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ORIGINAL RESEARCH

Driving Efficiency Improvement (EI): Exploratory Analysis of a Centralised Model in New South Wales

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Introduction: Public healthcare systems face rising demand coupled with reducing funding growth rates, necessitating ongoing approaches to efficiency improvement (EI). Centrally coordinated EI approaches l may support EI leaders, yet few such approaches exist internationally. This study provides evidence to inform system-wide EI by harnessing understanding of the perceptions, role demands and support requirements of key EI stakeholders in the centralised EI model implemented in New South Wales.

Methods: A purposive sample of key informants within NSW Health with responsibility for EI in their organisation were invited to participate. Semi-structured interviews were conducted, recorded and transcribed. A thematic analysis was undertaken using a theoretical deductive approach.

Results: Seventeen respondents participated who occupied EI leadership roles in metro (8) and rural (6) health services as well as non-clinical support (3) services. Four primary themes emerged on the perceptions and experiences of participants in 1. holding a unique skillset which enables them to undertake EI; 2. inheriting EI accountabilities as additional duties rather than holding dedicated EI roles; 3. the importance of senior support for EI success; and 4. feelings of isolation in undertaking EI. An additional underpinning theme that EI is not well conceptualized in public health systems also emerged, whereby EI planners felt that frontline staff generally do not consider efficiency as a component of their duties.

Conclusion: EI leaders provide points of authority, experience and influence across organisations within public health systems. This study finds that EI planners possess a unique skillset, can feel isolated both within their health organisation and within the broader public health system and believe that EI is poorly conceptualized amongst health staff. Centralised support for EI stakeholders across a public health system can promote knowledge sharing and capability development. Addressing the role and support requirements of key EI stakeholders is essential.

Keywords: public health, health management, efficiency improvement, stakeholder engagement

Introduction

Healthcare systems are experiencing increasing demand for care coupled with rates of increases in expenditure which exceed funding growth rates. The dual pressures necessitate efforts to improve efficiency by achieving sustainable expenditure levels while maximising value.[1,2] In public health systems with devolved governance structures, accountability for health service performance rests with individual health services and facilities, while overall system funding and performance are managed by a central agency, department or ministry.[3] Evidence exploring stakeholder perceptions and experiences of approaches to improving efficiency in healthcare settings is largely in the context of facility-level improvement projects.[4,5] These data suggest that initiatives focusing solely on improving efficiency without concurrently striving for improvements in quality, clinical outcomes and experiences are linked to unsustainable and even detrimental outcomes for care recipients, staff and longer-term financial performance.[6,7] The literature on this topic reveals a lack of comprehensive guidance for enhancing public health service efficiency at the whole-of-system level.[4,8,9]

New South Wales is a populous state in Australia, with NSW Health being the public health system serving the state. NSW Health is comprised of Local Health Districts and Specialty Health Networks which deliver tertiary clinical

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services for their geographic regions, with performance and funding centrally managed across this system by the Ministry of Health. NSW Health operates a system-wide EI model centrally coordinated by the Ministry of Health, supporting NSW Health organisations to deliver several hundred improvement plans each financial year which reduce service cost while maintaining or improving quality, safety and experience. This approach aims to improve financial efficiency within the current focus on value-based care, ensuring all other elements of service value are not adversely impacted.[10,11] The NSW Health centralised EI model forms one element of the overarching system performance management framework, with target requirements specified in service level agreements for each organisation. A key component of this approach is a designated individual in a senior management role in each NSW Health Local Health District and Network to serve as a key contact for the Ministry of Health in planning and reporting on EI plans. This model is operated by the NSW Health Program Management Office (PMO), which works closely with these designated key EI contacts in each NSW Health organisation to support EI opportunity identification, strategy development and performance monitoring, supporting each organisation to meet mandated EI performance targets.

Whilst the importance of stakeholder support and engagement in EI has been linked to EI success at the individual project level, evidence regarding system-wide EI roles and the impact of system-level support for such roles is lacking.[8,12] There is therefore a need for further knowledge on this topic to inform stakeholder support approaches within centralised EI models. We address this gap by exploring the perceptions and experiences of those working within EI roles in the NSW health system to provide system-level recommendations for EI stakeholder support. We sought to address the following research question: what are the perceptions and experiences of EI amongst key EI stakeholders in NSW Health?

Materials and Methods

Ethics Approval

Ethics approval was gained from the Health, Medical, Community and Social Panel at the University of New South Wales, with participant information and consent sheets including publication of anonymized responses (Approval number HC180866).

Design

Qualitative, descriptive study using semi-structured interviews.

Sample

A purposive sample of the population of designated EI stakeholders in each NSW Health organisation was invited by email to provide unique insight into centrally supported EI practices. The key informant technique was selected to underpin this sampling process due to the existing professional relationship between the author and participants, the specialist functions undertaken by the community of EI planners and the reliability of this method for producing high-quality data.[13] Although a relatively small pool of potential participants as only one key informant is assigned to each NSW Health Organisation (n = 26), information power was achieved through a narrow study aim, dense sample specificity, strong dialogue quality and thematic cross-case analytic strategy.[14]

Interview Schedule

Semi-structured interviews were used to explore experiences and perceptions while enabling novel lines of discussion. Initial questions focused on the role of the interviewees and their background, skills and experience in EI. Subsequent questions explored perceptions on executive sponsorship, support, collaboration, current practice, challenges and opportunities for EI. Role navigation, support requirements and efficiency-related interactions with health staff were also included as discussion topics. Specific EI plan topics, focus areas and other routine performance management processes were not included as these were beyond the study scope.

Data Collection

Interviews were conducted by one author with a clinical and health services management background (JW) over the phone and audio recorded following consent. Interviews were guided by the interview schedule. Interviews lasted 20–30 minutes. Recordings were given a unique identifier code and professionally transcribed verbatim.

Analysis

An established interpretive thematic analysis approach was employed.[15] A theoretical deductive approach to identifying themes was selected to test and elaborate upon background knowledge and assumptions.[15] Two authors (JW and RH) independently reviewed a subset of the same five transcriptions and met to discuss and agree emerging themes and the codes to be used to identify them in the transcripts. These two authors then manually and independently coded the remaining transcripts. Both reviewers then met and explored the identified themes with reference to the research question, with one author (JW) then synthesising these under higher-order themes which served as the units of analysis.[15,16] Face validity checks were conducted by a third reviewer (AS). Transcripts were then re-read in full by one author (JW) to confirm themes and code any additional data identified as themes solidified.

Results

Of the pool of 26 eligible participants, 17 individuals participated (65%) of which 10 were female and 7 were male. Participants were Directors (n = 8) and Managers n = 9) across eight metropolitan Local Health Districts (LHDs), six rural LHDs and three statewide support services. Thirteen participants identified a financial or accounting background and four participants identified a health services operation management background. In addition to these core skillsets, two participants also held experience in project management, and one of these two participants held further background experience in quality improvement. Of the nine potential participants that did not participate, reasons provided including two being on leave during the study invitation period, two citing high work demands at the time of study invitation and one declined due to imminently moving to another role. No response was received from the remaining four invitees. Four primary themes were generated, in addition to an underpinning theme that EI is not well conceptualized in public health systems also emerged.

Efficiency Improvement Planning as a Unique Skillset

Participants had a diverse range of backgrounds, most commonly in finance. Participants stated that skills in business management and project management were also needed. The ability to understand the nature of the health service, its environment and outputs was described as foundational to EI planning:

> It's really important that you understand the importance of protecting the organisation at a financial and strategic level. To do that, obviously you need to understand where the efficiencies are, what are the opportunities to improve what you're doing in a financial framework, and making sure that any new direction that you take is improving the business in terms of the value add (Interview P).

The diverse skillset described by participants for EI planning covered multiple disciplines and transcended traditional professional areas of practice. The importance of stakeholder, people and communication skills was as equally evident throughout discussions as the importance of financial and technical skills. Participants felt that this combination of skills was a rarity:

> I'm not sure how many people would have that variety of experience like in finance, in quality and in projects, in audit … So, for me, personally, I don't have any trouble with it. But someone coming in that probably doesn't have that gamut of project management experience as well as the finance experience, it would be a bit of a learning curve for them. Because my finance experience really helps me undertake the role (Interview D).

Efficiency Improvement Planning as an Additional Responsibility

The experiences of becoming responsible for EI varied across each individual account. The reasons for which participants were assigned responsibility for EI often related to organisational positioning, knowledge, skills and experience:

> In my previous roles, I've had oversight of some of the smaller projects that have occurred to do it in. We just saw that there was a need to have a central contact at our Local Health District and I had the most knowledge at the time, so I was sort of volunteered (Interview L).

Participants described EI as a dual role with their primary duties, with the EI workload added onto an existing established role in a financial, management or project capacity. Existing relationships were described as a reason for selection along with technical skills and experience:

> When I took (EI planning) on, I actually sat in finance as a financial analyst. Because I had my head around it and had formed some good relationships, it came with me into the role (Interview D).

Some interviewees found the experience of being assigned accountability for EI planning in addition to their core duties to be burdensome and unsettling and was not necessarily accompanied by additional workload or time allowances. A lack of previous involvement was described as a source of concern, as this unfamiliarity and lack of experience caused perceptions of pressure and stress for several participants:

> by default I ended up doing EI Plans … I found It very very daunting. I found it frustrating (Interview F).

Executive Sponsorship as an Enabler of Efficiency Improvement

Interviewees were asked about their thoughts on executive sponsorship for EI. All interviewees acknowledged the importance of executive sponsorship, with the specific function of executive sponsors in the context of EI well articulated:

> The leadership of the organisation sets the standards, sets the direction, sets the ability for the organisation to function appropriately. So that leadership, having a leadership profile and lens around efficiency is critical, without that you can't actually do the job properly. So, the whole organisation needs to be aligned, and without the leaders pushing that sustainability and efficiency lens it's difficult (Interview P).

In instances where EI was described as immature and not achieving results, interviewees attributed this in part to inadequate or absent executive sponsorship. Participants identified that executive sponsorship included maintaining regular dialogue, embedding EI in routine governance processes and setting performance measures for staff:

> I think that if you don't have executive sponsorship and good executive sponsorship, so someone who actually talks about improvements consistently, you don't get the traction that you need and you won't reach your efficiency target … so if they are making the EI program a priority and they're constantly talking about it in all of their monthly catch ups or their accountability meetings or their staff reviews, that becomes a way of doing business (Interview M).

Perceptions of Isolation Amongst EI Planners

Although participants felt well positioned to provide advice to operational decision makers, participants did not occupy decision-making roles and instead focused on coordinating across the organisation's range of business owners and operational decision-makers. Participants described perceptions of being distanced from the ability to enact change:

> It's the unfortunate thing, we can only put the case from our position as the service provision to the overall organisation, most of the time finance alone, it doesn't get the decision but we can only really state the case for change and provide the evidence and information to support that change is necessary (Interview A).

The picture of isolation was consistently painted across each interview. Where this had been overcome and relationships built with key stakeholders, interviewees linked this closely with success in EI planning. Interviewees felt that the nature of their role in coordinating initiatives required a large amount of stakeholder engagement, which was made difficult due to the potentially uncomfortable nature of providing advice on better ways of working to others from the perspective of an outsider:

> Frontline staff can become very defensive when it comes to saying that they could be doing something more efficient. So, it's sometimes a really hard conversation to have, to tell somebody that they'd be better off doing something a different way when you're not involved in the day to day business (Interview H).

When asked about collaboration with others in similar roles in different areas of the health system outside of their own organisation, participants stated this rarely happens. The topic of efficiency itself was felt to be isolating. Interviewees found that frontline staff and managers were less willing to discuss efficiency and would disengage when the topic was raised:

> It's about the narrative and how we contextualise that with them … if you approach it with a stick and you say how do we save money? They'll turn off straight away because all they're worried about is the patient in front of them (Interview P).

Underpinning Theme: EI is Not Well Conceptualized Within Healthcare Organizations

Across the spectrum of staff in healthcare organisations, EI planners felt that efficiency was misconceptualised and poorly understood. Interviewees felt that frontline clinicians were not concerned with service efficiency and the cost of delivering healthcare services due to being focused on delivering high-quality clinical care and that this presented a barrier to engaging them in EI:

> That's difficult to be able to sell (the EI) message to a clinician, that all they care about is patient care (Interview G).

It was frequently suggested across the study group that frontline staff felt that EI was purely focused on cost-cutting, often at the expense of clinical services. Others felt that EI amounted to a meaningless "tick-A-box" compliance exercise to meet mandated targets. Participants identified that the key to engaging clinicians was to avoid discussing expenditure and instead focus on service improvement and service sustainability:

> Whenever you talk to a doctor or a nurse about cost cutting, you'll lose them in the first five minutes. When you talk to them about how we can improve the business, make it more sustainable and to ensure that the business is enduring and we can bring in innovation and other things, then you get them in the room and their ideas start flourishing (Interview P).

Participants commonly shared sentiments that frontline staff did not have a sense of ownership of the efficiency of their organisation. This extended to feelings that frontline staff did not consider the efficiency with which their services were provided to be their responsibility as long as the standard of clinical care was appropriate:

> Providing care to consumers. That's the one thing they really care about and they often don't link that to being efficient as well. Being efficient meaning that you are delivering the care but also taking care of the finances at the same time. So, sometimes you'll get a view from those staff members that it's actually not their job to do that, because their job is to care for the consumer (Interview M).

This theme of a lack of understanding of EI underpinned the other themes identified across this study. Participants identified this as a contributor to their perceptions of isolation, a barrier to engagement and a risk to the delivery of EIs.

Discussion

The unique skillsets identified in this study inform current evidence on the requirements for EI planning roles. Participants almost entirely exhibited a blend of financial, business management and project management background experience. Primary duties reported by participants highlight the requirement to incorporate both technical management and stakeholder engagement expertise when designing EI roles. The extent to which participants perceived their influence and authority to implement efficiency-related change was directly linked to perceptions of self-efficacy in driving EI, highlighting that positioning EI roles and units at appropriate decision-making levels within the organisation is a consideration for practice.[8] Also, bearing consideration is the importance of assigning ownership for EI to staff with sufficient seniority, influence and capability to undertake EI duties.[17]

The importance of senior executive support in driving EI in public health organizations was consistently noted, although the mechanisms and extent to which this occurs showed variation associated with executive priorities, length of

tenure and organizational maturity. EI planners felt that efficiency was poorly conceptualized within their health organisation. It was consistently reported that frontline clinical staff generally do not consider service efficiency to be within their remit and are generally focused solely on clinical outcomes, rather than both clinical and cost outcomes. Furthermore, frontline staff often equate the concept of EI with cost-cutting at the expense of service and clinical outcomes and tend to disengage immediately when the topic of efficiency is raised. This presents a significant barrier to engagement in EI discussions and initiatives, requiring ongoing collaboration, consultation and transparency to overcome.[18,19]

Clear links were evident between cost-efficiency and the delivery of appropriately safe and accessible healthcare services, a position supported in the broader literature.[20,21] In line with this current paradigm of value-based care, participants upheld that cost-focused EI must also ensure the maintenance or improvement of clinical service performance and stakeholder experiences. Even where the reduction in service cost was seen as the priority outcome, parallel considerations to quality, safety and experience were also consistently identified. Despite these sentiments, EI planning was often perceived as a "tick a box" exercise in compliance rather than an urgent need to achieve more value with ever-tightening resources. Strategies to promote understanding of and engagement with EI include using agreeable terminology, linking improvements to outcomes and promoting experience and clinical improvements in tandem with EIs.[5,22,23]

A range of common requests for improved central support for EI were identified which are potentially common across public health systems. Requests for cohesive information systems and consistent methodologies for planning, delivering and evaluating EI were desired improvements. Transparency regarding efficiency target-setting and provision of realistic timeframes for efficiency to be improved were also flagged as improvement requests. Stakeholders also exhibited strong demand to have visibility over improvement initiatives underway across the system in order to identify and replicate improvement opportunities. It is anticipated that these requests may also represent opportunities for service enhancement across the wider range of public health systems.

The importance of system-wide EI support provided by the NSW Ministry of Health as the central public health system management entity was strongly represented. Key elements included provision of systems and processes for EI, capability development, transparency, sharing of knowledge and partnerships to translate system-wide programs to local-level efficiency gains. Above and across these needs was a recognition of Ministry of Health support received by the EI planners themselves in order to assist them with addressing the additional responsibilities, unique skillsets, isolation and stakeholder engagement requirements necessitated by their accountability for EI. This partnership approach also provides an opportunity to systematically address the misconceptions related to EI characteristic of clinical and administrative stakeholders in public health organisations. This establishes the value of central leadership and coordination for EI across public health systems.[24,25]

This study advances current evidence on EI at a whole-of-system level by identifying support requirements, common challenges and opportunities for improvement amongst the leaders of improvement initiatives. The value created by sharing EI knowledge was established, particularly on topics which represent common challenges across the organisations within a public health system such as engaging staff in improvement initiatives and concurrently improving both financial and health service outcomes. Where a strategic direction or program stretches across an entire public health system, implementation and evaluation can be centrally supported to reduce duplication and enhance consistency in planning for and delivering such initiatives. Additionally, key EI stakeholders can be brought together to form a community of practice for collaborative solution development, capability development and knowledge sharing. This reaffirms the value of promoting collaboration and knowledge sharing across stakeholder networks within public health systems.[26,27] The NSW Health centralised approach to EI appears to be one of a very limited number of similar approaches identified in the literature, indicating that other public health systems may stand to benefit from dedicated centralised stakeholder support functions to enable EI activities at a whole-of-system level.[24,28]

Conclusion

By examining the experiences of designated key EI stakeholders across the range of organisations within NSW Health, this study finds that EI planners possess a unique skillset, can feel isolated both within their health organisation and

within the broader public health system and believe that EI is poorly conceptualized amongst health staff. Centralised support for EI stakeholders across public health systems can facilitate knowledge sharing and capability development, thereby driving EI at a whole-of-system level. Consistent system-wide EI models can also support EI stakeholders to improve conceptualization of and engagement with EI amongst frontline staff by demonstrating that EI can be achieved in tandem with improvements in care outcomes and experiences. We argue that addressing the role and support requirements of key EI stakeholders is an essential consideration for public health systems seeking to address the challenge of balancing resource use and health service demand to maximize outcomes achieved.

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Author contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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