

BMJ Open COproduction VALUE creation in healthcare service (CO-VALUE): an international multicentre protocol to describe the application of a model of value creation for use in systems of coproduced healthcare services and to evaluate the initial feasibility, utility and acceptability of associated system-level value creation assessment approaches

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ABSTRACT

Introduction Coproduction introduces a fundamental shift in how healthcare service is conceptualised. The mechanistic idea of healthcare being a ‘product’ generated by the healthcare system and delivered to patients is replaced by that of a service co-created by the healthcare system and the users of healthcare services. Fjeldstad *et al* offer an approach for conceptualising value creation in complex service contexts that we believe is applicable to coproduction of healthcare service. We have adapted Fjeldstad’s value creation model based on a detailed case study of a renal haemodialysis service in Jonkoping, Sweden, which demonstrates coproduction characteristics and key elements of Fjeldstad’s model.

Methods and analysis We propose a five-part coproduction value creation model for healthcare service: (1) *value chain*, characterised by a standardised set of processes that serve a commonly occurring need; (2) *value shop*, which offers a customised response for unique cases; (3) a *facilitated value network*, which involves groups of individuals struggling with similar challenges; (4) *interconnection* between shop, chain and network elements and (5) *leadership*. We will seek to articulate and assess the value creation model through the work of a community of practice comprised of a diverse international workgroup with representation from executive, financial and clinical leaders as well as other key stakeholders from multiple health systems. We then will conduct pilot studies of a qualitative self-assessment process in participating health systems, and ultimately develop and test quantitative measures for assessing coproduction value creation.

Ethics and dissemination This study has been approved by the Dartmouth-Hitchcock Health Institutional Review

Strengths and limitations of this study

- The CO-VALUE study is an international, multisite protocol adapting a novel conceptual model for coproduction value creation and assessment in healthcare services.
- The international, multisite application of a value creation model for coproduction and its assessment in healthcare services could provide useful information for both applied and research communities.
- A community of practice consisting of executive, financial and clinical leaders as well as patients, facilitators and advocates from four countries has been established to guide each phase of this study.
- CO-VALUE is designed to leverage substantial diversity in participating health systems in hopes of yielding a generalisable model for coproduction value creation, but this large degree of diversity also introduces heterogeneity limitations.
- This is not an effectiveness study and is neither randomised nor blinded.
- Rather, it aims to apply and optimise qualitative and quantitative methods for coproduction value creation assessment in initial evaluations of feasibility, usability and utility.

Board (D-HH IRB) as a minimal risk research study. Findings and scholarship will be disseminated broadly through continuous engagement with health system stakeholders, national and international academic presentations and publications and an internet-based electronic platform for publicly accessible study information.

INTRODUCTION

Over the past three decades, healthcare improvement has striven to address significant gaps in quality and safety and to optimise experience of care and population health outcomes by improving the efficiency, reliability and capability of healthcare systems to deliver better healthcare services.¹ Healthcare improvement methodologies have historically been derived from industry, engineering, computing (informatics) and implementation science.² Many of these approaches assume that healthcare is a product generated by systems that behave like factories (production lines). Concepts of healthcare value have followed from this logic seeking to maximise health outcomes, efficiency and standardisation while minimising cost and unnecessary utilisation.²⁻⁶ Despite considerable progress in the development and application of healthcare improvement approaches over time, uniform measured gains on population level disease outcomes, wellness or costs, especially for complex chronic illnesses have not been realised despite some notable accomplishments in some chronic disease conditions.⁷⁻⁹ Additionally, the mechanistic view of healthcare improvement has failed to acknowledge and integrate social and behavioural determinants of health, the potential for individuals to meaningfully participate in driving their own health outcomes and the interaction between healthcare systems and the people they serve.¹⁰⁻¹⁴

New frameworks have emerged that may be more representative of the complex, variable and interactive nature of healthcare services that extend beyond the product-based conceptualisation of healthcare. These frameworks include coproduction,^{15 16} coproduction learning healthcare systems (CLHS)¹⁷ and multilevel interactive collaboration and value configuration models.¹⁸⁻²² Building on the historical foundations of systems-based healthcare improvement approaches and these new conceptual models, we herein propose a novel five-part, coproduction value creation model for healthcare service improvement and a mixed-methods approach for iteratively assessing coproduction value creation. We aim to refine the model and assessment approach through a 3-year, three-phase study (CO-VALUE) employing principles of coproduction, a community of practice (CoP) and discovery learning cycles (DLCs).

Healthcare coproduction models

Coproduction introduces a fundamental shift in how healthcare service delivery is conceptualised. The mechanistic idea of healthcare as a ‘product’ generated by an active healthcare system and delivered to a passive patient is replaced by the idea that healthcare is a service co-generated through collaboration between healthcare professionals and the users of healthcare services.^{15 16} Adapted from the Wagner Chronic Care Model²³ and the Coulter House of Care Model,²⁴ the coproduction model (figure 1) envisions healthcare as a dynamic interplay between two sets of actors: those often referred to as ‘health professionals’ and ‘patients.’ The focus of coproduction is on the

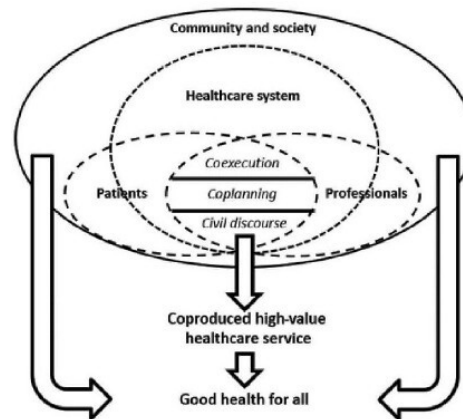


Figure 1 Coproduction in healthcare.¹⁵

health of service users engaged in the co-creation (rather than passive receipt) of improved healthcare services. The process of coproduction includes the *joint assessment, planning, execution, and evaluation* of high quality services yielding improved health outcomes. The CLHS model describes a shared information environment which can be leveraged to facilitate coproduction and measure its quality, cost and value at the systems level.¹⁷ This shared, feed-forward information (clinical and patient reported) informs and facilitates coproduction at the point of care by helping the healthcare system predict and respond to the specific needs of the people it serves. The CLHS also includes a feedback mechanism for assessing population outcomes, which informs improvement work while simultaneously enabling research. Recent applications of the CLHS include Cincinnati Children’s Hospital and the Crohn’s and Colitis Foundation’s CLHS for inflammatory bowel disease care in the USA.^{25 26}

Value creation: a five-part model

Fjeldstad *et al* describe a three-component model (*value chain, value shop and facilitated value network*) for value configuration in business, which offers a flexible approach to value creation and, potentially, a good fit with the diverse realities of healthcare services.¹⁸⁻²⁰ A ‘*value configuration analysis*’ provides a way to assess and design better-value operations. The first component of Fjeldstad’s value configuration model is the *value chain*, which closely aligns with the product-dominant logic historically employed in healthcare. Value chain is characterised by a standardised set of linked sequential processes that serve a commonly occurring need—an example is algorithm-informed treatment of people with community-acquired pneumonia. The second component is the *value shop*, which addresses a particular, often changing and ambiguous, need for which a customised response is required—an example is a new fever of unknown origin. The value shop provides a customised response after some mode of diagnosis, understanding and classification of the need. It is highly individualised and often resource intensive. The final component is the *facilitated value network*, which aims to meet a variety of needs through collaboration with a

1. **Chain:** The ability of a system to meet a commonly occurring need, such as people with community acquired pneumonia. It usually involves the work of a series of linked processes, which occur sequentially.
2. **Shop:** The ability of a system to meet a particular, often changing, unclear need, such as people who are experiencing a new fever of unknown origin. It usually involves the construction of a focused customised response after some mode of diagnosis, understanding, classification of the need.
3. **Facilitated Network:** The ability of a system to meet a variety of needs with the help of a community of resources, often including both individuals struggling with similar challenges and problems, such as a group of people who may share a common diagnosis or treatment pathway. Networks are facilitated by an individual, group of individuals, or technical processes to help persons in need by matching a need with an appropriate mode of meeting that need.
4. **System of Interdependent Elements:** The interconnected elements above (Chain, Shop, and Facilitated Network) which are in some relationship with each other and the relevant population.
5. **Leadership:** The interaction, development, and improvement of the elements above, and accountability for achieving highest value approaches to meeting needs.

Figure 2 Five-part model for value creation of coproduced healthcare service.

community of invested people. Networks often include groups of individuals struggling with similar challenges and problems—an example is a group of people with a chronic condition, such as multiple sclerosis, who are working together to optimise their wellness. Networks use *facilitation* to help guide people to the most appropriate component of Fjeldstad’s model (chain, shop or network) to appropriately meet their needs.

Each system component of Fjeldstad’s model carries different unit cost structures. We assume that the value shop component draws most heavily on healthcare system resources due to its requirement of a customised response for each individual and high service intensity, that value chains require fewer resources because of standardisation efficiencies and that the facilitated value network requires the fewest health system resources because of its prominent focus on peer-to-peer exchange of knowledge and support.

Based on a detailed case study of a renal haemodialysis service in Jonkoping, Sweden, we have adapted Fjeldstad’s model for healthcare applications. This renal haemodialysis service organically demonstrates coproduction characteristics and the three components of Fjeldstad’s model in a chronic illness population.²⁰ These coproduction value creation elements are: (1) a *value chain* element, in which people work with nurses who administer dialysis procedures via standardised algorithm; (2) a *value shop* element, in which people consult with a staff nephrologist located on-site to manage complex and unique service needs and (3) a *facilitated value network* element, where people trained and approved by clinic nurses as able to self-administer dialysis, manage their own dialysis care independently. Peer facilitators function within the network structure to help support, guide and connect people to needed resources and to help navigate among elements. The clinic’s physical space is configured to allow flexibility of access to people engaged in the facilitated value network element of care and provides a milieu for groups of people to interact while engaged in self-dialysis.

We identified two additional elements integral to the success of the renal dialysis service. First is a necessary *interconnection* between the shop, chain and network elements. People in any one element (shop, chain or

network) can move to another element depending on service needs, for example, a person in the self-dialysis element (network) may require a consultation for a new complex problem that has presented (transition to the shop). Second, we observed a necessary role for *leadership* oversight and accountability.

Specific aims

We aim to study the five-part conceptual model for coproduction value creation in healthcare settings (figure 2), with the following specific aims:

1. To describe potential applications of this model across healthcare contexts to articulate and adapt the model to healthcare.
2. To develop and pilot test a qualitative self-assessment guide for coproduction value creation for feasibility, utility and acceptability.
3. To develop and pilot test quantitative measures of coproduction value creation for feasibility, utility, acceptability and concordance with qualitative assessment method findings.

Rationale

In order for coproduction to make the transition from theory to practice, it must be operationalised, applied, assessed and used in healthcare systems. We propose that our adaptation of Fjeldstad’s value creation model can be articulated and specified for healthcare applications through a systematic journey of inquiry and development undertaken by a diverse international CoP. Associated qualitative and quantitative assessment methods can be developed to help health systems demonstrate coproduction value creation, measure value creation performance over time and inform related improvement and research efforts aimed at transforming services by leveraging coproduction to improve the efficiency and effectiveness of health systems.

METHODS AND ANALYSIS

We have developed an international learning community comprised of key stakeholders from diverse health systems across the USA, UK, Sweden and Israel. Through this CoP, we aim to facilitate a coproduced, qualitative process of inquiry to further articulate the five-part value creation model and to design the iterative assessment approach, using DLCs over three phases of the CO-VALUE study.

Community of practice

Health system teams and the research team comprise a *CoP* inspired by the general principles of communities of practice and learning collaboratives.^{5 27–29} The CoP is supported by an online information environment that will be used to exchange ideas, experiences, data, literature and contacts. The platform facilitates synchronous and asynchronous collaboration between researchers and stakeholders including real-time webinars. The CoP has a regular meeting schedule consisting of inperson

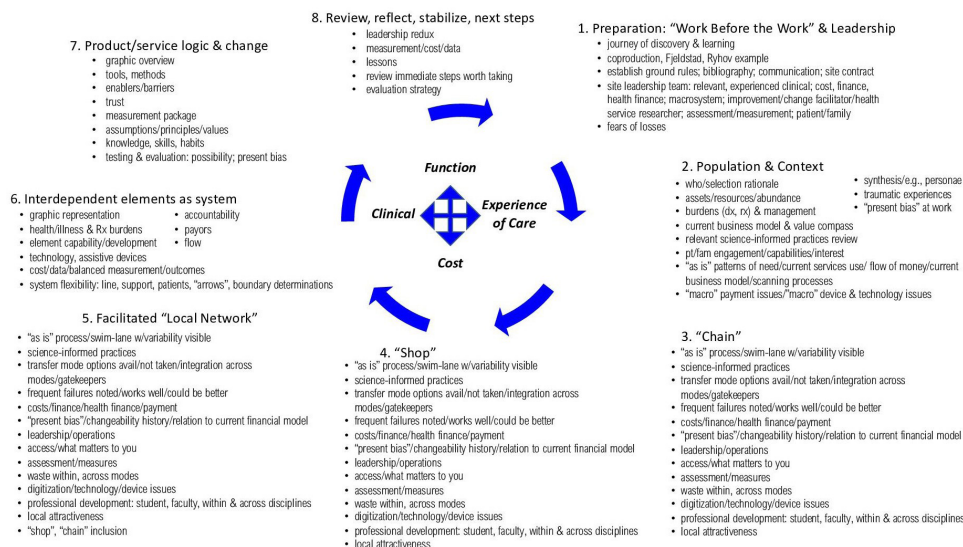


Figure 3 Discovery Learning Cycle.

and virtual learning sessions following a three-phase developmental trajectory and is facilitated using a standard approach to collaborative inquiry—the Discovery Learning Cycle (DLC).

Patient and public involvement

The CoP represents an international group of key stakeholders from multiple health systems to explore, articulate and assess the healthcare value creation model. Participating health system teams represent diversity in geography (ie, the USA, the UK, Sweden, Israel), system type (eg, academic, community), populations served (eg, chronic illnesses, primary care) and team members. Each team includes an executive-level leader (eg, CEO, CNO, COO), a high-level financial executive (eg, CFO), a clinical leader (eg, medical director of the palliative care service, nurse director of a mental health clinic) and other key stakeholders (eg, clinicians, patients, facilitators and advocates). Many of the participating health system teams include patients as key stakeholders involved in developing and implementing the value creation model.

Discovery learning cycle

The DLC is a standard, semi-structured approach for collaborative learning and discourse established by the International Coproduction Health Network. The DLC guides facilitation of the CoP as it progresses through

the three-phase developmental trajectory (figure 3). The DLC draws on elements of the Dartmouth Clinical Microsystem Improvement Curriculum⁴ and the IHI Model for Improvement, including the Plan-Do-Study-Act cycle,⁵ Kolb's Experiential Learning Model³⁰ and our value creation model. The initial steps in the DLC help to define populations and contexts, and to establish structure, process and leadership for each health system. The ensuing steps focus sequentially on exploring characteristics and applications across contexts for each of the five elements in the value creation model. The final steps of the cycle integrate the findings from previous steps, identify domains for value measurement and plan for the next learning cycle.

Three-phase developmental trajectory

We propose a 3-year, three-phase study following a stepwise developmental trajectory (figure 4). Each phase of the study will include completion of at least one cycle of the DLC shown in figure 3. The first phase of the study (year 1) will focus on articulating the value creation model. This will include fitting the model to examples from CoP health systems, developing a prototype self-assessment guide and establishing consensus for initial conceptual domains of the iterative value creation measures. The second phase (year 2) aims to iteratively test and optimise a prototype qualitative self-assessment guide for evaluating feasibility, acceptability and usability in multiple CoP health systems. The second phase will also finalise conceptual domains and draft value metrics for each domain. In the final phase (year 3), we will expand use of the self-assessment guide to all participating centres and pilot test a draft set of quantitative coproduction value metrics in a subset of participating centres.

Guiding principles for development and pilot testing

Coproduction offers the potential for robust change in healthcare theory and practice. Therefore, the DLC

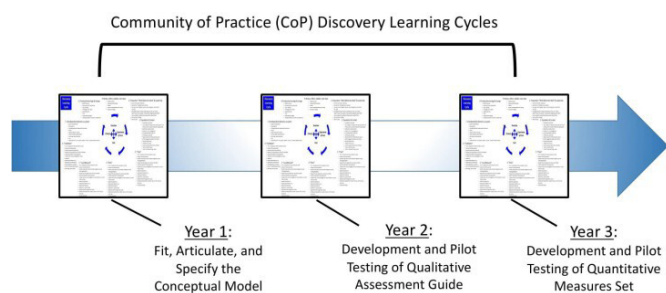


Figure 4 Three-phase developmental trajectory.

process will support continuous and iterative development of the self-assessment guide. While the development process will generally progress in the sequence described above, the process allows for frequent changes in the self-assessment guide and revision of concepts, domains and value measures based on continued CoP discourse and pilot test findings. The self-assessment guide will be based on the five-part value creation model and the domains developed by the CoP via the DLC process. For initial development of quantitative value measurement domains, we will use a balanced whole-system measures conceptual framework.³¹ We will employ a modified Delphi process to achieve consensus on measurement domains and candidate metrics.³²

Pilot tests of the self-assessment guide will focus primarily on the following elements: (1) feasibility (ease of implementation, potential for disruption, time and resource needs for use); (2) usability (ease of use, user experience) and (3) utility (added value to systems). We will also assess the alignment of the guide and value measurement domains to the realistic assessment of systems (ability to assess the system in which it is being employed) and the ‘fit’ of the CO-VALUE model to the health systems under study—the degree to which the elements and the model realistically apply to the health system and the manner in which it applies. We will obtain qualitative information for assessments by interviewing CoP participants from systems participating in pilot testing and direct observation of selected health systems. We will use standard qualitative thematic analysis procedures to evaluate and summarise qualitative data.^{33 34}

Limitations

While the diversity of the health systems participating in the CoP may increase generalisability, this same heterogeneity may complicate our attempts to describe consistent application of the value creation model across these systems. One potential defence against this weakness is a grouping phenomenon often observed in CoPs in which subgroups emerge organically, based on similar clinical populations and health system characteristics, facilitating greater concordance. A second potential weakness is associated with the iterative methodology that will be used to optimise the application of the value creation model and its associated assessment approaches in the absence of a finalised a priori model. For example, after the end of the first DLC (phase I), the full description of the value creation model informing the qualitative assessment approach for use in phase II may not yet be achieved. This might be caused by a delay introduced from an unanticipated major event negatively impacting CoP participation—such as the COVID-19 pandemic. We plan to mitigate this risk by using a flexible, gated strategy to address this in which we will allow an extension of an existing phase until readiness for the next phase is achieved. Additionally, we have designed each phase in the developmental trajectory to be ‘subsequently independent’, so that dissemination of results from a

completed phase is not dependent on the completion of the subsequent phases.

ETHICS AND DISSEMINATION

Ethics

This study has been approved by Dartmouth-Hitchcock Health Institutional Review Board (D-HH IRB) as a minimal risk research study. Participating health system stakeholders will complete written informed consent prior to participating. Informed consent documents for this study meet U.S. and E.U. standards. No patient identifying information or proprietary health system information will be collected. Information will be used for research purposes only. Participants will have the right to review work products and withdraw consent. Only designated research staff will have access to study information and privacy of study participants will be assured across study sites. Sites and participants will not be specifically named in publications.

Dissemination

We will disseminate our findings and scholarship via the following means: (1) regular project review meetings and continuous engagement with health system stakeholders; (2) provision of the self-assessment guide; (3) presentations at national and international meetings and conferences; (4) press releases, videos and interviews in the media aimed at communicating the key project findings, including an internet-based electronic platform where study information will be publicly accessible; (5) publication of articles in peer-reviewed academic journals with emphasis on open access sources and (6) research reports for funding sources including publishable executive summaries and white papers.

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Correction notice This article has been corrected since it was published. Boel Andersson Gäre was misspelled as Boel Anderson Garre.

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Contributors BJO oversaw all aspects of the study. BJO and PBB had the main idea for the study. BJO, PBB, RCF, TCF, ECN, and BAG contributed to the design of the study. BJO, PBB and PRD drafted the manuscript. BJO, PBB, PRD, RCF, TCF, ECN, and BAG were involved in editing of the manuscript. All authors read and approved the final manuscript.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the 'Methods and analysis' section for further details.

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REFERENCES

- Institute of Medicine. Crossing the quality chasm: a new health system for the 21st century, 2001. Available: [Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf](http://www.nationalacademies.org/2001/01/01/chasm/2001%20report%20brief.pdf)
- Batalden PB, Davidoff F. What is "quality improvement" and how can it transform healthcare? *Qual Saf Health Care* 2007;16:2–3.
- Sigma LS. The power of lean six sigma. Available: <http://engineering.dartmouth.edu/sixsigma/>
- Trustees of Dartmouth College. Clinical microsystems. Available: <http://www.clinicalmicrosystem.org/>
- Institute for Healthcare Improvement. The model for improvement. Available: <http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>
- Godfrey MM, Oliver BJ. Accelerating the rate of improvement in cystic fibrosis care: contributions and insights of the learning and leadership collaborative. *BMJ Qual Saf* 2014;23:i23–32.
- Osborn R, Squires D, Doty MM, et al. In new survey of eleven countries, us adults still struggle with access to and affordability of health care. *Health Aff* 2016;35:2327–36.
- Woolf S, Aron L. *US health in international perspective: shorter lives, poorer health*. Washington, DC: National Academies Press, 2013.
- Bradley EH, Elkins BR, Herrin J, et al. Health and social services expenditures: associations with health outcomes. *BMJ Qual Saf* 2011;20:826–31.
- McGinnis JM, Williams-Russo P, Knickman JR. The case for more active policy attention to health promotion. *Health Aff* 2002;21:78–93.
- Van der Maesen LJG, Walker A. *Social quality: the theoretical state of affairs*. Amsterdam: EFSQ, 2002.
- McGovern L, Miller G, Hughes-Cromwick P. The relative contribution of multiple determinants to health outcomes. *Health Aff* 2014;21.
- Turrell G, Oldenburg B, McGuffog I, et al. *Socioeconomic determinants of health: towards a national research program and a policy and intervention agenda*. Brisbane, Australia: Queensland University of Technology, 1999. <http://eprints.qut.edu.au/585>
- Boehmer KR, Gionfriddo MR, Rodriguez-Gutierrez R, et al. Patient capacity and constraints in the experience of chronic disease: a qualitative systematic review and thematic synthesis. *BMC Fam Pract* 2016;17:127.
- Batalden M, Batalden P, Margolis P, et al. Coproduction of healthcare service. *BMJ Qual Saf* 2016;25:1–9.
- Batalden P. Getting more health from healthcare: quality improvement must acknowledge patient coproduction—an essay by Paul Batalden. *BMJ* 2018;1:k3617.
- Nelson EC, Dixon-Woods M, Batalden PB, et al. Patient focused registries can improve health, care, and science. *BMJ* 2016;354:i3319.
- Stabell CB, Fjeldstad Øystein D., Stabel, Fjeldstad O. Configuring value for competitive advantage: on chains, shops, and networks. *Strat. Mgmt. J* 1998;19:413–37.
- Ø Fet al. The architecture of collaboration. *Strat Mgmt J* 2012;33:734–50.
- Fjeldstad Øystein D, Johnson JK, Margolis PA, et al. Networked health care: rethinking value creation in learning health care systems. *Learn Health Syst* 2020;4:e10212:1–9.
- Vargo SL, Lusch RF. From goods to service(s): divergences and convergences of logics. *Ind Mark Manag* 2008;37:254–9.
- Osborne SP, Radnor Z, Nasi G. A new theory for public service management? toward a (public) service-dominant approach. *Am Rev Public Adm* 2013;43:135–58.
- Wagner EH. Chronic disease management: what will it take to improve care for chronic illness? *Eff Clin Pract* 1998;1:2–4.
- Coulter A, Kramer G, Warren T, et al. Building the house of care for people with long-term conditions: the foundation of the house of care framework. *Br J Gen Pract* 2016;66:e288–90.
- Seid M, Dellal G, Peterson LE, et al. Co-designing a collaborative chronic care network (C3N) for inflammatory bowel disease: development of methods. *JMIR Hum Factors* 2018;5:e8.
- Johnson LC, Melmed GY, Nelson EC, et al. Fostering collaboration through creation of an IBD learning health system. *Am J Gastroenterol* 2017;112:406–8.
- Kmietowicz Z. Self dialysis and video consultations feature in report on innovative care. *BMJ* 2015;350:h837.
- Nix M, McNamara P, Genevro J, et al. Learning collaboratives: Insights and a new taxonomy from AHRQ's two decades of experience. *Health Aff* 2018;37:205–12.
- Health Foundation. *Improvement collaboratives in health care*. Long Acre, London, 2014.
- Sims RR. Kolb's experiential learning theory: a framework for assessing person-job interaction. *Acad Manage Rev* 1983;8:501–8.
- Martin LA, Nelson EC, Lloyd RC, et al. *IHI innovation series white paper*. Cambridge, Massachusetts: Institute for Healthcare Improvement, 2007.
- Thangaratnam S, Redman CWE. The Delphi technique. *Obst Gyn* 2005;7:120–5.
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007;19:349–57.
- O'Brien BC, Harris IB, Beckman TJ, et al. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med* 2014;89:1245–51.