And at different points all team members will be the leading expert if team member selection has been effective. In high performing teams, 'air time' and expertise are correlated (team members with relevant expertise at that point are listened to most). Status hierarchies and dominant individuals hinder effective decision making, thereby jeopardising patient care (Koslowski & Bell, 2003; Mathieu et al., 2008).

Conflict in teams is generally damaging. Interpersonal conflict is particularly damaging to team effectiveness (De Dreu & Weingart, 2003; De Wit et al., 2012; Tjosvold, 1998). Aggressive, intimidating and otherwise confrontational behaviours undermine effective team functioning and those who often exhibit these behaviours require coaching to change them. Rude or intimidating behaviours by team members are a direct threat to the safe patient care because they can prevent team members from speaking up when they see unsafe practice. There is a cultural norm within the English NHS that accepts intimidating or aggressive behaviour, particularly by a small number of senior medical staff, despite the threat to patient safety. This norm must be challenged and changed to make such behaviour unacceptable.

Health care is a high stress environment, yet health care staff are required to deliver care with compassion. Compassion can be understood as having three components: paying attention to the other; allowing an empathic response; taking intelligent action to help the other. If teams are to model compassionate care for patients, it seems obvious their compassion should begin with fellow

team members, given the level of stress health care staff experience. Social support for fellow team members therefore requires that team members pay attention to each other (Nancy Kline calls it 'listening with fascination' (Kline, 1999, p.37); are empathic in reactions to fellow team members; and take intelligent action to help each other. When team members are overloaded, stressed or distressed they cannot pay sufficient attention to patients; have less emotional capacity to be empathic; and are less likely to make intelligent decisions to help patients when under stress. Team members can promote compassionate care by creating a compassionate team environment that supports team members (Atkins & Parker, 2012; Gilbert & Choden, 2013)

Quality improvement and innovation: Teams are powerhouses of innovation - or should be. When we bring together a diverse group of individuals in health care, with varying skills and experiences, we identify a task with a clear set of associated objectives, innovation is inevitable. With good team processes, such teams will be sparkling fountains of innovation, developing and applying new and improved ways of delivering patient care (West, 2003). And that capacity is ideal in a context where quality improvement must be part of the texture of working since quality improvement leads to better health and well-being for the community. Effective health care team working therefore involves a commitment to continually improving quality of care such that quality improvement is the way teams work. In addition, team members should be equipped with and empowered to adapt appropriate suites of tools from the quality improvement movements in the private sector (and increasingly in health care) (Plsek, 2014). Health care teams must have objectives focused on improving quality and developing new and improved ways of delivering care but organisational leaders must also find ways to support teams to do that. This includes providing resources and leadership support for innovation; reducing work that does not add value to patient care; freeing up innovation time for teams; and removing systems blockages that prevent teams from innovating (Dixon-Woods et al., 2013).

Leadership: The leadership of health care teams has a significant influence on their effectiveness – this is a statement of the obvious. Poor leadership hinders teams from delivering continually improving, high quality and compassionate care. When teams have leaders who are interfering, controlling, aggressive, unfair, or focused on meeting their own needs rather than those of their followers, team work suffers. What is required then from the leadership of health care teams?

Leadership is about providing clarity of direction and purpose and helping to articulate an inspiring view of the team's work. It is about ensuring that the core human values of wisdom, humanity, courage, prudence, justice and gratitude are embodied in the work of the team. The wisdom to learn and develop knowledge to improve quality of health care; the courage to pursue a vision, to

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persevere, to deal with difficult challenges, conflicts or colleagues; the humanity to model kindness and compassion; the justice to treat people fairly and to be honest and transparent; the prudence to manage initiatives in ways that do not overburden and relationships in ways that resolve rather than escalate conflict; and the gratitude and wonder to celebrate the work of health care in communities.

As we described above, research evidence increasingly suggests that effective teams have shared leadership (Aime *et al.,* 2014; Carson *et al.,* 2007).. There may well be a designated leader but *leadership* is shared. Leadership shifts between team members as expertise needs and motivational orientations vary with the task at hand. Effective teams develop their *leadership* to ensure they deliver high quality care; moving away from the notion of a single heroic leader is a key part of that development. That requires a recognition that top-down, hierarchical, command and control leadership is inimical to effective teamwork. For many readers it will be surprising to learn that the military was one of the first sectors to understand the need for shared leadership in teams, despite its formal hierarchical structure. Platoons need the expertise and good decision making of all their members and do not rely on the top down dictates of one person, especially in complex situations.

This requires that formal leaders see their role as helping to clarify direction, facilitating the participation of all team members in decision-making, valuing the contributions of all (because not regardless of the diversity of team members), and building supportive relationships with the rest of the organisation and its leaders. A key skill for a team leader is listening to team members rather than talking themselves, summarising understanding and ensuring all voices are heard by all members. Research on the 'hidden profile' phenomenon reinforces this perspective: team members spend more time discussing information held in common and tend to ignore information known only to one member, even when that is critical information (Stasser and Stewart, 1992REFS). In health care the threat to quality of care of this weakness in team decision-making is as real as the threat posed by 'groupthink'. Team leaders who listen and summarise are far more effective than those who talk and direct. The only caveat to this is that in a crisis, someone needs to lead the team rather than initiate extended consultation but it is not necessarily the hierarchical leader. In surgery, it will sometimes be the anaesthetist who leads in a crisis and sometimes the surgeon, depending on the nature of the crisis.

And leaders should not exhibit favouritism in teams. This is obvious but a particularly influential theory of leadership exposes an endemic problem that is little understood outside of academia. Leader Member Exchange (LMX) Theory describes how virtually all leaders have different reactions to each of those they lead and this particularly depends on similarity and liking between them (Graen & Cashman, 1995). The greater the personal compatibility with followers, the more time

leaders spend with them and the more likely they are to attribute follower success to ability; conversely, the lower the compatibility, the less time they spend with particular followers and the more they are likely to attribute success to situational factors. And of course, followers quickly realise whether they are 'in-group' or 'out-group' members, with consequent effects on trust, commitment and engagement. As transformational leadership theory suggests, team leaders who offer a high degree of individual consideration and support for each of their followers, ensure more effective team work, cooperation and quality of care (Howell & Avolio, 1993 ; Gilmartin& D'Aunno, 2007).

If we are to develop cultures in which those seeking health care are treated with compassion, teams should also have norms of compassion. Formal leaders can play a key role in modelling compassion in working with team members and thereby reduce the degree of favouritism that is implied by LMX theory and supported by research evidence (Martinko, Harvey, & Douglas, 2007). This would be enacted by team leaders paying careful attention to each of their team members and their needs and challenges at work; responding empathically in each case; and then taking intelligent action to help and support them.   Modelling compassion in this way helps to create norms of compassion within the team which will extend, via emotional contagion, to interactions with those seeking health care. And in the process may help to reduce the very high levels of stress, described earlier, that health care workers suffer. Although shared leadership is important, we know that the behaviours, values and orientations of formal hierarchical leaders exert a disproportionately strong effect on team climate.

Reflexivity: A visit to almost any health care institution will often reveal teams engaged in high levels of activity, overwhelming workloads for team members, noise, complexity, emotional tension and a hum of frenetic busy-ness. These are not great circumstances in which to deliver compassionate care; to make complex team decisions; to communicate confidence and to think creatively as a team about how to improve care. The response to high demands by teams is often to work harder and faster, leading to errors and more stress (West, 2000). For more than 25 years we have been amassing evidence showing that teams that take time out on a regular basis to review what it is they are trying to achieve and how they are going about it, and then adapting their objectives and processes accordingly are much more effective and much more innovative in delivering patient care (Widmer, Schippers, & West, 2009; Schippers, Edmondson, & West, 2014). For example, a study of 98 primary health care teams showed that teams with high workloads (patient to doctor ratio) or with poor premises whose members took more time out to review their working methods, were significantly more innovative than other teams. Health care teams should pause in their work from

time to time and reflect on team objectives, working methods, challenges, conflicts, innovations and team functioning generally to discover how to improve health care methods and processes (see Schippers, Edmondson, & West, 2014 for a discussion of how this can prevent medical errors). This might be at the end of a shift, in the middle of day or in quarterly team away days. The evidence suggests that such 'team reflexivity' leads to much higher levels of team effectiveness, quality of patient care and to continually improving care (Widmer et al., 2009).

Team based working in health care organisations

To understand and improve team working in modern organisations, we have to address the wider organisational context within which teams work. Nurturing teams in hierarchical, directive, antagonistic or aggressively competitive environments is unlikely to be highly successful. Team work is about listening, cooperation, shared objectives and engagement. It is important to focus, not so much on individual team building, as on building organisations which are truly 'team based'. Such organisations will have structures, processes and behaviours which enable teams to produce the synergy required to provide high quality outcomes.

Developing effective team based working involves all teams prioritising patient care overall not only their individual areas, supporting, cooperating and engaging with other teams with which they interact to provide that overall care. And every health care team should therefore have, as one of its five or six objectives, a commitment to improving the effectiveness with which the team works with other teams in the organisation. Indeed, in a study of 57 primary health care groups, such cross boundary working was found to be vital for intergroup cooperation and support and therefore for patient care (Richter, West, van Dick, & Dawson, 20XX).

Team based health care organisations describe their structures as team communities, identified as a number of teams that need to work together to achieve a shared goal such as delivering high quality care for patients on a particular pathway such as fractured neck of femur. This is different in nature from the description of organisational areas as 'directorates' , or worse 'divisions' which suggest siloed and separetly focussed rather than integrated sets of operations. A team community may well include teams outside the organisation, such as GP practices, suppliers and regulators. All team members need to know how their team relates to all the other teams that need to work together to achieve the overall purpose. Mapping the team community helps to ensure the alignment of goals and objectives within and between teams to ensure achievement of the overall goal of delivering high quality, continually improving and compassionate care.

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Building team based organisations requires consideration of supporting processes. For example, team based organisations are likely to employ team level appraisals to support teams in setting, reviewing and delivering against their team objectives. Team members then appraise individuals within the team collectively. Such organisations also invest in team training, developing team leaders, training team coaches, and ensuring individual teams make the journey from start up to fully-fledged team working (West & Markiewicz, 2004).

Given the findings reported above about the poor development of team working in the English NHS and the significant consequences, it is clear that there is much to be gained from improving team working and team based working in health care. Other challenges face teams working in health care and we briefly identify some of these and potential solutions.

Challenging issues in the current context

A challenge but also an opportunity for team working is the need for different professional groups to work effectively together in teams: *"a key characteristic of health care organisations is the range of distinctive and vivid occupational subcultures which provide the 'raw' material for its organisational culture"* (Scott et al., 2003, p. 25). Healthcare professionals have unusually strong professional affiliations (both broadly, such as doctors' or nurses' professional identification, and also more narrowly in terms of particular specialisms such as pediatrics, obstetrics, accident and emergency). The socialization of professionals in health care takes place over long periods of time, ensuring a deep sense of professional identity and distinctiveness. This is one consequence of occupational groups organizing themselves into associations and institutions that enjoy status and recognition from the general public and governments (Bloor & Dawson, 1994). Members of such professions tend to share schemas for the way they make sense of their work, their professional encounters, the technologies they employ, individuals (such as patients and other professions) they interact with and the organizations they are a part of. They develop a distinctive discourse as well as distinctive identities. Their shared values, beliefs, understanding and identity lead to the development of strong professional (sub) cultures. Associated with this is the tendency of such groups to accumulate power and decision making influence, such as the medical cohort in hospitals (Tolbert & Barley, 1991). This then becomes a powerful cause of intra and inter-team conflict.

These conflicts between professional staff groups (e.g., doctors, nurses, radiologists) and between agencies in health care lead to inter-professional rivalries or schisms that produce

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interaction processes inimical to the sharing of knowledge and skills, instead protecting professional identities by hoarding knowledge to the detriment of patient care. For example, a study of 16 Canadian hospitals revealed that disagreement over patient treatment goals was the most common source of conflict in the ICU (Meth, Lawless, & Hawryluck, 2009). Professional subcultures therefor embody differences in values, despite all professions in health care being focused on providing high quality care for patients and these value differences are a source of team and inter-team conflict.

The evidence also points to deeply rooted tensions in relationships between doctors and managers, especially when they work in the same team and especially when managers' actions result in perceived restrictions to doctors' autonomy and authority (Martinussen & Magnussen, 2011). Such tensions lead to frequent conflicts between doctors and managers and teams which is detrimental to team performance (De Dreu & Weingart, 2003). But there is also evidence that these differences can be overcome depending on other contextual factors. Martinussen and Magnussen (2011) investigated the attitudes of doctors in managerial positions managerial positions and doctors directly involved in patient care, four years after a market-driven reform in the Norwegian health care system. Doctors involved in management had positive attitudes, while those directly involved in patient care were more negative to the reforms. There was considerable evidence that managers with medical backgrounds had adopted managerial values and tools, when they made the transition across professional subcultures.

Health care teams tend to be highly diverse on a number of dimensions. A community mental health team for example typically comprises a consultant psychiatrist, a clinical psychologist, several mental health nurses, an occupational therapist, a social worker, and other support workers. As a result, health care teams are often characterized by status inequalities based on professional groupings or disciplines. Such status hierarchies inhibit open communication and information sharing across professional groups, which can in turn affect decision making quality, innovation and the quality of patient care (Edmondson, Roberto, & Watkins, 2003). For example, low status groups such as nursing assistants or administrative staff may have difficulty speaking up or challenging high status groups such as physicians. Furthermore, team member status can inhibit participation in decision making and team meetings (Molyneux, 2001). Nevertheless, in a study of 100 primary health care teams (Borrill et al., 2000, those teams high in professional diversity judged their

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overall effectiveness and their effectiveness in delivering patient focused care as better than teams low in such diversity. Moreover, diverse teams introduced more innovations focused on improving quality of patient care, reinforcing the value of professional diversity.

What the research evidence does clearly indicate, is that teams with clear objectives, high levels of participation (in terms of interaction frequency, information sharing and influence over decision making) benefit rather than suffer from such diversity. Where teams are structured in the ways suggested in this chapter, diversity becomes a source of creativity, a spur for innovation and is associated with higher levels of productivity. We turn now to consider other challenges in the current context.

One often stated challenge is that hHealth care workers are often members of more than one team and may have different roles in different teams. The more teams they are a part of, the more difficult it can be to function as an effective member of any of them. One way of helping individuals to manage the inevitable stresses of working in multiple teams is to utilise the 'home team' concept (Aston Team Journey: Aston OD 2009).   The home team is defined as the team whose objectives determine how the individual works in all other teams they are a member of. Thus the medical oncologist may be a part of one or morel multi-disciplinary cancer care teams, a multi-agency project team to improve services, a clinical specialist team and a service management team. It is helpful if the oncologist in this example can identify which of these teams is the one whose objectives determine how they work in all the other teams they are part of; that is the team from which they derive their aligning objectives..   This does not mean that the work they do in teams other than their home team is any less valuable or engaging, but it will be informed by the home team's goals and objectives.   Another example is the Medical Director who is a member of the Hospital Executive Team, the Medical Management Team, a Specialist Surgery Team, and the regional Cardiology Services Review Team. Which of these is her home team? She spends more time in her Specialist Surgery Team where she is a valued senior Surgeon; she feels she has most support from her colleagues in the Medical Management Team; and she feels least comfortable in the Executive Team.   In our experience many Medical Directors would like to think of their speciality team as their home team rather than the Executive Team, which may be more appropriate.   The consequences of poor definition of the 'home team' at all levels of the organisation can be significant, but particularly at Senior Management levels.   We often see Executive Teams comprised of team members who all regard their Divisional or Directorate Management Teams as their 'home team'. As a consequence many Executive Teams function as un-focussed committees, with individual competing interests, rather than as integrated, collaborative, supportive teams.

The 'home team' concept suggests that usually the 'home team' should be the most senior team that the individual is a member of – in large, hierarchically arranged, organisations this enables alignment of objectives and is critical to the achievement of organisational goals. For individuals the ability to describe their 'home team' is likely to increase role clarity and reduce levels of stress. At the team level, the discussion of the 'home team' concept amongst team members increases understanding about different team members' motivations and decision making criteria and this increases role clarity within the team and aids identification of opportunities for improved inter-team influence.

In some areas there is structural complexity, created by the need for large numbers of people to work in 'action teams' for a short time (e.g. a shift on an acute hospital ward) to carry out the same role but with different team members on a daily basis.   And there are particular pressures on team work when some members are rotated after only a short time working with the team – for example, junior doctors on rotation must cope with such rapid and repeated changes. The challenges of working in teams where multiple professional groups are represented have been referred to above, particularly where these reinforce status hierarchies. And there is lack of clarity about the extent to which patients and their carers should be seen as part of teams, partly because there is limited understanding of how the role of patient might be effectively enacted in a health care team.

One solution is to augment our understanding of team by using it also as a verb 'to team' (Edmondson, 2012; 2014).   In our work in health care organisations, we encourage leaders to think about how the, often large, group of people they lead, will 'team'. This allows them to develop a visual depiction of all the different work groups; uni-disciplinary and multi-disciplinary teams; within function, cross-functional and cross agency project teams; management teams etc which the people they lead will work in at different times during their work. For each of these different types of 'team' there will still be a requirement for the basic features of effective real team working. For example, even a shift team which forms at 8am and disperses at 4pm, never to work together again in the same formation, will need to know what it is there to achieve during the shift (clear, shared objectives), who will do what and how they will work together (role clarity and interdependence) and the shift will be more likely to carry out its work effectively if at some point near the middle of the shift the team members meet to review if they are achieving what they set out to do and, if not, to adapt their approach to ensure success.

Amy Edmondson (Edmondson, 2012; 2014) has described the increased importance for employees at all levels to develop the skills of 'teaming'. The key skills Edmondson believes that all individuals need to demonstrate in highly flexible teaming environments are: asking questions, sharing

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information, seeking help, identifying potential errors, suggesting improvements, discussing mistakes and seeking feedback. However, there is still a requirement for each team, as in the shift team example above, to have a 'hard frame' of objectives, clarity about team membership and mutual role understanding, to enable individuals to utilise these softer skills, not least because these structural features help to create the necessary levels of safety which will enable individuals to feel confident to use their skills. This need to develop participative safety is particularly important in health care settings where the ghosts of traditional power hierarchies may still be alive in the memories of staff.   With the changing demands in health care nationally and internationally, cross boundary team working is now fundamental. Health care teams and their leaders must work with teams in social care, education, social services, housing and police services to ensure integrated care for the community. There is also an increasing need to work across sectors. No longer is healthcare a purely public service and the creation of effective team based working with private and third sector providers is vital for the provision of high quality care in future. Such cross boundary working requires that teams work together across service areas and organisations to identify the superordinate, shared goals they can commit to together – such as supporting the health and well-being of all those in their community. Our understanding of cross-boundary working and relationships also emphasises a joint commitment to long term stability and continuity in the relationship (not just another short-lived initiative between agencies); the importance of sufficiency of regular face to face contact between teams that must work together across boundaries; a commitment to dealing swiftly, fairly, openly and creatively with the inevitable conflicts that arise; and a commitment to understanding and prioritising the needs of the other teams they are working with to ensure high quality care and support for the community. Applying our understanding of these principles in cross-boundary contexts is essential if we are to respond to the current challenges faced by health care systems internationally.

Conclusions

The evidence of the importance and value of team and team based working in health care is convincing. Equally convincing is the evidence that quality of team working in health care is often poor and that there are errors, near misses, inefficiencies, wastage of resources and lack of responsiveness to patients as a consequence. Clinical effectiveness, patient safety and patient experience are all jeopardised on a scale just as (if not more) damaging as infections and medication errors. This chapter described the methods by which we can develop effective team working in health care. We end by urging practitioners and policy makers to focus their efforts on improving the quality of team based working in order to improve quality of care. It is team working that ultimately determines whether or not patients receive high quality, continually improving and compassionate

care. And so the leadership of health care organisations must ensure high quality and continually improving team-based working.

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