



OPINION ARTICLE

**REVISED** **A multidimensional quality model: an opportunity for patients, their kin, healthcare providers and professionals to coproduce health [version 3; peer review: 2 approved, 1 approved with reservations]**

Previously titled: A multidimensional quality model: an opportunity for patients, their kin, healthcare providers and professionals to coproduce care

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**V3** **First published:** 16 Sep 2020, 9:1140  
<https://doi.org/10.12688/f1000research.26368.1>  
**Second version:** 19 Jan 2021, 9:1140  
<https://doi.org/10.12688/f1000research.26368.2>  
**Latest published:** 20 Jul 2021, 9:1140  
<https://doi.org/10.12688/f1000research.26368.3>

**Abstract**

**Background:** It is twenty years since the US Institute of Medicine (IOM) defined quality in healthcare, as comprising six domains: person-centredness, timeliness, efficiency, effectiveness, safety and equity. Since then, a new quality movement has emerged, with the development of numerous interventions aimed at improving quality, with a focus on accessibility, safety and effectiveness of care. Further gains in equity and timeliness have proven even more challenging.

**The challenge:** With the emergence of “service-oriented” systems, complexity science, the challenges of climate change, the growth of social media and the internet and the new reality of COVID-19, the original domains proposed by the IOM invite reflection on their relevance and possibility for improvement.

**The possible solution:** In this paper, we propose a revised model of quality that is built on never-ending learning and includes new domains, such as Ecology and Transparency, which reflect the changing worldview of healthcare. We also introduce the concept of person- or “kin-centred care” to emphasise the shared humanity of people involved in the interdependent work. The change of *Person Centred Care* to *Kin Centred Care* introduces a broader concept of the person and ensures that Person Centred Care is included in every domain of quality rather than as a separate domain. The

**Open Peer Review**

**Reviewer Status** ? ✓ ✓

	Invited Reviewers		
	1	2	3
<b>version 3</b> (revision) 20 Jul 2021		✓ report	
<b>version 2</b> (revision) 19 Jan 2021		? report	✓ report
<b>version 1</b> 16 Sep 2020	? report	? report	


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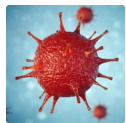
concentration on the technological aspects of quality is an example of the problem in the past. This is a more expansive view of what “person-centredness” began. The delivery of health and healthcare requires people working in differing roles, with explicit attention to the lived realities of the people in the roles of professional and patient. The new model will provide a construct that may make the attainment of equity in healthcare more possible with a focus on kindness for all.

### Keywords

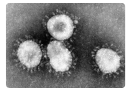
quality, safety, kin centered, covid19, person centered care,

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Any reports and responses or comments on the article can be found at the end of the article.



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**Competing interests:** No competing interests were disclosed.

**Grant information:** The author(s) declared that no grants were involved in supporting this work.

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**How to cite this article:** Lachman P, Batalden P and Vanhaecht K. **A multidimensional quality model: an opportunity for patients, their kin, healthcare providers and professionals to coproduce health [version 3; peer review: 2 approved, 1 approved with reservations]** F1000Research 2021, **9**:1140 <https://doi.org/10.12688/f1000research.26368.3>

**First published:** 16 Sep 2020, **9**:1140 <https://doi.org/10.12688/f1000research.26368.1>

**REVISED Amendments from Version 2**

Changes made

In the abstract we have included a statement emphasising the importance of the new concept we introduce in the paper as follows:

The change of Person Centred Care to Kin Centred Care introduces a broader concept of the person and ensures that Person Centred Care is included in every domain of quality rather than as a separate domain. The concentration on the technological aspects of quality is an example of the problem in the past.

In the main text, we have added this statement to strengthen the argument for a new framework.

To ensure that Person Centred Care is at the core of all that we do, care givers must accept that people centredness is the primary aim and concern of healthcare and is essential for the realisation of health. Only when this has been attained can our advances in biomedical knowledge and skills serve the patient as a person. Patients and healthcare providers are humans first and patients. If we lose our humanity, then the people involved, the patient and the healthcare provider are diminished in their unique interaction.

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*but progress in results. Changes in culture, investment, leadership, and even the distribution of power are even more important than measurement alone*<sup>5</sup>. They identified four stages of quality improvement – defining the problem, measuring to improve, reporting and transparency and paying for value. None of them have produced person centred care. In this paper, we take the opportunity to revise the basic quality framework and to redefine quality with the advantage of the experience gained over the past 20 years. The aim is to allow us to address the deficiencies that have been identified by the task force and redefine what it will take to make a difference.

The actual work of healthcare service today struggles to meet the needs of people for better health. Previously, the work has been designed to address failures in disease management, rather than in working with people to maintain or improve health. It seems easier to focus on “standard work” and the “actions” in disease management, rather than on a more integrated view of the “relationships” that are required to maintain health. Furthermore, more advances in health have come from preventive measures in public health, such as immunisation, clean water, sanitation and housing<sup>6,7</sup>. In addition, the methods of assessing the impact of quality improvement have not lent themselves well to the standard way of assessing interventions in healthcare, nor have they addressed the change in disease management to better health<sup>8</sup>.

**The rationale for change**

Over the past twenty years, since the defining of quality in healthcare by the Institute of Medicine (IOM)<sup>1</sup>, an industry has developed in the field of quality improvement and patient safety. This has included the academic study of the theory and methodology and the actual implementation of the studied theory. The result has been some improvement, but not to the extent that would allow a claim of success<sup>2,3</sup>. It has been said that there is insufficient evidence for the impact of quality improvement and more research is required<sup>4</sup>. One may ask why we need to redefine what is meant by quality in healthcare. A recent review by the National Quality Task Force in the USA stated that *“Despite impressive gains, notable shortcomings persist in normalizing consistent, high-value, person-centered care. What is primarily missing is not progress in measurement,*

Current healthcare service improvement has adopted many theories, methodologies and interventions from other industries, which have demonstrated important gains in quality, cost and safety. During the last century, one can discern two approaches on the creation, assessment, and improvement of the quality of healthcare delivery (see Table 1). Each approach has made important contributions to our abilities to make a better healthcare service and each has worked around a relatively common question. For convenience, we have named the first approach, Quality 1.0, “Q 1.0”. This began in the second decade of the 20th century in the USA, when the American College of Surgeons began their program of hospital standards. Three decades later, other national organizations of hospitals and professionals joined to form the “Joint Commission” for the Accreditation of Hospitals<sup>9</sup>. With the passage of the Medicare

**Table 1. Stages of quality improvement in healthcare.**

Quality 1.0	Quality 2.0	Quality 3.0
<b>Thresholds</b>	<b>Organization-wide systems</b>	<b>Coproduction of health</b>
“How might we establish thresholds for good healthcare service?”	“How might we use ‘enterprise-wide systems’ for best disease management?”	“How might we improve the value of the contribution that healthcare service makes to health?”
Illustrative themes: <ul style="list-style-type: none"> <li>• Development of Standards</li> <li>• Inspection to assess</li> <li>• Certification</li> <li>• Guidelines</li> </ul>	Illustrative themes: <ul style="list-style-type: none"> <li>• Systems, processes</li> <li>• Reliability</li> <li>• Customer-supplier</li> <li>• Performance measurement</li> </ul>	Illustrative themes: <ul style="list-style-type: none"> <li>• Logic of making a “service”</li> <li>• Ownership of “health”</li> <li>• Kinship of coproducing people</li> <li>• Integration of multiple knowledge systems</li> <li>• Value-creating system architecture</li> </ul>

payment program, these certification efforts were linked to qualification for receipt of payment for hospitalisation.

With the advent of post-World War II improvement in systems thinking and system improvement methods, system- or enterprise-wide efforts to address quality emerged in many economic sectors. Initially, these improvement initiatives occurred outside of healthcare service, but increasingly from the mid-1980's, enterprise-wide improvement interventions spread to healthcare services. This new approach is termed Quality 2.0, "Q 2.0". In this process the ideas of quality were defined by Donabedian as being system- and process-driven to produce the desired outcomes<sup>10</sup>. The early interventions to make quality a system or enterprise-wide endeavour were promoted with the introduction of the theories and methods of W. Edwards Deming, Joseph M. Juran and others<sup>11-14</sup>.

The IOM provided an important stimulus for the current focus on quality in healthcare with its reviews of the safety and quality of health care services<sup>1,15</sup>. The IOM defined six domains of quality, which have become the standard within the growing development of the science of improvement in healthcare: safe, efficient, effective, timely, equitable and patient-centred<sup>1</sup>. The theories and methodologies that had been successful in other economic sectors have been thought to be appropriate to the challenges of quality in health care delivery<sup>16-18</sup>. We have learned much, as a new language of systems, processes and outcomes has been added to the study and practice of clinical excellence, previously thought to be "quality in healthcare." Attention shifted from a minimum "threshold" of quality to the concept of a "ceiling" of quality—not, "*are you good enough to qualify?*" but "*how good can quality become?*" Examples of success have been decreases in some infection rates, perceived increased access to healthcare, changes in person-centred care and improvements in aspects of safety<sup>19-23</sup>. System-wide improvement has been demonstrated at some institutions<sup>24</sup>.

Yet, for all these achievements, the persistence and the universal nature of the problem was highlighted in three key publications in 2018, which demonstrated that more than eight million people die from poor quality care in Low- and Middle-income countries (LMIC)<sup>25-27</sup>. In high income countries, at least 1 out of 10 patients is adversely affected during treatment, often resulting from persistent unwarranted variations in healthcare delivery, where a considerable proportion of patients did not receive appropriate, evidence-based care<sup>28</sup>.

We believe that the development of technical solutions helped connect improvement efforts to the earlier focus on "professional work." These efforts allowed many gains. For example, specific safety initiatives have decreased pressure ulcers, falls in hospitals and hospital-acquired infections<sup>29-32</sup>. However, today we can also recognise the diminishment of attention to some very basic issues. For example, what does "quality" really mean to the person whose health it is? In our efforts to clarify desired professional roles, we may have inadvertently created a "product-dominant logic": professionals making a quality healthcare service and then trying to "sell" it to patients. We think it

is time to step back and reconsider what healthcare service is. How is it made and what does quality really means to the person whose health it is?

With the Industrial Revolution came the development of the goods/product dominant logic for manufacturing. This logic separated the producer and the consumer with progressive specialization of the producer and the production of homogenous goods with progressively more efficient methods of production. This logic became a pervasive model for the operations of organized work and was transposed into the design of healthcare where the clinician held all the knowledge and skills and provide care to the person as a patient.

Today the internet connects across "separated" functions and fosters networking that obliterates the earlier separation of producer and consumer. Service-dominant logic fosters integrated resources and interactivity and collaborative work of producers and consumers for mutual value-creating work<sup>33</sup>. For healthcare this implies that the distinction between clinician as the holder of knowledge no longer holds and the patient is now a person who can share in finding the solution.

If one considers the study of the process of production of an outcome, the logic behind the making of products, or "goods" involves linked processes. Efforts to improve those processes often uses "standardization" of the processes and their linkages. The output of the processes is usually tangible. The logic behind the making of a "service" usually involves interactive steps of professionals and beneficiary users working in dyads or networks that are needed to solve a problem, on an individual or group basis<sup>34,35</sup>. Therefore the service will require interaction between all parties involved (see [Table 2](#)).

The approach has changed more recently, and the focusing question seems to have become something of the following nature: "How might we improve the value of the contribution that healthcare service makes to health?"<sup>36</sup>. This invites attention to who actually owns a person's health: the healthcare provider or the individual receiving healthcare? In addition, we postulate that the concept of kinship extends to include both the care giver and the care provider, as they regularly work together to make and improve services in support of an individual's or a community's health. The work of design, execution, assessment and improvement involves the integration of multiple systems of knowledge and skill.

Early observers of "service" work noted that because more than one person was involved, it might be named, "Co-productive work"<sup>37</sup>. It also invites and enables new models of value creation with attention to the basic architecture of those systems. Because these are different to those in the approach of "Q 2.0," we have named this approach Quality 3.0, "Q 3.0". Each of these approaches to quality offer important insights into the complex work involved in healthcare service. We think of each approach as adding to our capability to make better health, rather than "substituting" or "replacing" for the earlier approaches. The approaches are summarised in [Table 1](#).

**Table 2. Difference between Health Products and Health Service.**

Health-related Goods/Products	Health-related Service
<ul style="list-style-type: none"> <li>• usually tangible—can hold it, measure its physical dimensions</li> <li>• usually made without direct active involvement in the manufacturing process by the user</li> <li>• usually made with standardized linked processes</li> <li>• dichotomized maker and user, seller, and purchaser</li> <li>• e.g., “unit of blood,” IV solution, on-the-film Xray image, a lab test—such as a CBC</li> </ul>	<ul style="list-style-type: none"> <li>• usually intangible—usually does not have material physical dimensions</li> <li>• usually made with direct and active involvement in its “construction” by the professional and the user</li> <li>• usually made to solve a problem for individuals or at scale, for a community</li> <li>• because the two parties work together to create a service, some of the dichotomizations of the roles seen in ‘product-making’ do not fit perfectly well</li> <li>• e.g., “a medical history”, “a physical exam”, “advice” for exercise, well-child assessment</li> </ul>

In this paper, we propose a new construct for defining quality of healthcare, where the aim is to meet the needs of the patient as a person, rather than meeting the needs of the healthcare system, which is as complex industry selling a product of disease management<sup>38</sup>. The construct builds on an often overlooked emphasis in the original IOM concept, namely that person centredness is central to quality<sup>1</sup>. Some authors have focused on the need for compassion and person centredness to have a greater position in a quality framework and have noted the shortcomings of many initiatives<sup>39–42</sup>. In the person centred care literature the lack of kindness and respect has been raised as failing in our healthcare systems<sup>43–48</sup>. Despite the focus on the need for person centred care to be a central part of the quality system there has not been the traction required to make a difference. We believe that this is because person centred care is seen as a separate domain rather than one that is a precondition in every domain of quality. To ensure that Person Centred Care is at the core of all that we do, care givers must accept that people centredness is the primary aim and concern of healthcare and is essential for the realisation of health. Only when this has been attained can our advances in biomedical knowledge and skills serve the patient as a person. Patients and healthcare providers are humans first and patients. If we lose our humanity, then the people involved, the patient and the healthcare provider are diminished in their unique interaction.

In proposing a new framework, it is tempting to dismiss earlier concepts. While we utilise the same dimensions, they have been reoriented with new ones added to invite a “service-dominant” logic. The new dimensions of quality will become even more relevant for the way we will facilitate health and make healthcare services in the future. This new model incorporates the key essential values that embody person centred care and incorporates a broader definition of persons and the essential relational nature by including their kin.

**Why now?**

Many forces are at work today that seem to invite these changes. Information access has become more open, with the growth of the internet and social media, so it is much easier for any person to explore what is known about a problem or condition. “Making” and the maker-society invite a sense of personal

agency more than traditional deference to “professional experts.” Healthcare professionals have been working to shed paternalistic legacies, creating a new construct, which we have named the commons, whereby all are working together towards the common good of health rather than simply managing disease and its related illness. This is evidenced in some of the interventions to address the challenge of COVID-19. Historic conventions about payment and finance have given way to significant organizational financial stresses in all societies. The challenge of explicitly recognising the contributions of patients and families, in addition to those of professionals, while maintaining a person-centred focus during and after the pandemic for people who are affected and for those who are not, has invited a new model of quality for the future.

Concurrent with the pandemic, the issue of the structural inequalities in society have become more prominent. A new model is required to address the way we, as healthcare providers, address issues in society that impact the health of the people. These include structural racism<sup>49</sup> and the social determinants of health<sup>50</sup>, including food insecurity<sup>51</sup>, gender inequality<sup>52</sup> and inherent violence<sup>53,54</sup> within many societies. COVID-19 has unmasked these<sup>55</sup>, and we think the new model is a response to the past failures of society to address these issues. Some may say that this is politicisation of health. Rather we see it as making the quality model socially relevant to our times and to the people who are most marginalised.

One of the early developers of modern Health Services Research, Kerr White, noted that the public’s health was not well served by the schism that developed during the last century between “medicine” (personal health) and “public health”<sup>56</sup>. He suggested that this separation was not serving the public’s health well and that the study of epidemiology might help. Today, the challenge of the COVID-19 pandemic has given us another clear view of the ways that this separation has had real consequences in unnecessary death and continues to serve us poorly. We believe that an appreciation of the common humanity—kin—amongst the people who act in the personal and in the public sectors, in addition to the study and contribution of epidemiology, can help. This focus on the relationships helps energise a bridge across the divide of the two sectors. By an

explicit focus on the concept of kin, we can see a person as an individual and as a member of a population. This shared position of people helps us appreciate that kin-shipness or “kindness” can serve as a core value and the ‘glue’ of cooperation required for progress and for the benefit of most people<sup>57</sup>. It has helped us recognise the importance of kin, our fellow human beings, in our daily lives and that the absence of attention to these relationships—kin—, is a painful limitation to how we pursue health, not only in COVID-19, but also in numerous other ways, including in the end of life, for example. By kin we refer to the wider social construct around the people involved in receiving and providing care. Moreover, there is a need to develop a new way of thinking as one faces the challenges of measuring wellness, equity and good health<sup>58</sup>. The COVID-19 pandemic has exposed the failure of linear thinking to produce results when responding to a crisis. This has demonstrated that we need to see quality as part of a complex adaptive system with many competing linkages. Healthcare has many components, both within the formal structures of health service delivery and more importantly within the community and in other sectors. To produce health, these components need to interact in a way that benefits the people receiving care<sup>59,60</sup>.

In short, we can now see clearly that not only is it very difficult to outsource one’s health to someone else—the truth is that we have no real option but to work in new ways to coproduce a healthcare service that is capable of a greater contribution to better health. We believe that the impact of COVID-19 opens an opportunity not to return to the “old normal” or develop a “new normal” based on the old, but rather to conceptually redefine what we mean by quality in healthcare, how we define each other’s roles and how we define person-centred care for individuals and communities.

### Assumptions underlying a new quality movement

Underlying our thinking has been a recognition of the benefits of understanding systems as complex adaptive phenomena, of recognising that at some level all healthcare service is coproduced by persons we sometimes call professionals and persons we sometimes call patients. They are “kin” to each other in this interdependent work<sup>57</sup>.

The failure to link up the different parts of care during the pandemic, e.g. social care with healthcare, has exposed an underlying problem with the design of care. This has meant that many vulnerable people were placed at risk and potentially endured more harm. Healthcare quality and safety requires the interaction of these complex parts, continually adapting to the changing demands, each with its own complexity and each of which having to integrate at a specific time to deliver safe, good quality care. For example, the initial approach to patient safety (called Safety 1) focused on addressing adverse events and undertook linear assessments of unsafe events. These cause and effect assessments were often too simplistic to consider the complexity of causal systems at work. The progression has been to an understanding of complexity and resilience in quality and safety, with the building of resilience and constant learning, as we adapt to changing circumstances (called Safety 2). A different approach to quality is required as well<sup>61,62</sup>.

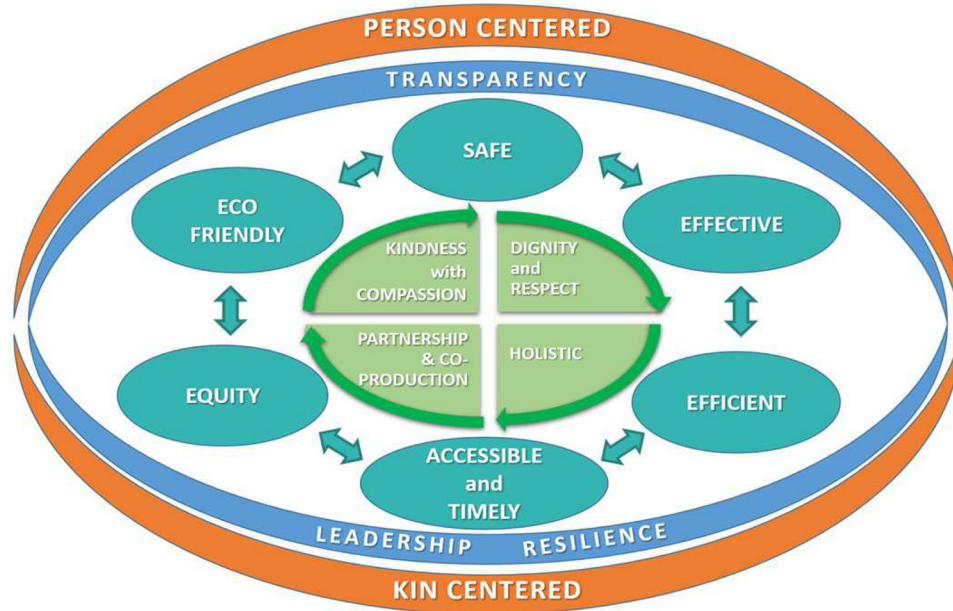
The quality and safety movement has been reactive to what has not been working and we believe that we now need to move to the concept of health and its coproduction. The concept of coproduction of quality in healthcare service systems is in its early phase of development<sup>63–65</sup>. There is a need to include people as partners and to move away from the correction of defects in disease management towards the co-creation of health. People, i.e. both the professionals and the patients interdependently involved, are not the problem, they are the key to a future quality model. While there has been a growing body of evidenced-based interventions, the problem has been one of implementation, spread and sustainability of interventions that have a firm evidence base<sup>66</sup>. We believe that organised efforts of quality improvement and safety, be it the practice or academic research of the practice has become too technical and people cannot relate to the challenge of fostering better health. We need a paradigm that works in today’s real world. One that facilitates better health for individuals and communities, so that the goal of better health will be achieved. In an era where shared creation of services is key, human resources in healthcare will become one of the major challenges. Quality should include care for both persons as patients and as professionals.

### The model

The six domains of quality in the IOM model no longer fit the requirements of a person-centred approach to the facilitation of health and the delivery of universal healthcare. We suggest a focus on the co-creation of better health — a quality system for the people who are working together to co-produce services that contribute to better health (Figure 1).

The original model had person-centred care as one of the domains. We wish to further develop this by recognising the shared humanity of the people involved. The word “kin” is introduced to embody the social relationships and lived realities that surround the individuals involved, both those providing care and those receiving care. Healthcare service is not only about the person as patient or professional, but also about their family and wider social relationships. The dimension person/kin-centred surrounds every domain and is part of all that we do. The need for this approach has been demonstrated to be an essential component of the response to the pandemic. John Ballatt and colleagues suggest that “kindness [kinshipness] is ...not a ‘nice’ side issue, it is the glue of cooperation required for progress to be the most beneficial to the most people”<sup>57</sup>.

We place the person at the core of quality, rather than being a separate domain. At the core are the values of healthcare, based on kindness with compassion; partnership and coproduction; dignity and respect for people and each other; where people are seen from a holistic approach, in their totality and not as a disease-holder or a person with a problematic body organ. The central tenet is kindness, so the dimension of person-centred care is *kin-centred* as well, involving all those who are related to the person receiving and the person providing care. This approach will facilitate the coproduction of quality and safety and achievement of the other domains. This emphasis invites and expands change from “installing” technical solutions to working with people and technical solutions. Telehealth



**Figure 1.** The domains of quality for the new era of health.

efforts make it clear that more use of digital connectivity can work and possibly become part of the extended connectivity of kin<sup>67,68</sup>. The other domains remain in place. They are transfused with person-centred care. This new way of thinking also applies to the other person involved in making the service called “healthcare.” This means that among colleagues, and certainly with regards to relationships with hierarchical supervisors, there needs to be an understanding built on kindness, dignity, respect and partnership – and it includes the holistic person.

A new domain, eco-friendly, is added to reflect the growing challenges of climate change and to introduce the need to address the challenges of sustainability, not only on organisation level, but in every contact in the micro-system<sup>69,70</sup>. We believe that being eco-friendly with a concern for climate change is central to the concept of kinship. The principle of transparency and leadership are included to surround all the technical domains, respecting the person’s right to privacy but also the right to know the data that specifically concerns themselves. Transparency is needed for providers, so that they can be open with themselves, as well as with the people to whom they deliver care. Humble leadership is needed to merge the technical domains with the core values of the model and the vision of person and kin. Humble leadership calls for “here and now” **humility** based on a deeper understanding of the constantly evolving complexities of interpersonal, group and intergroup relationships that require shifting our focus towards the process of group dynamics and collaboration<sup>71</sup>. In the multidimensional quality model we state that it is not only a collaboration among care providers but also open and trustful collaboration between care providers and patients & kin. This implies a change in the culture of care to one that can embrace the new

model. Transparency and resilience, i.e. the ability to operate with psychological safety, are the basis for the pursuit of truthful data collection, analysis and interpretation. Transparency with all our “kin” begins with professionals being transparent with each other<sup>72</sup>.

### Implication for current programmes

We believe that healthcare promotion and the delivery of healthcare must return to the core tenets of care—a form of “service”—and include the values that we have made central to the model in everything that we do. As one reflects on the Donabedian construct of “Structures and Process leading to Outcomes,” neither the structures nor processes we currently have designed are able to deliver a care model that could encompass the domains of quality nor kin centred approach. Healthcare will require a considerable redesign in which power is transferred to the person rather than remaining in the system. This would entail placing the people who receive care in positions of power in deciding how care should be delivered and how services are planned. As the complexity of care has redefined the way care is delivered with several providers often being involved in the delivery of care, the concept of integrating care around the person receiving care will be required with partnership and collaboration being core. In the [Table 3](#) we demonstrate the actions that are required to implement this new quality paradigm. Kin and person-centred care are infused in every effort to improve care, safety and effectiveness. The introduction of transparency will require a culture change in every sector of healthcare. Ecology is now a central domain, so all decisions and planning will require programmes to improve the impact on the climate and environment. Quality health services are based on what one human offers to another. These services are fundamentally a human activity, with attendant

**Table 3. The domains of quality and action to be taken.**

Domain of quality	Patient/Kin receiving care	Person providing care	Organisation
<b>Person/Kin centred</b>	The care a person receives should be filled with kindness, dignity, and respect. People should be seen as a whole and their care must be coproduced. Shared decision-making and self-management are essential.	The person providing care should experience psychological safety, kindness, dignity and respect with a sense of belonging and meaning. This will facilitate the resilience or coping skills required by healthcare professionals to feel physically and mentally safe.	The core value is about quality, and kin-centred care health with meaning and purpose. Leadership is distributed to engender physical and psychological safety for all people providing care. Meaning and purpose to the work is part of all decision making and the organisation is learning from excellence and challenges.
<b>Safety</b>	Care should be free from harm, where harm is defined as <i>something one would not accept for oneself or one's Kin (physical or psychological)</i> .	Psychological safety is a central part of the culture. Proactive management of risk and learning from incidents is standard. Debriefing and support are provided after an incident.	Learning and understanding how the complexity of the system works, is a daily activity. Designing for safety using human factors is central to all operations.
<b>Effective</b>	All care follows evidence-based guidelines and standard operating procedures (SOP) where appropriate, with deviation only as per need of the person receiving care.	Reliable care is provided following SOPs to reduce unwarranted variation. Transparency on (non-)compliance to SOPs is evident.	Translating evidence-based guidelines into local protocols. Benchmarks process and outcome indicators.
<b>Efficient</b>	Unnecessary care is not provided. All care should have intended benefit.	Care provided is cost-effective, minimising duplication and waste. Clinicians constantly study processes to improve. Focus on prevention of wasteful processes. Improvement and or management methods are used to decrease waste.	Administrative waste is decreased. Constant attention to pricing and cost of care without decreasing quality is standard. Health is the outcome one aims for, rather than disease management.
<b>Accessible and Timely</b>	There are no delays in receiving care. Universal quality with safe access is the goal.	Working in teams to provide care. Available 24/7/365 with respect to staff wellbeing and risk of burn-out and bore-out.	Organisation of services so that they are accessible. Manage the impact of weekend-effect or out-of-office hours demand.
<b>Equitable</b>	Care is of the same quality all the time, no matter who you are and where you require care.	Seven-day week service for acute care that is fully staffed for acute care. No racism among staff. Real interprofessional care where all professionals can contribute equally.	Active programmes to decrease institutional racism, or any discrimination based on gender, ethnicity, sexuality disability etc. Focus on the Social Determinants of Health.
<b>Eco-friendly</b>	Kin and the person aim to receive care that decreases duplication, repetition and over-investigation or treatment. Decrease unnecessary consultations.	No duplication of tests. Electronic records where possible and use of digital health. Decrease disposables and consumables in all processes. Organise video-consultation to decrease need to attend clinics.	Water and energy management. Less use of plastic. Conversion to reusable energy. Active programmes for heat conservation and efficient water disposal.



Core values	Patient or Kin	Provider	Organisation
<b>Dignity and Respect</b>	All views are accepted and respected in all decision-making.	Practices shared decision-making. Is treated with respect by other providers from own and other disciplines. Does not see divisions of care.	Develops a culture of learning and respect. Provides a sense of belonging. Develops psychological safety of staff.
<b>Holistic</b>	Care addresses physical needs as well as spirituality and mental wellbeing in an integrated manner.	Moral compass in all activities. Treats patients as people, not as diseases and integrates care.	Breaks down the silos between levels of care so that the person experiences integrated care.
<b>Partnership and coproduction</b>	Be an active partner in designing health. Able to choose where and how to receive care.	Sees patients as equal partners to develop health. Coproduces health with people. Supports the involvement of patients as experts by experience.	Works across all systems in pursuit of health. Are people focused. Performs experience-based coproduction programmes.
<b>Kindness with compassion</b>	Appreciation of the human side of the person. Patient/Kin are kind to the provider.	Appreciation of the human side of the person. Is always kinder than necessary.	Appreciation of the human side of the person. Kindness is quality indicator in balanced scorecard.

rights, responsibilities, and implications. To achieve this, we need to have high quality care for the professionals who deliver care and a redesign of systems, in order to facilitate true person and kin-centred care. In Table 3 the possible actions to be undertaken are suggested, these are not comprehensive and will be dynamic, changing in different contexts. These in turn can become measures of the change process.

The model can be used to define and translate your own view on quality or integrate different visions and ideas into one overall framework. The multidimensional model has been piloted recently in different types of care organizations and it helped the involved clinicians and managers to define and specify the organization specific goals for the six technical domains, the umbrella domain of person and kin centred care and how to focus on the four core values. For example, to demonstrate application of the new eco-friendly domain one could preserve energy, water, resources, improve are using digital interventions and decrease carbon footprint. We invite clinical teams to use the model to examine how they can become person centred and then publish their experience so that we can coproduce the future.

## Conclusion

Over the past few years, there has been a growing realisation that the current design of the system of healthcare has resulted in decreased wellbeing for the professionals involved in healthcare, with increasing reports of burn-out and “bore-out”<sup>73</sup>. The impact of safety events on clinicians has been documented and a meta-analysis of wellness and burn-out demonstrates the negative impact on care givers<sup>74,75</sup>. The review by the National Academies of Sciences concluded that the delivery of quality

person-centred care will require a workforce whose wellbeing is paramount, which implies the dehumanisation of healthcare must be reversed<sup>76,77</sup>.

The recent focus on health inequalities and structural racism makes a change of focus more pressing with the concept of kinship reaching to the core of what it is to be a healer. This attention to relationship-as-fundamental is not new. It is the foundation of many religions. In addition to the bridging energy for our use as we address the “schism”, we also recognise that numerous cultures across the globe have realised for centuries that this universal recognition of the importance of relationship is fundamental in all human life. Perhaps this is best known in the African philosophy of Ubuntu, where “I” am because “we” are. It is our contention that the new model of quality that we propose is the first step in this direction for policy makers, leaders and healthcare providers to explore and embrace this new way of thinking and to invite a return to a recognition of our shared humanity and the importance of kindness in healthcare for people and kin.

## Data availability

No data is associated with this article.

## Acknowledgements

The graphic is based on one designed by Sinead McArdle at ISQua. Astrid Van Wilder proofread the paper. We thank our reviewers and international experts who commented on this paper for their suggestions which lead to this second version of the manuscript and the multidimensional model.

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# Open Peer Review

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## Version 3

Reviewer Report 27 September 2021

<https://doi.org/10.5256/f1000research.58266.r89992>

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Thank you for an excellent paper. No further comments.

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Health service researcher with a focus on digitally supported, person-centered, integrated and proactive care.

**I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

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## Version 2

Reviewer Report 09 June 2021

<https://doi.org/10.5256/f1000research.42565.r82799>

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**James Mountford** 

Royal Free London NHS Foundation Trust, London, UK

This is a well-written, thought-provoking and timely addition to the literature on quality of care.

The historical context around eras 1 and 2 of quality links well to the cogently set-out framework for quality which includes kindness/kin and person-centred as elements which run through the whole frame. In the UK/NHS context at least (& I expect for other health systems too), this framework will be of practical use to a range of people aiming to rebuild better in light of the pandemic. The authors should be congratulated on bringing together complex issues, multiple strands and schools of evidence into a coherent, readable and likely actionable whole.

**Is the topic of the opinion article discussed accurately in the context of the current literature?**

Yes

**Are all factual statements correct and adequately supported by citations?**

Yes

**Are arguments sufficiently supported by evidence from the published literature?**

Yes

**Are the conclusions drawn balanced and justified on the basis of the presented arguments?**

Yes

**Competing Interests:** I have collaborated with of two authors (PL & PB) on several previous initiatives and am in ongoing contact with them. I edit BMJLeader

**Reviewer Expertise:** Quality measurement and improvement ; System thinking ; Coproduction and kindness in health care ;

**I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

Reviewer Report 28 January 2021

<https://doi.org/10.5256/f1000research.42565.r77700>

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? **Gro Rosvold Berntsen** 

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I think you have responded well to my comments. I especially liked the following response which i think is key to the potential impact of this paper:

"Firstly, person centred care is expanded to kin centred so is an overtly broader; and secondly we

do not see it as a separate domain of quality by rather in every domain. We contend that other models have focussed more on the technical – e.g. patient safety is a good example of this problem in the past.”

I think it is essential that you bring this **point out in a much clearer way in the abstract**, and possibly also in the text. This is the central change, and a much needed change in our thinking about quality of care. People-centeredness is the primary concern, which is served by our advanced biomedical knowledge and skills. We are humans first, both the patient and the provider. If our humanity is lost, the health care transaction turns into a violation of both the patient and the provider. Most of the other arguments of the paper flow from this one point and as such deserves to be highlighted.

Good luck.

**Is the topic of the opinion article discussed accurately in the context of the current literature?**

Yes

**Are all factual statements correct and adequately supported by citations?**

Yes

**Are arguments sufficiently supported by evidence from the published literature?**

Yes

**Are the conclusions drawn balanced and justified on the basis of the presented arguments?**

Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Health service researcher with a focus on digitally supported, person-centered, integrated and proactive care.

**I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.**

Author Response 19 Jul 2021

**Kris Vanhaecht**, KU Leuven, Leuven, Belgium

Thank you for the positive review. We agree with your suggestions and have added a section in the abstract and main text to emphasise the importance of the person as a person, for both the patient and the provider.

**Competing Interests:** No competing interests were disclosed.

**Version 1**

Reviewer Report 09 November 2020

<https://doi.org/10.5256/f1000research.29109.r73483>

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**Summary**

The paper is an opinion piece which analyses the development of the concept of “Quality of care” over time:

- Quality (Q) 1.0 – Accreditation and Improvement cycles
- Q 2.0 – IOM. The study and practice of clinical excellence
- Q 3.0 – New model in the current paper.

An acknowledgment of several shortcomings in the current IOM dominating quality of care model inspired this new quality of care model. The current IOM model consists of six goals: Effective, efficient, patient-centered, safe, timely, and equitable care. The authors claim that the following challenges make it necessary to review the IOM model:

- The Quality Chasm is 20 years after the publication of IOM's model for quality, not yet closed.
- The current model of care is too focused on disease and disease management and less on health.
- There is no focus on “relationships” and co-production of care in the IOM model, which is necessary for patients and professionals to “work” together towards a common good.
- The focus on general prevention is lacking.
- What added value health care provides is not explicitly addressed.

A new model for quality must attempt to correct these shortcomings. The new model builds on the IOM model but adds “Eco-friendly” as a 7th quality domain in addition to the original six IOM dimensions. It also provides a strong argument for Kinship as a core value in health care. The authors argue that Kinship is related to kindness – the sort of action you would confer upon someone of your kind. The authors underscore the importance of how both patient and professionals are persons and that although they have different roles, they have the same fundamental human needs for values that are core to the new model:

- Kindness and compassion.
- Dignity and respect
- Holistic
- Partnership- and co-production

The new model also has an outer "shell" consisting of:

- Transparency and resilience
- Person/ Kin- Centered.

All the terms of the model are described more in detail in table 2, which shows how the authors expect each of the following "roles": Patient-kin, Health provider, Organization, to work, or act in alignment with the goals that make up the model.

### Strengths:

I agree with the authors that the current IOM-model of quality of care has not brought about the expected improvements. In practice, the IOM-domains of effective and efficient, and safe care have gotten all the attention and become the primary "measures" of care quality. The softer goals of person-centered, timely, and equitable care have also received some attention, but not nearly as much as the three former.

This paper adds some genuinely new ideas in the following areas:

- The authors emphasize Kin-ship and how we are all first humans. It underscores even more than the many other papers on Person-centeredness in care that the foundation for success is a relationship built on trust between the person who needs care and the person who provides it. Without a robust trusting relationship, the common goal(s) of health can not be reached.
- Also, I believe that the cross-table between roles and care goals is genuinely new. It bridges the gap from the desired outcome, e.g., safety (the row-headline), the most critical resources (column headlines), and the process (Cell value). The essential resources in every care process are those mentioned in the column headings: the patient, the provider, and the Organization.
- The domain Eco-friendliness is not commonly highlighted in other publications on quality of care and adds a novel dimension to the complex concept of quality.
- The strong emphasis on the well-being of the person who provides care is not entirely new<sup>1</sup>. Still, this paper gives it a more decisive role than most other similar publications on quality of care, and I believe this to be an essential contribution.

### Comments

The authors present their quest as a novel approach: "**Assumptions underlying a new quality movement.**" However, most of the features of Lachman's quality model, such as relationship-based care, patient-centeredness, and transparency, were highlighted in the original IOM "Quality Chasm" report (See "Simple Rules for the 21st-Century Health Care System, p. 67"). Many other authors have also pointed out many of the same shortcomings of current care systems<sup>2,3,4,5</sup>. The



terms of kindness, compassion, dignity and respect, holism, partnership, and co-production, are desired outcomes highlighted before by different authors<sup>6,7,8,9,10</sup>. These authors share the concern, with Lachman *et al.*, that the current care systems are not adopting the quality chasm report's recommendations well enough, nor fast enough. It would strengthen the paper to acknowledge how this paper builds and adds to the many previous publications that have pointed this out.

The many prior authors on this topic show that practice worldwide builds on a "too technical understanding of care quality" over a long period. The bigger question then is: Even though many express the need for qualities similar to those presented in this new model, such as person-centeredness, compassion, and empathy in current care, these authors concern does not seem to make an impact on care practices. Why are these compelling publications and analyses, many with strong arguments and support from empirical data, not making a difference? I would welcome the authors' reflection upon the following question: How will this model make a difference when other publications did not? What is it with this model that makes it stand out from previous models?

The paper has a paragraph concerned with complexity and how linear solutions may not provide the answers we need. The illustrated version of the quality model reflects the complexity in the arrows that link every component to other components. I share this view. Furthermore, I support the authors' recommendation of co-production, where a plurality of voices participates in the change implementation. However, change management in complex adaptive systems rely heavily on a shared vision and iterative trial-and-error implementation efforts, where measurement/ observations of "the desired change" are central<sup>11</sup>. I want to challenge the authors on the consequences of making a complexity science approach to improvement: How should we identify the measurements or observations that will guide change?

Donabedian's Structure => Process => Outcome model for understanding a care process's outcomes is still relevant. In their quality model, the authors have given us several domains that should be reflected in the care process. I would like to see the authors reflect upon the following question: If this is the process we would like to see, what changes, if any, do we need in care structures that would support such an approach?

The authors strongly argue the need to honor the relationship between patient and provider. However, in many care processes, the only stable person is the patient. Only those conditions that are managed by the general practitioner (GP) have continuity in terms of "persons" present in the relationship. Even in the GP office, there are temps and health secretaries and nurses, so that personal continuity might not be ensured even there. For patients with more complex issues, the care process consists of a string of care providers, who, more often than not, are not fully aware of what happened last with the last provider they saw. I invite the authors to reflect upon the "patient-provider relationship" in a situation where many different persons share the role of "the provider."

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## Is the topic of the opinion article discussed accurately in the context of the current literature?

Partly

## Are all factual statements correct and adequately supported by citations?

Yes

## Are arguments sufficiently supported by evidence from the published literature?

Partly

**Are the conclusions drawn balanced and justified on the basis of the presented arguments?**

Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Health service researcher with a focus on digitally supported, person-centered, integrated and proactive care.

**I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.**

Author Response 04 Jan 2021

**Kris Vanhaecht**, KU Leuven, Leuven, Belgium

### **Response to Gro Berntsen**

Thank you for your valuable comments We have responded to each as follows.

1. Features such as relationship-based care, patient-centeredness, and transparency, were highlighted in the original IOM "Quality Chasm" report would strengthen the paper to acknowledge how this paper builds and adds to the many previous publications that have pointed this out

We agree with this point . With reference to the IOM report while this has been so, the focus has been more on the product logic as we have noted and called Quality 2.0. We think that the new model addresses this issue and brings the person into the centre rather the process.

Thank you for the references which we agree will ground the paper better within the literature. We have added as follows:

*In this paper, we propose a new construct for defining quality of healthcare, where the aim is to meet the needs of the patient as a person, rather than meeting the needs of the healthcare system, which is as complex industry selling a product of disease management.[38] The construct builds on an often overlooked emphasis in the original IOM concept, namely that person centredness is central to quality.[1] Some authors have focused on the need for compassion and person centredness to have a greater position in a quality framework and have noted the shortcomings of many initiatives.[39,40,41,42] In the person centred care literature the lack of kindness and respect has been raised as failing in our healthcare systems.[43,44,45,46,47,48] Despite the focus on the need for person centred care to be a central part of the quality system there has not been the traction required to make a difference. We believe that this is because person centred care is seen as a separate domain rather than one that is a precondition in every domain of quality.*

1. How will this model make a difference when other publications did not? What is it with this model that makes it stand out from previous models?

This is an important question that we think is difficult to answer as only time will tell.

However we think there are two difference from past models. Firstly, person centred care is

expanded to kin centred so is an overtly broader; and secondly we do not see it as a separate domain of quality by rather in every domain. We contend that other models have focussed more on the technical – e.g. patient safety is a good example of this problem in the past.

**1. How should we identify the measurements or observations (of complexity) that will guide change?**

Table 3 provides many different possible interventions, each of which could be developed into a measure of the complexity and the changes required. This noted in the text

**1. If this is the process we would like to see, what changes, if any, do we need in care structures that would support such an approach?**

**2. I invite the authors to reflect upon the "patient-provider relationship" in a situation where many different persons share the role of "the provider."**

In response to the above two question, We agree there needs to be some consideration of the Donabedian model and the different relationships and have amended as follows:

*We believe that healthcare promotion and the delivery of healthcare must return to the core tenets of care—a form of "service"—and include the values that we have made central to the model in everything that we do. As one reflects on the Donabedian construct of "Structures and Process leading to Outcomes," neither the structures nor processes we currently have designed are able to deliver a care model that could encompass the domains of quality nor kin centred approach. Healthcare will require a considerable redesign in which power is transferred to the person rather than remaining in the system. This would entail placing the people who receive care in positions of power in deciding how care should be delivered. And services be planned. As the complexity of care has redefined the way care is delivered with several providers often being involved in the delivery of care, the concept of integrating care around the person receiving care will be required with partnership and collaboration being core.*

We have reflected on the need for leadership and have added a reference to this point. We believe that this will be ongoing work in process. As we see the model being adopted so we will learn about the complexity of implementation. Nonetheless, the outcome will be looking at health from the view of the person and kin rather from the current model based on disease.

**Competing Interests:** No competing interests

Reviewer Response 20 Jan 2021

**Gro Berntsen**, University hospital of North Norway, Tromsø, Norway

Dear Authors,

I think you have responded well to my comments. I especially liked the following response which i think is key to the potential impact of this paper:

"Firstly, person centred care is expanded to kin centred so is an overtly broader; and secondly we do not see it as a separate domain of quality by rather in every domain. We contend that other models have focussed more on the technical – e.g. patient safety is a good example of this problem in the past."

I would expect to see this **point outlined in the abstract**, because this is the central change that you are advocating.  
Good luck.

**Competing Interests:** None

Reviewer Report 13 October 2020

<https://doi.org/10.5256/f1000research.29109.r71675>

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### Ross Baker

Health Policy, Management and Evaluation, University of Toronto, Toronto, Canada

This article offers a substantial revision to the dominant model of healthcare quality and the measurement framework for that model, derived from the IOM Crossing the Quality Chasm report. The current model has been highly influential in the strategies and interventions developed to improve quality of care, yet frustratingly limited in practice. The authors acknowledge the ground-breaking nature of the current model (over the earlier framework that focused on standards and inspection.) They also point to a number of areas where that model has failed to yield substantive results because of poor implementation strategies that aim at technical changes rather than creating a more resilient and complex adaptive system. More profoundly, they also criticize the limitation of current themes reflected within the current model that aim at improving disease management rather than producing health, involve patients, but fail to create more effective co-production of services, and fail to create an environment that supports both providers as well as patients and caregivers.

The arguments are complex and thought-provoking, and ambitious in scope. Still, the reader is sometimes left uncertain about the requirements of the new quality framework; more details on several important constructs would aid in clarifying these ideas. In particular, the distinction between product dominant logic and service dominant logic is tied to the ideas of co-production and kinship but the linkages between these ideas is not fully developed for those unfamiliar with the sources, and examples might help to elucidate the ways in which these constructs are intertwined. The notion of “kinship of coproducing people” deepens the understanding of how providers and patients with their caregivers might more effectively identify appropriate care, but it is unclear what this might look like in practice, and how to develop closer connections and co-production in an environment where providers are stretched to the limit by growing needs.

A critical issue for this new framework and the individual elements within is “how do we enable the work needed to achieve quality of care as defined in this way?” The details provided in Table 2 offer detail and definitions, but little guidance of what is needed to achieve quality in these

domains. Full specification is likely beyond what could be addressed in the current article, but illustrative examples might provide guidance. Since the focus of the authors is aspirational, their conclusions are more speculative than can be documented from published literature. Nonetheless, their arguments provide a useful set of ideas and provocations to refocus current efforts to improve the quality of healthcare services.

**Is the topic of the opinion article discussed accurately in the context of the current literature?**

Yes

**Are all factual statements correct and adequately supported by citations?**

Yes

**Are arguments sufficiently supported by evidence from the published literature?**

Partly

**Are the conclusions drawn balanced and justified on the basis of the presented arguments?**

Yes

**Competing Interests:** No competing interests were disclosed.

**I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.**

Author Response 04 Jan 2021

**Kris Vanhaecht**, KU Leuven, Leuven, Belgium

**Response to Ross Baker**

Thank you for the valuable review. We have identified three main issues to be addressed.

**1. Distinction between product logic and service logic**

We accept that the explanation of the distinction between product and service logic had not been as well developed as it could have been. We have added more detail to support this part of the argument. We have added a table which can provide an easier way to distinguish between the two

We have added as follows as well as provided a table to explain the point. Changes on page 6-7

*With the Industrial Revolution came the development of the goods/product dominant logic for manufacturing. This logic separated the producer and the consumer with progressive specialization of the producer and the production of homogenous goods with progressively more efficient methods of production. This logic became a pervasive model for the operations of organized work and was transposed into the design of healthcare where the clinician held all the knowledge and skills and provide care to the person as a patient.*

*Today the internet connects across "separated" functions and fosters networking that obliterates the earlier separation of producer and consumer. Service-dominant logic fosters integrated*

*resources and interactivity and collaborative work of producers and consumers for mutual value-creating work.[33] For healthcare this implies that the distinction between clinician as the holder of knowledge no longer holds and the patient is now a person who can share in finding the solution.*

*If one considers the study of the process of production of an outcome, the logic behind the making of products, or “goods” involves linked processes. Efforts to improve those processes often uses “standardization” of the processes and their linkages. The output of the processes is usually tangible. The logic behind the making of a “service” usually involves interactive steps of professionals and beneficiary users working in dyads or networks that are needed to solve a problem, on an individual or group basis.[34,35] Therefore the service will require interaction between all parties involved. t.*

#### **1. Requirements of the new framework**

#### **2. What the interventions may look like in practice especially where providers are stretched due to growing need**

These two points are related. A theoretical model needs to be tested and implemented. We believe the model brings together some of the current concerns regarding wellness of healthcare workers, of people who receive care and the concepts of kindness. As the model is new it has been tested in a limited way in Belgium where it has been adopted by the local policy makers as a framework. One could also look at different quality frameworks developed in other organization where elements of the framework are included in their definition of quality, e.g., in British Columbia. . <https://bcpsqc.ca/what-is-quality/> We contend that the framework is being implemented in part and it brings together many of the current activities in to one construct. We have expanded on this in the text and have added more on leadership as any changes will require a leadership responsive to both people receiving care and those providing care.

*The model can be used to define and translate your own view on quality or integrate different visions and ideas into one overall framework. The multidimensional model has been piloted recently in different types of care organizations and it helped the involved clinicians and managers to define and specify the organization specific goals for the six technical domains, the umbrella domain of person and kin centred care and how to focus on the four core values. For example, to demonstrate application of the new eco-friendly domain one could preserve energy, water, resources, improve are using digital interventions and decrease carbon footprint. We invite clinical teams to use the model to examine how they can become person centred and then publish their experience so that we can coproduce the future.*

**Competing Interests:** No competing interests

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## Comments on this article

### Version 2

Reader Comment 19 Jan 2021

**Carlos Hiran Goes de Souza**, AACI Portugal & Brazil, CEO, Portugal

The authors have signalled a differentiated vision of the conventional quality of care perception, which is a very welcome thought. The quality model that integrates human factors as a sustaining point for the learning processes in a holistic approach seems to be the right perspective for better healthcare outcomes. And thinking about a feasible design to reflect co-creation took me to the challenge of health professionals being prepared to live patient's experience and vice-versa. Anyway, this article is provocative in many aspects and enriches our willingness to rethink our practice in the quality of the health care field.

**Competing Interests:** No competing interest.

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### Version 1

Reader Comment 14 Oct 2020

**Wouter Cattoor**, Vives University College, Department of Nursing and Midwifery, Brugge, Belgium

I have read the proposed article and I must say at first it shook the fundament of our view of quality in healthcare that we assumed through education and experience. But afterwards it felt refreshing to question even such fundamental assumptions, like the authors did.

While reading I noted some ideas to challenge the view stated in the article.

- A first concept I would suggest to relate to the proposed model is patient-experience. E.g the knee replacement patient will not consider the maximum angle he can bend his knee, but he will estimate the quality of his care considering if he is able again to walk to visit his neighbour or family or to perform work in the garden he loves. However the physiotherapist uses the angle of bending the knee to estimate the quality of care.

I think the different points of view should be taken into account. And maybe the patient and the clinicians should share these views before and during treatment and care.

- In the visual presentation of the model I would suggest to add connecting lines between the six domains and towards the central concept, as they seem interconnected with each other.

- The authors suggest that between 1999/2001 and 2020 no improvement was made, and that we would only fix things going wrong.

I would like to see more elaboration to underpin how this new paradigm will effectively lead to better care. The adoption of the new model and the outcomes in the future will depend heavily on the culture of the institutions that adopt the new vision. An organisational culture that shares a common vision and drive towards the best possible patient care, is essential and takes more than the text of the mission statement of the care facility, the hospital or the elderly home.

- In my opinion there could be a larger emphasis on the mission, the task, (almost 'the obligation') for health care organisations to keep aiming for better quality of care. Off course this depends on



the everyday work ethics of the individual healthcare providers and all involved in the care process. But the organisation focus could be more elaborated in the article.

- To conclude I think there is a need of 'leadership' on different levels and for the different actors, which is not addressed yet in this article. The proposed model can serve towards a common and shared mission.

This mission almost cannot be defined otherwise than "to focus on the health and well-being of the client and all involved, in an atmosphere of friendly and kind relationships".

And the patient himself should show some leadership by taking an active role in decisions about his health, cure and care.

Clinicians should lead the patient forward, but not in a paternalistic way. They should also be leaders for their multidisciplinary colleagues and lift each other to a higher level of quality.

The health care providers (institutions) should show leadership to maintain 'healthy' organisations and a healthy staff.

**Competing Interests:** I have worked with one of the authors (KV) on quality of care in hospitals until 2018 but we kept contact.

Reader Comment 14 Oct 2020

**Mitch Blair**, Imperial College, London, UK

A welcome think piece which takes us back into humanity as the core of our interactions in health service delivery. The paradigm shifts from QUality System 1-3 are well laid out and illustrated. I would have liked to see a proper recognition of the importance of social determinants and Marmot's work here. Politics and Medicine are inextricably linked and the contributions of both to "health" could be better emphasised. "Quality health services are based on what one human offer to another" However, I would argue in a technocratic era we are also in need of designing humanity in our computing and technological support systems. These can and should aid immensely with coordination of care, increased access and efficiency if they were more kin centred in their design. Design of these technical aspects to reflect human values should be one of the key "to dos" in supporting the utility of this reconceptualised framework in its aim to provide a better experience of health care.

**Competing Interests:** Nil

Reader Comment 06 Oct 2020

**Angela mccaskill**, US ISO Technical Committee #)\$, USA

The article very much resonates with the current state of healthcare. I think the article is thoughtful, innovative, and brings up factors that must be considered. In particular, the added components of kindness/compassion, and dignity/respect are significant, with life-changing potential. Nonetheless, with abstract ideas such as kindness and respect, I am always interested in seeing how these will be quantified, assessed, and acted upon. Who determines what is considered

“kind,” or how do we measure “feeling respected?” I hope in the future experts will work to provide us with some possible objective ways of measuring, so that we can learn and grow. I also like the idea espoused in the article about “co-creation” of better health. I agree that it takes a team, sometimes even a village! One important factor is that the patient must have the desire and be willing to co-create. Therefore, practitioners should be skilled in the art of motivation and relationship building.

Angela McCaskill, RN

MSc, MA, BSN, Certified Health Coach

**Competing Interests:** I have no competing interests

Reader Comment 25 Sep 2020

**Dominique Vervoort**, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

The authors have described opportunities to reform the conventional quality of care perception and discourse laid forth by the Institute of Medicine (IOM) in light of the changing paradigms within health systems and due to globalization, virtualization, and “covidization” of the modern world. The authors propose a revised model of quality integrating learning processes and including novel concepts, such as Ecology, Transparency, and “Kin-centred Care”, to add to previous quality conceptualizations but moving from systems to persons and their kin.

The authors are to be applauded for their work, which will add to our understanding of the complex, systems-, and patients-oriented nature of “true” quality in healthcare. Their proposed model provides opportunities to better define and evaluate the current quality of care from the perspective of the patient as a person, and emphasize the co-production (i.e., person- and kin-centred nature) of health, which will be critical to re-center the needed discussions surrounding holistic care delivery during and beyond the COVID-19 pandemic.

**Competing Interests:** I declare no conflicts of interest.

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