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A systems perspective on collaborative care delivery

For collaborative care delivery to be a driver of healthcare transformation, we need to think differently about how we design and manage healthcare delivery.



Craig Kuziemsky

Professor and University Research Chair in Healthcare Innovation
MHA Program Director
Telfer School of Management
University of Ottawa
Ontario, Canada

kuziemsky@telfer.uottawa.ca

[@ckuziemsky](https://twitter.com/ckuziemsky)

Healthcare systems are undergoing transformation in order to meet the ever-changing needs of modern healthcare delivery. Our ageing population and increased prevalence of chronic disease have created complex patients defined by factors such as poly-pharmacy and comorbidity. Patient complexity cannot be managed effectively by single disciplines or by siloed or acute care delivery models. Rather, we need to embrace models of collaborative care delivery as a conceptual underpinning of healthcare transformation efforts.

Collaborative care delivery is not a single model or intervention but rather a dynamic process that integrates people, processes and technology over time. Collaborative care also has an evolutionary element to it and is an example of a learning health system (LHS). A LHS is characterised as a socio-technical system where data from day-to-day operations are used to evaluate care delivery as part of continuous system improvement (Friedman Charles et al. 2016). Dynamic processes and system evolution means that we do not just run processes in a mechanistic manner but rather we need to study and make adjustments to processes based on system needs. This dynamic system nature is what differentiates healthcare processes from those in many other industries.

For collaborative care delivery to be a driver of healthcare transformation we need to think differently about how we design and manage healthcare delivery. Collaboration is a complex and dynamic system of people, processes and technologies that cannot be managed by focusing on individual aspects of the healthcare system; instead we need to develop collaborative competencies that enable us to manage collaboration from a systems perspective.

This paper presents a systems perspective on collaborative care delivery. It starts by defining

collaboration and then describes how to operationalise and measure collaborative care delivery. We conclude with a systems-based management strategy for collaborative care delivery.

Defining collaboration

An essential first step is to understand what collaboration really is. While collaboration and teamwork are often used interchangeably, they are in fact very distinct entities. Teamwork refers to the structure by which patients and providers work together during care delivery. A multidisciplinary team involves different care providers who exchange information to coordinate care delivery outcome, but the actual care delivery take place through provider-specific workflows (Casimiro et al. 2015). Multidisciplinary tasks are well defined, an example being a patient recovering from knee replacement surgery where a surgeon, physiotherapist, pharmacist and nurse work independently on their own tasks with little communication across providers. In contrast, interdisciplinary teams require the integration of knowledge and skillsets from different team members to deliver patient-centred care. Interdisciplinary tasks lack definition and may evolve in the context of care delivery. Therefore, ongoing information exchange and communication across team members is needed to define, monitor and deliver team tasks. An example of interdisciplinary care is complex patient care such as palliative care delivery.

Collaboration is defined as “planned or spontaneous engagements that take place between individuals or teams of individuals, whether in-person or mediated by technology, where information is exchanged in some way (either explicitly, ie verbally or written, or implicitly, ie through shared understanding of gestures, emotions, etc), and often occur across different roles (ie physician and nurse) to deliver patient care” (Eikey et al. 2015). Unlike

team-based models which focus on the structure of a team, collaboration is about the process of engagement between team members. Collaborative goals and outcomes are dynamic and often cannot be predefined, as their context and care delivery goals emerge through communication amongst team members.

Operationalising collaboration

Operationalising collaborative care delivery is a significant challenge. At its core, collaboration is a group process that is operationalised by individuals. Agency, broadly defined as an individual's ability to make their own decision regarding actions, is a crucial consideration in how we implement collaborative care delivery. Working in a collaborative system requires the establishment of collaborative rules of engagement and it will not be possible to accommodate all individual needs or workflows in establishing these rules. Collaborative care delivery requires us to think beyond individual agency. Aspects of individual agency such as workflow or authority may have to change and individuals may have to make trade-offs about their individual agency in the context of working collaboratively (Kuziemsky 2015).

“COLLABORATION IS A COMPLEX AND DYNAMIC SYSTEM OF PEOPLE, PROCESSES AND TECHNOLOGIES THAT CANNOT BE MANAGED BY FOCUSING ON INDIVIDUAL ASPECTS OF THE HEALTHCARE SYSTEM”

Collaborative agency is how we reframe individual tasks such as leadership and decision-making into collaborative tasks (Raelin 2014). Collaborative agency starts by defining a value statement to define collaborative rules of engagement in order to unite all the disparate individual interests of a care team. Maximising value for the patient should be the unifying concept upon which healthcare delivery is coordinated (Porter and Lee 2013). Maximising patient value would then guide health system transformation to support collaborative care delivery at all levels including micro-level tasks such as communication and decision-making about a patient's case as well as macro-level governance

considerations such as programme and policy development and funding of healthcare delivery.

Operationalising collaborative care delivery requires both a structure and set of behaviours. Structures describe the people, processes and technology involved in collaborative care delivery while behaviours describe how agents interact while providing care delivery within the structure (Kuziemsky et al. 2016). Operationalising collaborative behaviour is challenging because of the dynamic and evolving nature of collaborative care delivery. A key part of operationalising collaboration is nurturing collaborative competencies over time. Two such competencies are common ground and awareness. Common ground is the knowledge and shared understanding needed for collaboration while awareness refers to the information that people need to know about the activities and people they are collaborating with (Eikey et al. 2015).

Measuring collaboration

Healthcare delivery must be measured using metrics so we can assess whether or not we are achieving our care delivery goals. It is important that we have the right outcomes and the right metrics to measure them. Too often we use proxies for health system metrics such as wait times for access to healthcare services or patient transit time through the emergency department. Such outcomes only assess system access or throughput and do not properly assess system behaviour such as collaborative decision-making or patient engagement.

Proper metrics for collaborative care delivery must be tied to the means by which we operationalise it. As described above, collaboration requires the development and maintenance of competencies such as awareness and common ground. To that end, these competencies need to be the basis for collaborative care delivery metrics. Collaborative care delivery is a prime example of a learning health system and hence the metrics we develop need to be dynamic to account for the fact that collaborative competencies will develop over time.

A management strategy for collaborative care delivery

To effectively manage collaborative care delivery, we need to understand that collaboration is a complex dynamic system. A first step in managing

collaborative care delivery is to acknowledge and understand the integrated nature of it. Collaboration is a complex system of group activities that are conducted by individuals. Part of managing collaboration is reconciling individual practices into collaborative ones. Individuals cannot all strive to maximise their own agency as that is not conducive to achieving collaborative outcomes. A collaborative value statement such as maximising value for the patient must be defined and used to determine the rules of engagement for how collaborative care delivery is operationalised.

Technology can play a key a central role in supporting collaborative care delivery, but it must be emphasised that technology is only a means to support collaboration and not an end in itself. Implementing collaborative or social media technologies will not achieve collaboration on their own but rather our first step has to be defining collaborative processes and then designing technology to support these processes.

This paper has made several suggestions on improving collaborative care delivery, but there is still much we do not know about it. While studies of collaboration are common in classic healthcare settings such as emergency departments, intensive care units, and surgery, we need more research on collaboration in less traditional settings such as community care centres and patient's homes. We also need research that looks at how collaborative competencies are nurtured in different environments and how to facilitate and engage different combinations of providers, patients and families in collaborative care delivery. Finally, collaborative care delivery is a dynamic learning system that is always evolving. Collaborative interactions spawn new processes, roles and system outcomes and these outcomes must cycle back to inform system learning and redesign.

Conclusion

Collaborative care delivery is playing a large role in healthcare transformation efforts and is the underlying basis for much of the foundation of modern healthcare delivery such as patient participatory medicine and chronic disease management. However, collaborative care delivery is a complex system of interactions between patients, providers, processes and technologies that is shaped by the unique contexts where care is delivered. Management strategies for collaborative care delivery must be shaped by this complexity and tailored for specific contexts. While collaboration involves teamwork, they are distinct entities. Teamwork defines the structure of how people work together while collaboration is about the behaviours that take place in the structure to enable us to achieve desired outcomes. A key focus on operationalising collaborative care delivery is defining a collaborative value statement and then nurturing collaborative competencies over time. ■

KEY POINTS



- ✓ We need to embrace models of collaborative care delivery as a conceptual underpinning of healthcare transformation efforts
- ✓ Collaboration is a complex and dynamic system of people, processes and technologies that cannot be managed by focusing on individual aspects of the healthcare system; instead we need to develop collaborative competencies that enable us to manage collaboration using a systems perspective
- ✓ Operationalising collaborative care delivery requires defining collaborative agency in order to reframe individual tasks into collaborative ones
- ✓ Collaborative care is delivered through a structure and an underlying set of behaviours and is a dynamic learning system that is always evolving



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