

Khushi Baby Strategic Vision Document: 2021-24

Vision

- Transform the approach to community health care through culturally-competent, digital health solutions designed to enable field champions
- Expand the footprint of the Khushi Baby platform and approach to new states, central government, both acutely to support the pandemic response and for long-term health systems strengthening
 - Complete roll-out across Rajasthan by 2022 end
 - Pan India by 2024
- Save and improve lives of high risk pregnant women and infants by facilitating timely identification, referral, and treatment
 - 1 million lives improved by 2023 end

Immediate Development Focus:

1. Stabilize RCH deployment in Udaipur with phones
2. Health Census
3. Community Health Integrated Platform (CHIP)
4. Integrated Backend Platform / Dashboard
5. Integrations with MOHFW backends
6. Remote configuration / deployment pipeline

Future Technology Pipeline*:

7. Khushi AI (data quality and high risk prediction)
8. Mobile camera + AI as a portable instrument
9. IOT integrations
10. Geospatial predictions, big data analysis
11. Smart notifications / gamification
12. Optimized Rural Telemedicine Platform between ANM and MOIC
 - a. Text / chatbot
 - b. Photo
 - c. Voice
 - d. Video-call
13. OPD application with self-learning clinical pathways / order-sets
14. NDHM integration

*order subject to change based on availability of projects; project requires resources, technology platform, mandate, scope for deployment and impact, and priority level

Upcoming Deployments

1. Replacement of Udaipur tablets with phones
2. Wadia Hospital Mumbai
3. Full state, Rajasthan - census
4. 5 Districts, Rajasthan - CHIP (RCH)
 - a. 24 subcenters - JHPIEGO
 - b. 360 IDPs - JHPIEGO
5. 100 Janta Clinics
6. Nuh block, Mewat District, Haryana
7. Bihar, with Care India
8. Jharkhand/UK/Andra Pradesh, with AIF
9. Bihar, MP, and Odisha with NIPI for CHO decision support tool
10. Pan India for COWIN tracking

Streamlining Processes:

1. HR Policy, including mechanism for social recognition
2. Formalized project planning process prior to new project commitments
3. Integrated Dashboard
4. Video data repository and standardization
5. Donation pipeline (content development, ads, click-through monitoring, google analytics, donation monitoring)

Pending Funding

1. GAVI - ~1-1.5M USD (with opportunity for matching)
2. BMGF/JHPIEGO - ~100K USD
3. Simprints - 400K USD

Hiring Strategy

- Gaps: CTO, 1 data analyst, 1 Senior Digital Health / eGovernance Specialist, gender parity
- Designate advisory board: Dr. Guriqbal Singh Jaiya, Priya Ajmera, RKS, SS

Partnerships Strategy

- **Donors:** GAVI, BMGF, PFF, JNJ, ARM, McGovern Foundation
- **Research:** Harvard, Yale, JPAL, MIT, Google AI for Social Good
- **Development:** Simprints, JHPIEGO, ADP
- **Deployments:** supported expansion primarily through NIPI platform and senior government bureaucrats (RKS and SS)

How will the world be different if your organization achieves everything you hope? (i.e. What *high level* impact is your org trying to achieve?)

The high level impact we aim to create is to ensure that 1.5 million pregnant women and another 1.2 million infants in Rajasthan receive informed and timely care by empowering beneficiaries, health workers, and health officials with culturally appropriate, intelligent, and automated systems. We hope that the impact we make in Rajasthan can carry forward as a model for adoption by the Government of India's Central Ministry of Health and Family Welfare, and our template can be rolled out in other states after local customization. Ultimately, we hope the solutions we are bringing to light, after 5 years of grassroots level work - designing systems hand-in-hand with community health workers, will help elevate accountability, a continuum of care, and system responsiveness to the gaps in public health delivery. We hope that these tools will be adopted by states to sustainably impact the over 25M pregnant women and infants in India who need care annually through over 1.25M community health workers who are on the frontlines serving them.

How long will it take to get there?

We are in the process of sustaining state-wide scale over the next three years, as per our contract with the Department of Medical, Health, and Family Welfare. We project that in the next three to five years we will also be able to expand to multiple states and demonstrate a model for uptake by the Central Ministry of Health and Family Welfare.

What is your ambition for your organization? What's the bold idea or BHAG?

1 million ASHA workers across India are empowered with a smartphone to provide better care to members of their village.

250K ANM health workers across India digitally enabled to provide better care to pregnant women and infants.

Each mother and child, and then ultimately everyone should own a portable, decentralized, digital health record to access informed care.

With these elements in place we believe we can add informed care and accountability to the health system to drive better health outcomes.

This article nicely articulates our understanding of what “scale” means. How do you think about this in relation to your current organization and intervention?

We see scale as a step-by-step progression.

We started as public health students volunteering our time to research with an NGO collaborator. After doing field scoping and a small randomized controlled trial, we realized that the government public health system is our prime target, given the scale to which it operates. We built our system around National Health Mission standards so that any community health worker in the future could uptake the system. But we still had to go through the progression.

With a larger randomized controlled trial and 2-years years of iterating with 150 ANMs across 400 villages, we were able to realize what works and validate the impact potential.

At that point, we progressed to advocating for scale-up at the multi-district level to the state, by approaching the Health Secretary. This effort led to us being vetted against other large NGOs and government incumbents who had their own solutions. After being selected, we had a chance to raise the required funds (2.4 million USD for program costs) from the Central Ministry of Health and Family Welfare. In this process we grew from 25 to 38 full-time members. Our current operating scale requires us to give state-level strategy and policy support, master training and technical support, and development and analytics. Now our team is supporting 58,000 health workers instead of 150 across 35,000 villages instead of 400.

At the same time, integral to our future growth is remaining rooted in Udaipur, where we have run local experiments in 400 villages to improve our system over the past 5 years. In these environments, where we are hands-on, we are able to remind ourselves of the direct impact the platform is able to create. We have had the opportunity to directly support high risk referrals, indicated by our system, and witness both barriers to care as well as the opportunities which lead to a beneficiary's health status improving first-hand. In our local lab we are currently running experiments on contactless biometrics and AI models to calculate health worker diligence and predict adverse maternal and child health outcomes.

Moving forward, we look to take our learnings from operating at the state level to onboard other states onto our platform. Our in-house technology and capacity building teams will grow slightly, but with the same template and some customization, we believe that adoption of the platform occurs rather quickly. Ultimately, we want our solutions to appeal to the Central Ministry of Health and Family Welfare's E-Health division to be selected as the

standard suite of digital health tools for states to adopt. These tools may be rebranded and integrated, but we hope some core process innovations remain, and that we continue to have a role at the table to push innovations forward, improve and maintain them. But there can be no scale without sustainability. While right now we are not taking payments from the government (we serve as a developmental partner), we hope that our track record over the next 3-years may open up opportunities for government contracts to support our operating costs for the services provided.