

NOORAHEALTH

**Annual Report 2018**



**5 years ago**, we launched Noora as a small group of individuals driven to redefine healthcare. Our idea was simple and sought to empower an underutilized, available, and willing resource - family members. We found that families, who care most for their loved ones, could help dramatically improve health outcomes of patients. By equipping them with key health skills, these families could be the keystone to ensuring proper recovery in the hospital and post-discharge at home.

We spent the last five years refining and spreading our idea across several states in India. Rapidly, our family of supporters grew to include everyone from nurses in remote districts to health directors in state capitals. They believed in our idea, not for its novelty, but for its striking relatability. Patients look to their families for comfort. Why not give families the best chance to support their patient?

In 2018, our growth took on a whole new meaning. This year, we:

- Initiated program launches across all district hospitals in three Indian states (whose combined population would be the 8th largest country in the world!)
- Welcomed 512 nurses and 16 team members to our Noora family
- Met more families across the country than ever before, visiting them in their homes and connecting with them through their mobile devices
- Nearly doubled the number of family members we trained for the second year in a row - over 146,000 representing 100,000 families

We aim to maintain this momentum in 2019, and by the end of the year plan to extend our reach to over 500,000 family members trained to date.

We're growing, but we're not satisfied. The opportunity remains to dive deeper into the effect of our program to understand how Noora can best support health behavior change and improve health outcomes. We need to better understand the effect of the program on key health outcomes, key influencers of health behavior change, and the components of what make families effective caregivers. Our research partnerships with Stanford and Ariadne Labs will aim to answer these questions.

There is much to do, and still a lot we don't know, but each day, we see the value in teaching family members skills to care for their loved ones. We also see the power in many families of individuals working together to provide the best care possible. It takes a family in the hospital to ensure patients receive the care they deserve, and it takes a family at home to improve the health outcomes of at-risk patients. As a part of our Noora family, your support allowed us to place over 300,000 family members at the center of healthcare over the last 5 years.

We truly can't thank you enough for your commitment as we continue moving forward.

Edith, CEO

Shahed, President





# 5 Years of Growth



Pilot

Four grad students meet at Stanford d.school, travel to India, meet Dr. Devi Shetty, and begin experimenting with ways to engage family members in patient care

2014

Accepted into Y Combinator... Noora officially launches!

Expand cardiac surgery program across India through partner Narayana Health



2015

Launch first public hospital partnership with Sri Jayadeva Institute, the largest government cardiac center in South India

Partner with private Manipal Hospital chain

Research study on cardiac program shows a striking **71%** reduction in 30-day post-surgical complications



2016

Oncology training program launches

Launch maternal and newborn care program with support from Karnataka state government and implement in 1 district hospital



2017

Expand maternal and neonatal program to 5 new district hospitals in Karnataka

Launch in our second state, Punjab, and roll out maternal and neonatal program to 6 district hospitals

Partner with IDinsight for impact evaluation...pre-post study shows improvement in behavior adoption and a **42%** reduction in newborn readmissions

2018



Begin piloting a mobile engagement platform on WhatsApp, enabling us to reach people with critical information once they return home

Begin partnerships with Ariadne Labs and Stanford Center for Health Education to evaluate CCP program; introduce pediatric cardiac program in Sri Jayadeva Institute

Implement maternal and neonatal program in 16 additional hospitals in Punjab; introduce antenatal care, high-risk newborn care, and general inpatient care programs across four hospitals in Karnataka

Expand maternal and neonatal program in 51 district hospitals in Madhya Pradesh and 12 additional hospitals in Karnataka





## Jyothiamma Ulligeshya

### **Sri Jayadeva Institute of Cardiovascular Sciences & Research, Bangalore**

When doctors diagnosed 8-month-old Ramesh with a heart problem, his parents and uncle traveled 260 miles from their hometown to Bangalore. In the mornings, they took turns visiting him in the pediatric ICU, then waited nearby all day. Since lodging was too expensive, at night they slept in the hallways outside his ward. His mother, Jyothiamma, was unable to read or write, and told us she thought herself to be around 15 years old. After baby Ramesh had surgery, she attended a Care Companion training. The session was developed after Noora realized the great need for families whose children were undergoing cardiac procedures. “I learned how to wash my hands and maintain hygiene,” Jyothiamma recounts. “And how to avoid holding the baby from the underarms because that would increase pressure on the wound.” She also learned the importance of breastfeeding Ramesh and getting his immunizations done on time. Jyothiamma and her family spent more than a month in the hospital while Ramesh recovered. “I’ll be happy when I see my baby playing the way he did before he got sick,” she says. “I just want him to get back to that.”



## The most at-risk patients are not receiving the care they deserve.

70%

Nearly 1 million children under 5 die in India every year. An estimated 70% of these could be prevented at home

<2.5  
minutes

Due to a shortage of in-hospital healthcare workers, the average amount of time that patients and families spend with a public health provider is < 2.5 min. This leaves little time for families to learn about life-saving preventative care.

Families leave the hospital unclear about their patients' conditions and uncertain of how to care for their loved ones, often leading to post-discharge complications or even deaths





**Our Mission** is to improve outcomes & save lives of at-risk patients. We strive to place patients and families at the center of high-quality healthcare by empowering them with the skills they need to care for their loved ones.

**Our Vision** is of a world where patients and their families are a core component of high-quality healthcare delivery and where family member training is the standard of care.





# Our Model







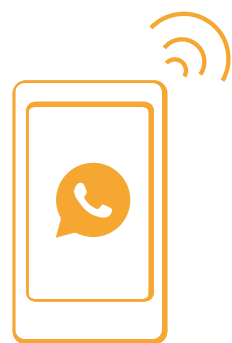
## Naveen Kumar

**Care Companion Program Trainer  
Sri Jayadeva Institute of Cardiovascular  
Sciences & Research, Bangalore**

A cardiac specialty nurse with 10 years of experience, Naveen Kumar LP has led hundreds of Care Companion sessions for patients and their families at Sri Jayadeva Institute, one of India's premier heart specialty centers. He makes the rounds of the multi-story building, where up to a hundred people will gather for his sessions, lining hallways or crowding a room off a hospital ward. "The people who come here are middle class or below the poverty line, some with no education," Naveen explains. "Everybody is very keen and interested to know what to do and what not to do, and it's our duty to train them." Often, a few people will approach him afterward with personal questions. Naveen still vividly recalls a teenage boy who sought him out. "He called me to one corner and just asked me, 'I am 15 years old. My father has diabetes, heart problems, everything ... You said family history is the main cause. Will these diseases come to me in the future?'" Naveen calmed the boy and advised him that annual cardiac check-ups starting in his mid-20s would help detect any problems early. The boy left reassured.

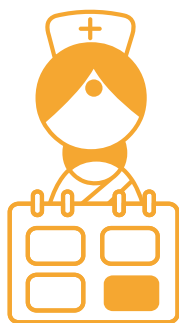


# 2018 in Numbers



153,000+

Post-discharge  
reinforcement messages sent



512

Nurses certified  
to run CCP



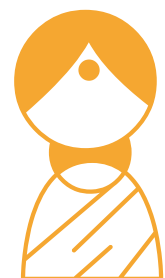
4

New condition  
areas initiated



146,884

Family members  
trained in 2018



16

New team  
members



79

New hospitals approved  
for expansion



3

State-wide  
implementations initiated

For the second consecutive year, we've nearly **doubled** the number of family members trained. Our success in 2018 contributes to a **85%** compound annual growth rate over the past three years.



# Our Reach

## Statewide Expansion

### Punjab

**22** government district hospitals launched

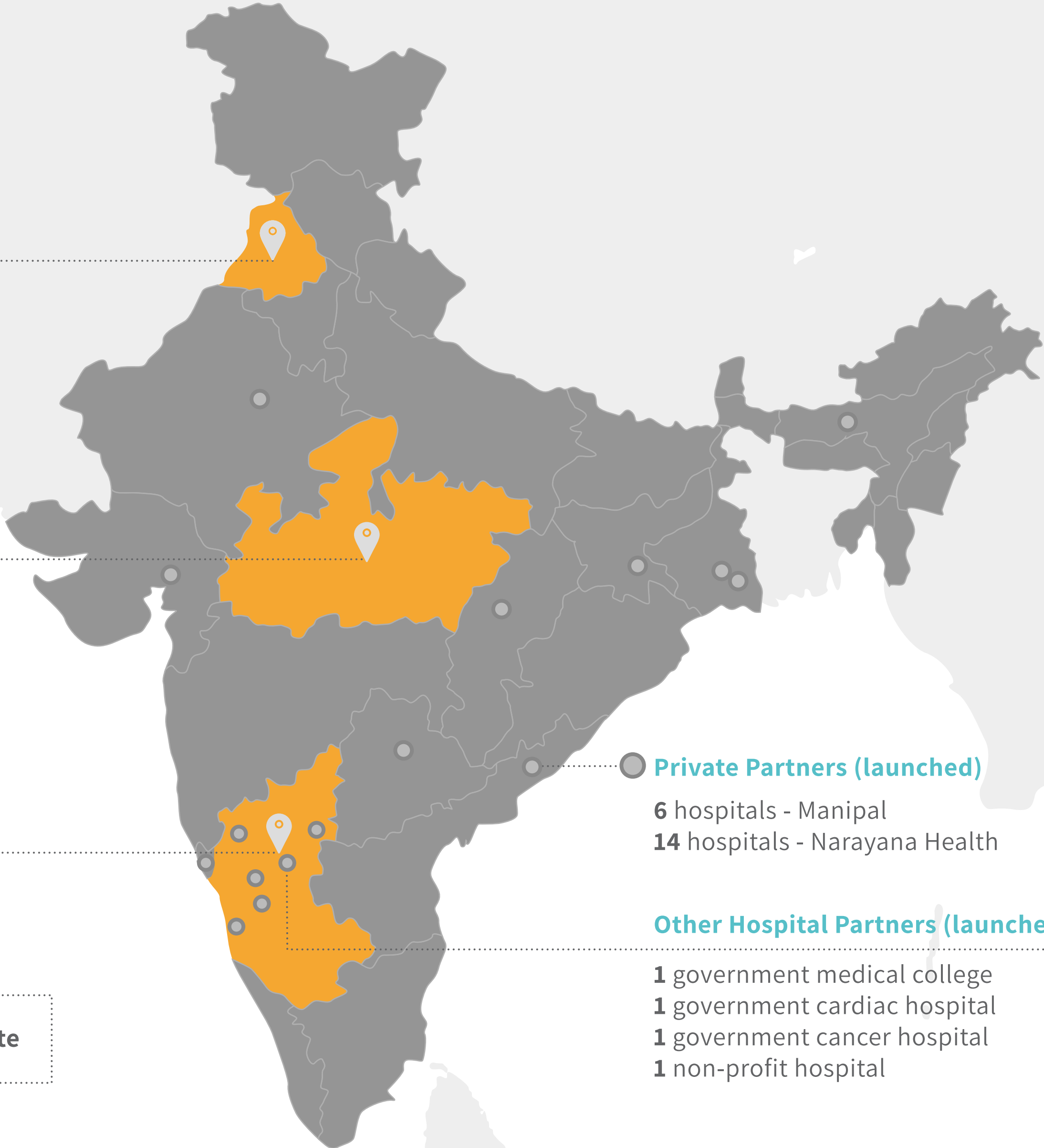
### Madhya Pradesh

**51** government district hospitals undergoing implementation

### Karnataka

**18** government district hospitals undergoing implementation

**115** Total number of facilities to date



#### Private Partners (launched)

6 hospitals - Manipal  
14 hospitals - Narayana Health

#### Other Hospital Partners (launched)

1 government medical college  
1 government cardiac hospital  
1 government cancer hospital  
1 non-profit hospital

**133,135**

#### Neonatology

family members trained to date

**165,820**

#### Cardiology

family members trained to date

**3,757**

#### Oncology

family members trained to date

**966**

#### General Inpatient

family members trained to date



**303,678**

family members trained to date



# Program Highlights



## Mobile Engagement

In 2018, we noticed that families are eager to receive more health information after their hospital stay. We also know that the uptake of new behaviors requires reminding and reinforcement. Accordingly, we initiated and expanded a mobile engagement platform to provide post-discharge health information over WhatsApp. By giving a missed call to our number, families can opt to receive reminders and educational videos on their mobile device. This year, we sent over 153,000 messages and reached over 7500 people across Karnataka and Punjab.



## Testing New Models

In addition to refining our postnatal care curriculum, we introduced programs in antenatal care, high-risk newborn care, pediatric cardiology, and general inpatient care. Concurrently, we tested various models of class execution (for example, staff nurse-led vs. dedicated trainer-led, and video vs. no video). We did this in an effort to begin understanding how different aspects of the program drive class quality and behavior uptake.



## Multiple State Expansion

This year, we expanded the Care Companion Program across 18 hospitals in Karnataka, 22 in Punjab, and 51 in Madhya Pradesh. As we nearly tripled the number of hospitals since 2017, we've placed measures to ensure class quality and to maximize the learning potential in the new environments. So far, we've initiated class audits and have collected baseline data in 24 hospitals across the three states (see Research and Evaluation). In 2019, we aim to utilize our expanded facilities as a larger lab to test the implementation and effect of the Noora program.





## Jyoti

### Civil Hospital, S.A.S. Nagar, Punjab

Jyoti's entire family – her husband, his parents and sister, and her parents – accompanied her to the hospital for the delivery of her second child. The 25-year-old was under close supervision since her platelet count decreased, a complication she also faced during her first baby's delivery. Jyoti and her mother-in-law, Jaago, attended a Care Companion session after her baby was born. They learned for the first time about Kangaroo Mother Care – continuous skin-to-skin contact between mother and baby – and feeding exclusively with breast milk. “We were not aware of any of these things earlier,” says Jaago. “Had I known them before, I would have taken better care of our children.”



# Research and Evaluation

In 2018, we initiated research projects to better understand the effect of Noora’s programs. Utilizing best-in-class methods in implementation science and evaluation, we plan to identify areas of success and improvement. In the coming year, we aim to share our learnings with the global health community. These studies will build upon our existing evidence, and in the coming year, we aim to share our learnings with the global health community.



We have initiated a large-scale evaluation of the neonatal Care Companion Program to assess its effect on health system and health behavior outcomes. In 2018, we collected baseline data in 24 hospitals across three states. In 2019, we will collect midline and endline data following program implementation.

11,000<sup>+</sup>

Families followed up with in 2018

## Stanford Center for Health Education

With our Stanford partners, we aim to identify ways in which to improve and grow the Noora Health model of educating mothers and caregivers on postnatal best practices. In 2018, we designed tools to dive deeper into how the Care Companion Program influences knowledge and behavior change in patients and caregivers. In 2019, we plan to implement testing of components of the CCP model in a selected facility.

### Evidence to date

#### Cardiology

2014 | Kolkata, India  
Quasi-experimental study at a tertiary care facility

**71%**  
reduction in 30-day post-surgical complications

**23%**  
reduction in hospital readmissions

#### Neonatology

2017-2018 | Karnataka and Punjab  
Pre-post study across 11 district hospitals

**42%**  
reduction in newborn readmissions

**16%**  
reduction in infant complications



# Challenges

## Hiring

As Noora expands, we are looking for motivated new members to join us. Hiring new team members was a consistent challenge throughout 2018. The search continues in 2019 for high-quality talent. Do you know of any organizations with strong hiring practices for India-based teams, or of any candidates who might be a good fit? If so, please send them our way!

## Balancing Innovation with Execution

In 2018, we scaled the Noora program to 79 new locations and four languages. As we expand, we aim to maintain the quality of our trainings, keep content locally informed, and tailor the program to meet the needs of new patient demographics. This has taken time from workshopping our service design and looking into niche conditions.

## Business Model

We have been successful in cost-sharing with the government by building the program into state budgets. However, we are still hoping to find a sustainable revenue stream to offset our R&D and training costs. In 2019, we plan to experiment with several different cost-sharing and revenue models as we move into new locations.







## Neelima Devadas

### Senior Health Researcher, Noora Health

Neelima Devadas was still a medical student when she joined Noora three years ago. “I learned so much more about public health with Noora than at school,” she explains. “And I realized I love working in a low-resource setting.” She is now part of the team that creates and verifies medical content, including the sessions offered by trainers in hospitals. Using her medical knowledge and ability to speak four languages, Neelima talks with patients, doctors, and nurses to make sure Noora’s content is up-to-date and relevant. “We started noticing that our nurses in Punjab were teaching about burping after breastfeeding to new mothers,” she says. “We thought women already knew about this. And we didn't realize it was actually causing a lot of problems for the baby. So we updated our trainer sessions to talk about the importance of burping.” Neelima says working in a low-resource setting is challenging because of the limited medical resources and the limited knowledge of the patients and families. But that also means not underestimating what they already know. “There's a lot more empathy involved in a low-resource setting and you really have to strip down your ego,” says Neelima. “You need to utilize what you have and provide the best care.”



# Our Goals for 2019

## Optimize Our Offering

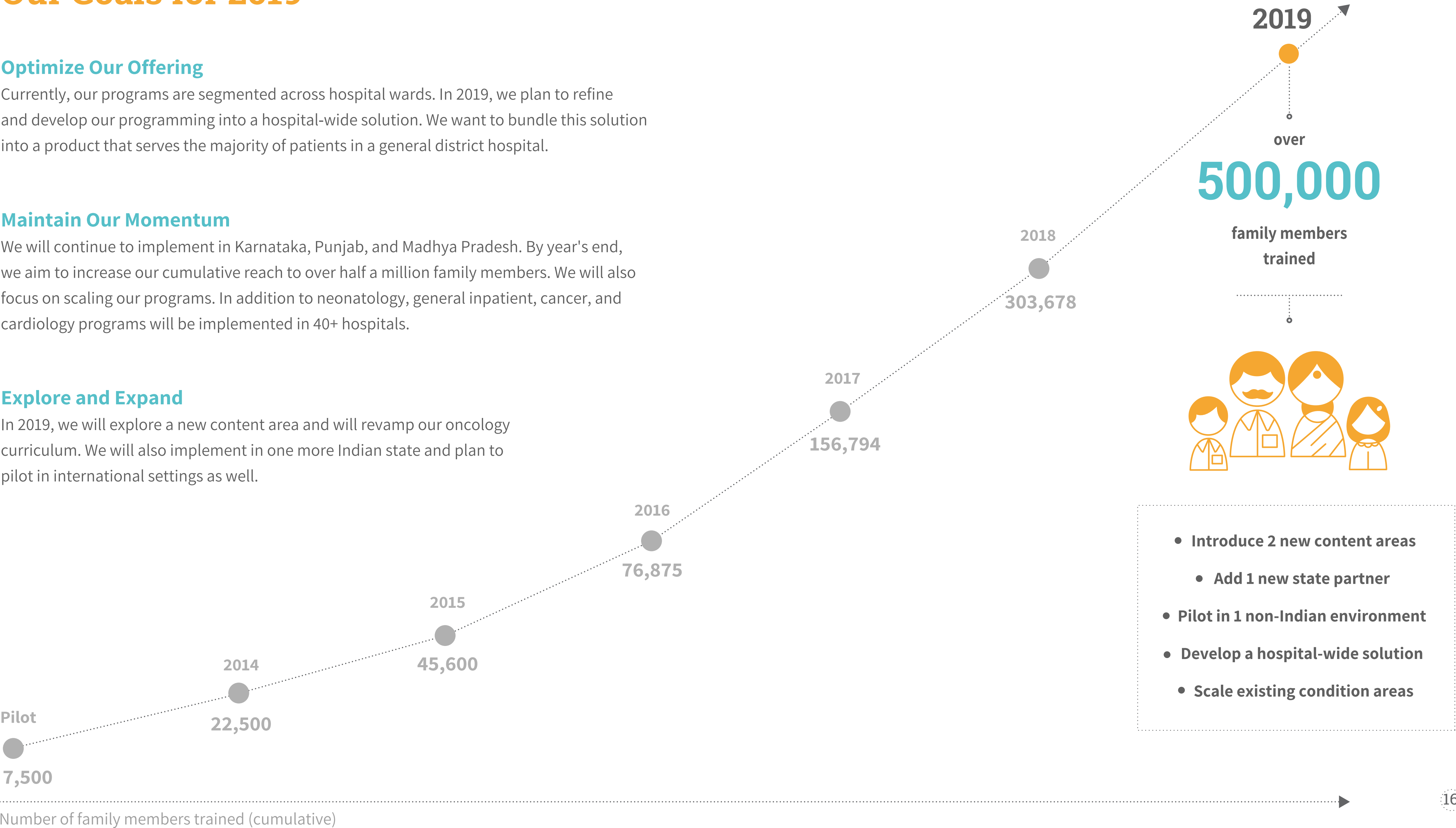
Currently, our programs are segmented across hospital wards. In 2019, we plan to refine and develop our programming into a hospital-wide solution. We want to bundle this solution into a product that serves the majority of patients in a general district hospital.

## Maintain Our Momentum

We will continue to implement in Karnataka, Punjab, and Madhya Pradesh. By year's end, we aim to increase our cumulative reach to over half a million family members. We will also focus on scaling our programs. In addition to neonatology, general inpatient, cancer, and cardiology programs will be implemented in 40+ hospitals.

## Explore and Expand

In 2019, we will explore a new content area and will revamp our oncology curriculum. We will also implement in one more Indian state and plan to pilot in international settings as well.





## Our partners explain the importance of training families



**Dr. Charanjit Singh**  
Senior Medical Officer, Amritsar District, Punjab

"... Now that CCP has been introduced to our hospital, patient confidence levels are very high and the hospital infection rate has dropped considerably... earlier it was 4%, now it's 1%."



**Dr. Geetha Shivamurthy**  
Medical Superintendent, Vanivilas Hospital

"Now we find that revisits to the hospital have decreased and the family members are more involved ... We require [family members'] services in the NICU and PICU where the patients need a lot of attention."



**Dr. Devi Shetty**  
Chairman and Founder of Narayana Health

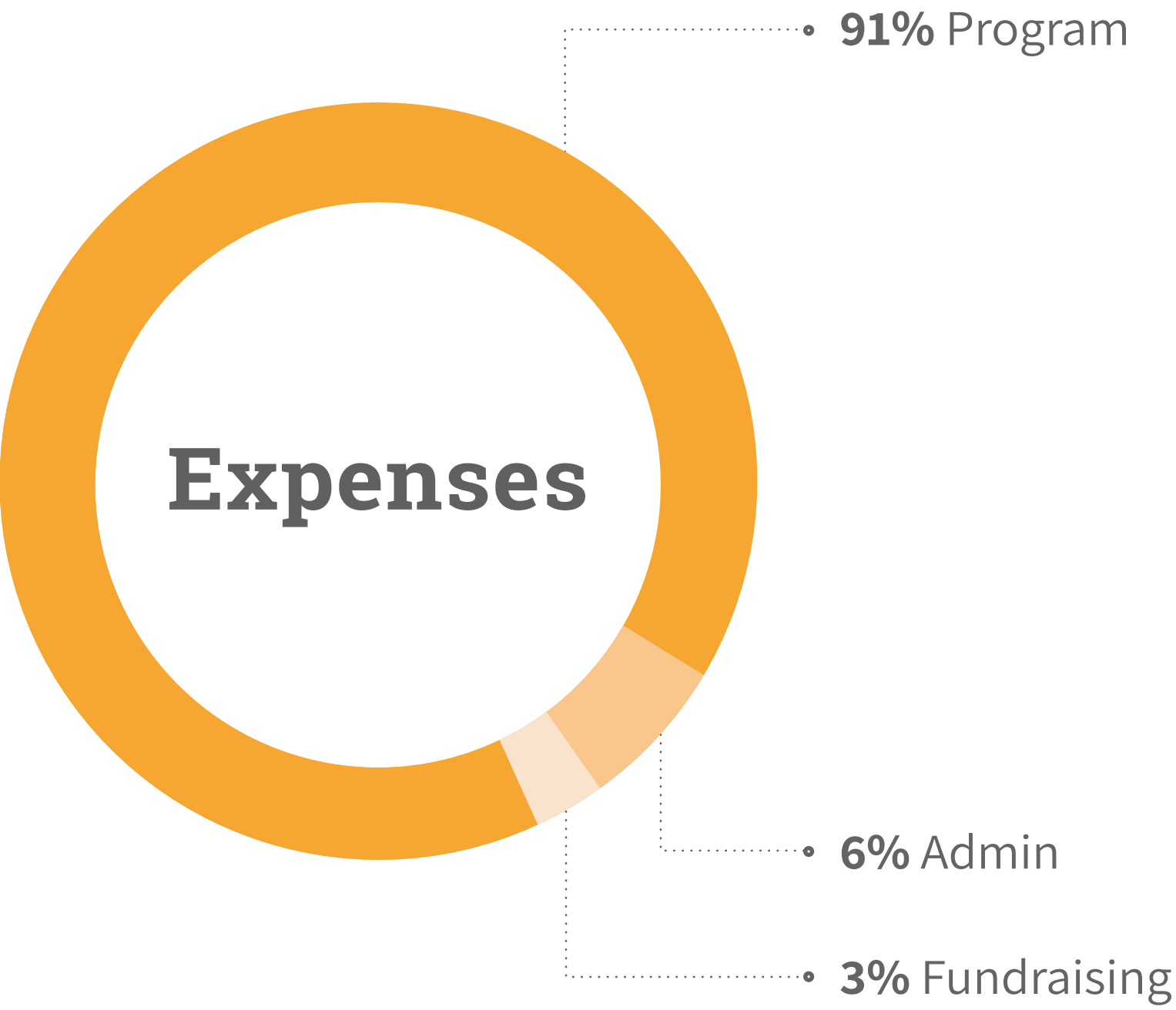
"Nobody can care for a patient better than their family member."



# Financials

| Donations                    |                  | Assets                                  |                  |
|------------------------------|------------------|---|------------------|
| Foundation                   | 1,291,380        | Current Assets                          | 2,557,285        |
| Corporate                    | 1,000            | Non-Current Assets                      |                  |
| Individual                   | 3,725            |   |                  |
| Stipends from Non-Profits    | -                | Total                                   | <b>2,571,328</b> |
| <b>Total Donation Income</b> | 1,296,105        | <b>Liabilities</b>                      |                  |
| Other Income                 | 3,569            | Current Liabilities                     | 134,079          |
| <b>Total Income</b>          | <b>1,299,674</b> | Other Liabilities                       | -                |
| <b>Expenses</b>              |                  | Total                                   | <b>134,079</b>   |
| Personnel Expenses*          | 813,436          |   | 14,043           |
| Benefit Expenses             | 29,554           | <b>Net Assets</b>                       |                  |
| Outside Services             | 233,717          | Unrestricted                            | 2,437,249        |
| Direct Program*              | 159,152          | Temporary Restricted                    | -                |
| Fundraising                  | 12,587           | Total                                   | <b>2,437,249</b> |
| Monitoring & Evaluation      | 137,751          |   |                  |
| Overhead Expenses            | 76,523           | <b>Total Liabilities and Net Assets</b> |                  |
| Total                        | <b>1,462,720</b> | Total                                   | <b>2,571,328</b> |
| <b>Net income</b>            |                  |   |                  |
| Total                        | <b>(163,047)</b> |   |                  |

\*In 2018, there was a remapping of personnel expenses included in ‘direct program’ into ‘personnel expenses.’  
2018 numbers are unaudited and all values are in USD





# Thank You

We are grateful to our community of advisors and supporters for their ongoing commitment to our mission

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It takes a family.



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