of: eat sleep Covid, and repeat until community transmission had stopped.

Case number 9 of Covid-19 brought a unique challenge to Naitasiri, the resultant lockdown, locked us out of exit point at Sawani and cut us off from all the business centres. Essentially we were locked inside Naitasiri and there were no more scheduled bus trips, a mode of transport that our population of near 7000 relies on heavily. This meant that our population had limited access to our services as they couldn't transport themselves. With flu season present plus the high number of asthmatics in our population, an asthmatic developing the flu and not having transport to obtain nebulised salbutamol and supportive oxygen could be lethal. We decided that we will place all Influenza like illnesses into home quarantine and monitor them also, regardless of their travel history, to make sure we can contain a flu outbreak before it starts. Transport remained an issue; we activated village health committees and asked them to find a transport in their village or a neighbouring one. If none was present then they could contact us directly if there was a sick person that needed to be brought over. These two measures helped us have an incident free lockout.

Covid-19 has affected health systems all across the world. It has made us more proactive rather than reactive, thus highlighting the need for the public health physician. We serve an essential part in the system, especially, when it comes to dealing with pandemics. If I may repeat the over said rhetoric that; we are at war with the virus, specialists win us battles within the war but to end it all a great public health effort is required.

Figures from article: Back to the Future: Putting: Primary Back into the Kiribati Health System

Figure 1: Kiribati Policy Framework and Timeline

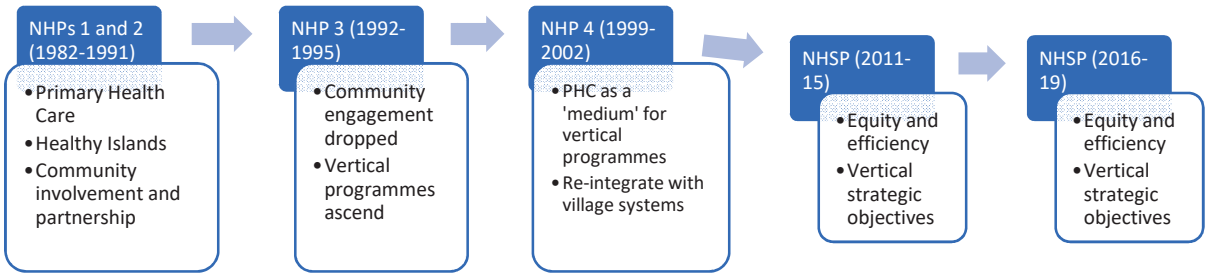
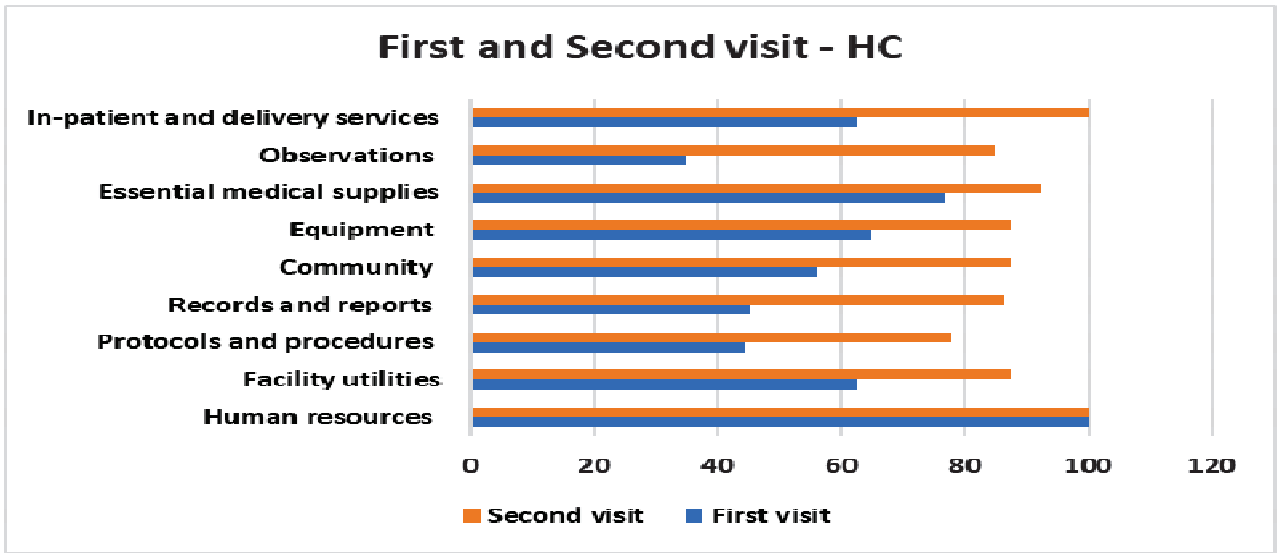


Figure 2: Facility Performance based on 1st and 2nd supportive supervision visits



Original Study

BACK TO THE FUTURE: PUTTING 'PRIMARY' BACK INTO THE KIRIBATI HEALTH SYSTEM

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ABSTRACT

This paper explores the introduction of a quality improvement initiative in Kiribati's primary health care (PHC) system.

INTRODUCTION

This paper explores the introduction of a quality improvement initiative in Kiribati's primary health care (PHC) system. A gap analysis and literature review were conducted in 2017, which informed plans for strengthening quality improvement tools addressing supportive supervision and community engagement. The supportive supervision guidelines and tool were formally introduced in late 2018. At that time, plans were made to pilot these in ten outer islands, comprising three of six of Kiribati's districts. This entailed two annual supervision visits by District Public Health Nurses (DPNOs) and quarterly supervision by Medical Assistants (MAs) based on the outer islands. Perspectives on their introduction as well as initial findings from implementation are reflected in the paper. Findings are relevant for other Pacific Island Countries and Territories (PICTs) [1] seeking to strengthen the quality of PHC and community engagement in their contexts.

BACKGROUND

Since the mid-2000s, there has been increasing recognition that global health progress cannot be achieved without resilient health systems and that quality of care should be the yardstick of system performance [1]. However, many governments are far from achieving these desired outcomes: only one-quarter of people in low-and-middle-income countries (LMICs) believe that their health systems work well, with poor-quality care a greater barrier to health outcomes than access [2]. The risk of epidemics, such as the recent measles outbreak in Samoa, further illustrates the consequences of weak and disempowered health systems.

In order to witness a shift in health outcomes, there must be greater attention paid to improving the quality of health services [3]. This, in turn, requires greater attention to health management and service capacity at the sub-national level, where health policies and strategic plans are operationalized. Good management has been characterized as "software" that enables system "hardware," such as health infrastructure, personnel and medical technologies, to function. In LMICs, strong management capacity is even more important to promote efficiency, given resource constraints.

Kiribati is no exception. Substantive challenges are prevalent in Kiribati's primary healthcare (PHC) system and cut across health system building blocks. [5] PHC performance and quality of care have waned over time. One possible explanation for the fall in service quality can be found by examining the successive Kiribati National Health Plans (NHPs) and National Health Strategic Plans (NHSPs), which suggest vision and mission drift from PHC and accountability to communities (Figure 1) [2]. Whereas in early plans (1980s, post Alma-Ata), there was a strong emphasis on community engagement, *tetoronib'ai* (self-reliance), and PHC, this emphasis has been diluted over time. There has been a *"progressive lack of community involvement"* [3], perceived to have resulted from lack of stewardship and management at district level.

Kiribati's recently developed NHSP for the period 2020-2023 provides opportunity to reorient the health system to PHC. In addition to PHC supportive supervision and

community engagement guidelines and tools, other quality improvement initiatives include a Role Delineation Policy (RDP). The RDP defines which services are provided at what level, by whom and with which resources. Implementing the RDP will require strengthening the capacity of district health management teams (DHMTs) to steward this.

METHODOLOGY

The paper is based on secondary and primary data collection. Secondary data included literature on quality and PHC as well as Ministry of Health and Medical Service (MHMS) supervision reports and action plans. This was complemented by key informant interviews with relevant MHMS and UNICEF staff. This included:

- Two District Principle Nursing officers (DPNOs)
- Director of Nursing Services
- One public health programme manager
- Two UNICEF technical staff supporting the initiative in Kiribati and in the Multi-country office (Fiji)

Interviews were conducted in March 2020. Supervision reports and action plans were accessed for two cycles of supervision by DPNOs. At the time of writing, first and second supervisory visits had been completed by DPNOs in targeted districts and outer islands over the period March – December 2019.

GAP ANALYSIS AND CHANGE PROCESS

The decision to strengthen existing quality improvement tools for PHC was initiated by the UNICEF Multi-country office in Fiji. UNICEF field visits to Kiribati PHC facilities suggested two phenomena: low utilisation of PHC services and large efforts being made to supervise PHC delivery by public health programmes. These programmes operated independently from the nursing department, which are the accountable unit for PHC staff.

According to a Kiribati Health Service Delivery Profile, clinical hospital services and curative care received the largest share of total health care expenditure; as such, *'curative care competes with preventive health care for public resources.'* [8] The great distance between the islands and the dispersion of the population also makes health care delivery difficult - and expensive – as it is reliant on domestic air and sea transportation. In this context, there are two trends that can be discerned:

- *Healthcare expenditure 'follows the patient', reflective of where I-Kiribati seek care*. For example, urban residents of South Tarawa and Betio increasingly bypass PHC facilities and use outpatient hospital facilities for all levels of care as hospitals are easily accessible. In contrast, residents of outer islands may delay care until they are in advanced stages of disease or illness, but ultimately seek care at one of the country's four hospitals, which means that resources are increasingly directed to these levels of care.
- *Healthcare expenditure, concentrated at national level, necessitates that the 'patient follow the money.'* This has resulted in weak systems at the sub-national level and limited up-scaling and expansion of priority services at primary and community levels. This has contributed to low service coverage and the migration of people to Tarawa (and other referral facilities), where additional pressure is placed on the tertiary level, and the environment.

Public health programmes have also attracted significant financial 'weight' with non-communicable diseases receiving the bulk of resources, followed by maternal and child health (MCH). In contrast, health system's strengthening has received significantly less resources, and attention.

Box 1. The Kiribati PHC backbone

Health centres and clinics and, the respective staff operating these, form the backbone of the PHC structure and fall under the Department of Nursing. Health centres are typically run by MAs, who may have a public health nurse, nurse aid, and student nurse assisting him/her. Conversely, health clinics are smaller and tend to have a public health nurse operating the clinic alone. Health centres are made of more permanent materials while health clinics are traditionally made of local materials.

Nursing and MA staff have community and supervisory responsibilities in their job descriptions. However, based on the field work, the MA's main interaction with other clinics was more focused on the distribution of health commodities. MAs and nurses also reported that they did not regularly engage with the Island Council or other community structures, despite governance of PHC being an Island Council function. PHC facilities were not busy at the time of the field work, implying that health workers had time to attend to these areas.

DPNOs are not based in their districts, but in Tarawa. They visit their districts infrequently, at most once a year (unless a visit is prompted by UNICEF or another agency). This means that neither support nor supervision is consistently available. This was evident in the lack of essential equipment, materials and skills, with many of the most glaring gaps 'long term' issues, left unresolved.

From a structural perspective, the gap analysis also found a clear disconnect between the programmes and the human resources intended to deliver these. Outer island

human resources, nurses and MAs, are under the nursing department while the specialist programmes are under public health with no functional management lines between the two. Box 1 provides more detail on PHC structures and roles as well as observations from field visits.

Based on the gap analysis, it was agreed with the MHMS to:

- Strengthen the supportive supervision structure under the direction of the Nursing Department and DPNOs
- 'De-clutter' the PHC toolbox, by introducing a streamlined supervision guide and tool to facilitate dialogue and action
- 'Rediscover' *tetoronib'ai*, through more purposive engagement with Island Councils and communities

FINDINGS

The supportive supervision approach and reactions to this

As alluded, the Kiribati PHC toolbox was 'cluttered' as public health programmes had layered in their specific programmatic areas into PHC requirements over time. These tended to take the form of long survey tools, for single conditions or combined as a series of questionnaires for multiple conditions or disease areas; as noted by a respondent, *"it's long, a lot of pages, it is also very tiring…it would take a whole day to carry out the supportive supervision with the old version."* Assessment tools were administered on an ad hoc basis when public health programme personnel conducted outreach (the DPNOs were invited to join but were not leading these events). During outreaches, programme staff would deliver services directly (such as screening exercises), bypassing PHC staff and working directly with communities.

The proposed approach sought to establish effective support supervision structures and tools under the leadership of the nursing department. The approach also sought to 'reconnect' the health system to local governance and community structures such as the Island Councils and their mandated role in PHC service provision and governance. Emphasis was placed on communication between accountable structures, focusing on areas of strength and weakness and follow up actions to address gaps in service provision.

A basic supportive supervision checklist and action plan were developed that included nine supervision domains. These were kept deliberately 'slim' and focused on essential requirements, such as infection prevention, and PHC tracer interventions and commodities. The checklist elicited performance benchmarks using a 3-star system (Box 2). This was intended to reward and recognise good performance and create a sense of 'healthy competition' between outer islands. The simple and visual format was intended to make information accessible to communities and the Island Councils and allow them to engage more centrally in PHC.

Reactions were mixed to the new approach, which was endorsed by the MHMS in 2018. Initially public health programme staff were resistant to the new approach; as noted by a UNICEF respondent, *"it took a long time to reconcile this with their 'needs."* DPNOs were also resistant at first as there were concerns that the tool was too simple. It was finally agreed that DPNOs would lead on supportive supervision, and through this, would be able to highlight gaps that programmes could then address more deeply. There was greater role clarity through this negotiation.

The supportive supervision approach and tool piqued DPNO curiosity, *"we were curious and nervous, but when we were trained on the guidelines, we felt relaxed and found that it was a good tool to use during the supportive supervision."* Curiosity – and a bit of apprehension - also extended to MAs and nurses as they felt that they were being scrutinised. However, over time,

Box 2. Ranking and performance benchmarking

The basic checklist allows for performance benchmarking. Currently the checklist uses colour coding alongside the scores (2 = green, 1 = amber, 0 = red), reflected as stars to better visualize performance.

As benchmarks are understood and PHC facilities scored against this, there will be differentiation in performance, allowing external and on-site supervisors to tailor support. For individual facilities (and health workers), the focus of a supportive supervision visit should change over time as issues are identified and resolved and performance improves.

Ranking is a useful PHC management tool as it can:

- Allow for tailored supportive supervision that addresses areas of weakness and builds on areas of strength
- Foster healthy competition between PHC facilities and between district supervisors
- Facilitate efficient and effective use of supervision resources
- Target different forms of support (e.g. on-the-job training, mentorship)
- Target recognition and reward strong performance

The use of ranking or other method of performance analysis shifts the emphasis of the supportive supervision to one that is more dynamic, which requires regular review and adjustment of action plans according to needs. It promotes evidence-based decision making and more effective planning.

this has been replaced with a sense of empowerment, expressed by the sentiment that MAs *"feel that they are really MAs."* They now visit their clinics and do supervision, not just commodity distribution. Internal Affairs, which oversee Island Councils, were also motivated by the approach and, in turn, activated Island Councils. Due to its simplicity, it has fostered a greater sense of joint ownership and support to PHC.

"[PHC staff] like the tool because it's picking out the health areas that need to be improved for service provision... they feel like they are not the only ones to address these issues…[there is] the community and Island Council, DPNOs, the responsible public health programme." (MHMS respondent)

Strengths of the supportive supervision approach

Respondents indicated that there is now stronger accountability and role clarity between key PHC stakeholders – the nursing department, the public health department, Island Councils and their constituent communities. The DPNO is leading on supportive supervision and is no longer in the background. They are very clear on standards and enforce these with PHC teams.

The tool has also strengthened communication as the DPNOs, *"feedback and draw in support"* from other MHMS departments. Findings from the supportive supervision spell out what is the responsibility of the DPNO and public health programmes, what belongs to PHC facility teams (MAs and nurses)and what is the responsibility of the Island Councils. Island Councils are engaged *"from the beginning…they have been familiarised with the tool and know what belongs to them."* This was not the case in the recent past but was a recognised strength of Kiribati's *tetoronib'ai* from earlier decades. The tool, while simple, has facilitated a connection with this principle as well as a bridge between health and community systems.

PHC improvements have been made as a result of the supportive supervision. An example of one health centre's improvement is shown in Figure 2. *"Initially in the past, the clinic was not that well organized...but with this new tool you can really see big improvements with our clinics on the outer islands and the nurses' performance which for us is outstanding."* (MHMS respondent)

All health facilities demonstrated a significant improvement in performance and quality from one visit to the next when measured against the standards. For the 29 facilities the average score at first visit was 57.3%. This increased to 72.8% at second visit. Most of the improvements resulted from actions within the control of PHC teams. About half of the facilities showed an improvement in community and Island Council engagement; in places where this did not improve it was attributed to the lack of underlying structure or partnership with Island Councils.

The tool has triggered initiative, but also recognition for such actions, which is important to the motivation of MAs and nurses working in isolation from the larger health system. As a MHMS respondent noted, *"our nurses are very creative in making their own posters with their own initiative. Like they write notes to patients, instructions that will help remind them of the things they need to carry out."* Supportive supervision has allowed these small acts of initiative to be recognised and praised.

The supervision tool and resulting action plan has also reignited community support and engagement. This was singled out by MHMS respondents as significant, and as one respondent noted,

"When we do the second round [supportive supervision], there is a big change, the water is running, the lights were on and working in the clinic. Also, for the disability cases, a ramp, it is now fixed where the patients go in the clinic, there is now wheelchair accessibility. That's the big changes that we see in the clinic." (MHMS respondent)

Beyond addressing some of the structural issues in the outer island facilities, there are also stronger linkages between communities and facilities, *"it helps to improve the capabilities of health workers to engage with communities and they are able to provide more services."* There has also been demonstrated buy-in to the supportive supervision approach through cost sharing. Currently this is shared between UNICEF and the MHMS with public health programmes contributing resources for the nursing department to conduct supportive supervision. In 2020, supportive supervision will target all districts, including Christmas Islands, supported by the MHMS.

Weaknesses of the supportive supervision approach

Supportive supervision is not a panacea for weak PHC systems, and challenges remain. A key challenge is credibility as it has been difficult for DPNOs to complete their actions. Inaction at this level creates a drag on momentum with PHC quality improvements and performance. DPNOs for their part require more capacity and support and suffer from competing priorities. Resources are also a challenge as most come from development partners; as noted, *"to fix things is very expensive."* These contribute to delays in actions; as reported, *"promises need to be managed"* so that Island Councils and PHC teams do not become frustrated.

There is also some recognition that the PHC system is over-extended and may benefit from consolidation. For example, a recent supportive supervision visit showed two clinics serving a population of 190. This resulted in discussion about having one clinic for the two communities and redistributing some of the larger equipment such as fridges to other, more populated sites. However, decisions such as these are recognised as political. Through the recently developed RDP, the MHMS can work with Island Councils to correct for these inefficiencies.

CONCLUSION

Quality improvement in Kiribati has taken a stepwise approach. This was not initially envisaged by UNICEF but was pragmatic, *"as it needed to be incremental to gain traction."* The current approach has used principles of change management and a spirit of 'adapt as we go', guided by MHMS stakeholders. Adaptation now needs to consider how to motivate PHC facilities to continue their quality improvement trajectory once they reach 3 stars. This will require more progressive support and needs to address management and capacity issues within the MHMS, which limit DPNO effectiveness.

The inclusion of community engagement in the checklist has also prompted more community engagement. While the supervision guidelines and tool were intended to prompt MA and nurse-led interaction with communities, it has also worked in the other direction, motivating Island Councils and communities to do their part to improve PHC. A separate community engagement guideline and, a 'how to' guide has been developed, which can now be 'layered in' to the approach.

The healthy competition between Island Councils and PHC facilities has been positive and is a source of motivation. Recent supportive supervision visits saw PHC teams rallying to "win the cup."This form of recognition used to exist in Kiribati as, under early NHPs, the notion of a District Health Team, comprising community and health staff, was in place. At that time, mechanisms were also in place to recognise and reward performance of the 'winning' health facility, village, island or district. The approach spoke to the unique context of Kiribati and acted as a means of countering dispersion and reinforcing cohesion among outer islands. It is time to go back to the future and find the 'primary' in Kiribati's health care system.

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