'You need to keep on looking to see how to improve it.' Lessons from a learning initiative in primary healthcare facilities in Cape Town, South Africa

U Walmisley, BSc Physiotherapy, MPH [iD]; U Lehmann, PhD; M Lembani, PhD

School of Public Health, University of the Western Cape, Bellville, Cape Town, South Africa

Corresponding author: U Walmisley (ullawc@mweb.co.za)

Background. The capacity of health systems globally to respond, learn and adapt has been brought into focus by the COVID-19 crisis. To enhance the adaptive capacity of health services, it is necessary that organisations develop learning as a core value, and institutionalise a learning process. Enhanced organisational agility implies the empowerment of micro-level actors who have the most immediate view of what is required in local contexts. Grassroots empowerment and a shift to distributed leadership often sit in tension with steep hierarchies and compliance mechanisms prevailing in many health systems. Primary healthcare (PHC) facilities in the City of Cape Town, South Africa, operate in a system that is typically hierarchical, leading to feelings of disengagement in frontline staff, hindering their responsiveness to challenges.

Objectives. To report on an initiative aimed at propagating organisational learning at PHC facilities using an iterative process of collaboration, experimentation and peer support, primarily focusing on the roles and experiences of PHC managers who were involved in the initiative. Despite strong initial support and signs of nascent learning, contextual factors undermined the process. This ultimately derailed efforts to embed and institutionalise organisational learning. Insights from the process could inform future learning initiatives.

Methods. A qualitative, exploratory design was used. Data collection involved individual semi-structured interviews with a sample of 12 health facility managers and two personal PHC managers, as well as document reviews.

Results. Facility managers had a positive perception of the participatory approach to planning, underpinned by peer-support workshops at which senior management endorsed the project and encouraged innovation. Scheduling systems were implemented where previous top-down instructions failed to achieve this. However, a change in senior management and organisational restructuring led to lack of support and a reversion to top-down implementation, which undermined the project.

Conclusions. The use of a grassroots learning approach, with sufficient support and clear endorsement from top-level management, can strengthen learning capacity at grassroots level. However, such efforts are vulnerable to derailment, particularly if the wider healthcare system remains rooted in a hierarchical tradition. They require long-term and stable commitments, particularly from senior leaders. Measures to safeguard future initiatives should be explored.

Over the past few years, and specifically after the 2014/15 Ebola pandemic in West Africa, literature has emphasised the importance of health systems' ability to respond to changes and crises, reflect on experience and adapt.[1-3] While Ebola sounded the alarm on the importance of resilient and responsive health systems in some parts of Africa, the COVID-19 pandemic has highlighted the importance of organisational capacity to be flexible, adjust and learn in dramatic fashion.[2,4]

In the current crisis, much attention has been focused on the role and preparedness of hospitals, but primary healthcare (PHC) facilities have equally had to respond with great speed to prepare for an influx of COVID-19 cases, altering infrastructure and human resources provision, decanting services, establishing safe zones and ensuring the safety of health workers, all while continuing to render routine services.[5,6]

Despite ubiquitous acknowledgement of the need for responsiveness and learning, health systems tend to be historically characterised by steep hierarchies, top-down decision-making[7,8] and resistance to change.[9-11] Tensions inevitably arise around nurturing practices of organisational learning and decentralised decision-making within authoritarian and compliance-driven environments.

This article reports on a small initiative in the health department of the City of Cape Town (City Health), which recognised the need for decentralised organisational learning and responsiveness at PHC facilities. City Health drew on research from a decade-long collaboration between local health departments and academics from two neighbouring universities, known as DIALHS (the District Innovation and Learning for Health Systems development project), which has been reported on elsewhere.[9,12-16]

DIALHS applied a resilience lens to health systems, stating that 'resilience is about (1) everyday resilience, not simply responses to sudden shocks, (2) health system software, not only its hardware and (3) creative adaptation, and transformation, rather than simply bouncing back'.[17] DIAHLS found that resilience was strengthened by shifting away from a hierarchical approach to planning and implementation – experienced as demotivating by staff[12] and developing favourable 'software' in the form of distributed, relational leadership and a culture of organisational learning. Middle-level managers, such as PHC facility managers, have been identified as vital mediators in fostering trust and team cohesion, and in shaping policy implementation.[14,16] Their learning capacity was found to be strengthened by reflective practice that provided an opportunity for them to detect problems, apply analytic skills and iteratively formulate solutions.[9,10,14] The project was accordingly conceptualised to propagate organisational learning through iterative cycles of collaborative, bottom-up planning and reflection (unpublished City Health document 'ASLI Information Letter', 2016).

City Health applied DIALHS findings to an enduring challenge: the historical failed implementation of appointment scheduling systems at PHC facilities (unpublished City Health document 'Perceived Barriers to Appointment Systems', B Harley, 2016). These facilities historically gave patients a date for appointments, but no specific time. Patients therefore arrived before facilities opened and queued for hours before accessing treatment[18] – a practice that was entrenched with both staff and patients despite negative effects, including worsened health outcomes.[19-21] The drive to improve operational efficiency at facilities was heightened by the need to retain a growing number of patients on antiretroviral therapy (ART). An action learning approach was used to 'enable participants to explore their respective perspectives on user and community outcomes, in this sense to evolve new meanings'.[22] Named the Appointment System Learnings Initiative (ASLI) (unpublished City Health document, 'ASLI Information Letter', 2016), this project was overseen by a steering committee consisting of City Health management, personal primary healthcare (PPHC) managers and DIALHS academics. The initial phase of ASLI was intended to last 18 months. During this period, two peer-learning workshops were held in May and November 2016, facilitated by steering committee members. It is from this period that the present study draws its data.

The concept of 'lessons learned' is well documented in the literature,[23,24] requiring analysis of all stages of a project's life, to capture knowledge and inform future work. This article adds to health system strengthening literature in a low- and middle-income country (LMIC) setting by providing a case study of what occurred when a pilot project to encourage innovation was introduced within a widely inhospitable organisational environment.

The article provides a narrative of ASLI's journey, and its iterative and reflective process. The phases of initiation and implementation are described, as well as derailment, where contextual factors undermined ASLI's intended objective of nurturing organisational learning. In doing so, the article describes issues that shaped the path of the project, including buy-in from actors, support of central leadership, the significant length of time required for change to take root and the vulnerability of the process to derailment. We deliberately focus on processes rather than outcomes and impact, as we want to draw attention to the challenges of developing organisational learning, and its importance for health systems resilience.[10,25,26] The establishment of appointment systems is used to illustrate obstacles to such initiatives, outlining lessons that could be applicable beyond the setting[27] to other projects seeking to nurture a culture of organisational responsiveness.

Methods

The methods section is based on the standards for reporting qualitative research (SRQR) checklist.[28] A flexible exploratory design was selected to examine and describe participants' understanding and interpretations of events, giving rise to conclusions that could be relevant beyond the study setting,[27,29] and permit adaptation of the approach where appropriate.

Context

The study was set in an area in the Western Cape Province run by City Health. Fig. 1 illustrates the City Health PHC facility profile at the time of study. City Health is a local government entity, and at the time of the study rendered nurse-driven PHC services at 81 fixed facilities, 28 satellite facilities, 42 community day centres (CDCs) and 9 community health centres (CHCs), divided between 8 sub-districts.[30] Some facilities are run in partnership with the provincial government's Metro District Health Service, which provides adult curative services.
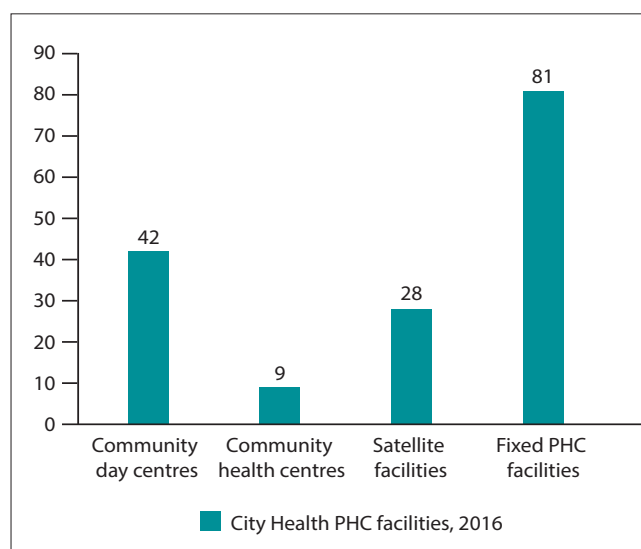

Fig. 1. Primary healthcare (PHC) facility profile – City Health (adapted).[32]

Facilities vary in size, with monthly headcounts of >5 000, 3 001 - 5 000 and <3 000 at small facilities.[31] Although not official nomenclature, in the parlance of City Health employees these are referred to as large, medium and small facilities, respectively – a phraseology which we have adopted in this article, as it reflects the discourse of the study participants. CDCs offer reproductive health, child health, prevention of mother-to-child transmission, basic antenatal care and tuberculosis treatment services. CHCs are larger and offer a wider range of services, such as nutrition, ART, women's health, men's health, eye health and counselling services.[32] In recent years there has been increasing pressure on City Health facilities to expand services, particularly around HIV, non-communicable diseases and women's health.

Units of study

PHC facilities are run by facility managers (FMs), who are nurses by background and profession. FMs are responsible for monitoring and managing service delivery, including handling medical supplies, human resources and patient complaints.[15] At the large facilities, managers may work in conjunction with managerial committees (composed of staff who head up sections of the facility), whereas at medium-sized facilities managerial work falls to the FM, who may be assisted by an operational manager. At the smallest facilities, there may be only two or three professional nurses with a nursing assistant, enrolled nurse and clerk. At large facilities, managers are not required to be involved in clinical work, but at smaller facilities they are expected to step in and perform a clinical role when necessary, which often consumes a large part of their time.[15] FMs report to PPHC managers, who oversee between 9 and 16 facilities within a subdistrict (Dr Kevin Lee, personal communication).

Data collection methods

Table 1 outlines data sources for this article, consisting of participant interviews and a document review.

Sampling strategies, data collection, processing and analysis

Fourteen individual semi-structured interviews were conducted. This approach allowed the researcher to build a rapport with participants and encourage a frank discussion of views while still maintaining participant confidentiality.[29] Twelve FMs were purposively selected for inclusion based on their participation in ASLI from the outset. Table 2 outlines the characteristics of facilities included in this sample. Two PPHC managers were purposively selected based on their in-depth knowledge of the initiative, and acted as key informants.

Interviews were conducted with the use of a flexible topic guide[29] (see Appendix 1: https://www.samedical.org/file/1806) compiled after a reading of the relevant literature, and information from the document review. Written informed consent was obtained prior to interviews, and audio-recordings and interviews were conducted in a private room.

Interview data were transcribed verbatim, and transcripts were read several times to allow for familiarisation with the

Table 1. Data sources (*N*=28)

Source	n
Semi-structured interviews	
Facility managers	12
PPHC managers	2
Documents included for review	
Steering committee minutes	10
City Health ASLI information newsletter	1
Workshop reports	2
Report: barriers to appointment systems	1

PPHC = personal primary healthcare; ASLI = Appointment System Learnings Initiative.

Table 2. Sampled facilities (*N*=12)

Facility size[35]	Average monthly headcount	n
Small	≤3 000	1
Medium	3 001 - 5 000	3
Large	>5 000	8

material.[29] Transcripts were uploaded to ATLAS.ti. Subjects' identity was concealed by using numeric identifiers, and data were stored on a password-protected device to which only the researcher had access.

Interview data were initially analysed deductively, focusing on themes generated in the research proposal, and thereafter inductive analysis was carried out to identify additional emerging themes. Codes were identified from the transcripts and grouped within broad themes. Analysis was initiated by the first author. Thereafter the logic of the coding process was verified with the co-authors of this article, who had insight into the ASLI process due to extensive and prolonged engagement as members of the ASLI steering committee and the DIALHS team.

For the document review, documents obtained from City Health and the ALSI steering committee were purposively chosen for inclusion if they related to the research question. Review documents were used to provide background and context with regard to ASLI, to clarify potential areas for questioning, to supplement information gathered in the interviews and for data triangulation.[27] This information was also used to construct a timeline of events related to ASLI, and to illustrate the influence of contextual factors (Fig. 2). Documents included for review consisted of minutes of the ASLI steering committee meetings, collated workshop notes, case reports from facilities and City Health newsletters. Documents were skimmed and re-read in an iterative process to identify and extract meaningful data according to the date, purpose, title, authors and subject matter of the document, and salient facts contained therein.

Techniques to enhance trustworthiness

Data were triangulated between interviews and documentary evidence, as well as between participants and key informants.

Researcher characteristics and reflexivity

The first author undertook this work as part of a Master of Public Health thesis. She had not previously engaged with the study participants, and took care to exercise reflexivity throughout the process.

Ethical issues

Ethical clearance was obtained from the UWC Biomedical Research Ethics Committee (ref. no. BM17/9/7), as well as the City of Cape Town (heareafter 'the City'), prior to commencement. Informed consent was obtained from participants, who were given an information sheet prior to commencement. Pseudonyms or numbers were used where appropriate to conceal identities, and confidentiality was preserved at all stages of research.

Results

The Appointment System Learnings Initiative: The journey

The findings described here are drawn from both the document review – used to construct a timeline of ASLI's trajectory (Fig. 2) – as well as from interviews. The initiative's journey is described according to three broad stages: initiation, implementation and derailment.

Initiation phase

The need to retain a growing number of patients on ART led to a renewed focus on appointment scheduling to improve efficiency (unpublished City Health document 'ASLI Information Letter', 2016), but it was recognised that staff and patient resistance to change had thwarted previous top-down attempts (unpublished City Health document 'Perceived Barriers to Appointment Systems', B Harley, 2016; unpublished City Health document 'Minutes of ASLI Steering Committee, 19 February 2016'). Some facilities had independently attempted to implement appointment systems for certain services, although many were discouraged by limited success (unpublished City Health document 'Workshop Report –
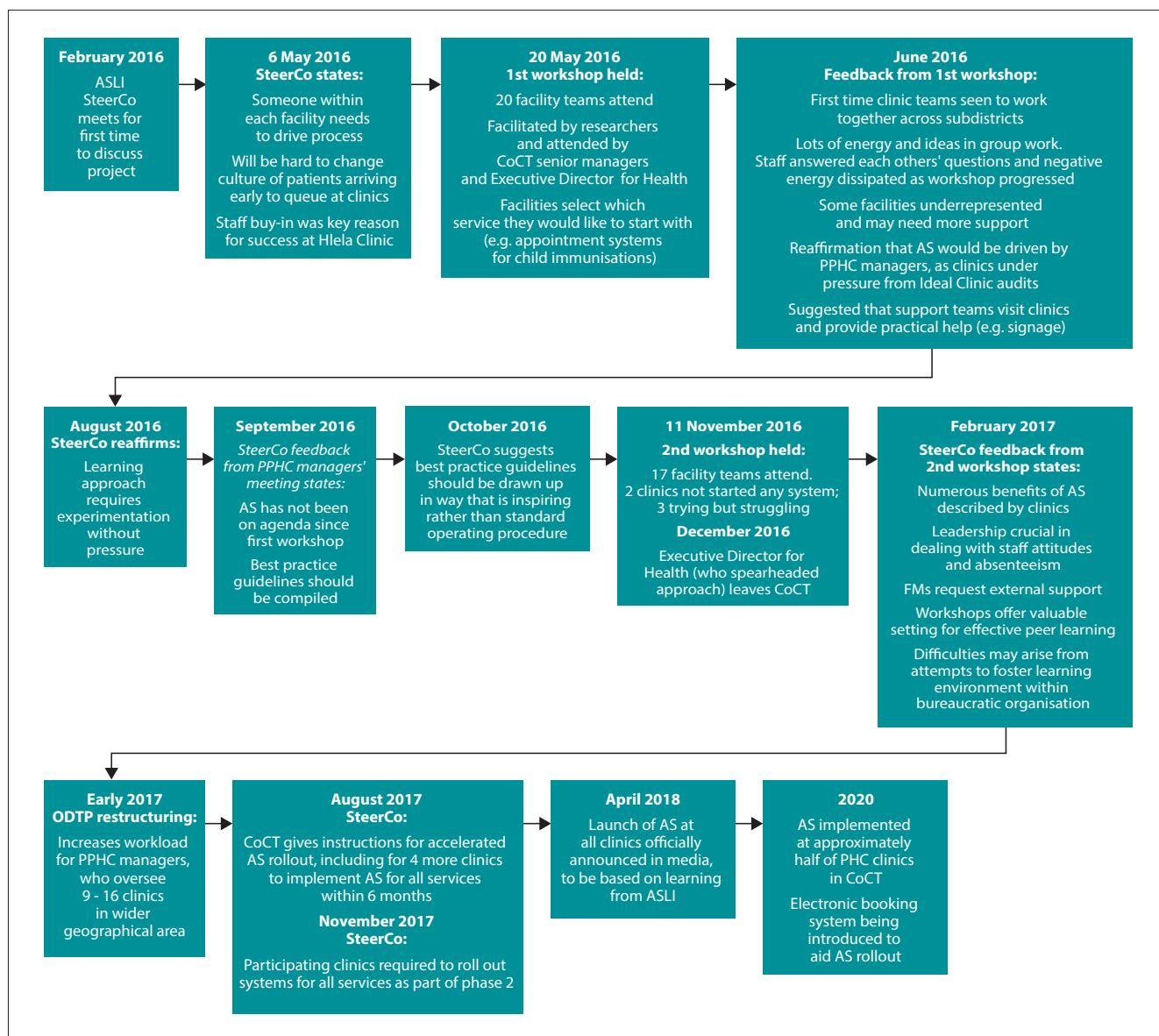

Fig. 2. Timeline of the learning process. (ASLI = Appointment System Learnings Initiative; SteerCo = steering committee; CoCT = City of Cape Town; AS = appointment system; PPHC = personal primary healthcare.)

November'. ASLI Steering Committee, 2016). One facility, known here as Hlela Clinic, provided an inspiring model of effective, facility-lead implementation characterised by a high degree of staff buy-in. City Health therefore decided to introduce a learning approach to appointment system design, based on the Hlela example in 2016.

It was hoped that an iterative and bottom-up approach that worked with 'early adopters' and was responsive to local contexts would spread lessons and buy-in throughout the system (unpublished City Health document. 'ASLI Information Letter', 2016). Known as ASLI, this project was intended to act as a seedling for the development of learning capacity and empowerment at PHC level. It was launched with strong support from the executive head of City Health at the time, and with enthusiasm from participating facilities. As we will elaborate, it was later undermined by other organisational agendas, and was ultimately replaced by a standard command-and-control approach to policy.

The guiding principle of ASLI was that to be successful, this, like other innovations before it, would require an extended period of experimentation, learning and support to allow staff and patients to get used to the new way of doing things. ASLI was not intended as a technical change, but as a 'whole system' intervention,[33] requiring that trust be built with communities and staff. An 18-month 'safe space for learning' was allocated for facilities to develop context-appropriate systems based on shared learning. The active support of PPHC managers was recognised as vital. Each facility was required to put together a team to drive the process, including the FM, the clerk and the professional nurse in charge of the service for which scheduling would be introduced. It was initially suggested that two facilities from each subdistrict would participate, one that had had some success with appointment scheduling and one that was motivated to implement a system, so that they could learn from each other. ASLI would be introduced at an initial workshop where experiences would be shared, workplans developed and challenges and solutions discussed. Progress would be reported in the second workshop after 6 months (unpublished City Health document 'ASLI Information Letter', 2016).

The first workshop, held in May 2016, was attended by teams from 20 participating facilities and representatives from City Health (unpublished City Health document 'Workshop Report – May', ASLI Steering Committee, 2016) including the Executive Director of Health, who addressed the workshop participants and stressed the goal of working together towards delivering an optimal experience for clients – providing strong leadership from the top: 'She encouraged each person present to contribute to the workshop, saying that each person's experience, perspective and ideas were important. She encouraged colleagues to be part of a learning process, saying that management did not have any easy, set answer as to what an appointment system needed to look like – they recognised that a system would have to be tailored to each facility. She freed colleagues to be creative and to 'think out of the box' in designing appropriate appointment systems' (unpublished City Health document 'Workshop Report – May', ASLI Steering Committee, 2016).

Implementation phase

At the June steering committee, feedback from the first workshop was discussed (unpublished City Health document 'Minutes of ASLI Steering Committee, 3 June 2016'.) It was noted that workshop participants found the motivation and support from the executive director an important signal, permitting experimentation, and that there was a sense of excitement about the project. Facilitators noted that facility teams were seen working together across subdistricts for the first time. 'Negative energy' that was noticed in more reluctant teams was found to have dissipated as the workshop progressed and teams worked together to answer each other's questions. Facility teams worked together, with staff members other than the FM taking the lead in some cases. At one facility, for example, the clerk spearheaded the initiative (unpublished City Health document 'Workshop Report – May'. ASLI Steering Committee, 2016.)

The initial approach was received with enthusiasm, with one FM stating:

'It was fine. [It's better that it was] not prescriptive. Because once they are prescriptive it's like "No, they are giving us extra work."' (P4)

A second workshop was held in November 2016. While most facilities had been able to implement an appointment system to some extent, two had not done so at all, and three had attempted to do so but were struggling. The former two facilities had uninvolved or recently appointed FMs, and therefore lacked a leader to drive the process (unpublished City Health document 'Workshop Report – November', ASLI Steering Committee, 2016; unpublished City Health document 'Summary notes for the second ASLI workshop', 2017).

Facilities that had a working appointment system, however, reported various benefits: shorter waiting times, an increase in the number of patients seen, less congestion, a more manageable workload, the ability to identify patients defaulting on treatment, and patients being able to receive care and still go to work or school that day (unpublished City Health document 'Minutes of ASLI Steering Committee, 3 February 2017'). From the workshop report, it emerged that FMs valued the opportunity to report back to facilitators and one another, with space for recognition of achievement and opportunities for support from peers (unpublished City Health document 'Workshop Report – November', ASLI Steering Committee, 2016). Facilities presented their cases and worked collaboratively to find solutions to each other's problems. An example of this was that managers assisted a newly appointed and younger manager whose system was struggling. FMs also stated that they were inspired by hearing of the examples of other facilities, including Hlela Clinic (unpublished City Health document 'Workshop Report – November', ASLI Steering Committee, 2016).

The need for an iterative process was expressed by a PPHC manager who acknowledged that a process of trial and error was to be expected:

'You need to keep on looking to see how to improve it. We're going to give it that period and then we'll look at it again.

You've got to do that constantly because things change – until you get it to where you want it.' (P2)

Following the second workshop, the steering committee discussed the importance of FM leadership, and discussed the fact that some facilities desired external support for practical assistance. Peer support was reaffirmed as an asset which aided learning at the workshop. The committee also noted that difficulties existed around encouraging participatory learning within a bureaucratic environment. Further workshops were planned to aid the approach, based on requests from facilities. Scale-up workshops were held in various areas within the City in June and July 2017, and these were well attended by facilities (unpublished City Health document 'Minutes of ASLI Steering Committee, 11 August 2017').

Derailment

Two contextual over-arching factors had a fundamental impact on the development of ASLI.

The Ideal Clinic Realisation and Maintenance programme (ICRM): At the June steering committee meeting, the importance of PPHC managers in driving the process at facilities was reaffirmed (unpublished City Health document 'Minutes of ASLI Steering Committee, 3 June 2016'). This was necessary because of the additional burden placed on FMs by ICRM audits. ICRM was a national plan to standardise PHC facilities, which intensified around the same time that ASLI was launched. ICRM required that four audits per facility were conducted annually, each taking at least one day. These audits were carried out by the relevant PPHC manager, dramatically increasing the workload (unpublished City Health document 'Minutes of ASLI Steering Committee, 12 August 2016'). ICRM also required all facilities to have appointment systems in place.

In August, ASLI was reaffirmed as a safe space for learning without pressure (unpublished City Health document 'Minutes of ASLI Steering Committee, 12 August 2016'). However, in September, feedback from PPHC managers indicated that ASLI had not been on their agenda since the first workshop 3 months before, and PPHC managers suggested that best practice guidelines should be compiled to assist FMs (unpublished City Health document 'Minutes of ASLI Steering Committee, 9 September 2017').

This was in contrast to their previously expressed support for the learning process. Their thinking is reflected in the statement by a PPHC manager who did not feel that FMs had the capacity to develop their own systems:

'I said to [the City Health manager] that we have to be more prescriptive in what we require. Almost as if to say … there's an appointment system and this is what it must have.' (P2)

It was suggested that these be drawn up in a way that was viewed as inspiring rather than as a standard operating procedure (unpublished City Health document 'Minutes of ASLI Steering Committee, 7 October 2017'), but the proposal signalled a mismatch between the opinions of supervising managers and the goals of the learning approach.

The Organisational Development and Transformation Plan (ODTP): Secondly, in early 2017, the City of Cape Town underwent comprehensive and far-reaching restructuring, including all services, according to an over-arching project called the Organisational Development and Transformation Plan (ODTP).[26,34,35] City Health, as part of the local government, was deeply affected, with significant implications for ASLI. First, the Executive Director for Health, who had been encouraging of the learning initiative, left the City,[36] meaning that ASLI lost high-level support. Her successor lacked the same extensive engagement with, or insight of, the DIAHLS project. City Health was restructured so that each subdistrict and PPHC manager was required to supervise a larger area, which further increased their workloads and meant that they were unable to support facilities in the way that had originally been intended. This is reflected in the statement by a FM:

'We will never get the support that we … really want to have, because of staff challenges. [Our PPHC manager] cannot run around for 17 clinics daily and still have meetings to attend all over.' (P6)

In addition, PHC facilities were required to expand their range of services, increasing the workload at facility level.

With ODTP restructuring came an increasing degree of top-down implementation, as described by these FMs:

'Ya, but now they start becoming prescriptive. That is what I find … in the beginning it was perfect. And now they started to be very specific about how they want it. Now they talk about standardisation, every clinic must have the same sort of appointment system and areas are different. And what works for that specific clinic and the flow in that structure differs from other clinics. So now they start becoming "No, you can't do this, no you can't do that", so it's a bit of a conflict now. But in the beginning it sounded wonderful.' (P9)

In August 2017, 15 months after the first workshop, City Health instructed that implementation should be accelerated, including the requirement for four facilities to implement an appointment system for all services within 6 months (unpublished City Health document, 'Minutes of ASLI Steering Committee, 11 August 2017'). This was before the initial 18-month period allotted for learning had elapsed, and ran contrary to the guiding principle of allowing space for experimentation. As part of ASLI phase 2, City Health stated that pilot facilities should implement appointment systems for all services by November 2017 (unpublished City Health document, 'Minutes of ASLI Steering Committee, 11 August 2017'). In April 2018, the introduction of appointment systems at all facilities was officially announced in the media, with a City official saying of ASLI, 'It is this learning from the project that is now being used to inform the appointment systems in all City Health facilities'.[38] By the beginning of 2020, appointment systems had not yet been implemented at all PHC facilities, but this was being pursued as part of an IT modernisation project (Dr Kevin Lee, personal communication).

Discussion

The importance of organisational learning for health systems responsiveness and resilience is well documented in the literature,[10,16,26,38-40] and has acquired even greater urgency with the COVID-19 pandemic.

This study, which precedes COVID-19, aimed to showcase and learn from a small-scale initiative in the City of Cape Town health department to deliberately structure a bottom-up learning space to introduce a small health systems innovation where top-down innovations had failed in the past.

While this was a small intervention, there are some important lessons for efforts to nurture learning organisations.

First of all, frontline managers and health workers responded with a sense of optimism and energy to an innovation where previous attempts at implementing scheduling systems by City Health had been met with resistance, which contributed to their failure (unpublished City Health document 'Perceived Barriers to Appointment Systems', B Harley, 2016). The findings here, however, suggest that the presence of, and support from, top leadership,[10,41] the creation of learning spaces through the workshops and the opportunity to work in facility teams and learn from peers created a willingness and, in fact, enthusiasm to take risks and find solutions to complex problems. This differs from previous research involving PHC staff in South Africa (SA), which described them as suffering from fatigue and burnout under a barrage of constant change over which they have little control.[12,17] Studies that have examined the use of similar participatory or collaborative approaches to ASLI have found increased feelings of empowerment in subjects, and enhanced implementation,[42-44] which supports the finding here that managers who drew up their own plans had a more favourable perception of the change process than they did of top-down programmes, which were seen as burdensome.

Peer support and the creation of learning spaces, in particular, are recognised as important to learning in other healthcare settings, with professionals of the same level found to be more influential on each other than managers, and thus more likely to secure conformity to norms and standards.[45] Lembani et al.[40] found that where stakeholders were able to collaboratively analyse factors contributing to poor maternal health indicators in a district in SA, preconceptions around problems and solutions were challenged, allowing for workable solutions to emerge. This was described as a key feature contributing to organisational learning and resilience, as it meant that unhelpful, entrenched ideas were recognised and discarded. This is an important part of the learning approach: the ability to recognise what does not work, and to 'unlearn' maladaptive strategies.[10] In the ASLI workshops, the collaborative peer-support approach enabled facilities to similarly overcome embedded notions about what was possible in a PHC setting, by seeing what others had achieved.

Secondly, the present study illustrates both signs of resilience and vulnerability at the frontline of service delivery. Although appointment system (AS) implementation was not universally flawless across facilities, many facilities did manage to generate and implement their own scheduling systems where top-down diktats had previously not achieved this. This points to

the development of improved adaptive resilience capabilities of frontline staff in recognising and appropriately responding to everyday challenges.[16,17,38,46]

Far-reaching changes in the wider environment (the ODTP and ICRM implementation) undermined the intent and approach of ASLI. The way in which ODTP led to uncertainty and the recentralisation of managerial processes has been described elsewhere.[27] This study equally found that the ODTP restructuring eroded the ASLI process and its objectives in several ways.

The initiative lost much of its crucial mid-level leadership support as increased rollout of service offerings at facilities placed additional burdens on FMs. PPHC managers, too, experienced an increased workload that reduced their capacity to focus on ASLI.

Simultaneously, there was a move away from allowing space for an iterative process of learning to occur, although this was recognised as a necessary element at the outset of ASLI. Senior management in the City government instructed an accelerated rollout of systems after 15 months, although the initial time frame for ASLI was 18 months. The request for accelerated rollout ignored the focus on process: that empowering micro-level actors was the aim of the learning initiative, rather than exclusively focusing on output (achieving the complete rollout of scheduling systems) at the expense of sustained learning. This return to a command-and-control approach suggests a mismatch between the intangible systems software of an autocratic organisational culture, and the tangible software of an initiative to foster decentralised leadership, which hindered attempts at resilience-building.[17] PPHC managers expressed favour for a more prescriptive approach when challenges to grassroots planning began to be evident, feeling that FMs might not be able to implement systems without guidance. This paternalistic attitude has been identified elsewhere in DIALHS research,[12] and is attributed to the prevailing autocratic culture of the system. This entrenched view needed time to be revised as FMs proved their capacity for decentralised leadership and responsiveness, but the truncated timeframe that was allowed for a learning environment to develop stymied this culture change. This is supported by literature that describes culture change as a means of effecting healthcare improvement, but which notes that long-term support is needed to achieve it.[47-49]

ASLI lost its most prominent champion when the Executive Director for Health left her post, and there was insufficient collective vision[50] around the need to cultivate organisational learning to pursue the approach. As reported, her presence and explicit support had contributed significantly to FMs and staff feeling empowered to innovate and problem-solve. The combination of ODTP restructuring and the departure of the executive director resulted in loss of support for the project, which was then largely transformed into an implementation initiative, losing its emphasis on bottom-up learning and innovation.

Conclusion

The importance of cultivating the capacity for organisational learning at PHC level has been highlighted by COVID-19, and had long been the focus of efforts to improve micro-level governance within the district health system as part of the DIALHS project. ASLI was

RESEARCH

one such attempt, which sought to empower PHC facility staff by giving them the skills, support and authority necessary to independently solve an everyday challenge – in this case, that of extended waiting times. This effort was based on research into the problems facing PHC facilities, which indicated that peer support, collaborative problem solving, sufficient support from senior managers and, especially, the commitment of participants were needed for the learning initiative to succeed. City Health established a strong foundation for developing distributed leadership and building learning capacity at the outset of ASLI, but the project was undermined by contextual factors, including national policy requirements in the form of ICRM, local organisational restructuring, and the enduring hierarchical environment of the health system. Despite these challenges, many facilities displayed great ingenuity and initiative in implementing their own systems, and reported improved functioning, which suggests that efforts at grassroots empowerment did have an impact. Future initiatives and research should consider possible contextual issues to allow for the embedding and institutionalisation of organisational learning, in order to enhance health system governance at the level of PHC facilities.

This study investigates the process, rather than outcomes, of a learning initiative by examining the perspectives of key implementers, and relevant contextual factors. It does so deliberately, as ASLI piloted a new way of working, by encouraging an entrepreneurial approach to planning and, as such, empowerment of frontline staff was the goal, rather than merely getting scheduling systems in place. It is therefore beyond the scope of this study to measure changes in waiting times or health outcomes. Further research could be conducted to explore additional aspects of the initiative, for example, the long-term impacts on trust and willingness to innovate of City Health staff, the impacts on staff morale, the outcomes of the changed approach to appointment system implementation and the impacts of new appointments systems on waiting times in City facilities. Measures to support and safeguard learning initiatives within hierarchical organisations should be investigated.

1. Kruk ME, Myers M, Varpilah ST, Dahn BT. What is a resilient health system? Lessons from Ebola. Lancet 2015;385(9980):1910-1912. https://doi.org/10.1016/S0140-6736(15)60755-3
2. Hanefeld J, Mayhew S, Legido-Quigley H, et al. Towards an understanding of resilience: Responding to health systems shocks. Health Policy Plan 2018;33(3):355-367. https://doi.org/10.1093/heapol/czx183
3. Kieny MP, Dovlo D. Beyond Ebola: A new agenda for resilient health systems. Lancet 2015;385(9963):91-92. https://doi.org/10.1016/S0140-6736(14)62479-X
4. Sarti TD, Lazarini WS, Fontenelle LF, Almeida APSC. What is the role of primary health care in the COVID-19 pandemic? Epidemiol e Serv saude Rev do Sist Unico Saude do Bras 2020;29(2):e2020166. https://doi.org/10.5123/s1679-49742020000200024
5. Brey Z, Mash R, Goliath C, Roman D. Home delivery of medication during coronavirus disease 2019, Cape Town, South Africa: Short report. African J Prim Heal Care Fam Med 2020;12(1):1-4. https://doi.org/10.4102%2Fphcfm.v12i1.2449
6. Primary Health Care Performance Initiative. Adjusting facility operations to promote safety and maintain access to routine and essential services in Johannesburg, South Africa. Johannesburg: PHCPI, 2020. https://improvingphc.org/sites/default/files/COVID-19 Promising Practice South Africa.pdf (accessed 21 July 2020).
7. Von Holdt K, Murphy M. Public hospitals in South Africa: Stressed institutions, disempowered management. In: Buhlungu S, Daniel J, Southall R, Lutchman J, editors. State of the Nation: South Africa 2007. Cape Town: HSRC Press, 2007:312-341.
8. Scott V, Gilson L. Exploring how different modes of governance act across health system levels to influence primary healthcare facility managers' use of information in decision-making : Experience from Cape Town, South Africa. Int J Equity Health 2017;1-15.
9. Scott V, Schaay N, Olckers P, Nqana N, Lehmann U, Gilson L. Exploring the nature of governance at the level of implementation for health system strengthening: The DIALHS experience. Health Policy Plan 2014;29:ii59-70. https://doi.org/10.1093/heapol/czu073
10. Davies HTO, Nutley SM. Developing learning organisations in the new NHS. Br Med J 2000;320(7240):998-1001. https://doi.org/10.1136%2Fbmj.320.7240.998
11. Nyikuri MM, Tsofa B, Okoth P, Barasa EW, Molyneux S. 'We are toothless and hanging, but optimistic': Sub county managers' experiences of rapid devolution in coastal Kenya. Int J Equity Health 2017;16(113):1-11. https://doi.org/10.1186/s12939-017-0607-x
12. Gilson L, Elloker S, Olckers P, Lehmann U. Advancing the application of systems thinking in health: South African examples of a leadership of sensemaking for primary health care. Heal Res Policy Syst 2014;12(1):1-13. https://doi.org/10.1186/1478-4505-12-30
13. Cleary S, du Toit A, Scott V, Gilson L. Enabling relational leadership in primary healthcare settings: Lessons from the DIALHS collaboration. Health Policy Plan 2018;33:ii65-74. https://doi.org/10.1093/heapol/czx135
14. Lehmann U, Gilson L. Action learning for health system governance: The reward and challenge of co-production. Health Policy Plan 2015;30(8):957-963. https://doi.org/10.1093/heapol/czu097
15. Daire J, Gilson L. Does identity shape leadership and management practice? Experiences of PHC facility managers in Cape Town, South Africa. Health Policy Plan 2014;29:ii82-97. https://doi.org/10.1093/heapol/czu075
16. Gilson L, Barasa E, Nxumalo N, et al. Everyday resilience in district health systems: Emerging insights from the front lines in Kenya and South Africa. BMJ Glob Heal 2017;2(2):1-15. https://doi.org/10.1136/bmjgh-2016-000224
17. Barasa EW, Cloete K, Gilson L. From bouncing back, to nurturing emergence: Reframing the concept of resilience in health systems strengthening. Health Policy Plan 2017;32(1):iii91-94. https://doi.org/10.1093/heapol/czx118
18. National Department of Health, South Africa. Ideal clinic realisation and maintenance – waiting times. Pretoria: NDoH, 2014. https://www.idealhealthfacility.org.za/App/Document/Download/76 (accessed 10 May 2018).
19. Daniels J, Zweigenthal V, Reagon G. Assessing the impact of a waiting time survey on reducing waiting times in urban primary care clinics in Cape Town, South Africa. J Public Health Africa 2017;8:23-29. https://doi.org/10.4081/jphia.2017.639
20. Egbujie BA, Grimwood A, Mothibi-Wabafor EC, et al. Impact of' Ideal Clinic 'implementation on patient waiting time in primary healthcare clinics in KwaZulu-Natal Province, South Africa: A before-and-after evaluation. S Afr Med J 2018;108(4):311-318. https://doi.org/10.7196/samj.2017.v108i4.12583
21. Naidoo L, Mahomed OH. Impact of Lean on patient cycle and waiting times at a rural district hospital in KwaZulu-Natal. African J Prim Heal Care Fam Med 2016;8(1):9. https://doi.org/10.4102/phcfm.v8i1.1084
22. Rigg C. Systemic action and learning in public services. Action Learn Res Pract 2011;8(1):15-26.
23. Rowe S, Sikes S. Lessons learned: Taking it to the next level. PMI Global Congress Proceedings, 2006:1-6.
24. McClory S, Read M, Labib A. Conceptualising the lessons-learned process in project management: Towards a triple-loop learning framework. Int J Proj Manag 2017;35(7):1322-1335. https://doi.org/10.1016/j.ijproman.2017.05.006
25. Naimoli JF, Saxena S. Realizing their potential to become learning organisations to foster health system resilience: Opportunities and challenges for health ministries in low-and middle-income countries. Health Policy Plan 2018;33:1083-1095. https://doi.org/10.1093/heapol/czy100
26. Gilson L, Ellokor S, Lehmann U, Brady L. Organisational change and everyday health system resilience: Lessons from Cape Town, South Africa. Soc Sci Med 2020;266(October):113407. https://doi.org/10.1016/j.socscimed.2020.113407
27. Krefting L. Rigor in qualitative research: The assessment of trustworthiness. Am J Occup Ther 1991;45(3):214-222. https://doi.org/10.5014/ajot.45.3.214
28. O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: A synthesis of recommendations. Acad Med 2014;89(9):1245-1251. https://doi.org/10.1097/acm.0000000000000388

29. Ritchie J, Lewis J, Elam G, et al. Qualitative Research Practice: A Guide for Social Science Students and Researchers. London: SAGE; 2003.

30. Western Cape Government. Socio-Economic Profile: City of Cape Town. Cape Town: Western Cape Government, 2017. http://resource.capetown.gov.za/documentcentre/Documents/City strategies, plans and frameworks/Water Services Development Plan.pdf (accessed 17 October 2018).

31. Sparks L. Exploring the clients' experience of primary health care services prior to and post the implementation of appointment systems in City Health Clinics, Western Cape, South Africa. Master's thesis. Cape Town: University of Cape Town, 2018.

32. National Department of Health, South Africa. The National Health Care Facilities Baseline Audit: National Summary Report. Pretoria: NDoH, 2013.

33. Best A, Greenhalgh T, Lewis S, Saul JE. Large-system transformation in health care: A realist review. Milbank Q 2012;90(3):421-456.

34. City of Cape Town. Area based service delivery model. Cape Town: CoCT, 2017. http://www.mile.org.za/QuickLinks/News/Presentations%MTSCape%TownJuly%2017/5%AREA BASED%SERVICE%DELIVERY%MODEL.pdf (accessed 11 October 2018).

35. City Health Directorate of Social Services. Report to area-based service delivery directorate 2017. https://www.capetown.gov.za/councilonline/_layouts/.../OpenDocument.aspx? (accessed 19 Oct 2018).

36. Mahlangu Z. LinkedIn page of Dr Zandile Mahlangu 2020. https://www.linkedin.com/in/zandile-mathibela-a1aba814/?originalSubdomain=za (accessed 13 August 2020).

37. IOL. New appointment system reduces waiting times at health facilities. IOL, 2018. https://www.iol.co.za/capetimes/news/new-appointment-system-reduces-waiting-times-at-health-facilities-14427832 (accessed 13 August 2020).

38. Kruk ME, Ling EJ, Bitton A, et al. Building resilient health systems: A proposal for a resilience index. BMJ 2017;357(May):1-8. https://doi.org/doi:10.1136/bmj.j2323

39. Stokes P, Smith S, Wall T, et al. Resilience and the (micro-)dynamics of organisational ambidexterity: Implications for strategic HRM. Int J Hum Resour Manag 2019;30(8):1287-1322. https://doi.org/10.1080/09585192.2018.1474939

40. Lembani M, de Pinho H, Delobelle P, Zarowsky C, Mathole T, Ager A. Understanding key drivers of performance in the provision of maternal health services in Eastern Cape, South Africa: A systems analysis using group model building. BMC Health Serv Res 2018;18(1):1-12. https://doi.org/10.1186/s12913-018-3726-1

41. Garvin D. Building a learning organisation. Harv Bus Rev 1993;71(July-August):78-91.

42. Mahomed OH, Asmall S. Professional nurses' perceptions and experiences with the implementation of an integrated chronic care model at primary healthcare clinics in South Africa. Curationis 201;40(1):e1-e6. https://doi.org/10.4102/curationis.v40i1.1708

43. Sastry MA, Long KNG, de Sa A, et al. Collaborative action research to reduce patient wait times: Results in two high-demand public clinics in Western Cape, South Africa. Lancet 2017;3(S18). https://doi.org/10.1016/S2214-109X(15)70137-3

44. Tetui M, Coe A, Hurtig A, et al. A participatory action research approach to strengthening health managers' capacity at district level in Eastern Uganda. Health Res Policy Syst 2017;15(Suppl 2):S110. https://doi.org/10.1186/s12961-017-0273-x

45. Dixon-Woods M, McNicol S, Martin G. Ten challenges in improving quality in healthcare: Lessons from the Health Foundation's programme evaluations and relevant literature. BMJ Qual Saf 2012;21(10):876-884. https://doi.org/10.1136/bmjqs-2011-000760

46. Health Systems Resiliency Project. Health systems resilience: A systems analysis. HSRP, 2014. https://assets.publishing.service.gov.uk/media/57a08985e5274a31e0000110/health-systems-resilience_eastern-cape-case-study_final-report.pdf (accessed 2 March 2022).

47. Smith ME. Changing an organisation's culture: Correlates of success and failure. Leadership Organ Dev J 2003;24(5):249-261. https://doi.org/10.1108/01437730310485752

48. Fonn S, Ray S, Blaauw D. Innovation to improve health care provision and health systems in sub-Saharan Africa – promoting agency in mid-level workers and district managers. Glob Public Health 2011;6(6):657-668. https://doi.org/10.1080/17441692.2010.489905

49. Scott T, Mannion R, Davies HTO, Marshall MN. Implementing culture change in health care: Theory and practice. Int J Qual Heal Care 2003;15(2):111-118. https://doi.org/10.1093/intqhc/mzg021

50. Schneider H, English R, Tabana H, Padayachee T, Orgill M. Whole-system change: Case study of factors facilitating early implementation of a primary health care reform in a South African province. BMC Health Serv Res 2014;14:609. https://doi.org/10.1186/s12913-014-0609-y

RESEARCH