

The Safe Delivery Champions of India



How digital learning & government leadership championed quality improvements in maternal and newborn health in India with the Safe Delivery App

Contents

1. Introduction	2
2. Addressing a critical knowledge gap in maternal and newborn health in India	2
3. The India App adaptation: the foundation for scale	3
4. The path to scale	4
4.1 LaQshya Curriculum Integration	4
4.2.1 National level orientations and training	5
4.2.2 Partner roll-out	5
4.2.3 State-level support	6
Punjab	7
Chhattisgarh	8
5. LaQshya User Experiences	9
6. Conclusion	10

1. Introduction

This document describes our growth, learning and the evolution of our work with the Safe Delivery App over the past 3+ years in India, with a particular focus on demonstrating how the App scaled in a national quality improvement programme championed through government and state-led efforts. Through this programme, skilled birth attendants across the country accessed digital learning on the App and worked hard to achieve the status of “MyLearning Champions”. The App also equipped skilled birth attendants with standardized clinical guidelines, further supporting quality improvement in care.

2. Addressing a critical knowledge gap in maternal and newborn health in India

India made significant advances in reducing the maternal and neonatal mortality rate in recent years, but population growth put pressure on the health system to increase human and financial resources.

Today, one of the main drivers of maternal and newborn mortality and morbidity in India is a lack of quality of care in health facilities. Inadequate competencies of health workers, insufficient quality of training and infrastructure, and the financial challenges of providing training across the country impede quality care provision. In response to this challenge, the Government of India (GoI) took various steps to improve the quality of Maternal and Newborn Health Care (MNH) to improve outcomes.

Several government-led programs in India included various Quality Improvement (QI) initiatives (see box 1).

About Maternity Foundation

Maternity Foundation is a Danish tech non-profit that works to ensure all women and newborns have access to a safe childbirth. Leveraging digital technology, we work with partners in low resource settings to train and equip skilled birth attendants with life-saving knowledge and skills.

The global development, roll-out and learning around the Safe Delivery App and program including in India have been supported by the Bill & Melinda Gates Foundation and Merck for Mothers.

Despite these efforts, there are large gaps in the knowledge levels of staff posted at public health facilities and in their access to latest national guidelines, and thus there is a need to add cost-effective interventions for on-going capacity building. To this end, while exploring tech and IT-based solutions to support existing QI initiatives, the GoI identified the Safe Delivery App as a potential solution.

Box 1:

Quality Improvement Initiatives

- **Dakshata:** a 3-day capacity building program for the health system and health workforce to improve intrapartum and immediate postpartum care of pregnant women and newborns.
- **Daksh Skills Labs:** 5 skills labs established at national level as state of the art maternal and newborn health skills training centre that focus on critical MNH training for medical officers and health care workers. Similar labs were established at the state level.
- **LaQshya:** an initiative to improve quality of care in labour rooms and maternity operating theatres in public health facilities.

3. The India App Adaptation: the foundation for scale

The co-creation of a nationally adapted version of the Safe Delivery App was an important precondition for large scale roll-out in India. Officials from the Maternal Health Division of GoI, who learned of and were impressed by the App at a conference in 2015, connected Maternity Foundation and Jhpiego India to create an adapted version for India. The partnership formally kicked off in February 2016 with Maternity Foundation, Jhpiego India and the Union Ministry of Health and Family Welfare (GoI), and MSD for Mothers providing the funding. This was the beginning of a strong partnership, championed with passion and care by the GoI. After an extensive review and adaptation process, MF published the Indian Safe Delivery App in English and Hindi in 2017.

Furthermore, Maternity Foundation with support from UNICEF India began work on seven new language versions to launch in early 2021

Since the first launch, the Indian Safe Delivery App has gone through two major rounds of updates:

2019: MyLearning was added to the Indian Safe Delivery App. Additionally, an updated neonatal resuscitation module and a low-birth-weight module were introduced with support from MF HQ.

2020: MF added a COVID-19 module with support from USAID Vridhhi and IPE Global, and made updates to the newborn management module.

Key steps in the adaptation process

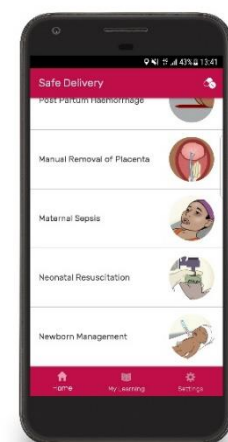
- Development of the Indian visual identity
- Clinical review of content and adjustment to Indian guidelines where needed (the standard App aligns with WHO's global guidelines)
- Translation of all scripts and text into Hindi
- A quality review of video scripts led by scientific partners and doctors in Copenhagen, in close collaboration with clinical review team in India
- Audio-recording of voice over
- Publication of Indian Safe Delivery App in English and Hindi in December 2017
- Official launch by national state officials

About the Safe Delivery App

The Safe Delivery App provides skilled birth attendants with instant, evidence-based, and up-to-date clinical guidelines on how to handle complications connected to pregnancy and childbirth – straight from their phones or tablets.

The App consists of 12 content modules addressing key interventions of childbirth emergencies (Basic Emergency Obstetric and Neonatal Care-BEmONC) and preventative procedures, aligned with standard clinical guidelines.

The Safe Delivery App's MyLearning component takes users through questions on each of the thematic areas covered by the App, across three levels of difficulty. Once users have completed all three levels, there is a final certification exam to become a MyLearning Champion and earn a certification.



4. The path to scale

After launch of the Indian App, the GoI guided Jhpiego India (as the implementing partner of the App in India) and Maternity Foundation to build on existing structures to introduce and roll-out the App. The App was introduced into existing training programs and capacity-strengthening exercises for skilled birth attendants, primarily the Dakshata and Manyata programs. But despite successful engagement with partners, none of the attempts led to sustained roll-out or scale. Within the first year of roll-out, there were approximately 11,000 users of the Indian App - far less than expected. At this point, Maternity Foundation decided to hire a country director to help drive implementation and roll-out directly in partnership with GoI and other partners.

4.1 LaQshya Curriculum Integration

The big breakthrough for scale came when the Safe Delivery App was integrated into the national 'LaQshya - Quality Improvement Initiative' launched by the Ministry of Health & Family Welfare (GoI). At the end of 2018, the Indian Ministry of Health requested Maternity Foundation provide recommendations on integrating the Safe Delivery App into the program.

LaQshya aims to reduce preventable maternal and newborn mortality, morbidity and stillbirths associated with inadequate quality of care during delivery at health facilities. LaQshya is a focused and targeted approach that starts with an initial training (Dakshata or Daksh skills lab) and after that, post-training mentorship.

Mentors recurrently visit the health centres for 12 months to introduce and re-enforce crosscutting quality improvement initiatives to improve health staff's knowledge and skills and strengthen the enabling health system where the staff work. The post-training mentorship supports health workers to translate learned skills into practice. To facilitate

health workers' continuous learning job-aids and checklists are provided.

The Safe Delivery App was integrated as a job-aid to reinforce learning and access to guidelines after the initial training. At the end of the program, the facilities achieve the LaQshya certification. Based on the experiences of integrating the App into national training programs in Ethiopia, Maternity Foundation developed recommendations on how to use the App in the LaQshya program to help achieve the objectives:

- ➔ To improve and sustain the knowledge of health staff through using MyLearning as self-directed learning between mentorship visits.
- ➔ To support the mentors' teachings on topics across the Quality Improvement cycles during their mentorship visits to health facilities.
- ➔ To disseminate standardized information on clinical guidelines across all LaQshya facilities.



The Maternity Foundation team developed recommendations on how the mentors could use the App across four main areas: self-directed learning and job aid, drills, discussions, and on the Objective Structured Clinical Examination (OSCE).

Further elaboration was provided in the recommendations in QI cycle descriptions which guide mentors in how to conduct their mentorship. The mentor's mastery of the App and MyLearning was written into the program, making it a pre-condition that mentors achieve the Safe Delivery Champion status before conducting any facility-level QI mentoring. To ensure that health providers could access the App, tablets with the Safe Delivery App pre-installed were made available at each LaQshya facility's nursing station.

Areas of App adaptation into LaQshya

Self-directed learning and job-aid: The Safe Delivery App is used by the health workers between the Quality Improvement cycles where they complete the assigned MyLearning levels. During visits, Mentors ask if the mentees completed the MyLearning levels and support them if they need help.

Drills: The mentor uses the Safe Delivery App either before, during and after a drill on complications management to support learning. For example, during the drill, staff use the App to look up information, and after the drill, they use it to watch videos and discuss what they did well and what they missed in e.g. practicing how to resuscitate a newborn.

Discussions: The App is referenced and used in numerous ways to facilitate discussions. For example, when discussing a specific topic, mentees look up information and review their peers' responses.

Objective Structured Clinical Examination (OSCE)
The App is used to prepare for upcoming OSCEs or review performance afterwards by reviewing the App's content.

4.2 Roll-out modalities

The health system in India operates under the GoI, but states have the authority to make decisions regarding programmes and training. Consequently, App uptake was not ensured solely because of the integration into the LaQshya curriculum at national level but had to be accompanied by roll-out support and buy-in at state level. To ensure maximum uptake of the App, the team pursued various approaches.

4.2.1 National level orientations and training

Maternity Foundation began by orienting state-level Programme Officers and identified champions from states/partners to lead the App roll-out in their states. Based on the initial trainings, nine states issued letters in support of App roll-out within LaQshya.

4.2.2 Partner roll-out

Maternity Foundation also relied on partners including UNICEF, USAID IPE Global, IHAT, CARE India, and WISH Foundation to lead roll-out activities to expand App uptake and use across the country. Through Maternity Foundation's partnership with USAID IPE Global, the App was implemented in LaQshya facilities across seven priority states through state-level training and support to their state and district teams to ensure standardization.



4.2.3 State-level support

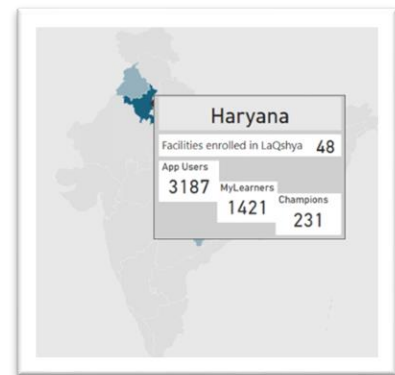
Maternity Foundation provided state or district level trainings and technical support to state governments and their partners during the roll-out of the App. In some cases, state governments played a highly active role. In Madhya Pradesh, Odisha, Punjab, Haryana, Chhattisgarh, Manipur, Uttar Pradesh, Uttarakhand, Jharkhand, Bihar, and Gujarat state governments issued letters to district level authorities to support use of the Safe Delivery App.

State governments also conducted training that focused on App orientation of master trainers. The data shows a higher number of App users in the states where this took place, suggesting state-level buy-in played an important role.

The details of roll-out varied from state to state. We learned that what worked well in one, might not work in others. Examples from three different states (below) illustrate the variety of roll-out approaches.

Haryana

The usage of the App in Haryana accelerated after the Maternal Health Division had held a one-day training of trainers on the App for district-level officials with technical support from MF, and further increased upon formal launch by Haryana's Health Minister. USAID IPE Global played a critical role in rolling-out the App at the district level as they were already part of the state system.



Strong advocacy and buy-in from higher government authorities and mentoring visits and follow-up mechanisms initiated by the GoI and USAID were critical to roll-out in Haryana. However, regular follow up by health officials is vital for effective and continued use of the App.

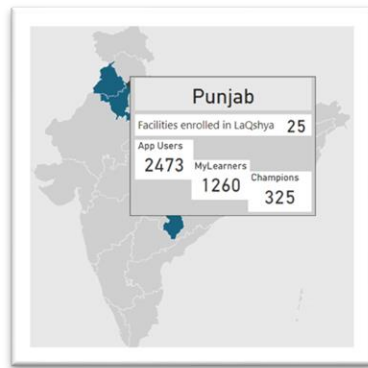
"We used to refer cases with low birth weight to the hospital. Now we have learned how to handle them and about the Kangaroo Mother Care. We have learned a lot from the App about Maternal and Newborn care and now know exactly what to do."

- Renu Rani, Staff Nurse, Mewat Primary Health Centre, Haryana.



Punjab

The Government of Punjab (GoP) is actively implementing the LaQshya programme in 25 facilities. To roll out the Safe



Delivery App, the Maternal Health Division of GoP with support from the USAID IPE Global team and Maternity Foundation organized training of all LaQshya facilities in April 2019. The training introduced users to the Safe Delivery App and the App's role in LaQshya.

The Maternal Health Division issued an official letter supporting the App's implementation across all facilities and made the Safe Delivery Champion certification an essential criterion for LaQshya state certification. Post-training, the state conducted regular reviews of the App implementation and integrated it into supervision visit checklists to strengthen continued use.

To further stimulate use, the GoP took steps to recognize staff nurses' efforts by setting up state and district level ceremonies to celebrate the nurses who achieved the Safe Delivery Champion status within the App. The ceremony not only recognized the nurses but also motivated others.

In Punjab, App usage also goes beyond LaQshya-government medical colleges Amritsar and Patiala now use the App after introduction to resident and staff nurses. Based on the Safe Delivery App's successful implementation in the LaQshya programme facilities, the state scaled up and introduced the App in subdistrict hospitals and skills/Dakshata lab trainings.

Punjab state is considered an App implementation pioneer due to the broad reach and success in the identified facilities. GoP and USAID IPE Global's work was recognized when the LaQshya-Safe Delivery App integration in Punjab received the prestigious SKOCH award and was selected for a poster presentation in Government of India's Best Practice Summit.



"I'm the oldest Safe Delivery Champion in the hospital. I'm 55 years old and graduated in 1985.

We were introduced to the Safe Delivery App through LaQshya. All the young nurses who come here know the latest procedures and guidelines, and I used to struggle to keep up. But now I **know** too. I'm updated about all the latest knowledge through the Safe Delivery App, and now I'm on the same level as them."

- Rajinder Kaur, nursing sister, Mata Kaushalya Government Hospital, Patiyala, Punjab

Chhattisgarh

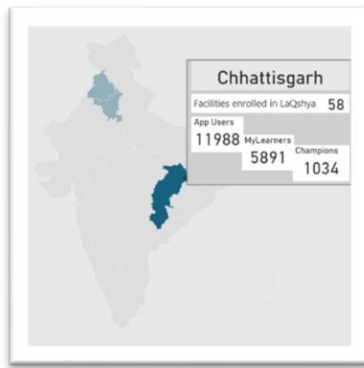
The Government of Chhattisgarh (GoC)

implemented the LaQshya programme

across 58 facilities. In

December 2019,

the GoC conducted district-level online Safe Delivery App trainings.



Maternity Foundation India created self-explanatory videos for the training. The Maternal Health Division, GoC, asked the District Public Health Nurses to supervise the App's roll-out, including MyLearning after the trainings.

The number of users increased dramatically post-training which highlights the strength of rolling out the App through a structured training and follow-up approach.

In collaboration with district officials, the GoC conducted monthly reviews, and the districts were requested to conduct Safe Delivery App trainings across all delivery points, including LaQshya facilities. The number of App users in the state further increased after system level integration and successful transition of App ownership and implementation from state-level to district-level authorities.

The GoC also implemented the Safe Delivery App beyond LaQshya facilities, and since December 2019 sub-centres and primary health care facilities have been using the App. Within a few months of wider App use, the State became a national leader in downloads, MyLearners and Champions.

Furthermore, the LaQshya-Safe Delivery App integration's success led the state to take steps to integrate the App in Skilled Birth Attendant trainings at state level to reach new recruits. More recently, the state is also moving towards integrating the App in trainings such as Newborn Stabilisation Units (NBSU) and newborn resuscitation trainings. Recently the App was introduced to NBSU and Sick Newborn Care Unit staff.

Whenever there is a situation where I'm unsure, I use the App. Before, we used to all have different practices; we had studied different places and learned in different ways. The Safe Delivery has helped us to standardize our practice – now we all do things in the same.

- Bharti Sinha, staff Nurse, Chrama Community Health Center, Chhattisgarh



5. LaQshya User Experiences

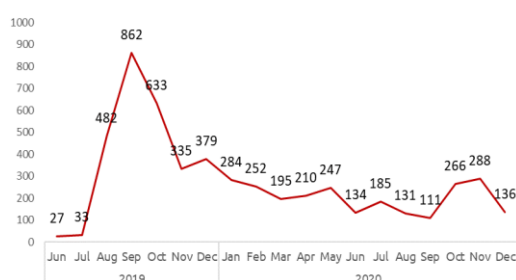
The graphs below illustrate how the monthly number of content users vary month to month. The peaks in content users coincide with efforts to roll out the App in the respective states. For many Indian users, App usage drops drastically after they achieve Champion status in MyLearning. Additionally, most LaQshya users have already improved their knowledge through training participation and are in service. For that reason, they only use the App when needed and irregularly.

The graphs point to the importance of finding ways to drive continued usage of the App as we observe a drastic drop in number of content users after the initial roll-out and Champion certification in MyLearning.

Chhattisgarh - Content Users



Haryana - Content Users



Punjab - Content Users



Testimonies from users across Haryana, Punjab and Chhattisgarh illustrate how the App has contributed to increasing the nurses' confidence in their ability to stabilize patients and provide preventive care, leading to fewer referrals – as well as a good teaching tool.

"It used to keep me awake at night not knowing if the staff nurses knew what to do if complications occurred. Today I know that my nurses have access to a step-by-step tool. They feel so much more confident - and so do I. They don't need to call for a doctor every time complications occur."

- Dr. Jyoti Dabas, Gynecologist, Mewat District Hospital

"A woman came in; she had already had 3-4 deliveries before this one. She had PPH and we used the App to manage it. She was in shock, we started IV immediately. We followed the steps from the App and finally, we managed the case."

- Manju Sharma, Staff Nurse, Mata Kaushalya Government Hospital, Patiyala, Punjab

"I introduced the App to all staff at the college. In intro trainings we introduce the App to everyone. The videos are very good and informative, they make it simple to learn. It's also a good teaching tool. The animated videos leave a sustained impression. It leaves an impact, learning becomes easy."

- Dr. Sangeeta, Assistant Professor, Obstetrics & Gynecology Government Medical College, Patiala,

The testimonies and usage of the App illustrate that it is a welcomed learning tool. However, sustained usage requires a continued effort to ensure content is relevant and up to date as well as continued engagement with users either directly, through partners or state-led, to make sure they are aware of any changes and updates.

6. Conclusion

In the past three years, Maternity Foundation successfully implemented and scaled the App within the LaQshya program and across India through strong partnerships, ownership, and championing of the App by national and state governments.

To date, there have been almost 90,000 downloads in India with over 20,000 engaged users¹, more than 14,000 MyLearners – including over 2,100 Safe Delivery Champions in 2020 alone.

The demand for the Safe Delivery App and related support by key stakeholders in India makes it clear that we are addressing an unmet need in building critical skills and knowledge among skilled birth attendants.

Building upon these achievements, we are now focused on longer-term institutionalization of the Safe Delivery App to help transform training programs to fully unlock the learning potential for skilled birth attendants across India.

We plan to do this through supporting the development of in-service and pre-service learning packages, scaling implementation and

partnerships, and supporting the government to replicate these models.

For example, the App was written into the national midwifery curriculum and as an EdTech tool by the Indian Nursing Council in December 2020, and steps are being taken to form a partnership with the Indian Nursing Council to avail blended learning modalities to their members of skilled birth attendants across the country.

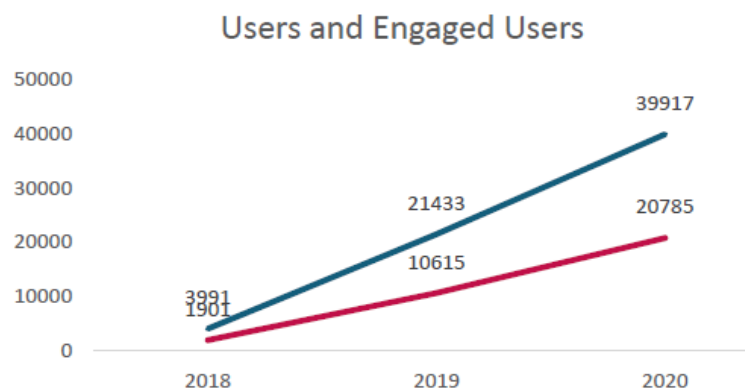
We look forward to continuing to work with the champions of quality newborn and maternal care in India – whether they are in the government, or at the bedside of when in labor, or pushing their levels of learning on the Safe Delivery App.



87,586
Downloads
by December 2020

55,093
users over all years

20,785
Engaged users in 2020



Note: This graph only represents users who indicated they are based in India

¹ An engaged user is a user who has used content features in the App a minimum of five times.

Key Learnings from Scaling the Safe Delivery App in India

National adaptation & integration was a pre-requisite:

- The Indian version of the App, aligned to national guidelines, was a prerequisite to make it a readily available tool for integration into a national training programme such as LaQshya.
- Maternity Foundation drew on best practices and developed integration models from Ethiopia, which proved useful on how to integrate the Safe Delivery App into the LaQshya program in India.

Government ownership, state buy-in, strong partnerships and flexibility in roll-out modalities were essential:

- Clear ownership from Government of India and state governments, and active involvement of state partners was key to secure buy-in and drive roll-out.
- The decentralization of the Indian health system posed a challenge for the roll-out because integration at national level into LaQshya was not in itself enough to ensure roll-out at state level. However, the flexibility of the roll-out approach enabled states to adapt to their specific context and priorities which increased the state level ownership of the process.
- Leveraging other technologies such as group video-sharing of presentations or self-explanatory videos played an important role in rolling out trainings at scale and reaching end-users directly. These simplified implementation models and training packages helped us in reaching users without having presence at ground in each state.
- It has been essential for sustainability to cement partnerships with the support of the government with partners including but not limited to UNICEF, USAID VRIDHHI and IPE GLOBAL.

The MyLearning platform spearheaded the uptake of the Safe Delivery App in LaQshya:

- A key success has been the growth in the number of MyLearners and Safe Delivery Champions. This explosive growth was due to the institutionalization of the certification in the LaQshya program -- health facilities and program managers used the certificate as an indicator that skilled birth attendants achieved a high knowledge level among key subject areas and made it mandatory to achieve certification. They also facilitated healthy competition among skilled birth attendants and facilitated public recognition of Champions. For example:
 - At the state level, a WhatsApp group was formed for all LaQshya facilities for sharing and learning best practices. This platform was also used by state level mentors to encourage facility teams to initiate and complete MyLearning modules in the Safe Delivery App.
 - At facility level Safe Delivery Champion badges were handed out, certificates were posted at notice boards in health facilities and ceremonies were conducted to celebrate Champions.
- The design and elements of the MyLearning platform designed to gamify learning and motivate users were a part of the key to success. In the words of Dr. Avneet Kaur, Director Health Services, Punjab: *"One reason for the successful roll-out of this App is that the App instantly gives results to the user. This is a huge encouragement for the nurses. We are also facilitating the champions at the state level, which is providing motivation to more and more facility staff to use the App and take the certificate exam."*

Using data insights to continuously drive update:

- Continuous monitoring and feedback are needed for effective and sustained rollout. Extracting data insights from the App usage and MyLearning progress and sharing those with state governments proved useful to keep up motivation for continued roll-out efforts.
- Sharing insights and case examples at various national platforms and fora too, helped creating awareness and reach more states.