Mphatlalatsane
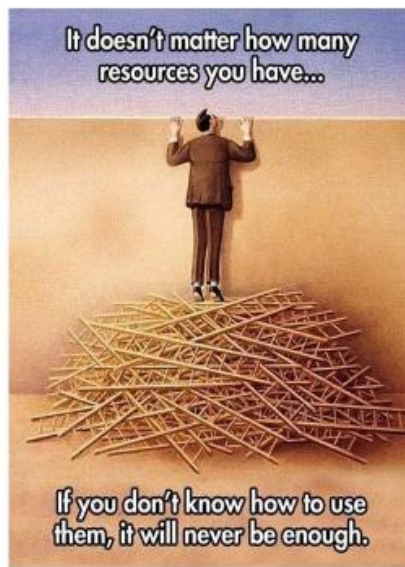### "The last star before the dawn"

Newsletter
Maternal and neonatal health and other project related topics

Issue 1
December 2019

To the reader

Welcome to our first issue of the *Mphatlalatsane newsletter*. We upgraded the *Reader* by adding a *Mphatlalatsane Corner* where we are sharing the experiences, successes, feel-good stories, and lessons learned, from those involved in planning, managing, and implementing the Mphatlalatsane Initiative. As with the reader, the *Newsletter* aims to provide busy programme managers and clinicians easy access to summaries of peer reviewed research articles on maternal and neonatal health, resources to access data, as well as content related to the Mphatlalatsane Initiative, such as quality improvement (QI) interventions and Plan-Do-Study-Act (PDSA) cycles. The summaries of research articles include (i) study characteristics such as date, place, and methodology, (ii) the results, and (iii) author conclusions. The research article texts are verbatim extracts from the respective papers, and should you use any of it, standard practice regarding citation of texts and publications should be adhered to. The full texts of the research articles are available from Arrie Odendaal (willem.odendaal@mrc.ac.za).

The *Newsletter* is maintained by the Health Systems Research Unit of the South African Medical Research Council (SAMRC). We are planning monthly issues and each issue will be standalone with new content.

We invite the Mphatlalatsane Programme Management Committee members (PMC) to send research articles, site news, announcements of maternal and neonatal events, and Mphatlalatsane progress reports, to the SAMRC team (willem.odendaal@mrc.ac.za), to be included in the *Newsletter*. We also ask the PMC to encourage Catchment area colleagues to contact us so that we can collect and share their stories with the *Newsletter* readers.

In this issue

- *Mphatlalatsane Corner section*: Our first interviews are with Dr. Dan Nhemachena, Mphatlalatsane Programme manager, and the two newly appointed QI advisors, Degratia Masenya and Azukile Nzuzo.
- We also present selected papers from a series published on the *Partnership for HIV-Free Survival* (PHFS) programme. PHFS was implemented in six countries, including South Africa, aiming to improve child survival in the context of HIV services, through QI activities. The PHFS partners included amongst others, IHI, USAID, and WHO (Maternal, Newborn, Child and Adolescent Health). The papers we summarised are:
  - ➢ An overview of the programme
  - ➢ Improving health services to HIV-affected mother - baby pairs (Kenya)
  - ➢ Reducing Mother-to-Child Transmission (Kenya, Tanzania, Uganda)
  - ➢ Data completeness and accuracy, retention in care
  - ➢ Lessons on establishing a learning network

Note

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Mphatlalatsane Corner

Mphatlalatsane Initiative

The Mphatlalatsane Initiative aims to improve sexual, reproductive, maternal, and neonatal healthcare services, by developing packages of clinical and systemic changes through quality improvement (QI) methodologies. This initiative is being implemented in purposefully selected catchment areas in Limpopo, Mpumalanga, and the Eastern Cape. Mphatlalatsane is a National Department of Health initiative, coordinated by the Clinton Health Access Initiative (CHAI), and co-funded by ELMA Philanthropies and a large anonymous donor. The programme partners are:

- Health Systems Research Unit, South African Medical Research Council (SAMRC)
- University of Limpopo Trust - Limpopo Initiative for Newborn Care
- SAMRC-University of Pretoria
- School of Public Health, University of the Western Cape
- Institute for Healthcare Improvement

Mphatlalatsane is a Sepedi word meaning "the last star seen before the dawn". This reflects the intention of using the learning or 'light' through QI activities to bring about effective change that heralds a new day of 'doing things differently', to achieve the initiative's objectives.

Our first interviews in this new addition to the *Newsletter* are appropriately with three PMC staff who are key to the successful implementation of the Mphatlalatsane Initiative. We had an interview with Dr. Dan Nhemachena (Mphatlalatsane Programme manager) on 22 October, and on 18 November, interviewed Degratia Masenya and Azukile Nzuzo (Mphatlalatsane QI advisors). Here are their stories.

Dr. Dan Nhemachena, Mphatlalatsane Programme manager (22 October 2019)

Key messages
- The first QI training of frontline workers in Limpopo and Mpumalanga, which took place in September, was a huge success.
- Dan is observing a dedication and desire from frontline workers to improve maternal and neonatal services, despite the many challenges they face.
- Though applying quality improvement principles are not new to some frontline workers, Mphatlalatsane is consolidating these principles into a methodology that is easy to follow, and that can be applied in every type of facility and service.
- Leaders at all levels are encouraged to support Mphatlalatsane.

It is so good to see their faces [trainees] *light-up during the training when they realise that 'Hey, wait, we can actually solve these problems through implementing simplified QI measures'. People are already doing QI, maybe not textbook methodology, and may not be calling it QI, but nonetheless employing QI principles.* (Dan Nhemachena)

It is very critical that the leaders are at the forefront pushing [Mphatlalatsane] forward. If people see their leaders excited and engaging, they are likely to engage with the project themselves. The project will succeed if we get the critical number of people buying into QI methodologies." (Dan Nhemachena)

Dan, who is a medical doctor, has been appointed through the Clinton Health Access Initiative (CHAI), as the fulltime programme manager for the Mphatlalatsane project. He is responsible for coordinating the multiple stakeholders and partners, ensuring that their objectives and activities align with the overall Mphatlalatsane goals. It has been quite a challenge to get everybody on board with the QI methodologies, and it is now time "*we start marching to the same* [QI] *drum beat.*" Much of his day-to-day work is spent on coordinating, tracking and deploying resources and deliverables to meet the needs of the project, problem solving, attending meetings, monitoring and reporting activities of the project and funding in alignment with NDOH and funder requirements. He is also taking care of site visits and briefing meetings to the respective catchment areas and Provincial Departments in Limpopo, Mpumalanga, and the Eastern Cape.

Dr. Nhemachena is very excited to see the past year's hard work of planning and preparatory work, is starting to pay off: *"The past year has been just a lovely journey of growth,* [and now] *seeing how all the hard work from everybody is turning what has been on paper into reality for those delivering MNH* [Maternal and Neonatal health] *services."* He is particularly excited about the recently appointed quality improvement (QI) advisors, Degratia Masenya and Azukile Nzuzo, who will be assisting the QI teams. Equally exciting, is the quality improvement (QI) training that the Institute for Healthcare Improvement has conducted at the 14 participating facilities, seven each in the respective catchment areas in Limpopo and Mpumalanga. The training was not only attended by the clinical staff who are providing maternal and neonatal healthcare (MNH) services, members of District clinical specialist teams (DCSTs), and operational managers, but also senior management staff who are getting acquainted with the QI methodologies. Staff are trained to do baseline assessments through which they identify problems in delivering maternal and neonatal healthcare services, and then to develop and test solutions to these problems. Since the training, *"we are very excited with the QI activities that are starting to take shape in each of these facilities, which is happening in all 14 facilities"*, says Dan. They are planning to have follow-up training and to introduce quarterly learning sessions. These sessions will bring QI teams together to look at the data and assess if they are achieving their objectives.

Asking Dan for highlights and 'feel-good-stories' from his engagements with those who will ultimately be responsible for improving MNH services, as well as ensuring that these improvements are sustained, he had the following to say: *"What has inspired me from my interaction with healthcare providers is that there is definitely a desire to improve things; yes, they have very real challenges, but at the same time they are committed to improving the way in which MNH services are provided. It is so good to see their faces light up during the training when they realise that 'Hey, wait, we can actually solve these problems through implementing simplified QI measures'. People are already doing QI, maybe not textbook methodologies, and may not be calling it QI, but nonetheless employing QI principles. I realise that everywhere people are solving problems daily. The QI methodologies just provide them with a framework so that they can 'speak the same language' and work towards the same goals in the medium and long term, rather than just putting out fires."*

Dan made it clear that strong leadership is required for Mphatlalatsane to bring about sustained high-quality MNH services: *"Where we have strong leadership from higher-level management, we definitely see the project moving forward. It is critical that they leaders are at the forefront pushing* [Mphatlalatsane] *forward. If people see their leaders excited and engaging, they are likely to engage with the project themselves. I think leadership is absolutely crucial."* The best traction for the project is where senior managers are buying-in to the project and have their voices be heard: *"Where there has been buy-in, it is like switching on a light bulb the way people come to understand the value of QI."* According to Dan, one of the main challenges is that some people whom they are targeting to endorse

and implement QI methodologies feel that they have already been doing it and are thus reluctant to engage with yet another project. The Mphatlalatsane management is putting different change-management strategies in place to secure higher-level management support Mphatlalatsane. They are also working on getting QI activities supported by clinical training, improving supply chain management, and will be putting policies guidelines and other work aides in place. Dan emphasised that though Mphatlalatsane has a particular way of doing QI, they are not dogmatic in their approach; the important thing that healthcare workers should realise is the QI is about using your agency and using existing resources to solve problems.

Dan's final words of encouragement were: "*As leaders, it will be important that we motivate and rally our people behind Mphatlalatsane and see that the momentum for QI grows. QI is not just a fad, it really works and is an internationally recognised methodology to improve health outcomes and patient experience of care. So, everybody should just get a better understanding of it, and give it a chance. Through perseverance, engagement, and resilience, I'm sure that we are going to build on the current momentum we have. Once people start seeing results on the ground, they will be more willing to engage with QI methodologies.*"

[Degratia Masenya and Azukile Nzuzo, Mphatlalatsane QI advisors (18 November 2019)](#)

Key messages
- Mphatlalatsane is now in the *Action period,* with the QI teams actively using Plan-Do-Study-Action cycles to solve service delivery problems in their respective facilities.
- The QI advisors are very optimistic that Mphatlalatsane will ultimately reduce maternal - and neonatal mortality, and still births, and are sharing success stories of QI teams.
- They encourage management at all levels to match the enthusiasm with which frontline workers are buying into Mphatlalatsane.

"Facility staff are used to attend trainings and workshops, and that often there is no follow-up after these events. Some of them were not expecting the first Mphatlalatsane QI training to be any different, and was really surprised to see us [QI advisors] back with our support visits, to the extent that some haven't started with their QI projects because they thought it was going to be business-as-usual: you attend training and then everybody just forgets about you." (Degratia)

In Basani clinic everybody [clinicians, information officers, clerks, even the security staff] *now knows about Mphatlalatsane, and that it is not about the clinicians only.* (Azukile)

The shift in people's mindset, from learned helplessness to becoming decisionmakers and looking at their data to improve their services, has been magical to watch. (Azukile)

Degratia, a registered nurse, joined the Mphatlalatsane team on 01 August this year, and Azukile joined a month later, on 01 September 2019. Azukile, a medical technologist, moved into quality improvement in 2016. On joining Mphatlalatsane, she said: "We started, hitting the ground running", referring to the first QI training of facility staff in Limpopo and Mpumalanga that took place in September. The advisors are running a tight schedule at the moment, to keep the momentum and energy for Mphatlalatsane that they experienced during the training. They ensured that operational managers who attended the

training, gave feedback to their respective staff, and are currently spending three weeks of the month doing in-field support visits to the teams. During their administration week, they, amongst other things, review progress reports and run-charts sent in by the teams and respond to teams' questions on QI methodology, such as doing root-cause analyses and also help them to formulate change ideas. The QI advisors emphasised that these field visits are important, not only because of the support to teams, but also for building relationships with the teams and getting a good understanding of the contexts in which each team functions.

The September training ended with each team having identified a service problem and drafted a change idea to solve that problem. "*So now the teams are in the 'Action period', meaning they are implementing the QI training they received in September 2019."*, says Azukile. The next workshop / follow-up training is scheduled for early 2020, which will be a 'shared learning session', where the teams will share their experiences, successes stories, and lessons learned, with each other. They teams will also be supported to identify new QI projects and to start with new PDSA cycles after the training. Azukile and Degratia are very excited about what is happening in this *Action period,* and has the following two feel-good stories to share:

> From Degratia:
> Themba hospital in Mpumalanga, decided at the training that their QI change concept was going to be address triaging patients in the labour ward. At the training they planned to create additional space in the corridor for this, and also assign a person to this, like a professional nurse doing community service [Change idea 2]. At our follow-up visit which was one week after the training, they already started trying out these change ideas. When they realised that it was not going to work to create additional space in the corridor, they decided to use their existing admission area [Change idea 3]. They are now using one bed from the admission area for the triaging. They also couldn't assign someone to do the triaging, and realised that a 'community service' staff member would not work, because you need an experienced person to do it. Since they have two professional nurses, they have allocated one to also do the triaging [Change idea 4]. They also have developed a system through which they collect patient information during the triaging, which helps them to know who to prioritise. They have moved from a baseline of 0% triaging to 95% of the total number of patients for the day, who have been triaged within 10 minutes from when they have arrived. It is working for them, because they now know who to prioritise, and helps them to manage the patient flow better. *And the beauty of the story is that they have even extended it to their ANC high-risk clinic, who is now using the same process and stamp to indicate who needs to receive priority care.*

> Azukile had the following example:
> In Basani clinic, Limpopo, I was so impressed to see the level of teamwork happening there. When the facility manager returned from the training, she called a meeting and informed everybody, from the clinical staff to the clerks and security guards, about Mphatlalatsane. Their QI project is addressing anaemia, because it is a big problem in their area. Most pregnant turn to eating soil during pregnancy. Their QI project is to make sure that every woman who comes for antenatal care is educated about proper care. The staff do three to four health talks during the day at the clinic to educate as many women as possible. Since this is a general community problem, the health education is not only limited to pregnant women but to all patients, so it is given in all waiting areas. Even the non-clinical staff can do these educational talks and warn the women about the dangers of eating soil. What we get from staff, is that when operational managers attend training or workshops, some don't give feedback to their staff*, but in Basani*

clinic everybody now knows about Mphatlalatsane, and that is not only about the clinicians only. It is about helping the community at large.

According to Azukile, it was of great help that the September training included content on the psychology of change behaviour. "It helps operational managers to understand why people are resistant to change. *Being sensitive to the psychology of staff's behaviour, help to unpack and understand how staff react to change.* Sometimes change is resisted simply because people don't know what to do, and not because they don't want to do it.

When asked about examples where they experienced challenges with teams getting on with their QI projects, the advisors explained how human resource - and supply chain problems can negatively impact the efforts of QI teams:

> One of the Mpumalanga facilities is serving a very difficult community, and adding to this, is the fact that they are short-staffed. They had three doctors who recently resigned, and another is leaving at the end of this year, so they have real HR challenges. *Staff morale is already low, and now adding this QI project, makes them feel that you are just adding to their workload which is already burdening. It is difficult when things at the facility are not in place, for staff to respond positively to Mphatlalatsane.* The Mphatlalatsane management is meeting with the Provincial management to resolve the staff shortages in that facility because QI alone cannot resolve it.

> We also found that supply shortages impact negatively on the QI activities: In Basani clinic example, they had serious supply shortages of ferrous sulphate, needed to address their anaemia problem. However, they communicated with leadership and now have consistent supplies.

Their concern is also about ensuring district and Provincial level buy-in into Mphatlalatsane. Though higher-level management is quite willing to accompany them on their facility visit, they would want to see these leaders take more ownership of Mphatlalatsane. The ideal would be if management plays an active part in the QI projects: whilst the QI advisors can advise teams on QI principles and methodology, management is the one to say, at a systems level, what can, and cannot be done, regarding a QI change idea. They feel that greater ownership from higher-level staff must translate in active support and engagement at the facility level. Degratia said that the travel restrictions in some areas given budget constraints is a huge barrier for these managers to visit the facilities that fall outside the allowed travel distance.

Despite these challenges, Azukile and Degratia are optimistic about what the future holds for Mphatlalatsane: *"With the frontline staff being willing, I tell you the [Mphatlalatsane] possibilities are endless."* (Azukile). They are excited about the behaviour changes that they are beginning to see. Says Azukile: "Half of the time [in clinics], it is all about the patients for clinicians, and they tend not to integrate data into their care. What really excites me: when facilities are sending us their data, asking us to help them understand the story it is telling about what is happening in their facilities. The shift in people's mindset, from learned helplessness to becoming decisionmakers and looking at their data to improve their services, has been magical to watch."

Degratia has the following message to all involved in Mphatlalatsane: "Do it properly, the first time, so that you don't need to do it over again." Azukile in turn, is encouraging Mphatlalatsane staff with the following two quotes: "If you are not prepared to be wrong, you will never come up with anything original." (Ken Robinson), and then the well-known one from Nelson Mandela: "It always feels

impossible, until it is done." Some of what Mphatlalatsane is trying to achieve is new, and seems difficult now, until someone does it.

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Research articles

Quality improvement

(Barker, Quick et al. 2019) A 6-Country QI Initiative

"A 6-Country Collaborative Quality Improvement Initiative to Improve Nutrition and Decrease Mother-to-Child Transmission of HIV in Mother–Infant Pairs"

Study characteristics
Country
Kenya, Lesotho, Mozambique, South Africa, Tanzania, Uganda

Setting
Unclear.

Date of programme
October 2013 - February 2016

Aim
a. The *Partnership for HIV-Free Survival* (PHFS) programme coordinated a 6-country effort to improve the continuum of care and infant survival in 6 high HIV-burdened countries.
b. The QI intervention was to ensure that the clinical and therapeutic interventions (ex. screening, counseling, nutritional support) were reliably administered to mother - child pairs through the continuum of care from antenatal visits, through to the postnatal breastfeeding period.

Key quote from the article
a. Ministries of Health (MoHs) need to take on a leadership role and increasingly "owning" the activities.
b. To achieve better performance for a specific process of care, the QI method starts with setting an aim for expected performance, measuring the gap in actual versus expected performance, and eliciting local ideas for closing that gap, which are then iteratively tested and ultimately implemented and shared for scaling up if found to be successful.

Methodology
a. Narrative description of the PHFS programme.

Programme description
a. The partners included USAID (with PEPFAR funding), WHO (Maternal, Newborn, Child and Adolescent Health), UNICEF, IHI, and HEALTHQUAL.
b. Due to funding constraints, there were no formal QI skill-building trainings offered to the national, subnational, or district management teams.

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c. The PHFS used team-based learning at facilities, multiteam collaboration at the district level, and multi-stakeholder meetings at the national level to foster more rapid learning that could be fed back into local efforts to improve performance.
d. The PHFS promoted the networking of primary care facilities in health districts using a systematic process of joint knowledge production and sharing, the Breakthrough Series (BTS) collaborative developed by IHI.

Programme uptake
South Africa (PHFS in 25 facilities)
a. There was a lack of enthusiasm at the national and provincial levels for another externally driven PMTCT/MNCH/nutrition program.
b. PHFS was not scaled up by the national / provincial governments.

Mozambique (not clear how many facilities participated)
a. It was difficult for PHFS to influence clinical and therapeutic interventions since there was an existing QI initiative funded by another US government, using a different, standards-based approach.
b. There were no specific plans to scale up PHFS.

Tanzania (PHFS in 90 facilities) and *Uganda* (PHFS in 34 facilities)
a. Had active participation and leadership from the MoH with ambitious scale-up plans.

Kenya (PHFS in 16 facilities) and *Lesotho* (PHFS in 12 facilities)
a. Limited engagement of the national government and scale-up plans.

Author discussion and conclusions
a. The primary achievements of PHFS were to (i) generate new implementation knowledge to decrease postnatal PMTCT transmission and improve nutrition care, (ii) spread this knowledge across 6 countries, and (iii) to influence and increase the pace of deployment of new PMTCT programming, using QI methods, in some of the countries.
b. PHFS, as an externally designed initiative, as with other "competing" external initiatives, needed to be fully integrated within and supportive of existing government programs.
c. A barrier to analyzing and comparing data across the countries was the lack of using the common set of process and outcome indicators that had been developed during the PHFS set-up phase.
d. Countries and their NGO partners were hesitant to share routine process and outcome data from PHFS supported facilities without formal government approval.

2019): A 6-Country QI Initiative - Health services

"Applying Quality Improvement Strategies to Health Services for HIV-Affected Mother - Baby Pairs in Rural Kenya"

Study characteristics

Country
Kenya

Setting
a. 16 facilities in the rural areas: x3 were level 4 health centers, x8 were level 3 health centers, and x5 were level 2 dispensaries.
b. The facilities also had to have the highest patient volume for antenatal care (ANC) with a high PMTCT case load within each subcounty.

Study design
The analysis uses longitudinal secondary data collected during the treatment process in the facilities. No data outside the clinic registers were used.

Aim
This evaluation of the PHFS implementation assessed the effect of QI on the integration of NACS [nutrition assessment, counseling, and support services] within PMTCT services and the retention of MBPs [mother - baby pairs] at selected sites.

Key quotes from the article
a. We engaged in a bottom-up approach. Health workers were empowered and given the capability - while being guided by coaches - to identify areas that negatively impact care within their facility and to address those problems by testing small changes to the process with the aim of improving care.
b. All facilities had to address data quality issues first.
c. Integration of services in weak and overburdened health systems can be daunting when there is a lack of adequate and skilled human resources to address a perceived low-priority concern such as infant feeding and counseling.

Intervention
a. Each facility was assigned a coach who guided the teams through the improvement process.
b. Level 4 facilities included a QI committee that consisted of representatives from all the departments in the hospital: maternal, newborn, and child health; laboratory; surgical; and medical.
c. For the level 2 and 3 facilities, there were only WI [work improvement] teams.
d. QI teams consisted of 2 to 10 members depending on the facility level.
e. Peer-to-peer collaborative learning sessions provided an opportunity to share successful change ideas across the facilities.
f. The learning sessions brought together representatives of the QI committees, WI teams, and coaches to discuss progress and challenges as well as to jointly develop action plans to support the ongoing QI strategies.

Data collection and analysis
a. Baseline assessments occurred from January 2013 and implementation began in September 2013 for nearly 3 years, ending in June 2016.

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b. Each indicator was plotted monthly over the baseline period (January 2013 to August 2013) through the period of program implementation (September 2013 to June 2016).

c. For the purpose of this analysis, the project time line was divided into 4 periods: baseline period 1 (January 2013 to August 2013), period 2 (September 2013 to August 2014), period 3 (September 2014 to August 2015), and period 4 (September 2015 to June 2016).

d. We used the nonparametric Wilcoxon signed rank test in Stata 13.0 to determine the statistical significance of a difference in the median of the indicator from one period to the next. The Wilcoxon signed rank test is a nonparametric test used to analyze repeated data.

Results

Retention of MBPs

a. There were consistent and significant increases over the baseline period median of 19%. In period 2 (the first 12 months of implementation), the median increased significantly to 42%. In period 3 (the second 12 months of implementation), there was another significant increase in the median to 60%, and in the final period, an increase to a median of 66%.

Nutrition Assessment, Counseling, and Support

a. The median during the baseline period was 15%, and there was a significant improvement to 40% in the first year of project implementation. Further significant improvements occurred in the last 2 periods from 69% to 88%.

HIV-Positive Rates for HEIs [HIV-exposed infants] *Delivered at the Facilities*

a. The overall median of the expected number of HEI deliveries across all facilities was 27, with a median of 1 for the number of HIV-positive exposed infants and a median of 5.5% for the MTCT outcome indicator.

b. The outcome indicator showed considerable fluctuations from January 2014 to December 2015 (periods 2 and 3). The change in the median of 9% in period 3 to the median of 4% in the last period was not statistically significant.

Tested Changes ideas that contributed to the results

a. Improved documentation helped with completion of the registers relevant to PMTCT services and allowed for better calculation of the indicators.

b. Facilities actively integrated and consolidated all relevant services to improve MBP retention.

c. The services along the continuum of care for MBPs were offered in one location; clinic visits were synchronized for the MBPs to facilitate attendance and ensure that MBPs received all recommended services.

d. For the NACS indicator, exclusive breastfeeding for the first 6 months was recommended while the mother was on ART.

e. The nutrition assessment, counseling, and support provision improved with the introduction of the MBP register, a change from documenting services only for the mother.

Author discussion and conclusions

a. The findings demonstrate that the impact of QI on integration of NACS into PMTCT services and increased retention of MBPs is significant and can be attributed to the iterative QI approach and coaching support provided to health workers at the pilot facilities.

b. We learned that integration and consolidation of clinical services was an important part of retaining MBPs; all related PMTCT and NACS services were offered at 1 monthly visit at the same location.

c. Although solutions were focused on processes within the facility, of note were the linkages facilitated by a mentor mother program and its expansion during the implementation period. The program supported patients with the help of fellow HIV-positive mothers who had experienced the PMTCT program.

(Livesley, Coly et al. 2019): A 6-Country QI Initiative - Mother-to-Child transmission (1)
"Reducing Mother-to-Child Transmission of HIV Using Quality Improvement Approaches"

Study characteristics
Country
Kenya, Tanzania, Uganda

Setting
Unclear.

Study design
We analyzed data using statistical process control charts.

Aim
This article describes the post-weaning HIV prevalence in facilities supported by the PHFS initiative in Kenya, Tanzania, and Uganda.

Key quotes from the article
a. We believe that our general approach of (1) building health worker skills to use QI to change how care is delivered and supporting them to apply these skills, through (2) on-site coaching, and (3) peer-to-peer learning opportunities are generalizable, but the details of how these 3 elements are applied need to vary based on local context.

Intervention
a. Initial training on new prevention of MTCT guidelines and the basic concepts of QI:
    ➢ 5-day classroom training in Kenya and Tanzania, 1-day on-site training in Uganda
b. On-site support from trained QI coaches to help teams apply the QI skills: helping them to work as multidisciplinary teams, pick specific improvement aims, to use simple analytical tools to identify causes for poor care, and to use iterative methods to test and adapt solutions to improve care.
c. The frequency of on-site support varied from monthly (Kenya and Uganda) to quarterly (Tanzania).
d. The programme also facilitated peer-to-peer learning sessions that allowed teams from different facilities to share progress and learn from each other.
    ➢ Learning sessions were 2 or 3 days in length and were held quarterly (Tanzania and Uganda) or annually (Kenya)

Data collection and analysis
a. Kenya and Tanzania used cohort approaches to measure transmission.
b. Kenya tracked the outcomes of HEI [HIV-exposed infants] born 24 months previously, while Tanzania tracked infants until 18 months of age.
c. Uganda did not have a cohort system in place, and thus measured the proportion of HEI who were HIV positive when they were discharged from the early infant diagnosis (EID) system between 0 and 18 months.

d. Data for the project were collected by facility-level staff from existing government monthly reporting registers and double-checked by the QI coaches.
e. Data for Tanzania were collected again due to data quality concerns.
f. Data on HIV transmission were analyzed using p-control charts that are used to analyze data with a binomial distribution (eg, infants are either infected with HIV or not).
    • A detailed description of the method is provided in the paper.

Results
a. The number and proportion of infants with known HIV status at time of discharge from early infant diagnosis programs increased in Tanzania and Uganda, but not Kenya
Kenya (15 facilities)
    • At baseline (Jan-Aug 2013): Of the 228 enrolled HEI, 157 (68.8%) had known HIV status at 24 months of age.
    • During QI (Oct 2013 - Sept 2014: Of the 488 enrolled HEI, 315 (64.5%) had known HIV status at 24 months of age.
Tanzania (28 facilities)
    • At baseline (Jan-Aug 2013): Of the 1011 enrolled HEI, 371 (36.7%) had known HIV status at 24 months of age.
    • During QI (Nov 2013 - May 2016): Of the 6163 enrolled HEI, 4525 (73.7%) had known HIV status at 24 months of age.
Uganda (12 facilities)
    • In the 12 Ugandan facilities without data prior to the QI training, complete data were available from December 2013. We therefore constructed a control chart from this point on. We calculated the initial mean using the first 8 months of the program.
    • During the first 8 months (December 2013 and August 2014), an average of 32 children were discharged from the EID [early infant diagnosis] with a known HIV status.
    • Between September 2014 and August 2015, an average of 41 children were discharged from the EID with a known HIV status.
b. Mother-to-child HIV transmission did not decrease in the Kenya sites, but decreased from 12.7% to 3.8% in the Tanzanian sites, and decreased from 17.2% to 1.5% in the Ugandan sites with baseline data.

Author discussion and conclusions
a. Teams in all countries were able to successfully use QI approaches to improve retention in care of mother - infant pairs and improve processes of care during clinic visits.
b. Improvements are likely due to the combination of option B+, service delivery improvements, and retention through QI approaches.
Study limitations
a. Since control groups were not included within the PHFS, it is therefore possible that factors other than the QI intervention led to part or even all of the decrease in HIV transmission.
b. The PHFS was designed to build on existing QI approaches in each country. The design did not include a controlled study to assess the effectiveness of different components of the approaches.
c. We had to use a different definition of HIV transmission in each country, making project-level analysis of data challenging. Because of this, we can only report data by country rather than aggregated across all countries.
d. Additional limitations include data quality issues related to the use of facility registers and the short duration of data collection in Kenya, which may explain why no shift in HIV prevalence was found.

: A 6-Country QI Initiative - Mother-to-Child transmission (2)

"Applying Quality Improvement Approaches to Reduce Mother-to-Child HIV Transmission and Improve Health and Nutrition Care in Five Countries: Lessons from the Partnership for HIV-Free Survival"

Study characteristics

Country
Kenya, Lesotho, South Africa, Tanzania, Uganda

Setting
Unclear.

Study design
A narrative description of lessons learned

Aim
This article described the application of quality improvement (QI) methods in 5 of the 6 countries (Mozambique was excluded).

Key quotes from the article
a. The heart of the PHFS work was changing how care was delivered at facilities.
b. Healthcare service delivery is typically an individual activity (e.g. the nurse is responsible for one set of tasks, while the doctor has another set). Retention does not fit this paradigm: no one individual is responsible for ensuring people stay in care.
c. From the very first meeting, we agreed to a deliberate focus on learning and documenting what health workers were learning in real time.
d. Quality improvement applications are contextual; health-care workers learn to constantly modify and adapt when using QI approaches.

Intervention
a. Two- or 3-day QI trainings were conducted by advisors with at least 5 years' experience applying QI methods to different clinical areas, except for Lesotho staff who were newer to the QI approach.
b. Teams in Kenya, Lesotho, Tanzania, and Uganda used QI documentation journals, while teams in South Africa used QI trackers, hardcover books, and PDSA templates.
Coaching
a. The teams received regular coaching led by Ministries of Health (MoHs) district health officers competent in QI, as well as advisors from the technical assistance teams.
Peer-to-peer learning
a. Two to 3 individuals from each demonstration site were convened for 2-day district-level learning sessions every quarter. The technical assistance team led the development of learning session agendas, created graphs depicting site performance, identified roles for district management coaches and implementing partners at the sessions, and prepared materials (flip charts, markers, notebooks).
b. Learning sessions begin with presentations of site-level performance data, which often ignited friendly competition among teams.
c. These gatherings also often included small group discussions to identify good practices, technical or QI method refresher training, and development of action plans by each team.
d. Team members rotated their attendance at the next session so that most, if not all QI team members, participated in at least 1 learning session.

e. The PHFS learning session participation ranged from 25 to 50 people, depending on the number of demonstration sites in the district.
f. The ASSIST technical support teams held biweekly phone learning meetings to discuss progress, successes, and challenges.

Some of the programme outcomes
Improving data completeness and accuracy
a. In Kenya and Tanzania, data quality audits were conducted during coaching visits, and data cleaning exercises were undertaken to address gaps.
b. In South Africa, teams conducted file audits and cross-checked tally sheets, facility input forms, registers, and DHIS data monthly to ensure accuracy and to identify and address inconsistencies in the data.
c. In Uganda, data accuracy and completion was a QI aim. At baseline in Uganda, only 2.9% of HEI [HIV-exposed infants] clinical charts were found to be complete and accurate. Quality improvement teams improved the completeness and accuracy of records to over 90% within 9 months and maintained that level of performance for the subsequent 9 months before they ceased regularly tracking this indicator.

Examples of Change ideas tested and adopted to improve data completeness and accuracy	Countries tested
On-the-job training for staff on proper documentation of records	Kenya, Lesotho, South Africa, Tanzania, Uganda
Staple mother and baby cards together	Kenya, Lesotho, Tanzania, Uganda
Records completed immediately before MBPs leave the facility	South Africa, Tanzania, Uganda
Staff reviews data tools and provides feedback on completeness and accuracy before the MBP leaves the Ccinic	South Africa, Tanzania, Uganda
Paste reminders on wall for clinicians to remember to fill out records	Uganda

Keeping MBPs [Mother-Baby pairs] *in Care to Avoid Postpartum LTFU*
a. Providers worked to reorganize and integrate care delivery by merging service points for MBPs, which ensured they could link the files of mothers and their babies and give pairs a joint appointment date.
b. Improving retention also included ensuring that MBPs accessing other services at the facility (like for fever) were identified and given HIV/ MNCH appointments.
c. The South African technical assistance team faced challenges combining MBP files:
   - Joint appointments were given, but files ultimately remained separate.
   - The team identified HIV-positive pregnant women at antenatal care and used postnatal care (PNC) registers to identify HEIs.
   - Pairs were documented in another book. This exercise proved helpful; HEIs were easily identified at the 6-week PNC visit and received care.
   - However, follow-up visits were challenging because up to 60% of mothers resumed working and their HEIs were brought to facilities by guardians.
d. On p. 7 of the paper, they listed the Change ideas tested for MBPs' retention in care.

Author discussion and conclusions
a. Quality improvement is a collective management approach that can give health workers better skills and tools for fixing problems like retention - areas that are not easily assignable to any one person - and for changing service delivery, making it less dependent on individual initiative or memory.
b. Breaking addressing problems down into 3 stages, a focus on country ownership, and a collaborative country-level steering group allowed countries and QI teams to quickly get started.
c. The key elements of success were:
   1) breaking down problems into smaller, more specific problems;
   2) addressing those problems with data driven QI led by individual facility teams;
   3) multi-stakeholder, in-country leadership;
   4) on-site QI coaching; and
   5) inter - and intra - country shared learning and support.

(Webster, Deka et al. 2019): A 6-Country QI Initiative - Learning network

"Using a Multi-country Learning Network to Harvest and Rapidly Spread Implementation Knowledge across Programs Aimed to Reduce Mother-to-Child Transmission of HIV and Improve Nutrition: Perspectives and Lessons Learned for Similar Large-Scale Initiatives"

Study characteristics
Country
Kenya, Lesotho, Mozambique, South Africa, Tanzania, Uganda

Setting
Unclear.

Date of programme
October 2013 - February 2016

Aim
a. The *Partnership for HIV-Free Survival* (PHFS) programme coordinated a 6-country effort to improve the continuum of care and infant survival in high HIV-burdened countries.
b. In this article, we describe the mechanisms used to foster communication and sharing of ideas and results across PHFS countries, leveraging a multi-country learning network.
c. We describe the range of in-person and virtual learning/knowledge sharing opportunities created and what we learned about the process. We share perspectives on the value of this learning system and reflect on the implications of using this type of multi-country learning network for improving program implementation.

Key quotes from the article
a. *Head and Heart: a combined data- and story-driven approach to learning*
   • We found that having a data-driven QI approach as the underlying approach to learning brought about new dimensions of cross-country exchange.
   • This is coupled with knowledge-sharing approaches that centered on storytelling (emphasizing what was happening from a clinical, community, and personal perspective that made the data change, what worked, and what didn't), provided opportunities for more influential learning.

b. Both in-county and multi-country learning were driven by a regular rhythm of gathering and sharing implementation ideas and data generated by facilities in the participating countries.

Lessons regarding the learning network
a. The network emphasized rapid adaptive learning, collaborative learning, use of reflective data systems, phased scale-up designs, and planning for sustainability.
b. Specific exchange methods were also based on Wenger's community of practice model, Dixon's knowledge management techniques, and other successful social learning models.
c. Top 5 enablers of successful large scale learning networks:
   1) Local ownership and co-design to secure engagement and commitment (including commitment to data sharing)
   2) Clear delineation of roles with dedicated knowledge management team to nurture learning
   3) Connection before content: nurture ongoing relationship and trust building
   4) Designing for value, ensuring continuous evaluation, and adaptation
   5) Head and heart: a combined data- and story-driven approach to learning
d. A listserv was established to provide a regular rhythm of information sharing, with over 96 e-mails/touch points both to and from participants in the first 9 months.
e. Between March 2013 and March 2017, 15 newsletters were shared across the listserv to all participants (reaching 248 subscribers).
f. Twitter and Facebook impressions did not see significant growth and were abandoned in favor of face-to face communications, webinars, newsletters, and a PHFS mini website.
g. This online repository, launched in 2016 (https:// www.usaidassist.org/toolkits/partnership-hiv-free-survivallearning-platform), helped disseminate learning across the participating countries and to the global community through 1900 pages views in the repository's first year of operation.

Author discussion and conclusions
a. Although true attribution cannot be made on direct effects of the multi-country learning component on clinical outcomes, what we can suggest is the strength in application of a common QI approach and joint learning.
b. Local change ideas as well as the more formal collection of successful implementation ideas (change packages) were made available across the 6-country network through the in-person and virtual learning system.
c. The network promoted trust and transparency that allowed teams and individuals to generate dialogue and ideas and reinforced effective methods to mainstream QI approaches to improving HIV/AIDS and nutritional care.

Webster et al 2019: Assessment of impact versus cost of knowledge exchange methods

Menu of learning exchange options proposed and discussed with each country team

	Low impact	Medium impact	High Impact
High cost			*In-person all-country meeting* All team members attended
Medium cost			*Peer-to-peer knowledge-exchange visits* Small team visited another country's sites
			Exchange visits during learning sessions Above visits hosted during learning session to maximize impact of learning from multiple facilities
Low cost	*Virtual meeting* All-country teams convened via virtual platform	*Smaller peer-to-peer, one-on-one calls* Facilitated and scheduled phone discussions on specific topic across 2 or more teams	*Hybrid virtual meeting* Adding on-site facilitation to virtual meeting option • Designated facilitator on-site in each country • Facilitated local breakaway sessions and then connected across to other countries via virtual connections
	Facebook/Twitter chat Questions posed, ideas shared and live discussion	*Video messaging/learning/site visit* Teams video recorded and shared learning from facilities with other teams via video	*Piggyback exchange meeting onto a current meeting* Identified upcoming meetings that were not QI related and add QI to the agenda
	Hosted online discussion group for casual Q&A		

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Data sources

World Health Organisation

Maternal, Neonatal, Child and Adolescent portal
(https://www.who.int/data/maternal-newborn-child-adolescent)

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Institute for Healthcare Improvement (IHI) Newsletter

(http://www.ihi.org/)

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14 August 2019

Integrate conflict into your joy work

(By IHI President and CEO, Derek Feeley)

a. I believe that deceptively simple shift in mindset - from burnout to joy, and from focusing on deficits to celebrating assets - is powerful.
b. However, focusing on the positive can lead to misunderstandings. It doesn't mean ignoring or avoiding conflict.
c. I can't envisage any group of people - much less a whole team or entire organization - that won't at some point experience some disagreement or difference of opinion. What matters is how we choose to react to conflict.

Healthy conflict

a. When conflict emerges in our workplace, we must make sure it's in service of a shared sense of who we are, who we aspire to be, and what we want to achieve as an organization.
b. This doesn't mean conflict has to be enjoyable, but it can be constructive.
c. Leaders have a crucial role to play in fostering healthy and respectful responses to conflict. Consider adopting these three actions:
   1) *Support speaking up*
      There's a clear relationship between psychological safety and joy in work. If health care providers don't feel able to voice a counter-opinion or point out problems without fear of appearing silly, incompetent, negative, or disruptive, it's both demoralizing and a safety problem for both patients and providers. Leaders must create and promote a climate in which people feel they can speak their minds.
   2) *Encourage civility and what Edgar Schein would call "humble inquiry" - dissent must be expressed respectfully.*
      You can't effectively pursue joy in work without a spirit of camaraderie and common purpose. Leaders should model being inquisitive when sharing their thoughts. "Would you help me understand why you're doing it that way?" "Can you show me what our guidelines suggest we should do?" Leaders must also receive feedback in the same way. "Would you tell me a bit more about why you're raising that concern?" "Would you help me understand why you think this approach isn't realistic?" The more we encourage inquiry-based dialogue, the more likely we are to make our conflicts productive.
   3) *Strive for understanding*

> Leaders don't need to agree with all opinions, but we should do our best to listen so that people feel heard. Staff often tell me that they don't expects leaders to do everything they ask, but they appreciate getting a fair hearing and knowing how their concerns are going to be addressed.
>
> **The risks of too much consensus**
> a. One way we measure joy in work at IHI is our online employee survey that we issue every other month. A question on the survey asks whether IHI is "going in the right direction." While it's gratifying to see a high number, I would be really worried if 100 percent of our staff responded "agree" or "strongly agree."
> b. To me, unqualified consensus would be a strong suggestion that we're not being ambitious enough.
> c. If some people in the organization don't feel that our efforts to improve health and health care worldwide are challenging their comfort zone, then I have to question if we're really at the leading edge.
> d. Too much apparent agreement can also be a sign that we're not hearing from people with a variety of perspectives.
> e. If someone disagrees with me, I want to hear and understand their views. I want to discuss what changes they would suggest. I can learn things from them that I may never have considered otherwise.
> f. Indeed, leaders should welcome a diversity of perspectives and ideas because no health care organization ever improved without them.

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Previous issue articles

Pre-eclampsia
a. Criteria-based audit of quality of care to women with severe pre-eclampsia and eclampsia in a referral hospital in Accra, Ghana (Browne et al, 2014)

Care practices
a. Missed nursing care in newborn units: a cross-sectional direct observational study (Gathara et al, 2019)

Incidence, prevalence, mortality, and morbidity
a. Place of delivery and perinatal mortality in Kenya (Kunkel et al, 2019)

Health systems
a. Lenses and levels: the why, what and how of measuring health system drivers of women's, children's and adolescents' health with a governance focus (George et al, 2019)
b. The whole is more than the sum of the parts: establishing an enabling health system environment for reducing acute child malnutrition in a rural South African district (Schneider et al, 2019)