Achieving greater clinician engagement and impact in health care improvement: a neglected imperative

Engaging frontline clinicians in effective quality and safety improvement is essential for improving patient outcomes

Health care in Australia faces many challenges. Research suggests, for example, that effective care is underused in 40% of clinical encounters,[1] up to 60% of tests and treatments are not justified by evidence,[2] and misuse or errors affect up to 20% of hospital admissions.[3] These observations call for significant investment in systematised quality and safety improvement (QSI) activities which can improve patient outcomes across a variety of clinical settings. These include reducing surgical site infections in joint replacement surgery,[4] reducing mishaps, complications and mortality during and after non-cardiac surgery,[5] or improving survival and optimising care processes of patients with acute cardiac disease.[6]

Unfortunately, the pace of QSI internationally remains sluggish,[7] with patients often not receiving best available care. Simply treating QSI as a top-down compliance and regulatory activity is ineffective. Greater engagement of frontline clinicians (defined here as any health practitioner) in optimising care increases professional satisfaction and reduces burnout[8] that would otherwise result in poorer quality health care and reduced safety for patients.[9] Positive organisational and workplace cultures are consistently associated with reductions in indicators such as mortality rates, falls, hospital-acquired infections and increased patient satisfaction.[10] In this article, we consider ways of achieving such engagement.

Engaging clinicians in quality and safety improvement

Clinicians will engage in QSI if they feel respected, listened to, able to influence the care they deliver, and appreciate how QSI promotes better care for their individual patients.[11] However, they will avoid investing if they perceive previous efforts to have been poorly managed and unproductive. Managers who effectively facilitate QSI, without trying to micromanage it, are well appreciated by clinicians, with both parties forging a common purpose, reframing prior perspectives, aligning mutual interests, and co-designing and co-executing QSI interventions.[12]

Health care organisations are large and complex, comprising incongruent subcultures divided by occupational streams, clinical specialties and physical boundaries. These subcultures can, at different times, be driving forces for change, overt defenders of the status quo, or covert countercultures quietly undermining new initiatives.[13] Cultural change is difficult as it is often adaptive not technical, that is, it involves a change in the construct and dynamics of care delivery, forging of new relationships and responsibilities and, in some cases, an unlearning of outmoded beliefs and customs.[14] While change can occur rapidly in a planned and predictable fashion for new highly structured and evidence-based models of care, it just as commonly occurs slowly and emergently with more experimental approaches that evolve in a more contested, unpredictable and context-sensitive fashion.

Factors that enhance receptivity of clinicians to adaptive change include a compelling awareness that current care is posing a risk to patient safety and to professional reputation; when the pros (and cons) of change are proffered by respected peers and opinion leaders; when the change is compatible with professional values and self-efficacy (an individual's sense of having the requisite knowledge and skills to enact the change); when an evidence-based rationale underpins the change; and when all clinicians involved in the process are afforded the opportunity to develop, observe, refine and lead the change.[15]

Iterative co-design and co-execution of change by all clinicians likely to be impacted by the change enhance collective understanding and ownership of QSI, and enable all involved to share in its eventual success. Negotiating and integrating multiple perspectives yields a broader view than individuals can formulate by themselves. The goal in recognising and reconciling differences is not to necessarily validate a single view or to dominate others, but rather to learn, to discern the best course of action, and to align all participants in committing to carrying out agreed actions.[15]

Critical to engagement are clinician leaders who can inspire others to want to change, adapt their leadership style when working with multiple stakeholders, persevere despite setbacks, and act as change agents across disciplinary interfaces, not just within narrow specialty areas.[16] Also important are organisational attributes that include a supportive and stable senior executive; adequate QSI infrastructure (staffing and training levels, information technology, resources); a cohesive vision for QSI that utilises widely understood unifying professional values and a focus on learning from data, peer benchmarking, research evidence and patient narratives in reviewing and improving practice; well functioning relations with external stakeholders; and a preparedness to consider innovations that have been successful in other organisations.[17,18]

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Using change theories and toolkits

Devising effective means for changing clinician behaviour and work practices is an integral aim of the new discipline of implementation science — an interdisciplinary scientific inquiry that uses empirical methods, frameworks and theories to investigate how best to carry intentions into effect when translating research evidence into clinical practice. It has spawned numerous behaviour change theories, but to guide design and implementation of a QSI intervention, any theory must be grounded in, and resonate with, reality as perceived by clinicians. Despite there being more than 150 different QSI theories and frameworks, none have empirical evidence of guaranteeing success more than any other.[19] Most stress the importance of sensitivity and responsivity of QSI to context, although practical guidance on how to operationalise any one theory or framework is not always forthcoming. Many lack a multilevel approach to bringing a commitment to change across multiple clinicians, groups and teams, or the entire organisation. Moreover, many theories reflect linear cause–effect conceptualisations and ignore the emergent, non-linear nature of many QSI initiatives, shaped more by dynamic relationships, feedback loops, resource availability, interdependencies and trigger events that characterise complex adaptive systems.[20] Similarly, while there are multiple QSI toolkits (programmatic resources that assist in implementing a change theory), the evidence base for these is often unclear and their effectiveness has rarely been assessed.[21]

A pragmatic schema for enacting change

Based on a review of available literature[15,17,19,22] and our own experience in leading QSI, we offer a simplified, pragmatic schema for enacting change (Box 1). This emphasises basic concepts such as "what is the shortcoming in current care we are trying to remediate?", "what do we envisage as being optimal care?", "what are the changes we may want to make?", "who, what, when and how will the changes be made?", "how do we ensure that we involve and give a voice to all stakeholders in how we design and implement the change?", "how will we know if we have been successful in improving care?", and "what is needed to embed and sustain the change as routine care?".

Failure of QSI interventions is more likely if the problem in care is poorly characterised; there is no coherent change theory underpinning interventions; the change is presented as a predetermined solution with no proof of concept, or in ignorance of past failures; the intervention is poorly structured and/or not implemented with fidelity; measures of effect are missing or lack rigour; adverse and unintended effects are not considered or assessed; or resource use and costs prove prohibitive.[23]

Box 2 is our summary of strategies for securing commitment to change from the wider clinician community. These strategies present practical actions which will assist in avoiding known barriers to

1 A pragmatic, simplified quality and safety improvement framework[15,17,19,22]

Preparing for change

- What is the quality and safety issue we (the quality and safety improvement team: designers, implementers, evaluators) want to address, and why?
- What is our goal and by when are we hoping to achieve it?
- Who are the key stakeholders, what do they do, what matters to them, and what drives their behaviour?
- What are the key behaviours and practices we may want to change?
- Can we identify individuals who are predisposed to, and can help lead, change?
- How can we provide a safe environment in which people can express their views about change openly and constructively, increase common understanding, come to own the rationale for change, and forge new relationships?
- How will we determine whether we are achieving change with the desired effect? What will be our process and outcome measures, and how will we collect and analyse such data?

Operationalising the change

- What might be possible strategies for changing behaviour? These should involve a literature or Google search, talking to other change leaders, subsequent group discussion to identify ideas that have been considered by others, and learning from them what they were able, or not able, to achieve, and why
- Can we adapt change interventions that have proved successful elsewhere and that better fit with local context?
- Do we have candidate intervention(s) that everyone involved feels is (are) potentially feasible and acceptable to clinicians, and therefore worth progressing?
- Does the intervention emphasise enablement (making it easier for people to do the right thing) rather than rules and forcing functions (which people may resist)?
- What resources, support and incentives do we need to implement and test the intervention?
- How do we evaluate and refine the intervention over time in a manner that ensures all involved remain informed, engaged and listened to?
- How will we ensure that the intervention, if successful, becomes sustained as business as usual?

2 Strategies for securing wider and more committed clinician engagement in quality and safety improvement[12,15,17,22,24]

- Present the primary need for change as a means of improving patient outcomes, not efficiency or costs
- Use case narratives and anecdotes in addition to quantitative data to personalise the need for change
- Emphasise common goals using shared language and avoid perceptions of tribalism
- Be careful in attributing cause and effect to specific groups or processes and avoid simplistic mechanistic explanations of why and how things happen
- Allow, listen to, validate and respond to healthy scepticism of proposed change
- Use strategies that allow clinicians to retain choice while encouraging them to change (nudge strategies)
- Avoid overambitious goals, technical jargon and excessive talk of transformation
- Alleviate any threats of proposed change to personal identity and dispel fears of hidden agendas
- Minimise over-reliance on particular individuals (lone heroes) as sole and continuing change leads
- Prevent a drive for perfection and paralysis by analysis becoming barriers to progressing the change
- Stay on message — maintain a consistent and coherent approach

engagement. From the outset, individuals who design and evaluate a QSI intervention should work closely with the clinicians who implement it, within an environment of shared knowledge, skills, influence and authority.[25]

Implementing quality and safety improvement at the local level

All successful QSI is local and centred on informal, naturally formed networks of clinicians and their patients which, given the increasing specialisation and compartmentalisation of care, must involve cross-service collaboration and communication.[26] Top-down, centrally led campaigns, especially those led by external consultants, are less successful than internally led, clinician-driven initiatives.[27] In some institutions, quality councils involving staff from all disciplines and from both junior and senior ranks have improved care through better interdisciplinary communication and collaboration, more effective work flows, and measurement of outcomes in identifying best practices.[28] Individual services should consider designing and implementing their own QSI programs led by clinicians with research and QSI expertise. Potential QSI interventions should be prioritised according to potential magnitude of impact, feasibility of implementation, and immunity to unintended, adverse consequences for patients and clinicians.[15] QSI programs should involve, and work to impart QSI skills to, all clinicians within the service, including those most junior.[17] In developing and deploying their QSI skills, clinicians need some protected time, training, support (such as data analysts), and access to expert peers. We believe this may not require extra hours or budget; instead, existing training programs, clinical meetings, quality assurance and governance activities, and accreditation efforts could be reconfigured towards more focused QSI interventions.

Achieving wider adoption and sustainability of effective quality and safety improvement interventions

A major challenge for QSI is to take successfully implemented and effective interventions in one or a few sites, and embed and sustain them across multiple services or sites. Clinicians in other sites not previously involved in a specific QSI intervention are more likely to embrace it if high quality evidence clearly demonstrates patient benefit, it has near universal application while remaining locally customisable, any training and other resource requirements are not onerous, and they see the intervention as professionally rewarding. Multisite, clinician-led QSI collaboratives or networks can serve to spread QSI interventions more quickly and on a wider scale.[29]

Sustaining QSI interventions beyond the post-implementation phase can be challenging, with slippage caused by multiple factors such as local staffing constraints, lack of resources, competing demands, and change in organisational governance and priorities.[30] Research suggests partial sustainability is more common than continuation of the entire intervention, with most failing to maintain all attributes as originally designed or implemented. Maintenance strategies — such as ongoing training and supervision, audit and feedback, and checklists, reminders or prompts embedded within routine care processes — can all help sustain an intervention over time.[30]

In conclusion, engaging frontline clinicians in effective and scalable QSI activities is a health care imperative in improving patient outcomes, and we believe the concepts outlined here may help to achieve this engagement.

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