

The resident physician as leader within the healthcare team

An exploratory inquiry into the perspectives of interprofessional clinicians

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Abstract

Purpose – The purpose of this study was to explore inter-professional clinicians' perspectives on resident leadership in the context of inter-professional teams and to identify a definition for leadership in the clinical context. In 2015, CanMEDS changed the title of one of the core competencies from manager to leader. The shift in language was perceived by some as returning to traditional hierarchical and physician-dominant structures. The resulting uncertainty has resulted in a call to action to not only determine what physician leadership is but to also determine how to teach and assess it.

Design/methodology/approach – Focus groups and follow-up individual interviews were conducted with 23 inter-professional clinicians from three pediatric clinical service teams at a large, Canadian tertiary-level rehabilitation hospital. Qualitative thematic analysis was used to inductively analyze the data.

Findings – Data analysis resulted in one overarching theme: leadership is collaborative – and three related subthemes: leadership is shared; leadership is summative; and conceptualizations of leadership are shifting.

Research limitations/implications – Not all members of the three inter-professional teams were able to attend the focus group sessions because of scheduling conflicts. Participation of additional clinicians could have, therefore, affected the results of this study. The study was conducted locally at a single rehabilitation hospital, among Canadian pediatric clinicians, which highlights the need to explore conceptualization of leadership across different contexts.

Practical implications – There is an evident need to prepare physicians to be leaders in both their daily clinical and academic practices. Therefore, more concerted efforts are required to develop leadership skills

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among residents. The authors postulate that continued integration of various inter-professional disciplines during the early phases of training is essential to foster collaborative leadership and trust.

Originality/value – The results of this study suggest that inter-professional clinicians view clinical leadership as collaborative and fluid and determined by the fit between tasks and team member expertise. Mentorship is important for increasing the ability of resident physicians to develop collaborative leadership roles within teams. The authors propose a collaborative definition of clinical leadership based on the results of this study: a shared responsibility that involves facilitation of dialog; the integration of perspectives and expertise; and collaborative planning for the purpose of exceptional patient care.

Keywords Health care, Leadership, Interprofessional, Teams, Medical education, Residents

Paper type Research paper

Introduction

Over the past decade, excellence in clinical leadership has emerged as an essential component of health care and the medical education community worldwide. While professional integrity, ethics, effective communication and compassion have been identified as desirable health-care provider attributes, effective clinical leadership is considered to be the foundation for safe and efficient health-care delivery. Health care is a complex and adaptive social system that is continuously facing, rapid and ongoing organizational change. Within this complex system, the provision of safe and effective care is a priority that requires good leadership at the bedside. As a result, complete engagement and good leadership are essential characteristics care providers require to achieve and sustain improvement in the quality and safety of the care they provide to their patients (Daly *et al.*, 2014). Unfortunately, several factors pose challenges to effective delivery of care in clinical practice, some of which include the continuous stream of new technology, pull from old traditions, conflicting priorities of policymakers and the shortage of material and financial resources, making the task of developing effective clinical leaders a daunting one (Dickson and Tholl, 2014).

In 2015, the CanMEDS framework developed by the Royal College of Physicians and Surgeons of Canada (RCPSC) changed one of the seven physician core competencies from manager to leader (Dath *et al.*, 2015a). The RCPSC remarked that “this change to leader represents a timely evolution for contemporary health care” and will “encourage physicians to develop and use leadership skills to advance the care of their patients and to contribute to improving the health care system” (Dath *et al.*, 2015a). This shift in language has generated debate among various stakeholders, as some perceive the term “leader” to represent a return to traditional hierarchical and physician-dominant structures in health-care delivery. The intention, however, is to address the physician’s role as a collaborative leader in improving individual patient care within increasingly complex health-care systems.

In medicine, as in other professions, leadership is an important capability that physicians are expected to demonstrate. The literature on leadership, however, shows that there is neither consensus on an ideal definition of clinical leadership nor a best theoretical approach to describe it in practice. (Bass, 1990; Bryman, 2011; Day and Antonakis, 2012; Gardner, 1990; Mumford, 2006; Rost, 1991). To date, several qualitative and quantitative studies conducted to investigate leadership in different contexts have demonstrated that leadership is a complex and sophisticated concept that is often reduced to simplistic descriptions (Northouse, 2015). This complexity is illustrated by at least 65 classification systems that have reportedly been used to define different dimensions of leadership (Fleishman *et al.*, 1991). Therefore, the use of a single definition of leadership can be challenging, as the nature of leadership is highly context dependent (Bass, 1990).

While leadership is conceptualized by some scholars as a trait or behavior, others view it from an information-processing perspective or relational standpoint (Kotter, 1990). Four

components have been proposed as constituting the central concept of leadership, namely, process, influence, groups and common goals. The definition developed by Bass (1990), for example, used three dimensions to describe the process, personality and behavioral traits constituting leadership. The first dimension described leadership as a *focus on group processes* where the leader is seen as the center of group change and activity, embodying the will of the group; the second examined leadership from a *personality perspective*, where a combination of special traits or characteristics of individual described leadership; and the third focused on leadership as an *act* or a *behavior* – where the actions of the leaders are what bring about change within a group (Bass, 1990, pp. 11-20).

With the added complexity of language and the evolving conceptualizations of leadership within unique health care contexts, defining leadership in health care remains a very challenging feat. As a result, leadership can be broadly defined as a process whereby a person influences a group of individuals to achieve a common goal (Northouse, 2015, p. 5). It regularly entails rising to a challenge in times of need (individual leadership) in addition to using one's skill (s) to engage others in solving a problem (collective or shared leadership). According to Yukl (1989), *shared* leadership involves the engagement of individual members in activities that influence the team and its' members. Conversely, it can be described as a dynamic, interactive influence process among individuals and groups for which the objective is to lead one another to the achievement of group or organizational goals or both (Pearce and Conger, 2002). Regardless of the choice of words, however, all definitions describe a similar phenomenon, which is leadership by a team of "actors" rather than just an appointed leader.

Current views about leadership in health care indicate that the traditional leadership role of physician as "head of the pack" is shifting to the more collective, collaborative and systems-oriented type of leadership (Frank *et al.*, 2010). In their work on leadership practices in inter-professional health-care teams, Chreim, *et al.* (2013) discovered that leadership could be exercised by different members of the health-care team and at different levels within the team. They also found that leadership practice entailed managing boundaries between the following:

- the roles of different members within the leadership team;
- leadership roles versus clinical roles;
- formal leaders and other members of the team;
- the various professional disciplines;
- personal life experiences and professional work; and
- the team and what members considered to be the environment.

The authors' conclusion was that leadership practices in health care (teams) were shaped by both the management *of* these boundaries as well as the management *at* these boundaries.

While it is evident that there is a need for modern day clinical leaders and formalized structures in health care, it is expected that effective individual or collective leadership by any member of the health-care team could potentially improve individual patient care and/or health-care service delivery. Furthermore, it is a "societal expectation that physicians demonstrate collaborative leadership and management within the healthcare system [. . .] locally, regionally, nationally, and globally" (Dath *et al.*, 2015b). Intuitively, within this line of thinking, it is important that physician residents (i.e. future medical specialists) are also exposed to such opportunities that would enable them to develop leadership capabilities that would help them function effectively in a new landscape of health-care delivery (Bax *et al.*, 2011; Berkenbosch *et al.*, 2013; Brouns *et al.*, 2010). Unfortunately, to date, the role of

residents as leaders in health care is poorly understood, thereby adding to the pre-existent complexity of defining leadership in clinical health-care settings.

With the revived focus on competency-based medical education and the recent shift from Manager to Leader within the CanMEDS framework, a renewed call to action has emerged. This call is focused on determining what physician leadership means for postgraduate medical training, i.e. what it entails, how to teach it and how to reliably assess it (Chan *et al.*, 2016). In addition, the declaration of the Canadian Interprofessional Health Collaborative (Canadian Interprofessional Health Collaborative, 2010) to focus on collaboration and collaborative leadership falls in line with this plea. These developments provided the impetus for this study, which focused on gaining an insight into clinicians' conceptualization of leadership, the nature of potential leadership roles of physicians and medical trainees and how these roles are situated within the context of inter-professional collaboration. Similar to the work by Chreim *et al.* (2013), we explored clinicians' perspectives of leadership in inter-professional health-care teams. Our focus, however, was to develop a definition for leadership that identifies the resident physician as a member of the inter-professional team.

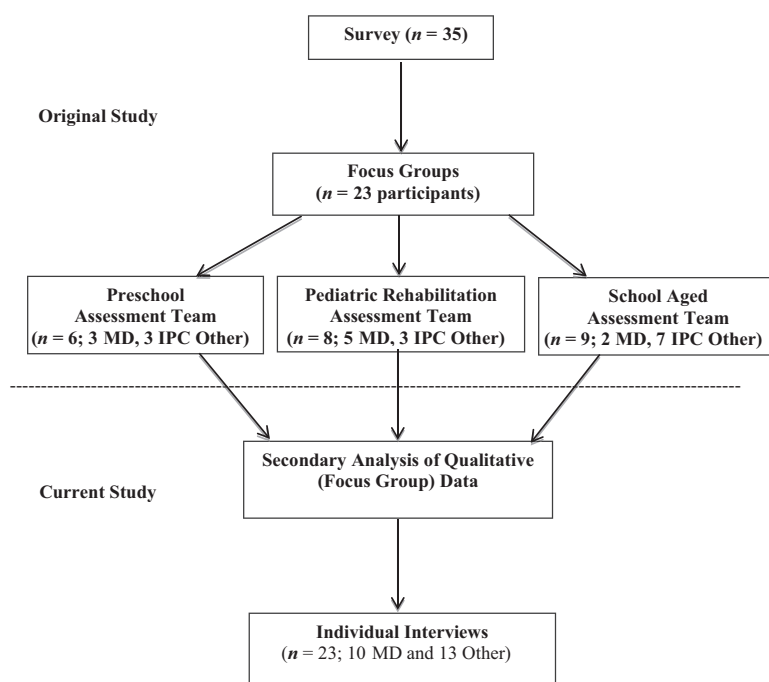
To achieve this objective, we chose constructivist theory as the theoretical framework to guide this research. Vygotsky's (1978) Social Constructivism Theory espouses that people create meaning through their interactions with others and that learning is an inherently social process. We believe that Vygotsky's Social Constructivism Theory can be used to inform understanding of leadership in inter-professional clinical teams, particularly in regard to the role of medical residents as learners and emerging leaders on teams. As is common in qualitative research, theory was used as a particular "lens" through which to collect, interpret and inductively analyze data (Reeves *et al.*, 2008). Throughout this paper, the term inter-professional clinicians is used as a general term to describe all members of the health-care team, including physicians.

Methods

This study was embedded in a larger project to explore the ability of inter-professional clinicians to observe and assess communicator and collaborator roles within the CanMEDS framework (Sonnenberg *et al.*, 2017). In the process of conducting this study, we discovered that the role of physicians and physician residents as "leaders" garnered much discussion and debate during the focus groups. Additional insight into inter-professional clinicians' perspectives on clinical leadership, particularly related to resident physicians, was needed by us, and others, to understand how leadership roles of resident physicians can be realized and further developed throughout their training. Were the inter-professional clinicians reacting to the traditional, hierarchical role of physician as leader or to an unclear definition of leadership itself? To explore clinicians' perspectives on resident physician leadership in the context of inter-professional teams, we conducted a secondary analysis of data from the primary study (qualitative data from focus groups); and structured individual interviews to further explore how clinicians defined resident physician leadership, as well as their own leadership perspectives, within inter-professional teams (Figure 1). This study was approved by the Health Research Ethics Board at the University of Alberta.

Participants

Inter-professional clinicians who had recently worked with physician residents, from three pediatric outpatient clinical service teams (preschool, school-aged and pediatric rehabilitation) at a large, Canadian tertiary-level rehabilitation hospital, were identified by residents and invited to participate in focus groups. Each clinical service team was



Notes: MD = Physician; Other IPC = Non-physician Interprofessional Clinician

Figure 1.
Methodology flow
chart

organized differently. The school-aged and preschool teams had a shared leadership model, with shifting responsibilities between team members, depending on family areas of concern. The teams conducted multi-day assessments, which included team conferences, to formulate decisions and plans. Following the team conference, the physician and/or resident physician met with families regarding team recommendations. The pediatric rehabilitation team, however, followed patients longitudinally, with the composition of the team formulated to meet the visit needs, and defaulted toward greater physician leadership and direction.

Of the 45 inter-professional clinicians who were identified by the resident physicians, 23/45 (51 per cent) attended one of the three focus group sessions. These included clinicians from the disciplines of occupational therapy ($n = 2$), speech-language pathology ($n = 3$), psychology ($n = 3$), nursing ($n = 4$), social work ($n = 1$) and medicine ($n = 10$). All disciplines and members from all three clinical service teams [preschool ($n = 10$), school-aged ($n = 10$) and pediatric rehabilitation ($n = 13$)] were represented, with the exception of physical therapy. Those who could not participate in the focus groups had indicated interest, but schedule conflicts precluded their involvement in the focus groups. Individual interviews were conducted with every focus group participant ($n = 23$) to further explore individual perspectives about “self” as leader and the role of resident physician as leader.

Methodology

Focus groups. As part of the original study (Sonnenberg *et al.*, 2017), qualitative data were collected during focus groups to explore inter-professional clinicians’ perceptions of their

ability to both observe and assess specific CanMEDS objectives in physician residents, including leadership, using qualitative descriptive methodology (Neergaard *et al.*, 2009). The results of this study, including the survey and focus groups, are published elsewhere (Sonnenberg *et al.*, 2017). The semi-structured focus group interview guide focused on exploring the results of a survey to explore the ability of inter-professional clinicians to observe and assess resident physician behaviors, with a focus on the objectives that survey participants considered observable but not assessable. In addition, other influences on their abilities to observe and assess desirable physician behaviors were explored, including clinic structure and other contextual factors. The focus groups were conducted at the rehabilitation hospital and were facilitated by the first author, a clinician educator and developmental pediatrician. She was known to all of the participants prior to the commencement of the study as a colleague and the Developmental Pediatrics' Program Director. Another member of the original team, a physician and PhD student who was not associated with the clinical teams, created field notes to document non-verbal responses, particularly for quiet participants, and group dynamics, including how conversations evolved and whether consensus was present regarding particular issues or not. Probes and follow-up questions were used to seek elaboration and clarification. Participants were also invited to speak to the lead researcher individually if they had additional issues they would like to discuss that they did not feel comfortable sharing in the group setting.

Consistent with the emphasis on learning through social interactions characteristic of constructivist theory, focus groups were selected as the data collection method in the original study to allow for the co-construction of ideas among team members who work in the same clinical setting (i.e. preschool, school-age and pediatric rehabilitation). Through observation of team dynamics and collective discussion about team functioning, focus groups provided the opportunity to understand how different team structures and settings affected their abilities to provide feedback to residents. In addition, we believed focus groups were the appropriate data collection method since the interaction among the team members would stimulate ideas and discussion that would enable us to gain an insight into how their perspectives were shaped through interactions among team members.

As leadership is one of the roles identified in the CanMEDS framework, inter-professional clinician perspectives on resident physician and physician leadership were discussed during the focus groups. The research team considered the theoretical focus, fit and context of the original study and secondary analysis to be adequately aligned as is considered important for secondary analysis of qualitative data (Hammersley, 2010). *Individual Interviews.* The results of the secondary analysis of the focus group data suggested that while participants discussed the role of residents as leaders, additional information was required to address the specific objective of this study. Individual, structured interviews were conducted by the lead researcher (LKS) with all focus group participants ($n = 23$), at a time convenient to the participant, to further explore their views on leadership using a structured interview guide. The responses were scribed by the researcher and not recorded. Responses were reviewed with each participant to ensure the correct capture of the data and to obtain any further clarification. There was no set time limit for the individual interviews and participants were free to speak for as long as they needed. Participants were asked how they define the terms "leader" and "leadership" and if they saw themselves as leaders on their team. If they indicated they considered themselves as leaders, they were asked how they engage in clinical leadership on their team. Participants were provided the definition of leadership, as adapted from CanMEDS 2015 (Dath *et al.*, 2015a):

Engaging with others to contribute to a vision of a high-quality health care system and taking responsibility for the delivery of excellent patient care through activities as clinicians, administrators, scholars, or teachers and then asked how they see the resident/fellow as a leaders on their teams.

Finally, they were asked again about their perspectives of themselves as leaders to determine whether the CanMEDS definition had changed their conceptualization of leadership. This strategy enabled us to explore how differing definitions of leadership can shape how clinicians perceive themselves and others as clinical leaders.

Data analysis

The thematic analysis process described by [Braun and Clarke \(2006\)](#) was used to inductively analyze the data. Analysis was conducted using the following six steps:

- (1) Familiarizing with data;
- (2) Generating initial codes;
- (3) Searching for themes;
- (4) Reviewing themes;
- (5) Defining and naming themes; and
- (6) Producing the report ([Braun and Clarke, 2006](#); [Sonnenberg et al., 2017](#)).

Transcripts were reviewed by LKS and excerpts revealing of participants' perceptions of leadership were identified and coded using descriptive codes. Codes were grouped into relevant themes and then were further defined and named in collaboration with Lesley Pritchard-Wiart.

Results

Data analysis resulted in one overarching theme and three subthemes that provided an insight into inter-professional clinician's views on resident physician leadership in the clinical setting. The collaborative nature of effective clinical leadership was a prevalent topic that underpinned discussions in all three focus groups and was, therefore, identified as the overarching theme. The three subthemes – leadership is shared, leadership is summative, and conceptualizations of leadership are shifting – describe distinct attributes of resident physician and physician leadership behaviors related to the overarching theme of collaborative leadership.

Leadership is collaborative

Participants emphasized the need for a collaborative leadership style that respects team members' unique expertise. It was a strongly held opinion by a number of the inter-professional clinicians that one formal team leader is no longer needed:

If we're supposed to be a team, we sort of don't look at ourselves as having a leader, right? And so I didn't sort of think we probably have even a role for a leader on our team. [Inter-professional clinician, focus group]

Others discussed the notion of the physician as leader of the health-care team as outdated and based on traditional hierarchies that are irrelevant in the current context:

This totally sets my back up, the physician as leader! Like it really irritates me, because I think that is a thing of the past; and I think that we are all a team member, and there isn't one more than the other. [Physician, focus group]

During the individual interviews, participants spoke about the important roles of facilitating dialog, ensuring team members' concerns are addressed and problems are solved, and providing guidance for the team. In doing so, the leader does not work in isolation, but actively solicits and integrates the perspectives of different team members, including the voices of patients and families, to make clinical recommendations.

The ability to engage in collaborative leadership by synthesizing perspectives to produce team recommendations was not considered universally possessed among resident physicians. Senior residents were generally considered to have more knowledge and skill in this area, resulting in increased confidence of the team and greater acceptance of the resident physician as clinical leader:

If they're almost done, they have more experience, and I'll give them my results; most residents take up the information in and collaborate with their supervisor as they don't know the teams as well. [Occupational therapist, rehab team, individual interview]

Non-physician participants noted greater resident physician engagement with the collaborative leadership role in the absence of preceptors. As one team member stated: "When the mentor is not around, they show their leadership better". [Speech-language pathologist, school-aged team, individual interview] However, involvement of preceptors was preferred and deemed necessary when handling more complex clinical decisions. Mentorship was considered crucial for increasing the ability of resident physicians and non-physician team members to increasingly take on collaborative leadership roles within the team. It was also noted that effective leaders often intuitively include a mentorship element to build leadership capacity.

Leadership is shared

Inter-professional clinicians perceived that a leader was necessary on the health-care team, but that the leadership role did not inevitably fall to the physician:

So I don't think of that as being particularly a physician's role, but it's a strength when somebody has the ability to do that on the team, and it makes the team flow a lot more easily. [Non-physician inter-professional clinician, school-aged team, focus group]

Meaningful leadership was viewed as informal and fluid; the leader in the group could shift from one person to another; this form of leadership requires a natural ebb and flow and did not require the assignment of a formal leader.

Somebody just – and I love that about the group – somebody steps forward and I think that when they need to do it, they [...] know when they need to do it and when they need to not do it [...] and sometimes it's the physician. I think it's funny [...] sometimes it'll be me, sometimes it'll be the physician; sometimes it'll be somebody else on the team. [Speech-language pathologist, focus group]

One participant emphasized the fluidity of leadership roles as a source of team strength: "Leadership is a fluid thing. Whenever you have a strength, you bring that forward, but at other times, you can be a learner" [Speech-language pathologist, school-aged team, individual interview], while a nurse team member emphasized the value of different team member perspectives within a collaborative leadership model: "On a team, someone who steps up during a collaborative effort to make decisions with something new or different." [School-aged teams, individual interview]

In summary, participants saw value in collaborative leadership in the context of clinical decision-making, with all disciplines contributing to discussion.

Leadership is summative

Participants also recognized that it is the role of a single leader to bring divergent views during discussions to a joint conclusion. In most clinical settings, this role often falls to the physician, but it does not always need to:

The role of the resident or the fellow is pulling together all of the different pieces of information and presenting it back, being able to help take all of the pieces and synthesize it. And I mean they present the information back to the family as well – this is a leadership role to me that the medical team has. [Non-physician inter-professional clinician, focus group]

At some point, there needs to be someone who takes responsibility for the information and moves forward with it. For example, making a diagnostic decision or treatment plans. Someone has to synthesize the information and move forward. [Psychologist, preschool and school-aged teams, individual interview]

You know, I think there's shared leadership in the discussion, because we need to come to consensus, but the leadership starts falling on single shoulders when you start walking down the hall, to go talk to the parents. [Non-physician inter-professional clinician, focus group] (Sonnenberg *et al.*, 2017)

Providing overall direction by synthesizing the contributions of the team, and ensuring that the direction resonated with the team, was also viewed as a significant summative leadership contribution. As one psychologist stated: "They [residents] are taking a lead in the final decision and looking to the team regarding their assessment and their agreement". [School-aged team, individual interview]

The participants also emphasized the importance of (the leader's) clinical expertise in guiding leadership decisions, providing direction and synthesizing team recommendations.

[...] and then can they get everybody [...] going in the same direction, or recognize when somebody's going off in this direction, and maybe we need to pay attention to this. And so to me if somebody's a leader, when they present that solution, the team can then move in that direction. [Non-physician inter-professional clinician, focus group]

Participants perceived residents as bringing unique and valued medical expertise to the discussion as they shared cutting-edge medical knowledge to the team. Patient and family perspectives are also often conveyed by the residents following their interactions with families, also adding significant value to team conversations. In summary, the leader is not solely responsible for making clinical recommendations but brings valuable clinical expertise to the collective knowledge of the team. The leader provides cohesiveness to team decisions by synthesizing multiple recommendations and perspectives, taking responsibility for identifying information that is most important or missing.

Conceptualizations of leadership are shifting

"Head of the pack" mentality and *de facto* physician as leader are previously held conceptions that are shifting and individuals from all clinical disciplines are starting to see themselves as leaders on health-care teams. To gain an understanding of how traditional perspectives on formalized leadership shaped participants' perspectives, at the start of the individual interviews, participants were asked if and how they see themselves as leaders. Most perceived themselves as leaders "some of the time", particularly related to how others treated them on the team or if they had been assigned a coordinator role on the team. The introduction of a more inclusive definition of leadership:

Engaging with others to contribute to a vision of a high-quality health care system and taking responsibility for the delivery of excellent patient care through activities as clinicians, administrators, scholars, or teachers (CanMEDS, 2015) resulted in some shifting perceptions of their own capacity to be leaders within their health care team.

Inter-professional clinicians appeared more comfortable discussing their role as leader, and were more open to the resident physician as leader, following the introduction of this definition. One physician, however, negatively reacted to “taking responsibility” in the CanMEDS definition: “Taking responsibility has a hierarchical view. They [residents] aren’t taking responsibility, but sharing responsibility!” in keeping with our first theme of *leadership is shared*.

Surprisingly, a greater proportion of non-physician inter-professional clinicians viewed themselves as leaders ($n = 12/13$, 92 per cent) on their clinical teams compared to the physicians ($n = 7/10$, 70 per cent). Physicians were noted at times to be struggling with the collaborative shift in leadership. As one physician stated, “We don’t want ‘bossy doctors’ on our team and then the team doesn’t see you as leading, so then you no longer see yourself as a leader.” Other physicians have made the shift expressing that, “High quality leadership means leading with knowledge rather than position,” and that leading now requires a “blend of confidence and competence.” [Physician, individual interview]

Complexity is noted particularly on inter-professional teams when it comes to the leadership role of the resident physician:

Leadership is trickier to define on a multidisciplinary team as there is no hierarchical leadership. There is leadership in terms of giving medical input, but not in terms of leading [patients’] clinical care. [Physician, individual interview]

Resident physicians were seen in need of mentorship to develop the knowledge and skills necessary to fulfill this leadership role. “They can operationalize and put things into effect. They have strengths and weaknesses and we can help them along the leadership continuum.” [Physician, individual interview] Finally, it was noted that resident physicians are leaders, but that they do not yet realize it:

They contribute knowledge, judgment, and guidance; they naturally teach to everyone on the healthcare team. They often don’t realize they are leaders as they are equally learners in the process. Dewey said it best when [he] alluded that ‘the learner is the teacher and the teacher is the learner’. The same can be said for leader~ “the learner is the leader and the leader is the learner”. [Physician, individual interview]

In summary, conceptualizations of leadership on health-care teams are shifting. For the non-physician group, they are seeing themselves as leaders, where the opposite rings true for some physicians, whose identities may have been tied to hierarchical position rather than leadership practice.

Discussion

In this study, we investigated inter-professional clinician perspectives of leadership in the context of multidisciplinary health-care teams that include resident physicians. The main findings from our study indicate that leadership is a collaborative process that is shared, yet can still be summative, by falling to the most qualified team member, to provide team direction and responsibility. The role of resident as leader is less established and appears to be influenced by his/her medical expertise, inherent interpersonal skills, leadership abilities and the mentorship provided by the staff physician. This study advanced the conversation regarding how contemporary views on health-care leadership have shifted from traditional,

hierarchical models with the physician as the default leader to shared responsibility of leadership responsibility; yet, some tension about physician leadership still remains in clinical practice.

Long *et al.* (2006) coined the term “clinical democracy” to indicate that leadership power is “distributed not on the basis of traditional social hierarchies but, instead, on whose expertise is relevant in a specific clinical situation”. Lingard *et al.* (2012) examined the dynamics of leadership within inter-professional teams, specifically the tension between embracing “clinical democracy”, while acting on traditional, hierarchical leadership. While clinical democracy is espoused, Lingard *et al.*'s (2012) study documented that physician actions on inter-professional teams suggest adherence to a more authoritarian leadership style. This leadership style can be unintentionally passed down from one generation of physicians to the next and may sabotage true collaborative practice. Andersson (2015) further added that leadership for the physician is not only about position and competence but “is just as much an identity challenge”. This mirrored what we found in a number of physicians who seem to espouse collaborative leadership theories, and find themselves lacking leadership identity with the theory in use, thereby unintentionally influencing the conditions for effective health-care leadership.

Most of the inter-professional clinicians perceived the reference to “leader”-ship language as a push toward a traditional, hierarchical and physician-dominated culture. When presented with a collaborative definition of leadership, most inter-professional clinicians considered themselves as leaders and viewed the term leader as less threatening and adversarial. The definition provided a more acceptable perspective on physicians’ leadership role within the health-care team. Given this sensitivity to the physician leadership role, it is imperative that resident physicians working within inter-professional teams understand the culture around and expectations for clinical, collaborative leadership. Engaging in traditional leadership styles may elicit resistance from inter-professional clinicians who no longer see leadership defaulting to the team physician. Leaders who will allow the “most capable and appropriate individual to take charge within a given team in a given context” are required (Dath *et al.*, 2015a).

The leadership dimensions put forward by Bass (1990) align with the findings of this study. The theme “Leadership is summative” embodies both Bass’ *process*, where the leader embodies the will of the group and *behavior traits*, when action is needed to bring about change. Depending on the clinical need, leadership is fluid from one team member to another, in keeping with a *collaborative leadership* approach and Bass’ *personality* dimension. Moving to a shared leadership practice is in keeping with both the existing literature and the results from our study.

The informal and flexible leadership style, espoused by the participants in this study, also aligns with the principles of complexity leadership. While traditional leadership is based on top-down, bureaucratic processes, complexity leadership emphasizes flexible processes and outcomes that facilitate creativity, learning and adaptive capacity (Uhl-Bien *et al.*, 2007; Uhl-Bien and Arena, 2017). Complexity leadership theory creates interactive spaces between people and ideas and serves as “a dynamic that transcends the capabilities of individuals alone” (Lichtenstein *et al.*, 2006; Grady, 2016), as innovation emerges from team creative processes and not necessarily from the vision of the leader (Mendes *et al.*, 2016). While complexity leadership does not discount the role of formalized, administrative roles, it emphasizes the importance of leadership that emerges from informal dynamic systems within organizations (Uhl-Bien and Arena, 2017). In addition to fostering team creativity and innovation, the adaptive response espoused by complexity leadership theory and a collaborative leadership approach are also better aligned with principles of patient

and family-centered care, as health-care teams must hold the values and priorities of individual patients and families central in decision-making processes, in keeping with a shared leadership approach (Pearce and Conger, 2002; Yukl, 1989).

Social identity theory (Tajfel and Turner, 1979) suggests that an individual's self-concept is shaped by their perception of belonging to a particular social group. As professional identity is also often born out of stereotypes and societal expectations, it is possible that traditional societal expectations for physicians at the top of the health-care professional hierarchy influences physicians' understanding of leadership. Kreindler *et al.* (2012) state that physician leaders are influenced by the identities that they value most, and health-care professionals are well-known for resisting threats to their identity (Fiol and O'Conner, 2006). In addition, as a social constructivist perspective would suggest, physicians' worldviews may be influenced by their ongoing interactions with other members of the health-care team. As leadership is redefined, we see evidence in our study that some physicians no longer identify themselves as leaders which resulted in a lack of clarity regarding their role as leaders and challenges to their professional identity. Further, this traditional leadership view contrasts with contemporary, less linear and collaborative leadership styles expected within inter-professional teams.

In our study, participants indicated they desired a collaborative and fluid leadership role and not merely becoming more collaborative and fluid as they worked together. The notion of collaborative leadership is not new. In their global independent commission, Education of Health Professionals for the twenty-first century (Bhutta *et al.*, 2010) issued a call for professional health education to address the silos that often exist in health-care professional training. The Canadian Interprofessional Health Collaborative (2010) answered that call with the national competency framework, particularly addressing role clarification and collaborative leadership. They advocate for inter-professional education to prepare clinicians for collaborative practice to improve health outcomes for patients and families. Universities are beginning to address this issue, as there is increasing acknowledgement that early integration of the various inter-professional disciplines, while students are near the start of forming their own professional identities, may encourage more effective collaborative leadership styles.

Although there are many papers defining leadership, a lack of clarity among clinicians remains (Snell *et al.*, 2016; Canadian Interprofessional Health Collaborative, 2010; Al-Sawai, 2013; Dath *et al.*, 2015a). "Collaborative leadership" is viewed as pulling together to increase engagement. "Situational leadership" is task-specific, with no clear "best" style of leadership emerging. The Canadian Society of Physician Leadership study defined "informal/voluntary leadership" as activities:

For which you do not receive direct compensation, that focus on the art of inspiring, enabling, and encouraging people to maximize their talents in the interests of improving your health care system (Snell *et al.*, 2016).

All of these definitions suggest a distinct leader, rather than a collaborative leadership approach. The CanMEDS definition of leadership (Dath *et al.*, 2015a) encourages divergence from the designation of leader to one individual. However, this perspective on leadership may not be readily accepted by all clinicians, as one participant clearly voiced, where "at some point, there needs to be someone who takes responsibility for the information and moves forward with it." Within the context of inter-professional health teams, a leader ensures that the patient/family perspective is heard and is capable of taking the lead within a team if the context and situation within the team demands. As Dath *et al.* (2015a) pointed out, the leader should inspire and motivate

others to achieve their goal. Both the collaborative team and summative individual pieces need to exist together.

We, therefore, propose a new definition of leadership, which draws from this study and the literature – a definition that is not attached to a professional identity; as one participant stated, “Leadership is broader than an individual professional responsibility.” It is a definition that is attached, in part, to a person but to a larger extent, the responsibility the person fulfills. Clinical leadership can be defined as the process of sharing responsibility for leadership by health-care professionals. It involves the facilitation of dialog, integration of perspectives and expertise, and collaborative planning for the purpose of exceptional patient care. Clinical leadership does not default to one person, but is rather assumed by the individual most prepared and competent to lead a particular task. We propose that moving toward a more inclusive and fluid definition of clinical leadership could enhance collaboration and, in turn, the effectiveness of clinical teams.

Limitations

Not all members of the three inter-professional teams were able to attend the focus group sessions because of scheduling conflicts. Participation of additional clinicians may have affected the results of this study. This study was primarily a secondary analysis of data that was not originally intended to focus on leadership. However, we posit that the spontaneity with which this study evolved suggests originality and authenticity. The fact that this study was conducted locally at a single rehabilitation hospital, among Canadian pediatric clinicians, highlights the need to explore conceptualization of leadership across different contexts.

Reflection for future work

As we move toward competency-based medical education, medical educators emphasize the importance of preparing physicians to be leaders in both their daily clinical and academic practices (Chan *et al.*, 2016). It will be necessary for clinicians to model and instill leadership competencies in the next generation of physician leaders, as resident physicians do not necessarily see themselves as natural leaders and currently lack specific leadership training (Grady, 2016). Therefore, a more concerted effort to develop leadership skills among resident physicians is needed. Continued integration of the various inter-professional disciplines during the early phases of training is postulated to foster clinical leadership and trust. This premise has yet to be studied longitudinally and represents an area for future study.

Conclusion

Given the interdisciplinary nature of medical knowledge and clinical practice today, we need to embody clinical leadership. It is imperative that these findings move from espoused theories to enacted models of clinical decision-making, routinely demonstrated for resident physicians, to deliver exceptional patient care.

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