

# The New Leadership in Health Care Teams: Progress Report of Development on a Promising Measure

Carole Orchard, BSN, MEd., EdD<sup>1\*</sup>, Erin Sinclair, BScN, MN<sup>2</sup>, Margot Rykhoff, BScN, MA (Ed)<sup>3</sup>

<sup>1</sup>The Arthur Labatt Family School of Nursing, Western University, London, ON, Canada.

<sup>2</sup>Guelph Community Hospital, Guelph, ON, Canada.

<sup>3</sup>UNB/Humber Collaborative Nursing Program, Humber College of Technology, Etobicoke, ON, Canada.

## REVIEW

Please cite this paper as: Orchard C, Sinclair E, Rykhoff M. The new leadership in health care teams: progress report of development on a promising measure. Archives of Healthcare [2019] 1(1): 20-26.

### \*Corresponding Author:

Dr. Carole Orchard,  
FNB Building, Rm 3351, The Arthur Labatt Family School of Nursing, Western University, London, ON, Canada;  
Tel: 519-661-2111 x 81010; E-mail: [corchard@uwo.ca](mailto:corchard@uwo.ca)

## ABSTRACT

Traditionally leadership roles in health care are those individuals who have a formal title. With this title their responsibilities include hiring, monitoring and evaluating those under their direct supervision. Theories of leadership have conformed with this perception and ascribed a leader as an individual who has some characteristics that are associated with one who leads or who has skills to guide others. More recently, leadership scholars have challenged this view in light of the shifting trends towards team based practice in organizations, and in particular health care settings [1-4] (Raelin, 2017; Pearce, 2004). Raelin advocates for a view of leadership as a practice (2009) while Pearce believes that leadership comprises both the traditional vertical leader as well as those teams who work cooperatively together to achieve the intended goals (2002). Others have explored the

application of shared leadership as a means to address the leadership existing within teams [2, 3]. Edmonstone also discussed the importance of focusing on clinical leadership as a part of sharing the leading with health providers in direct care, but no framework for this form of practice was presented (2009). Shared leadership as an approach to leadership has arisen from education. It is applied more frequently in an action learning context where a problem is brought forward and a group works together to explore and evaluate strategies that can address the same. In healthcare the need for both accountability and responsibility for care provided by each health professional in a team must be based on a shared and focused goal for specific patient care. This shifts the need from a collaborative exploration of shared interests to the need to address varying issues associated with each patient they provide care for. Thus, the term collaborative leadership has been identified as fitting more appropriately within healthcare to reflect a constant changing of the strategies needed to be implemented for each patient.

The implementation of the Canadian Interprofessional Health Collaborative's Interprofessional Collaborative Competency Framework (CIHC) in 2010 [5] identified collaborative leadership as a competency for health providers who share the leader role as collaborators within their teams. In the competency framework collaborative leadership was identified as a competency domain and described as: "learners/practitioners work[ing] together with all participants including patients/clients/families, to formulate, implement and evaluate care/services to enhance health outcomes" (CIHC,



2010, p. 15). The purpose of this report is to present the evolution of and initial testing of an instrument to capture collaborative leadership perceptions by healthcare team members.

**Key Words:** : Clinical Outcomes, Health Economics, Health Policy, Health Process & Outcome Evaluation, Health Services & Systems, Population Health.

---

## LITERATURE REVIEW

An obstacle to the complexity of care today within a bureaucratized health system and institutions charged with increasing productivity while controlling costs currently exists. The new managerialism [6] has created a disconnection between the growing complexity of patients with multimodal health and social challenges seeking care within a managerial structure that focuses on standardized approaches to care within clusters of like-patient health challenges (i.e. COPD or diabetes). While the above approaches are valuable in the business world, in health care more and more patients need to be attended to using individualized approaches. Hence, while managerial structures will continue to be the norm for the foreseeable future, interprofessional client-centred collaborative teams need the capacity to shape and enact care that is not dependent on decisional control from formalized institutional structures [7]. This in no way diminishes the need for structures, but we need ones that allow for responsiveness to immediate issues at the direct care interface with those seeking care. To consider how such new structures might function, a theorized model that presents the inter-relationship between the vertical (formal) leader [8] and the collaborative team emulating an adapted set of Kouzes & Posner's leadership practices (2006) with a linkage between the vertical and collaborative leaders through Gitell, Godfrey & Thistlethwaite's relational coordination framework (2013) [9] was proposed by Orchard and Rykhsch (2014).

To consider what might then comprise the collaborative leadership within teams an extensive review of literature was undertaken to assist in refinement of the

meaning of this form of leadership. Our first approach to this task was to carry out a concept analysis of collaborative leadership [10]. Four attributes of collaborative leadership were identified as: a situational interactive process [11-14], involving collaborative interdependence [15-17], and using shared assets [15, 18] (McComb & Simpson, 2014), while sharing a capacity to lead [19] (Dow et al, 2013). A further review of literature was undertaken. Key aspects identified included that collaborative leadership occurs when all members of a team, including the patient/family, symbiotically [20] accept their capacity to lead [21] the group by demonstrating mindfulness of the value in working together [22, 23], and using their shared assets to assist the patients to reach achievable and desired health outcomes. While some work around elements of practice was done in the area of clinical leadership [24, 25] for example Patrick, Laschinger, Wong, and Finegan (2011) published a measure for staff nurses providing direct care that utilized Kouzes and Posner's Leadership Elements [26], none of these studies focused on the attributes being used related to team collaborative leadership. This resulted in considering the identified attributes from the concept analysis to create a measure of this form of leadership. Sinclair and Orchard reviewed the attributes identified by Rykhsch, Orchard & Wong (2015) to determine how they might be assessed objectively by health professionals. This review resulted in two of the attributes (situational interactive process and collaborative interdependence) needing to be re-focused on a component associated with the named attributes. Situational awareness process became a symbiotic relationship dimension while collaborative interdependence was refocused on mindfulness. Both shared assets and capacity to lead were retained. Operational definitions for each were then generated – symbiotic relationship (5 items) “is a collaboration in which both team members have their own well-established roles and mutually adapt to changing demands of the dynamic”; mindfulness (9 items) “is a thoughtful and extended focusing on one's attention on immediate experiences as they transpire”; shared assets (7 items) includes ‘an environment that encourages an openness to distribute knowledge, skill and expertise within



a team; and capacity to lead(7 items) “is a willingness to both lead and accept accountability for the position of leadership” [27]. As the items were generated within each of the dimensions for the instrument care was taken to ensure all aspects associated with each dimension were captured. The outcome was development of the 28-item Assessment of Interprofessional Collaborative Leadership Scale (AICLS) (Sinclair & Orchard, 2018).

### **Symbiotic relationships**

1. help the members to appreciate their contributions to the group’s teamwork
2. encourage team members to value each other’s individual expertise
3. encourage team members to harness their complementary capabilities (shared knowledge, skills & expertise) to address care plans
4. allow all team members to have a chance to voice their opinions
5. promote the team members’ seeing their shared outcomes as meaningful and valuable.

#### **Mindfulness**

6. encourages team members to develop processes to lead to creating a shared decision-making environment
7. encourages team members to focus beyond the status quo (i.e. normal way of doing things) on relevant key issues
8. encourages team members to consider creative solutions to complex patient/client care planning
9. encourages team members to re-evaluate traditional ways of dealing with similar situations
10. encourages open discussions amongst all team members around patient care issues
11. is receptive to supporting team member suggested changes
12. encourages team members to adapt to varying situations
13. encourages team members questioning of things that do not make sense

14. supports team members’ creative innovation in solutions where there is uncertainty to patient/client care planning.

### **Shared assets**

15. ensure there are opportunities for all team members to share their perspectives around patient/client care planning issues
16. encourage team members to establish shared goals around their teamwork
17. facilitate team members’ adjustments to situational role needs
18. encourage team members to participate in accepting responsibility for their contributions within team decision-making processes
19. the decision-making process focuses on shared goals of all team members
20. there is attention to encouraging integrated perspectives to facilitate shared decision-making processes within patient/client care plan development
21. when plans of care are implemented the work is distributed across the team members depending on members’ capabilities

### **Capacity to lead**

22. team members support patients/clients being the collaborative leader
23. team members are willing to serve in a team leading capacity when asked
24. all team members accept ownership and accountability for their shared teamwork
25. all team members contribute to common goals shared by the team
26. team mentor one another to be able to lead the team effectively
27. there is support for the leader of the team rotating depending on the needs for our developing care planning
28. together we select the leader for our team.



## METHODOLOGY

### Study Design

A two-stage testing process was undertaken including a content analysis validation assessment followed by a full testing of the AICLS using a cross-sectional validation of the AICLS with 101 health care professionals reflecting a wide range of professional groups was carried out in a community general hospital in Southern Ontario, Canada.

Content Validity Assessment was carried out in May 2018. A group of 12 international interprofessional collaborative practice experts were contacted and requested to complete both an online 28 item version of the AICLS rated on a 5-point scale (1 = not at all to 5 = always) with a content validity index [28] using a 4 point relevancy scale (1 = completely irrelevant to 4 =extremely relevant). Six of the experts completed the instrument and CVI index. The overall CVI mean was 15.32 (SD = 0.65) all of the subscales were rated from 3.66 to 3.96 (symbolic relationships M = 3.96, SD = .08; mindfulness M = 3.84, SD = .13; shared assets M = 3.86, SD = .23; and capacity to lead M = 3.66, SD = .21). Based on these results the AICLS was rated as highly relevant. When individual items were reviewed only one item received a score below 3.5 which resulted in a revision in the item wording for stage 2 testing.

### Testing the instrument

In the 2nd stage the revised 28 item AICLS was uploaded into an online Qualtrics program for further testing to determine if the AICLS and its dimensions (symbolic relationship, mindfulness, shared assets, and capacity to lead) measured the overall construct of collaborative leadership within health providers. And secondly, what is the level of collaborative leadership within health providers working in teams within a hospital setting?

### Sample/sampling frame

Health providers working within a Southwestern hospital were approached by an administrator following ethics approval for the study by HREB at Western University and the hospital ethics review committee. The sample size

required was 400 to allow for both an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA) of the instrument. Unfortunately, only a total of 101 respondents participated in the initial testing of the AICLS. Therefore, only descriptive statistics and the instrument reliability can be assessed at this time. Further testing is in the planning stages at two international sites.

### Data Analysis

SPSS version 26 was used to analyzed instrument dimensions for their means, standard deviations, and sums by items and collaborative leadership overall. This was followed by assessment of AICLS reliability using Cronbach's  $\alpha$  for each dimension and then collaborative leadership overall. Collaborative leadership had a mean of 104.82 (n = 78; SD = 16.75); mindfulness had a mean of 33.56 (n = 64; SD = 6.06); shared assets had a mean of 26.18 (n = 65, SD = 4.90); and capacity to lead had a mean of 25.41 (n = 54, SD = 4.14). The preliminary evidence of reliability of the instrument was .96 and the dimensions ranged from .85 to .92). Therefore, there is likely some redundancy in the items (see Table 1).

**Table 1.** Interprofessional collaborative leadership dimensions by means, standard deviations, internal consistencies

DIMENSION	NO OF ITEMS	n	M(SD)	$\alpha$
SYMBIOTIC RELATIONSHIPS	5	78	19.35(3.19)	0.87
MINDFULNESS	9	64	35.56(6.06)	0.92
SHARED ASSETS	7	65	26.18(26.18)	0.92
CAPACITY TO LEAD	7	64	21.69(3.55)	0.85
INTERPROFESSIONAL COLLABORATIVE LEADERSHIP	28	56	101.11(16.30)	0.96

This was further confirmed when item-item correlations were carried out. A number of items across both mindfulness and symbiotic relationships inter-item correlations were above .40 which indicates likely redundancies exist. There were fewer items in the shared assets dimension that were outside of the .40 upper range



of recommended correlations. Capacity to lead seems to show higher inter-item correlations residing well above the .40 [29]. Therefore, it is likely once further data sets are available for a fulsome psychometric analysis that capacity to lead may not be a final dimension in the instrument. None of the items has inter-item correlations below .20. Thus, based on this initial analysis it appears that a number of items are assessing a small aspect of the construct [29]. It is anticipated that once further testing is completed and both an exploratory (EFA) and confirmatory factor analyses (CFA) are carried out we will be in a position to refine the instrument and gain a fuller understanding of its model fit indices.

### Findings

While the importance of team-based interprofessional collaborative leadership is one of the essential competency domains in interprofessional client-centred collaborative practice, to date being able to understand its dimensions and occurrence in present health care provider teams has been elusive. This initial reported work begins the path to potentially gain both. It is believed that the presence of effective collaborative leadership may result in improvement to patients' health outcomes by: advancing interdependent working relationships among team members; facilitating effective team processes; facilitating effective shared decision making; establishing a climate of shared decision making, shared expectations; and integrating principles of continuous quality improvement to work processes and outcomes [30-32]. Further testing of the AICLS may determine if it is a reliable and valid instrument to be used to measure collaborative leadership within interprofessional health care team. Once further testing occurs and the dimensions within the AICLS are finalized a beginning means for further in-depth studies of what comprises the work within the AICLS dimensions will be needed. Research questions such as how does leadership function within IP collaborative teams? How might the current formal leadership roles or managerial positions evolve as the collaborative teams continue to recognize their collaborative leadership impacts on complexity of

care? Will accountability for outcomes shift as teams recognize their collaborative roles within patient care goals? Further study if teams recognize their roles in collaborative leadership, or is it just becoming a standard of care to have interprofessional collaboration impacting outcomes? It may also provide a beginning understanding of components needed to be included in healthcare team development programs to learn more about what comprises the processes involved in this form of leadership. Further work is also needed in fully understanding the dynamics occurring within IP collaborative teams that supports its leadership.

This paper is intended to be a beginning to further studies in this important component in interprofessional collaborative teamwork.

### References

1. Drescher, M. A., Korsgaard, M. A., Welpe, I. M., Picot, A., and Wigand, R. T., The dynamics of shared leadership: Building trust and enhancing performance. *J Appl Psychol*, 2014. 99(5): p. 771-783.
2. Carson, J., Tesluk, P. and Marrone, J, Shared leadership in teams: an investigation of antecedent conditions and performance. *Academy of Management Journal*, 2007. 50: p. 1217-1234.
3. Bligh, M.C., Pearce, C.L. and Khooles, J.C., The importance of self- and shared leadership in team-based knowledge work: A meso-level model of leadership dynamics. *Journal of Managerial Psychology*, 2006. 21(4): p. 296-318.
4. Ensley, M.D., Hmieleski, K.M. and Pearce, C.L., The importance of vertical and shared leadership within new venture top management teams: implications of the performance of startups. *The Leadership Quarterly*, 2006. 17: p. 217-231.
5. CIHC. National Interprofessional competency framework. Vancouver, B.C.; CIHC. 2010.
6. Hunter, D.J, The health debate. Bristol, UK: The Policy Press, University of Bristol. 2008.
7. Orchard and Rykhoff, Collaborative leadership within interprofessional practice. In D. Forman, M. Jones, & J. Thistlethwaite *Leadership and collaboration: Further*



- developments for interprofessional education (pp. 71-94). Houndsmills, Basingstoke, Hampshire, U.K.: Palave Macmillan. 2014.
8. Pearce, C.L., and Sims Jr., H.P, Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors. *Group Dynamics: Theory, Research & Practice*, 2002. 6(2): p. 172-197.
  9. Gitell, J.H., Godfrey, M., Thistlethwaite, J, Interprofessional collaborative practice and relational coordination: Improving healthcare through relationships. *J Interprof Care*, 2013. 27(3): p. 2010-2013.
  10. Rykhsaff, M., Orchard, C. and Wong, C, Collaborative leadership: A concept analysis. Unpublished manuscript, Arthur Labatt Family School of Nursing, Faculty of Health Sciences, Western University, London, Ontario, Canada. 2015.
  11. Anonson, J.M.S., Ferguson, L., MacDonald, M.B., Murray, B.L., Fowler-Kerry, S. and Bally, J.M.G., The anatomy of interprofessional leadership: an investigation of leadership behaviors in team-based health care. *Journal of Leadership Studies*, 2009. 3(3): p. 17-25.
  12. Bleakley, A., Allard, J. and Hobbs, A, 'Achieving ensemble': communication in orthopaedic surgical teams and the development of situation awareness – An observational study using live videotaped examples. *Adv Health Sci Educ Theory Pract*, 2013. 18: p. 33–56.
  13. Casimiro, L.M., Hall, P., Kuziemy, C., O'Connor, M. and Varpio, L. Enhancing patient-engaged teamwork in healthcare: an observational case study. *J Interprof Care*, 2015. 29(1): p. 55–61.
  14. McCallin, A, Interdisciplinary team leadership: a revisionist approach for an old problem? *J Nurs Manag*, 2007. 11(6): p. 364-370.
  15. Bethea, D. P., Holland Jr., C. A., and Reddick, B. K., Storming the gates of interprofessional collaboration. *Nurs Manage*, 2014. 45(9): p. 40-45.
  16. Chong, W.W., Aslani, P. and Chen, T.F., Shared decision-making and interprofessional collaboration in mental healthcare: a qualitative study exploring perceptions of barriers and facilitators. *J Interprof Care*, 2013. 27(3): p. 223-230.
  17. van Schaik, S.M., O'Brien, B.C., Almeida, S.A. and Adler, S.R., Perceptions of interprofessional teamwork in low-acuity settings: a qualitative analysis. *Med Educ*, 2014. 48(6): p. 583-92.
  18. Bohmer, R.M, Leading clinicians and clinical leading. *New England Journal of Medicine*, 2013. 268(16): p. 1468-1470.
  19. Frenk, J., Chen, L., Bhutta, Z., Cohen, J., Crisp, N., Evans, T., Fineberg, H. et al; Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *The Lancet*, 2010. 376(9756): p. 1923–1958.
  20. Davis, J.P., & Eisenhardt, K.M., Rotating leadership and collaborative innovation: Recombination processes in symbiotic relationships. *Administrative Science Quarterly*, 2011. 56(20): p. 159-201.
  21. Hon, A.H.Y., and Chan, W.W.H. Team creative performance: the roles of empowering leadership, creative-related motivation and task interdependence. *Cornell Hospitality Quarterly*, 2012. 4(2): 199-210.
  22. Langer, E.J., *Mindfulness: 25th Anniversary edition*. Boston, MA: Da Capo Press. 2014.
  23. Ling, N.E., & Chin, G.H. *Mindfulness and leadership*, Centre for Leadership Development in the Civil Service College, 2012.
  24. Edmonstone, J, Clinical leadership: the elephant in the room. *Int J Health Plann Manage*, 2009. 24(4): p. 290-305.
  25. Patrick, A., Laschinger, H.K.L., Wong, C., and Finegan, J, Developing and testing a new measure of staff nurse clinical leadership: the clinical leadership survey. *J Nurs Manag*, 2011. 19: p. 449-460.
  26. Posner, B.A. and Kouzes, J.M, Psychometric properties of the leadership practices inventory – updated. *Educational and Psychological Measurement*, 1993. 53: p. 191-199.



27. Sinclair, E. and Orchard, C, Development of the Assessment of Interprofessional Collaborative Leadership Scale (AICLS). Paper session at the Arthur Labatt Family School of Nursing Research Project session, June 26th, 2018, Western University, London, Ontario, Canada. 2018.
28. Lynn, M.R, Determination and quantification of content validity. Nurs Res, 1986. 35: p. 382– 385.
29. Piedmont, R.I, Inter-item correlations. 2019.
30. Chen, G., Kanfer, R., Kirkman, B.L., and Allen, D, A multilevel study of leadership empowerment, and performance in teams. J Appl Psychol, 2007. 92(2): p. 231-346.
31. Kouzes, J., and Posner, B, The leadership challenge: How to make extraordinary things happen in organizations (5th Ed.). San Francisco, CA: Jossey-Bass. 2012.
32. Turning Point National Program. Collaborative Leadership: Self-Assessment Questionnaires. 2017.

#### PEER REVIEW

Not commissioned. Externally peer reviewed.

