Defining and demonstrating value from continuous improvement in the NHS

WARWICK BUSINESS SCHOOL
THE UNIVERSITY OF WARWICK

HORIZONS

Outputs and recommendations from two roundtable events with senior NHS leaders in September 2023

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Epigraphs

"En este mundo traidor, nada es verdad ni mentira; todo es según el color del cristal con que se mira.

Martín Fierro, Spanish poet, 1879
("In this duplicitous world, nothing is true or false; everything depends on the colour of the lens through which one looks").

"Does improving healthcare quality cost money or save money? Much controversy surrounds this seemingly straightforward question. The answer is often unknown, since the needed analyses are missing or inadequate. Even where analyses do exist, the answer varies with the stakeholder's viewpoint and the timeframe examined. An investment that improves quality for patients may have different financial consequences for providers."

(Leatherman *et al.,* 2003)

"… if this had been presented to the organisation as a "You're going to save money as a result of it" right, then people would resist it because they've seen this kind of programme happen many, many times before and they would have just seen this as "Here we go again. This is a posh way of dressing up a cost improvement programme".

"… There are savings and efficiencies around quality of life and length of life and that's not something we can really capture here. So, we've kept it very much on the savings in terms of maybe length of stay in intensive care, but even that's arbitrary because actually you may end up staying longer in intensive care because we identified your illness and we moved you to intensive care as opposed to you dying on a ward. So, it's a bit tricky really… So, we're always working with the finance department to look for savings and efficiencies all of the time… but I think that still causes some of us some anxiety.

Middle managers quoted in the evaluation of the NHS-Virginia Mason partnership for whole system continuous improvement (Burgess, 2003)

Defining and demonstrating value from continuous improvement in the NHS

Executive summary

In September 2023, Warwick Business School and the NHS Horizons team convened two roundtable events during which 150 leaders from across the NHS discussed the challenge of capturing the value arising from continuous improvement activity in the service. This paper summarises the discussion and outputs from these events.

The assembled leaders included people from the clinical, operational, finance and improvement leadership communities. They worked in national, regional, system and local delivery parts of the service. They shared an interest in exploring a challenge which has been evident since health services began to adopt continuous, or quality, improvement methods nearly three decades ago: How can we better and more consistently assess, capture, and realise the value, including economic and financial value, arising from this work?

The roundtables occurred at a time when many NHS organisations are adopting a more collective approach to their improvement efforts. April 2023 saw the launch of NHS Impact, a single improvement approach to support organisations, systems, and providers to shape their strategy, underpinning this with continuous improvement, to share best practice and learn from one another. A new National Improvement Board has been established to underpin this approach.

During the events, participants were introduced to the evidence that the consistent capture of value from improvement remains a challenge; one which we share with health systems internationally and which is common to other sectors. Organisations or systems are more likely to frame value through the lens of the social case and/or the business case for improvement. The economic case is often underdeveloped or underrepresented in approaches to impact or return on investment from improvement. The specific contributions to this challenge in the context of the NHS were explored.

Participants then heard from presenters who were making progress on this challenge, at the level of the care pathway and provider organisation, in the NHS. Finally, they heard of an approach being adopted at the enterprise level across a major group of hospitals in Australia.

Stimulated by these inputs, and working in small groups, participants addressed three questions. Here we summarise these and the conclusions reached by the participants; more detail follows in the paper.

The first question related to reluctance in some organisations to consider explicitly financial or economic value arising from improvement efforts, in fear that to do so would alienate a frontline workforce, whose contribution is pivotal to successful improvement.

Overall participants believed that this reluctance should be reconsidered and that, with appropriate framing and narrative, local leaders from the relevant leadership communities could overcome this challenge. Participants were split as to whether “waste” was the best or most appropriate framing of value.

The second question related to the insights that participants had taken from the presentations made by those making progress in capturing value from improvement efforts. Most participants saw merit in building a framework for this work, taking inspiration from what they had seen presented. Many wanted to have the opportunity to learn more about these approaches. The group debated the balance between local, system and national elements of a framework. There was concern about the risks if the impression was given that an approach was to be imposed.

The third question was for the group to identify the design principles which they would wish to see adopted if work to develop a framework were to be taken forward.

This table shows the top ten design principles chosen by the participants.

Ten design principles for creating a value framework for continuous improvement

1. Clarify purpose.
2. Engage those who do the work in co-design.
3. Engage in cultural readiness whilst designing.
4. Create and adopt definitions of value and continuous improvement.
5. Keep language and messaging simple.
6. Improve data through transparency and use.
7. Ensure leadership owns and curates the framework.
8. Cooperate across systems (ICS) in this development.
9. Focus on the strategic priorities.
10. Apply the approach to population health and prevention as well as direct care.

We make proposals relating to several of these principles in the remainder of this paper.

We hope that this paper can provide a stimulus for leaders across the NHS to develop a more consistent approach to the measurement and capture of value arising from continuous improvement.

The developing maturity of system level working and the adoption of the NHS Impact policy suggest that the time is right to address this challenge, one that has proved stubborn despite three decades of improvement strategy in the NHS. And which, we would contend, needs to be addressed if the shift to delivering our goals through collaboration and a philosophy of improvement is to be achieved. If we want CI to become fully operationalised, we need financial measures of value that fit with other activities.

Introduction: the roundtable meetings

During September 2023, Warwick Business School and the NHS Horizons team hosted two roundtable events, aimed at senior leaders of NHS organisations and integrated care systems (ICSs). The purpose of these roundtables was to explore ways in which the value arising from continuous improvement activity in the NHS in England could be better captured and understood, with a particular focus on the lens of economic value. 150 NHS and ICS senior leaders participated, including those with roles in continuous improvement, finance, operations and clinical leadership.

This report comprises six sections:

1. The challenge of defining and demonstrating value from continuous improvement in the NHS
2. Creating clarity through definitions
3. Warwick Business School's interest in these issues
4. The inputs to the roundtable meetings
5. The outputs and outcomes from the discussions
6. A call to action: suggestions for future work

1. The challenge of defining and demonstrating value from continuous improvement in the NHS

Increasing numbers of NHS organisations and integrated care systems are adopting a collective approach to quality improvement (QI) or continuous improvement (CI). This strategic shift has been given further impetus by the launch in April 2023 of NHS IMPACT:

NHS IMPACT is a single improvement approach to support organisations, systems and providers to shape their strategy underpinning this with continuous improvement, and to share best practice and learn from one another.

(NHS England, 2023).

To underpin this work, a National Improvement Board has been established. It has adopted the following priorities:

- Have a focus on creating the context in which continuous improvement is systematically used throughout the NHS to deliver better patient and staff outcomes.
- Agree a small number of shared national priorities which, NHS England working collaboratively with providers and systems, will focus our improvement led delivery work with national coordination and regional leadership.
- Provide support to implement a more consistent, high-quality delivery of services to improve performance and reduce unwarranted variation.
- Work with NHS England partners to co-ordinate improvement expertise to support improvement delivery at pace.

Many NHS organisations have adopted the language of CI, rather than QI. The concepts are closely related but the advocates of this shift of emphasis would argue that QI is seen as more orientated to specific goals and delivery through discrete projects, whilst CI is more systematic and adopts the philosophy that "better never rests". In this report, we use the term CI but recognise that QI is the preferred terminology of many NHS teams and seek to honour and encompass that within our definition.

The shift towards more collective approaches to CI includes features such as those shown in the table below. The table is drawn as a binary ("from/to") to illustrate a sense of direction, but the reality is more complex, often incorporating both.

From	To
Improvement work as a series of priority projects, e.g., reducing central line infections, improving the stroke pathway.	CI as a broader, long-term strategy to drive improved delivery of care across the whole system, which involves ongoing adaptation, innovation, and learning (whilst continuing to use a project-based approach).
Improvement focused on independent initiatives, with a clear boundary around the work, supported by specific tools & information.	Improvement focused on interdependent initiatives, working across boundaries in collaboration, built on shared purpose and using multiple methods.
Improvement work is led by enthusiasts.	Improvement work is championed by the board and most senior leaders, who integrate a focus on CI into their shared work.
A small number of people have specialist improvement capability so a limited capacity for CI.	Everyone in the system has improvement skills and capability, so a wide capacity for CI.
Improvement often makes a peripheral contribution to large-scale performance delivery.	CI is at the heart of large-scale performance strategies (improvement-led delivery).
The management and measurement of improvement is piecemeal and applies to specific improvement projects only.	Operating through a Quality Management System (Healthcare Improvement Scotland, 2022): a consistent and coordinated approach to managing quality that is applied at every level from team through to board.

We suggest three different lenses through which health and care leaders see the benefits of CI. A lens is a way of viewing the world, rather than a specific approach or methodology to improve health and care (Street and Gutaker 2023). Through these three lenses, we can make three different cases for CI:

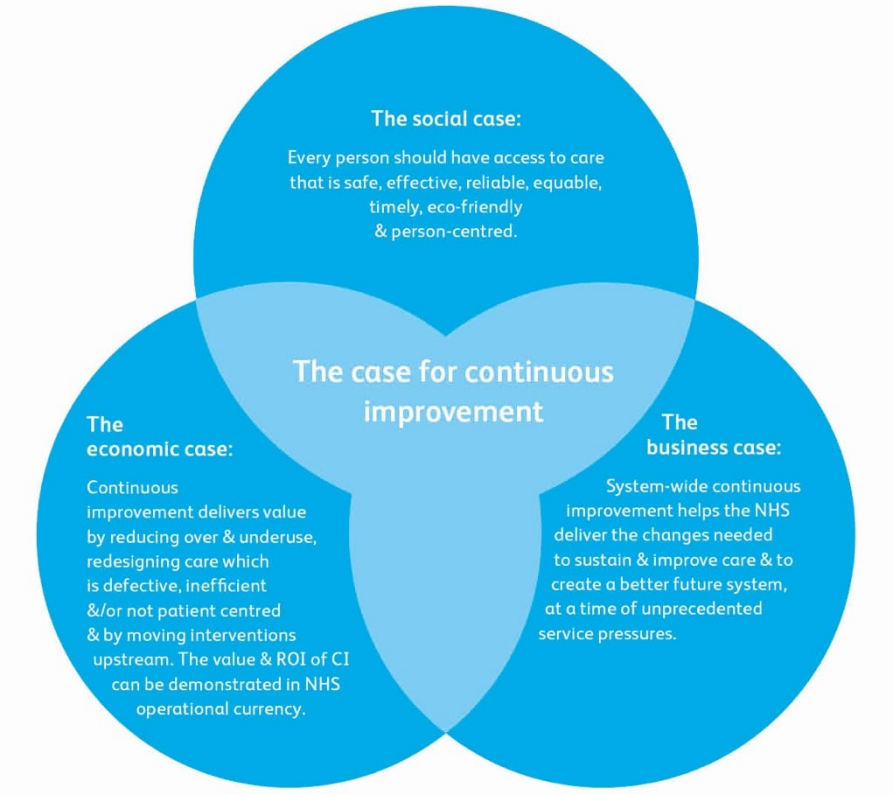
The social case: whether the CI intervention produces health benefits to individuals, their families, to people working in the service and/or to wider society of improved health status and productivity.

The business case: whether the CI intervention is strategically aligned with, and will be a delivery vehicle for, the key goals and priorities of the organisation or system.

The economic case: when evaluating the costs and benefits of the CI intervention, considering whether it is economically viable and provides value for money and a return on investment.

Leatherman *et al*. (2003) and HM Treasury (2018).

When the three cases are considered and evaluated together, they ensure a well-rounded and thorough analysis of the potential of CI (Jones and Pereira, 2023). Very few NHS organisations and systems are working with a delivery model that makes the economic case as strongly as the other two cases, or aligns CI, operational and economic aspects in a strategic approach. Even fewer have calculated the return on investment of their CI activities. Indeed, research shows that many NHS organisations are reluctant to focus on the financial value of CI, due to fears that it will prevent wholesale engagement in CI or that the economic case will overwhelm the social case.



The three cases are like three legs of a stool, creating a strong foundation for CI. However, if we continue to regard the economic case as "off-limits" or "too difficult", we will never be able to achieve the full operational potential of CI. Economic value and financial impact will always be part of the operational equation. We need to develop the third leg, the economic case, so we can mainstream CI, using improvement metrics that are more fully aligned with economic and operational measures.

A global search has identified that achieving this alignment is challenging. Very few organisations have been able to demonstrate the economic case for CI, not just in health and care systems but in other sectors too. Particularly at a time when the NHS is under significant financial and workforce pressure, being able, more consistently and confidently, to demonstrate the value arising from well executed continuous improvement must be a worthy goal. Not to do so risks the extension of CI efforts on the grounds of uncertain impact. Further, no country in the world has yet sought to cohere the development of the economic case for CI across a healthcare system, in the way being considered here. It is acknowledged that to do so will take time and consistent leadership, within the wider ambitions being set out for NHS IMPACT.

We pose the following questions:

- How can we make the economic case as strongly as the social and business case for CI?
- What approach could be developed to support organisations to evidence the value arising from their CI activity when considered through all three lenses?
- How can we demonstrate both the value and return on investment of CI in NHS operational currency?

It was in order to explore these questions that WBS and NHS Horizons collaborated to hold two roundtable meetings of senior NHS leaders. We will go on to describe the conduct of the events, the perspectives from those invited to present, and the guidance given by attendees about potential next steps.

But first, and in line with a key recommendation from participants, we define terms.

2. Creating clarity through definitions

During the roundtable discussions, several terms were used, often interchangeably, when people spoke of activities which aim to improve the quality of care. In groupwork, participants identified the design principles that they believed should be incorporated into any further work that might link CI with the demonstration of value. These are set out in section four of this report. One of the most supported design principles was to agree some common definitions. We have sought to provide clarity of definition throughout this report. To that end, and drawing on existing sources, here we propose some definitions that might be commonly adopted:

A **model** is a simplified representation of something specific, e.g., a system, phenomenon, or a process (The Content Authority, 2023). A model can help us to understand how something works, or to make predictions about how it might behave in the future. Models are created by identifying the key components of the system or concept and then simplifying them to make them more manageable. Examples: The Model Health System (NHS England, 2023b); The Model for Large Scale Change (NHS England, 2018).

A **framework** is different from a model in that it is not used to represent a specific system or concept. Instead, it provides a structured approach (The Content Authority, 2023) or set of

guidelines for addressing particular tasks, problems, or complexities. It offers tools, methods and methodologies for taking things forward. Examples: The Greater Manchester Quality Improvement Framework (NHS in Greater Manchester and Greater Manchester Combined Authority, 2019); the Cynefin framework to aid decision making (The Cynefin Company, 2023).

An **improvement tool** is a specific, standalone device or framework that we use to carry out a function that will help us accomplish a task towards our improvement goals. Improvement tools are often joined up in a process to make an improvement method. Examples: Ohno's eight wastes (NHS England, 2022), PDSA (Plan, Do, Study, Act cycle) (Institute for Healthcare Improvement, 2023).

An **improvement method** is an orderly logical arrangement of processes, underpinned by a way of thinking about change, that we use to attain an improvement goal. Examples: Kaizen (The Knowledge Academy, 2022), SIPOC (Suppliers – Inputs – Process – Outputs – Customers) (Michigan Tech, 2013).

An **improvement methodology** is the consideration of our improvement goals and the most effective methods and tools to meet those goals; it's the rationale by which we choose our methods and the lens through which our improvement work occurs.
Examples: The Juran Trilogy - quality planning, control, and improvement (Shah, 2020), The Virginia Mason Production System (Virginia Mason Institute, 2022) or Positive Deviance (Connor, 2018).

A **quality management system** extends beyond an improvement methodology. In addition to **quality improvement** activities, it incorporates **quality planning**, **quality control** and **quality assurance**. The framework below from the work of one of the contributors to the roundtable meetings, Dr Amar Shah, orientates the elements of a quality management system, and explicates the types of activity which fall into each component of a QMS.

Source: Shah, 2020

Well conducted improvement, however labelled, results in an upward spiral of performance and has in scope all aspects of an organisation's performance, consistent with the concept of a QMS.

What does this mean for the assessment of the value arising from continuous improvement?

The adoption of a more systematic approach to assessing the value arising from efforts to improve quality can be accommodated within these definitions.

It starts with an organisational and/or system commitment to consider value as an integral part of the assessment of all improvement efforts. This mirrors the adoption of system and organisational "quadruple aims" (HealthStream, 2021) or "quintuple aims" (Nundy, Cooper and Mate, 2022) for CI, in which value has always been a consistent component.

In turning this intention into practice, collaborative efforts might lead to the development of a **framework** incorporating useful new **improvement tools**, for example developing more consistent ways of ascribing value to some of the less tangible facets of outcome. An example might the benefit of reduced anxiety and early reassurance when an improvement initiative leads to faster access to cancer diagnosis. This approach is very analogous to the use of measures such as Quality Adjusted Life Years (NICE, 2023) in health economic practices and there will be a lot to learn from these precedents.

There may also be the wider adoption of **improvement methods**. An example would be the wider use of the methods within the EVO framework, presented at the Roundtables; an orderly logical arrangement of processes underpinned by a way of thinking about change, as the above definition implies.

The scope of the focus of **improvement methodologies** could be extended to include, routinely, the lens of value with more consistent evaluation of the impact on waste reduction and effective harvesting and reinvestment of freed resources.

Quality management systems could more clearly and systematically consider value in all four of their component parts. This was demonstrated to be the case during the roundtables, in the work presented from ELFT and St. Vincents which will be described later in this paper. Each developed locally acceptable ways of defining value.

The incorporation and adoption of this broadened sense of value will need to happen at an organisational and system level, but this could be enabled and supported through a process of co-design and collaboration in which models, frameworks, tools, methods, methodologies and systems are shared, debated and refined.

3. Warwick Business School's interest in these issues

Between 2015 and 2020 five NHS hospital trusts in England worked in partnership with the Virginia Mason Institute (VMI) as they sought to develop their own distinctive version of a quality management system for CI. The VMI is the educational and development agency associated with the Virginia Mason Health system which is based in Seattle, and which had developed an enviable reputation for its work to transform and improve its service delivery. It had done this by working closely over many years with the Toyota Corporation and had developed the Virginia Mason Production System as the way in which it managed its work.

NHS Improvement (which subsequently became part of NHS England) commissioned VMI to work with the five NHS hospital trusts. As part of the programme, the CEOs of the five hospitals met on a monthly basis with senior leaders from NHSE, and with senior representatives of the VMI in a Transformational Guidance Board (TGB) which acted as the national programme board for this project.

An evaluation was commissioned and was sponsored and funded jointly by the Health Foundation and NHS England. A team from Warwick Business School (WBS), led by Dr Nicola Burgess, conducted the evaluation. One facet of the brief for the evaluation was to try to establish if the investment in the partnership represented good value for money. The evaluation report explains that this was a challenge (Burgess et al 2022). The evaluation was commissioned two years into a five-year programme. No objectives for the partnership had been agreed which were couched in terms of value for money. There was no collection of baseline data on this issue prior to the programme beginning and no control group of similar hospitals which were not partnered with VMI was identified.

Furthermore, it was clear from interviews, conducted as part of the evaluation, with senior leaders from the NHS Trusts and from NHS England, that the choice not to set objectives relating to finance for the project was deliberate and explicit. The partnership was about establishing a self-sustaining culture of improvement and the adoption of a quality management system within the partner organisations (the social lens and the business case lens). Organisational leaders were concerned that associating the project with efficiency or improved financial performance would hinder the engagement of the workforce which was seen as central to these goals.

In the latter years of the partnership, Leeds Teaching Hospital NHS Trust, one of the five NHS Trusts which worked with VMI, developed a "waste reduction" programme. This programme, which involved the Clinical Divisions within the hospital and the Finance team, tracked examples of improvements which reduced or eradicated non-value adding activity. The Finance team were able to estimate the financial benefits, which could be in the form of reduced costs, or in terms of freed up capacity, which allowed additional work to be conducted by the Trust within existing staffing and physical resources. They were able to attribute a proportion of this waste reduction to the Trust's involvement in the partnership.

The WBS evaluation team worked with this trust to establish the annualised costs of their involvement in the partnership. This included direct costs, which were funded by the trust or the NHS nationally, but also the indirect, or opportunity costs, which arose because of the

time spent by staff in training, in programme management responsibilities, or in the range of routines that were established as part of the QMS, the Leeds Way, which the trust introduced.

Comparing the attributed waste reduction with the annualised costs of their membership of the partnership allowed an estimate to be made of the approximate return on investment. For 2019, the last full year before the impact of the Covid pandemic, the estimate was a return of £15.41 for each pound invested. With appropriate caveats, this estimate was included in the evaluation report.

Have others established the value arising from continuous improvement in healthcare?

At least three published reviews have examined the value and financial impact associated with continuous improvement in healthcare in the last 15 years.

In 2009 John Øvretveit, who has published extensively in the field of quality improvement, was commissioned by the Health Foundation to conduct a review entitled "Does improving quality save money?" (Øvretveit, 2009). From the review of over 400 publications, Øvretveit found only a very small number in which a CI had been deployed, had led to improvement, and for which there was sufficient evidence about the costs of the service impact, and the intervention itself, to draw conclusions. In answer to the question, "Does improving quality save money?", he concluded: "Sometimes, but sometimes not, and mostly we do not know because the research is limited. There is great potential for savings, but it depends on what we mean by quality improvement, who makes the savings, and when."

In 2020 de la Perrelle and colleagues reported on a systematic review of the costs and economic evaluations of Quality Improvement Collaboratives in healthcare (de la Perrelle *et al.*, 2020). Quality Improvement Collaboratives (QICs) are a mechanism to spread beneficial ways of working from one healthcare setting to another. Despite the widespread use of this approach, the authors found only a handful of studies in which costs and economic evaluations of the use of QICs were reported, were regarded to be of good quality, and showed that the QIC approach had been cost effective.

In 2023, Evans *et al*. reported the results of a systematic review of ways in which hospitals capture financial benefits from process improvement and the impact on hospital financial performance (Evans *et al.*, 2022, 2023). Whilst they identified seven papers which showed improvement in waste or in the value of care arising from the application of process improvement, none of these reported on the financial impact at the enterprise level of the hospital as a whole. This work was presented during the roundtables and is discussed below.

In addition, writing in 2018, Shah and Course, the Chief Quality Officer and Chief Financial Officer respectively of the East London Foundation NHS Trust, a mental health trust with long experience of QI, published an article making the business case for quality improvement, and introducing a framework for evaluating return on investment (Shah and

Course 2018). This work and its further development was presented during the roundtables and is discussed below.

Many publications show the potential for improved care to save money. The publications also instance that the use of CI can improve care. However, few publications link these issues, to show that the investment of time and resource in CI results in increased value in healthcare. What evidence exists focusses on CI as a lever for *productive efficiency*, making the most of available resources while maximising outputs (Walters et al 2022). There is little evidence of CI playing a role in *allocative efficiency*, the distribution and redistribution of resources across a system to create optimal gain for the population in terms of outcomes (Health Foundation 2021).

Why is this so difficult?

There are many reasons why it is difficult to make the economic case for CI and demonstrate value:

Is healthcare alone in finding this to be a challenge?

In short, no.

In 2021, Wemmerlöv published a review looking at the economic value arising from continuous improvement in manufacturing (Wemmerlöv, 2021). He found 35,000 peer reviewed publications reporting the results of the use of CI methods in manufacturing. 84% of the articles alluded to cost benefits arising from the programme. However, in only 34 studies (0.09%) were the financial consequences at the enterprise level reported in any

detail. Only 4 studies reported the costs of the CI intervention, in only 3 were finance staff involved in validating the financial analysis. In only 2 were the data sources reported.

This suggests that, at least in relation to published research, the value impact of the use of CI in manufacturing is also not strongly evidenced.

Does this matter?

Many healthcare organisations are sufficiently confident of the benefits that they observe from their adoption of CI methods that they do not feel that it is necessary to question their investment, nor to publish their work to a wider audience. However, even within these organisations there may be pockets of scepticism about the value of CI. Three communities are particularly likely to question whether CI delivers all that its proponents claim for it:

i. The clinical community

They will have acquired, through their training and acculturation, a particular perspective on what constitutes valid evidence of effectiveness. Whilst this perspective may be appropriate for evaluating the effectiveness of a new medication, or procedure, they may be less aware of alternative forms of evaluation which are better suited to the assessment of interventions which are more iterative in nature and in which the contribution of context is more substantial.

ii. The financial community

Scepticism in the healthcare finance community may be a particular challenge if their focus is confined to the direct cash releasing efficiencies arising as a consequence of CI activity; sometimes referred to as the "dark green dollars" (Alderwick *et al*., 2017). This is especially the case if they remain detached from the design of CI interventions and the choice of metrics used to judge impact.

iii. The operational delivery community

Operational leaders are often the people with responsibility for implementing the processes that bring clinical practice and financial oversight together. Their performance is often judged by the ability to deliver operational goals and standards and improvement activities may be perceived as a lot of effort without much immediate operational gain.

These descriptions are, to some extent, a caricature, in that there are many clinicians, finance professionals and operational leaders who play a full role in CI within their organisations. But many people leading CI can point to instances where this type of scepticism is observed and can be used as an excuse for disengagement.

4. The inputs to the roundtable meetings

These events were designed to bring together leaders from across disciplines in health and care, to discuss the challenge of assessing the value arising from CI activity, to explore why the challenge persists, and to discuss the potential ways forward. The slide deck from the roundtable meetings can be accessed by registering at the Warwick Business School link.

Following a scene setting, attendees were introduced to specific approaches to the capture of the value that can arise from CI activity. In addition to the Leeds waste reduction approach outlined previously, there were three additional models:

i. The Engagement Value Outcome (EVO) approach.

This approach was developed and piloted by One NHS Finance; a network of NHS finance professionals launched in 2019. It was presented by Richard Sawyer, Programme Manager for the Finance Innovation Forum.

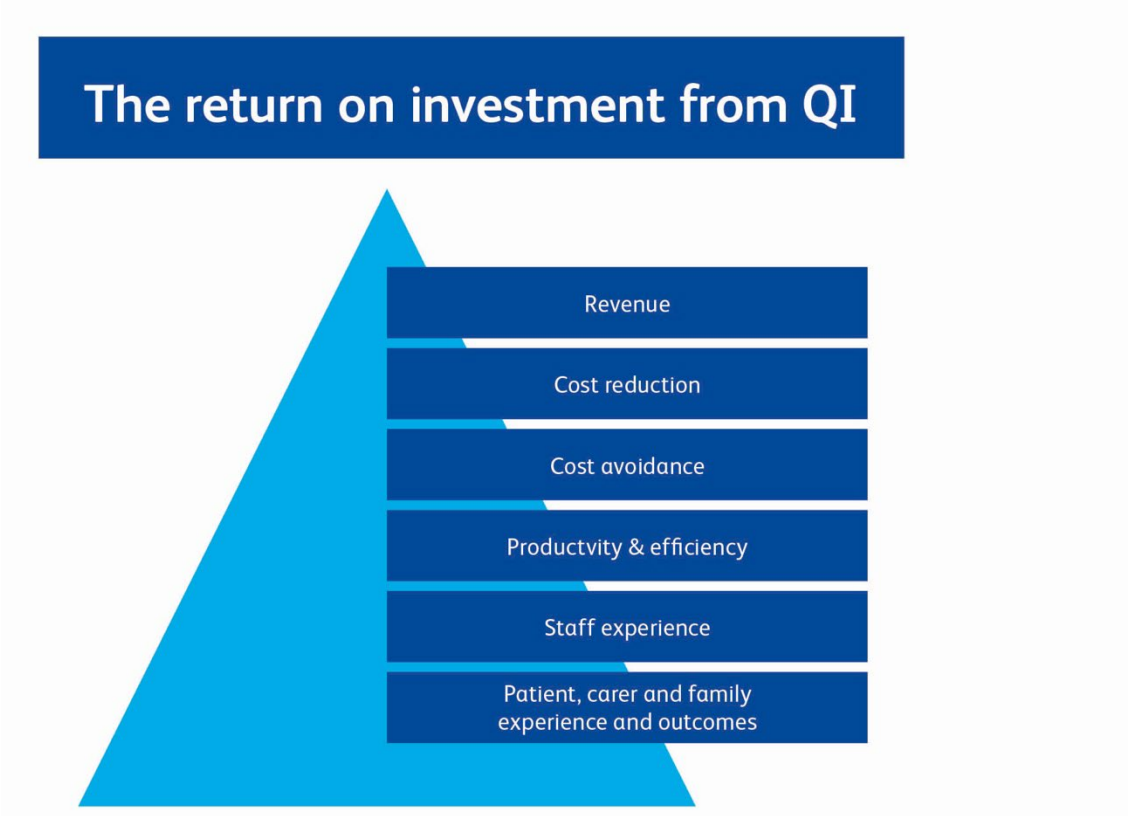
The approach offers a step-by-step process for clinical and finance leaders within an NHS provider organisation to explore the potential to release value by redesign of a small number of clinical pathways. Following this process, and with support from the EVO team, an organisation can identify a potential opportunity to capture value and can then track the consequences of an improvement initiative in terms of both quality and resource consumption. The process can be conducted over a three-month period. It makes use of the patient level costing information systems (PLICS) which are found in all NHS provider organisations but are not always used for this purpose. It brings clinical and finance professionals together, supported by people with expertise in improvement. EVO is freely accessible to any NHS organisation where the senior leaders are prepared to commit to use it with fidelity.

The pilot work with the EVO approach has been undertaken with NHS hospitals, community and mental health trusts. Typically, the work has focused on three discrete clinical pathways, chosen by the trust to explore the approach. The team who developed the approach is now working with one ICS to explore ways in which it might be used or further developed for use across organisational boundaries.

More information is available at EVO.

ii. East London NHS Foundation Trust (ELFT)

This large NHS provider of mental health and community services has been active in pursuing CI for over a decade. Dr Amar Shah, the Chief Quality Officer and a clinician described the framework used by his organisation to capture and monitor the impact of their CI efforts in value terms.



Source: Dr Amar Shah, Chief Quality Officer, East London NHS Foundation Trust

The trust views the value arising from its CI investment as falling into six categories as shown in the diagram above. This is a dynamic framework which it has developed over time. At present, the trust is considering the addition of a further "lens" through which value can be captured and monitored which would focus on sustainability and environmental impact.

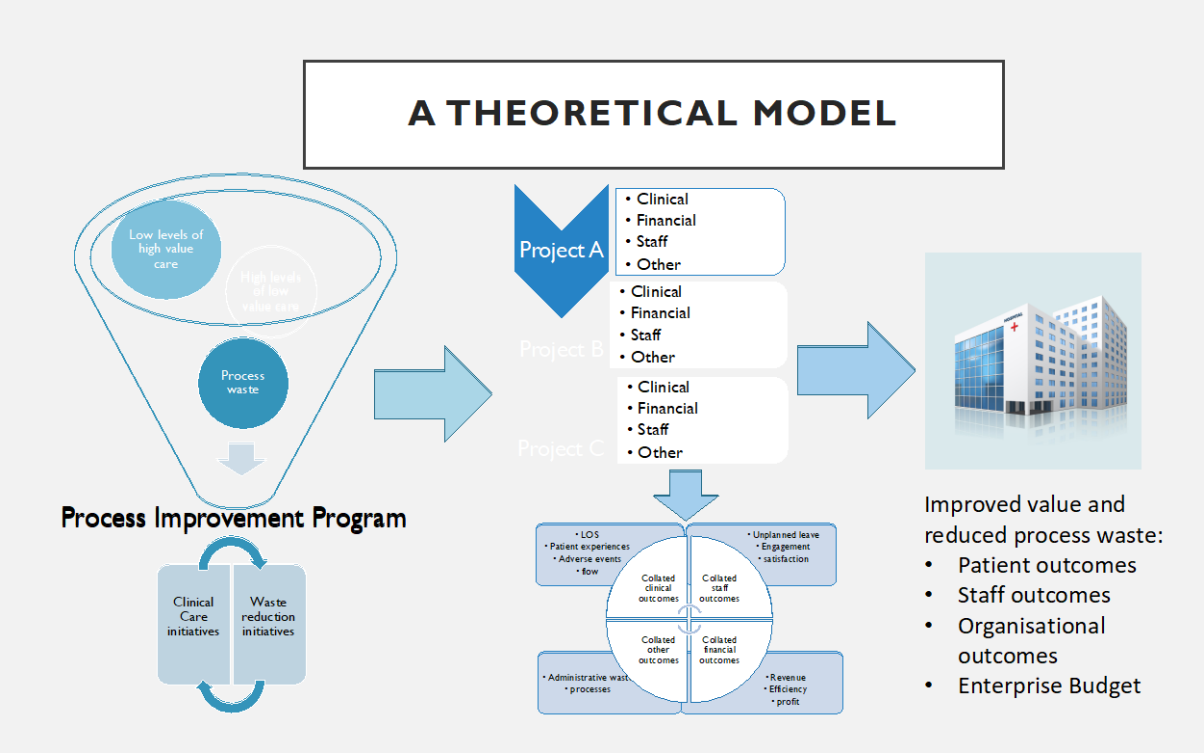
Dr Shah shared examples of successful CI interventions which had positively impacted one or more of these categories of value. He has written about how this framework has been used to make "the business case for quality" (Shah, 2020, 2018).

iii. The St. Vincent's Approach

St Vincent's is a large healthcare provider organisation in Australia. Jane Evans is its Group Manager for Improvement and Experience and has been researching the ways in which healthcare organisations capture the value from their CI efforts over the last five years, studying organisations in Australia, the UK, and the USA.

Jane Evans argues that there is a social case for the use of CI to reduce the acknowledged prevalence of waste of resources in all healthcare systems where this has been studied. The reality of opportunity cost; that a pound or dollar spent in activity that does not add value should be reinvested elsewhere, compels that we should make every effort to study our resource utilisation.

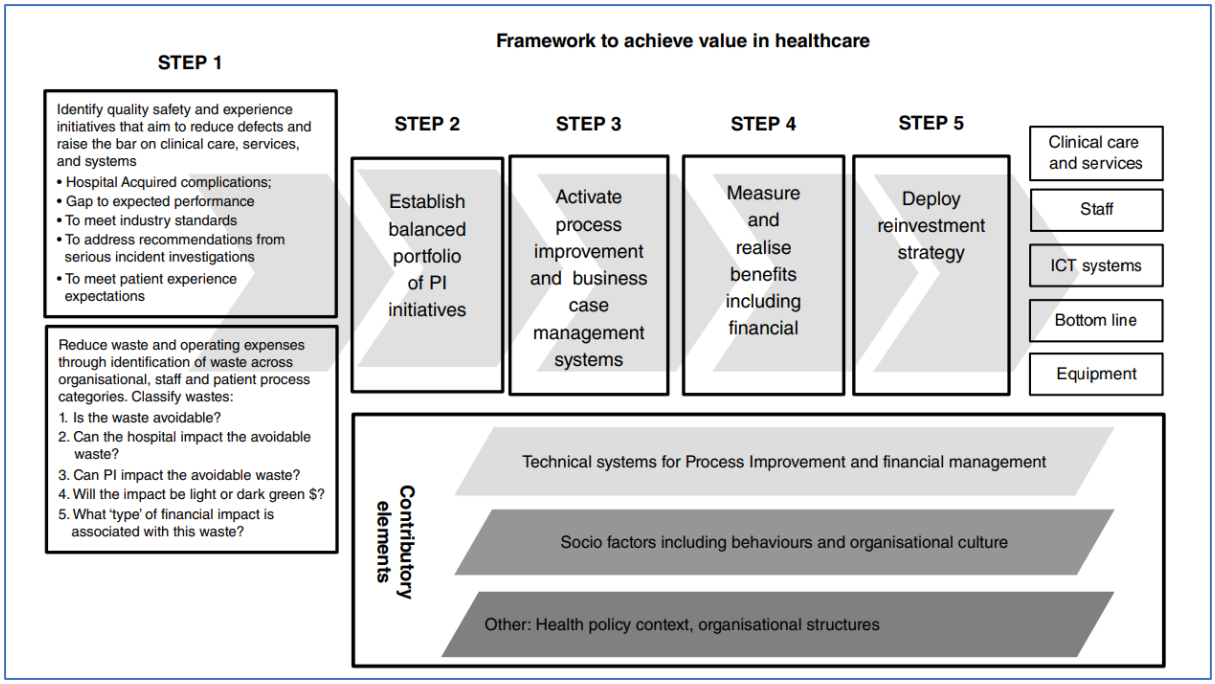
Working with her colleagues she has developed models for how this could be done.



Source: Jane Evans, Group Manager for Improvement and Experience, St Vincent's

She advocates an enterprise level portfolio of actions in which CI is focused simultaneously on clinical care improvements and waste reduction. Each project assesses value in terms of clinical impact including service user experience, financial impact, impact on staff experience and other relevant categories. The categories of value impact are collated at an organisational level.

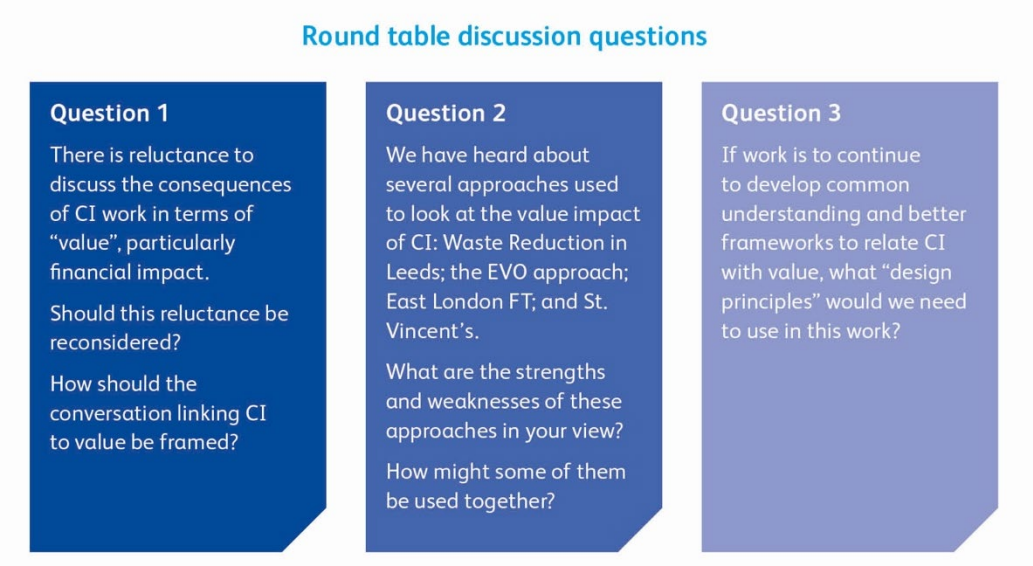
This approach is described in further detail in her publications, which offer a step-by-step approach to the development of such a portfolio (Evans et al 2022, 2023).



Following the presentations of these approaches, the participants discussed what they had heard in small interdisciplinary groups.

5. The outputs and outcomes from the discussions

The participants were asked to consider the following questions:



Outputs from question 1: Should we reconsider the reluctance to discuss value of CI, particularly financial impact? How should this be framed?

The overwhelming majority agreed that we should discuss value. Many reported that they, already do so. A minority do not want to openly discuss value because:
"If finance is the only driver, nothing will succeed".
"Should we be talking about value, or benefits?"

There was some concern that engaging the clinical community will be challenging:
"Clinicians switch off when money is mentioned".
"Finance has become a swear word".
"How do you talk about value-based care to clinicians who are firefighting?"

There were several themes around framing:
"The pandemic has created a burning platform".
"Traditional Cost Improvement Programmes have stripped things to the bone so now we need a mature conversation on value".
"Value always starts with quality".

There was significant discussion on using the framing of "waste reduction" and a polarity of views. On the one hand:
"*Being less wasteful has a double benefit; we save resources and get greater value when we reinvest them".*
"Drive out waste to drive out clinical harm".

On the other hand:
"Waste reduction is a double negative. Can we find a more positive frame?"
"Waste lands badly as a language. We need to look further ahead".

The framing needs to address some of the perceived obstacles:
"Changes happens at the speed of trust. People need to be confident that they will have a say in how resources that are freed up will be used".
"This will need priority. Clinicians need the headspace to play their part but are too busy to get involved".

Several groups mention sustainability and "socially responsible improvement" as part of the frame:
"The long-term future of services depends on more consistently delivering value". Others discussed the challenge of the need for a co-ordinated multi-level approach: *"Start with the organisation, then move onto both the system level and the patient level over time". "We need a golden thread. A clear line of sight. What does it mean at organisational level, division level and patient level?".*

The discussion on value should not only focus on CI:
"We need to challenge everywhere about the value question. Value is a valid question in all aspects of an organisation and system, not just what is delivered by quality improvement".
In addition, the link between value and the management of risk should be emphasised:

"Link risk with value and there is a huge opportunity".

We conclude that there is a need for a suite of frames, not a single approach to value.
"It's hard to make one set of language work for everyone."
"People need to see what this means in their own context".
Whilst the language of waste reduction" is a powerful driver for improvement in some systems, it has negative connotations in others:
"*Making value a single thing is a risk".*

Outputs from question 2: Strengths and weaknesses of the frameworks presented: How might they be used together?

Most of the groups agreed that we DO need a framework for value, though some disagreement on whether one standardised approach or multiple approaches:
"Do need a framework and structure and a way to measure impact".
"One change improvement agenda, use many tools".
"Too many frameworks! Is there a practical template we can use to quantify impact of change?"

The groups identified many commonalities across the four approaches:
"They were all variations of one another with quality improvement at their heart; that is good".
"All emphasised engagement of those who do the work".
"They all got people asking the right questions and working together".

Turning to the individual frameworks, many commented that they needed to see more detail:
"We have only heard about them for twenty minutes".

In terms of the overall feedback on each approach:

The Leeds waste reduction approach

"Involved a shift of language".
"Focused on value streams and systems to track costs across boundaries".
"Benefitted from being used consistently over time.

The EVO approach

There were divergent views about how complex the approach is:
"Seems very complicated and needs good finance support."
"Simple concept. Is there appetite for all that work for one pathway?"
"EVO is good because it uses existing systems and brings them together systematically".
EVO was seen as an approach but needs to be attached to a management system:
"EVO is a process but if benefits are to be realised it needs to be part of a quality management system.

The East London Foundation Trust approach

"ELFT is "staff-led" with strong staff and patient involvement."
"ELFT is an approach other Trusts are already embracing, adding their own flavour".
"We liked the ELFT pyramid and would like more information".
"Would like to see more clearly how it links to the financial system in the Trust".

The St. Vincent's approach

"Strong link to strategy."
"The welcome emphasis on opportunity cost is vital to bring about change".
"Critical is shared purpose with an emphasis on the need for action Now!"
"This was the model which looked at the issues end to end."

More general observations arose from discussing all the frameworks:
"Culture is key. Culture encompasses a willingness to use data."
"Most of these frameworks have an organisational, rather than a system, focus. Many of the big opportunities to liberate value are at a system level".
"It is easier to measure and put a value on bed usage, rather than improved user experience or greater staff wellbeing, which are critical to outcome. How are we more consistent in how we value that type of consequence?"
"How do we capture lessons from the use of frameworks such as these to feedback into policy change?"
"The NHS has been slow to recognise and to adopt methods such as dynamic modelling and operational management optimisation and has limited analytical capability in areas that could help in optimising value creation."

Outputs from question 3: What design principles would you wish to see in this work going forward?

We define "design principles" as a set of considerations identified at the beginning of a collective development process which, if followed, increase the likelihood of achieving the desired outcomes longer term (Sloan-Wilson et al 2013). There was a great deal of agreement across all the groups at both roundtable meetings about what the design principles should be. We have distilled the outputs into ten key principles:

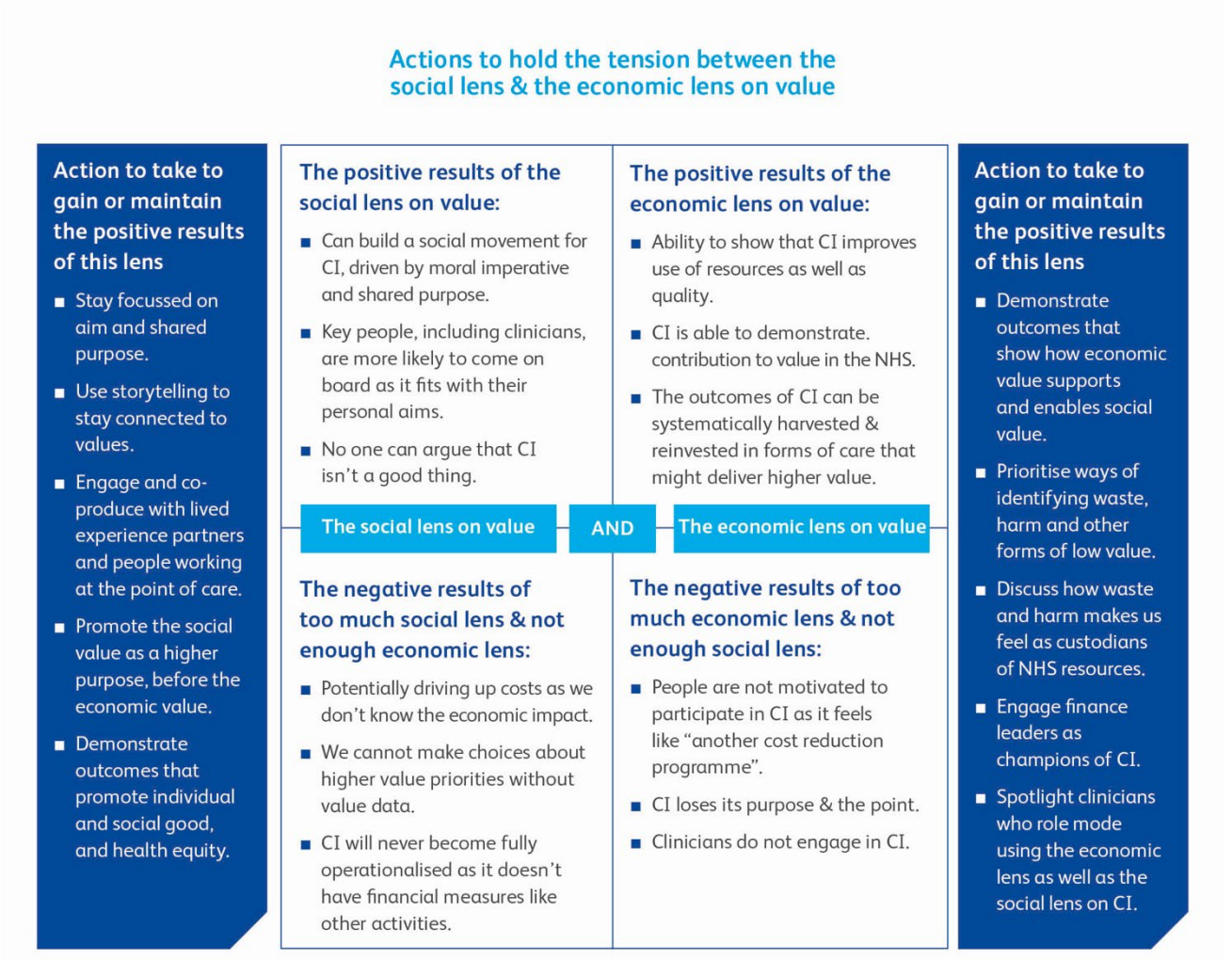
Ten design principles for creating a value framework for continuous improvement

1. Clarify purpose.	6. Improve data through transparency and use.
2. Engage those who do the work in co-design.	7. Ensure leadership owns and curates the framework.
3. Engage in cultural readiness whilst designing.	8. Cooperate across systems (ICS) in this development.
4. Create and adopt definitions of value and continuous improvement.	9. Focus on the strategic priorities.
5. Keep language and messaging simple.	10. Apply the approach to population health and prevention as well as direct care.

The challenge of defining and demonstrating value from CI in the NHS is a *wicked problem* (Grint, 2008). We use that term because:

- Multiple (seen by some as opposing) ideas or values are at play: the tensions between the social, economic and business cases for value and different interpretations of the nature and framing of value;
- This situation cannot be resolved by finding a best or right answer or single framework that provides a solution;
- Collaborative exploration and experimentation are required to take the topic forward.

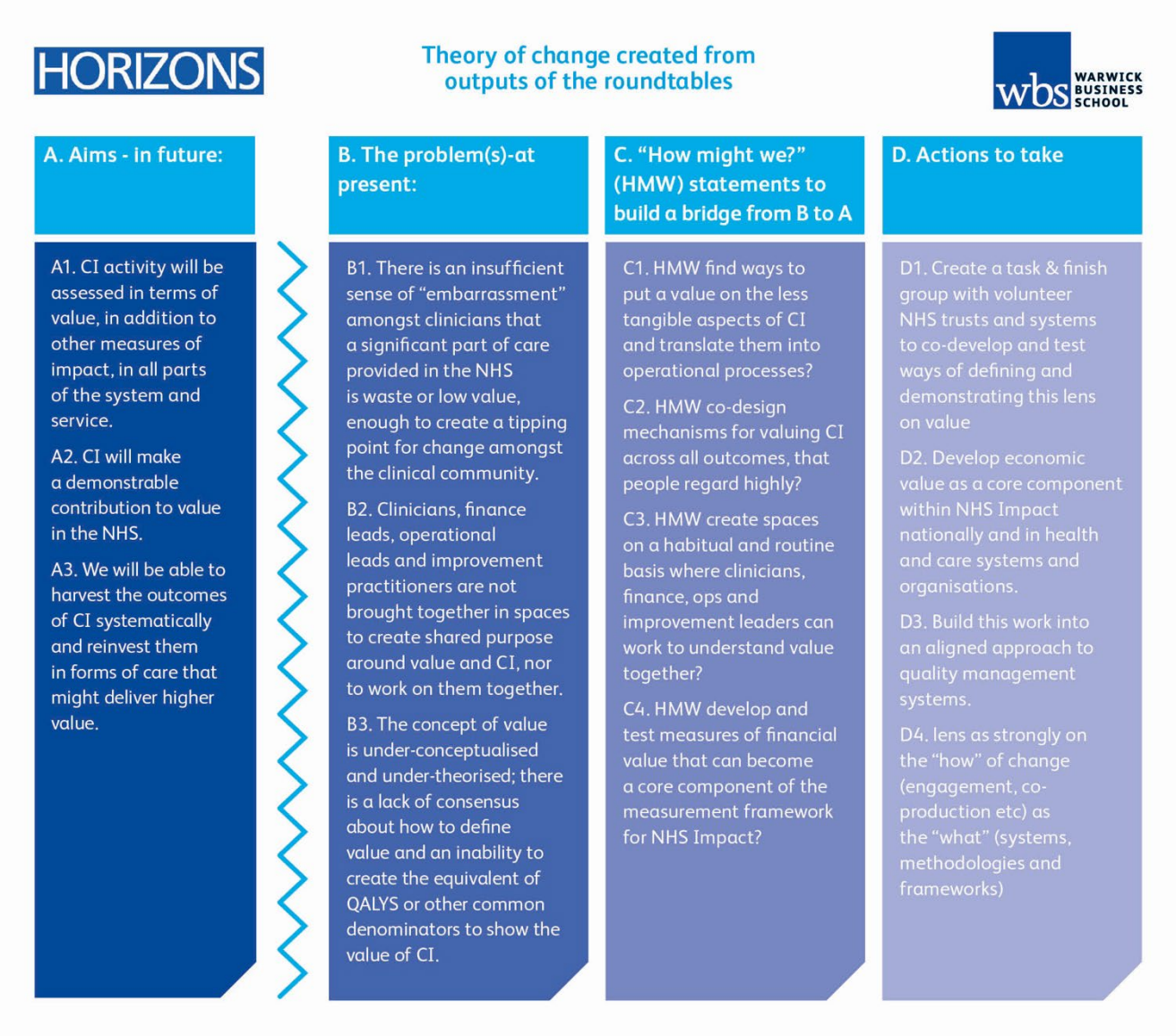
We have created a "polarity map" (University Innovation Fellows, 2023) to show the tensions between the economic and social cases for value, as well as actions that could be taken to gain or maintain the upsides of both. The content is based on what participants said at the roundtable meetings:



This tells us that whilst there are benefits in both the social case and the economic case for CI, there can be clear tensions between the two if we do not take explicit action to hold the tension. This is not an "either/or" situation. If there is too much focus on one of these lenses, to the detriment of the other, there are likely to be negative consequences.

For instance, if we overfocus on the social lens, we risk driving up costs as we don't understand the economic impact of our choices about CI. In addition, CI is unlikely to ever become fully operationalised if it doesn't have financial measures that fit with other activities. If we overfocus on the economic lens, our people may become less motivated to participate in CI as they perceive it to be a cost-improvement programme. CI may lose its purpose and its point. We need to create an explicit "both/and" for the social AND the economic lens on value.

In addition, we have created a theory of change (NCVO, 2022) from the outputs of the roundtable meetings. The theory of change sets out aims for the future, a definition of the problems to be addressed, a series of "how might we" statements that create a bridge from the problem statement to practical action and a series of recommendations.



6. A call to action: recommendations for future work

The large majority of the leaders who took part in the roundtables supported the need for the challenges in assessing the value from CI to be addressed. They would welcome action

leading to the development and adoption of a framework that could enable this to happen and would want to be active partners in its development. A number cited the difficulty of securing and sustaining investment in, and commitment to, CI in the absence of better methods to capture the value arising from CI.

This paper makes the case for developing an approach to this challenge and suggests some foundational elements arising from the views of participants in the roundtables and subsequent reflection.

The objective would be to develop and implement an approach in which the value attributable to CI activity in the NHS in England could be better captured and understood. The approach would furnish practitioners from the improvement, finance, operations and clinical communities with credible methods to assess value across all relevant domains, including economic impact. Central to the development and use of such an approach would be closer joint working between these communities which would itself add value. For organisational and system leaders it would help in their consideration of the contribution of CI. In time it may also lead to more systematic capture of some of the less tangible benefits of improvement activities and could contribute to a more nuanced understanding of productivity in healthcare.

A key design principle recommended by participants is that the approach is co-designed. We encourage national leaders with responsibility for the improvement of NHS services, population health and health inequalities to consider the case made in this report for an initiative to develop a framework leading to the capture of value arising from CI.

This might entail:

1. The identification of an organisation or network to be charged with leading on this programme of work.
2. Engagement with volunteer NHS organisations and systems in a task and finish group to develop this value dimension. This work might include examining what, from the frameworks already in place, could form the basis for a set of evidence-based, internationally credible tools that are benchmarked to the standards defining how the NHS consistently delivers value in meeting its purpose and aims.
3. Exploring, in the context of CI at a system level (in addition to an organisational level), how CI might contribute to allocative efficiency as well as productive efficiency: harvesting the outcomes of CI systematically and investing them in forms of care that might deliver higher value.
4. In the spirit of NHS Impact, development and testing of narratives about the purpose and conduct of this work with multiple different framing (bearing in mind the diversity of views within the leadership community, e.g., the polarisation about whether to frame CI as “waste reduction”).
5. Influencing current thinking on how the NHS quality strategy (overseen by the National Quality Board), might be engaged, so that this work contributes to our understanding of how the NHS consistently delivers value in meeting its fundamental purpose and aims.

6. Consideration of the link between this work and the recently initiated review of the approach to measurement being undertaken as part of the NHS IMPACT strategy.
7. Build consideration of sustainability and socially responsible improvement into the value equation.
8. In local settings, health and care system partners in England pro-actively engaging with clinical, finance, operational management, and improvement communities, to generate debate and cross disciplinary dialogue on the best ways to frame the conversation about the relationships between quality, value and CI. We recommend that perspectives from professional, management and service user organisations are included within this engagement, alongside health and social care partners whose work is inter-dependent with the NHS.

The roundtables demonstrated that there are significant opportunities to develop improvement-led delivery and that defining value is key to fully operationalising CI across the NHS. There is a high level of interest amongst the senior leaders to participate in this work. Better capturing and understanding that value will generate important insights that then inform our understanding of quality, contributing to broader work on how the NHS consistently delivers value in meeting its fundamental purpose and aims.

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