Quality improvement

Can quality improvement be used to change the wider healthcare system?

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The quality movement has made major strides in developing a discipline and methodology for improvement, mostly focused on the front line of healthcare delivery. The planning of the level above this—hospitals and other large systems that deliver health services does not have the same rigour or discipline. Yet, the results of poor design of a hospital or of processes linking parts of health care together can be just as serious for patients as an unsafe clinical procedure. The lack of methodology also matters because the need to redesign the way that health care is delivered is becoming much more urgent. There are growing pressures from changes in medicine, a shrinking workforce, and increasing demands made on health care. Small incremental changes will not be enough to deal with these pressures. Could we harness the innovation, discipline, ability to borrow from elsewhere, and willingness to challenge the status quo that has often typified the quality movement and the best of medicine? Can we scale up the methodology of quality improvement to help those planning parts of the wider healthcare system do it better? I suggest three ways that this might be done.

CHALLENGING ASSUMPTIONS

Perhaps the area where quality improvement methods could have the most impact is in helping to challenge the assumptions and preconceptions about how health systems work using the key insight that every system is perfectly designed to achieve the result it gets. Many of the assumptions used as the basis for planning are often based on past custom rather than evidence. Nevertheless, they have often been elevated to the status of immutable rules. Many of the most dysfunctional aspects of current systems are a direct consequence of problems with these underlying assumptions and design principles.

The quality improvement discipline of rigorously identifying objectives and designing the service to achieve them is as relevant to large scale systems as it is to a single clinical intervention. An example of this approach at a national level is the Institute of Medicine's *Crossing the quality chasm* report on healthcare in the USA.[1] Examples of the Institute of Medicine's call to change the rules included moving from care based on encounters to one based on relationships, from information as a record to knowledge being shared and information flowing freely, moving from secrecy to transparency, reaction to anticipation, and from focusing on cost reduction to eliminating waste.

All countries will have assumptions that need to be challenged. In the UK one of the strangest is the division between primary and secondary care, which, in the way it is constructed, seems to have more to do with the medical politics of the 1940s than the appropriate division of labour between different areas of expertise. Hospitals perform large amounts of primary care and a significant amount of secondary care happens outside hospital. A related assumption is that specialists usually work for and at one institution and do so for most of their career. Some specialists in the UK are now working as part of wider networks and are finding that this makes better use of their expertise, improves care, and gives greater peer support. Other countries have their own shibboleths and it is likely that they have the same effect as in the UK; to constrain thinking, prevent innovative solutions from emerging and protect the status quo—however unviable.

UNDERSTANDING HOW PROCESSES WORK

The techniques of systems thinking used in quality improvement, for example in areas such as process mapping, need to be better applied to the planning of healthcare delivery. Too often planning uses modelling approaches that fail to understand the importance of variability, feedback loops, and human behaviour. For example, in Israel, the UK, and elsewhere, this has led to hospital planners assuming occupancy levels in excess of 90% will be possible without any adverse effects on efficiency or patients' experience. Understanding the variability of demand quickly confirms what experience shows; that this is impossible and the results are undesirable. These insights would lead to planners replacing design principles that value ''sweating the assets'' with others based on safety, eliminating waiting, improving the patient experience, and ensuring that patients flow through the hospital rather than being subject to a regime of "hurry up and wait''. This could make a major difference to the way hospitals and other services work and the design of new facilities.

SEEING THROUGH THE PATIENTS' EYES

Can we honestly say that the quality improvement discipline of seeing through the patient's eyes has been sufficiently widely used to plan healthcare delivery? These insights are used to improve the quality of patients' interactions with clinicians and their experience of care. But at the level above this, in the planning of hospitals and the systems they are part of, the use of this technique is much less common. If this approach were more widely applied new models for service delivery might emerge including using more non-health care settings for routine care, using information technology to deliver care in patients' homes, and making patients the designers and co-producers of care.

CONCLUSION

The discipline and methods of quality improvement could help planners and policy makers think differently about how to improve the design of healthcare buildings and systems. It is important that this happens as there is little point in improving front line clinical delivery if it is embedded in a wider system that is dysfunctional. Quality improvement methods offer the chance to find innovative ways to solve some of the most intractable problems facing many healthcare systems by providing an approach that challenges assumptions, tests new models, and ensures that services meet patients' needs. Without new ways of tackling these issues health services will continue to disappoint an increasingly demanding public and wear out the patience of those who pay the bills.

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