



# COMMUNITY EMPOWERMENT LAB

Making lifesaving newborn care routine  
in public health systems



# SCALE BREAKTHROUGH (1/2)

Aiming to reach  
500,000 low-birth  
weight babies  
annually by 2030

**The day a child is born is the most dangerous day in their life**<sup>1</sup>. Small and vulnerable newborns comprise about 20–25% of all births but a disproportionate 80% of all newborn deaths.<sup>2</sup>

For decades, Kangaroo Mother Care (KMC) has offered a proven way to reduce mortality in small vulnerable newborns by up to 40%. It involves sustained skin-to-skin contact on the mother's or caregiver's chest along with exclusive breastmilk feeding to support warmth, nutrition and improve survival. KMC was first introduced in 1978, has been present in World Health Organization (WHO) guidance since 2003, and in 2014 was recommended as a key pillar for improving newborn survival in the Every Newborn Action Plan<sup>3</sup>.

Yet despite global evidence, KMC has remained difficult to integrate because health systems are often not designed to support the continuous, relational care it requires. In many lower- and middle-income countries, care is organised around short, provider-led interactions such as procedures, checks and rapid discharge, while postnatal wards are overcrowded and lack the space and privacy for mothers to stay and practice KMC.

In alignment with WHO's 2014 guidance, the Government of India made KMC a national priority, embedding it in policy and guidelines. However, uptake lagged beyond policy intent. The Government of Uttar Pradesh, India's largest state with a high burden of neonatal deaths, partnered with Community Empowerment Lab (CEL) to answer a critical question: **if KMC is already proven, what is preventing public health facilities from delivering it, and what would it take to improve uptake?**

1. Our World in Data (2024) The day a child is born is the most dangerous day of their life. Global Change Data Lab. [Available here](#).

2. Lawn, J., Blencowe, H., Oza, S. et al. (2014) 'Every Newborn: progress, priorities, and potential beyond survival', The Lancet, 384, pp. 189–205. [Available here](#).

3. World Health Organization and UNICEF (2014) Every Newborn: an action plan to end preventable deaths. Geneva: World Health Organization. [Available here](#).

# SCALE BREAKTHROUGH (2/2)

Drawing on their community-centric research in neonatal mortality, Dr Vishwajeet Kumar, Aarti Kumar and their team at CEL worked with mothers, health providers and health system leaders to translate KMC's evidence into a scalable delivery model.

The result was the KMC Lounge Ecosystem, which creates dedicated, dignified spaces for mothers to practice KMC, combined with staff training, changes to facility routines and a decision-support app. The model works within existing infrastructure and staffing to make KMC routine.

Through implementation research, CEL have translated KMC policy endorsement and evidence into routine practice, reshaping how care is delivered at scale by centering mothers in newborn care.

**How did CEL work with the government to take a proven intervention and make it practical, scalable and affordable enough to take root?**

## IMPACT TO DATE

363

public facilities are implementing the KMC Lounge Ecosystem **across six Indian states**

576,545

low birth-weight babies have received KMC through KMC Lounges

10,682

estimated number of newborn lives saved (based on modeling estimates)

96%

of mothers are satisfied with their KMC Lounge experience

# THE PROBLEM

## WHY KMC IS HARD TO PRACTICE

Evidence shows that KMC dramatically improves survival and long-term neurodevelopment outcomes for vulnerable newborns, but a mismatch between what it requires and how care is delivered in practice makes it difficult to scale across public health systems. CEL identified that this was also true in India.

**“KMC struggled for over 40 years because people couldn’t believe that the mother could be so powerful - more powerful than sophisticated machines.”**

— Aarti Kumar, CEO and Co-Founder

### WHAT KMC REQUIRES TO BE EMBEDDED

Mothers recognized as primary caregivers

A safe space where KMC can be provided for extended durations

Continuous KMC integrated into daily care routines, rather than a one-off activity

Clear system-level ownership and accountability to sustain KMC

**VS**

### WHAT CARE DELIVERY CAN LOOK LIKE IN PRACTICE

Mothers are kept separate from babies; clinicians often prioritize incubators and costly, specialized interventions that are difficult to deliver, particularly in rural or under-resourced areas.

Crowded wards; early discharge (6–12 hours); lack of dedicated space to practice KMC.

KMC is used intermittently, outside of routine workflows.

Reliance on individual champions; lack of mechanism to drive adoption across public facilities.

# CEL'S RESPONSE

The **KMC Lounge Ecosystem** is a practical approach that redesigns postnatal spaces, workflows, and support in hospitals and healthcare facilities so mothers can provide long-duration KMC.

“With KMC, the mother is the intervention. She’s the provider of care, and the goal is to remove barriers between her and her baby.”

— Aarti Kumar, CEO and Co-Founder

CONSTRAINTS	HOW CEL ADDRESSES THIS
Mothers kept separate from babies; clinicians prioritized incubators and costly, specialized interventions	<b>Practical training and on-the-job coaching</b> enable staff nurses to initiate KMC, coach mothers, integrate KMC into routine shifts, and monitor practice over time, shifting norms from technology-centered to mother-centered care.
Crowded wards, early discharge (6-12 hours); no dedicated space to practice KMC	<b>Dedicated KMC Lounges</b> , the ‘VIP room for the mother’, serve as clean, private, dignified spaces where mothers can stay for long periods with their babies. As redesigned spaces within existing facilities, they do not require additional space, and make KMC practical, respected, and a source of pride within facilities.
KMC used intermittently, outside of routine workflows	<b>Technology and data systems</b> embed KMC into daily care. A KMC app guides staff step by step, while dashboards track real-time care and quality across facilities and districts. This supports consistent and continuous practice rather than one-off use.
Reliance on individual champions; no mechanism to drive adoption across public facilities	<b>Support mechanisms</b> , including a 24/7 helpline, provide real-time troubleshooting and follow-up. This helps facilities maintain KMC practice even when staff rotate and conditions change.

# HOW THE MODEL WORKS



## **CEL's scale model is built around government-led delivery.**

CEL partners with government through three mechanisms:

- 01 Working as a technical partner to government**

CEL provides technical inputs that enable government teams to operationalize KMC Lounge Ecosystems within public health facilities. Two decades of neonatal research and care experience in Uttar Pradesh, combined with peer-reviewed evidence and alignment to global and national guidance, position CEL as a technical authority rather than a short-term implementer<sup>4</sup>.
- 02 Driven by district decision-making and demand**

CEL's engagement with government is centered at the district level. District leaders decide which facilities adopt KMC Lounge Ecosystems and oversee rollout. CEL's model is designed to appeal to district priorities: visible facility-level improvements, low costs, and dashboards that give leaders oversight of performance. Districts fund the KMC Lounge Ecosystem upgrades from their own budgets, reinforcing local ownership from the outset.
- 03 Embedding delivery within existing public infrastructure**

KMC Lounge Ecosystems are embedded within existing public health facilities and delivered by existing staff using existing budgets. CEL's role is to support adoption, problem-solving, and quality improvement.

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4. This includes alignment with WHO recommendations on care of preterm and low-birth-weight infants, and national operational guidelines on facility based newborn care.

# IMPACT

At a community health center in Uttar Pradesh, Sushma's newborn was struggling to feed and continued to lose weight in the days after birth. After being placed in the KMC ward, the change was immediate and visible. The baby began breastfeeding and Sushma was able to provide continuous skin-to-skin care to her baby. She reported less discomfort despite recovering from childbirth, and staff observed improved feeding, stabilization, and weight gain: the baby grew from 1.8kg to 2.04kg, a clinically significant improvement.

This pattern is now routine across CEL-supported facilities, where mothers from rural and disadvantaged backgrounds stay for prolonged periods, learn KMC, and leave more confident caring for their babies at home.

While KMC is best known for improving newborn survival, its impact extends beyond neonatal outcomes. By centering mothers as primary caregivers, KMC strengthens mother–infant bonding, supports maternal wellbeing, and encourages greater family involvement in care.

What began in **11 facilities** in 2016 has since expanded to **363 public facilities** across six states, including 72 of 75 districts in Uttar Pradesh.

CEL's implementation research and evidence has informed WHO recommendations and national and state guidelines in India, shaping how KMC is delivered as routine care.

## ACROSS CEL-SUPPORTED FACILITIES TO DATE:

**576,545**

babies have received KMC

**96%**

of mothers reported satisfaction with their experience

**58%**

of mothers continued KMC at home

**82%**

of eligible newborns were initiated to KMC

**10,682**

estimated number of newborn lives saved (*based on modeling estimates*)

## LESSON 01

# Make government the owner from the start

From the outset, CEL positioned themselves as a 'system catalyst' and technical partner, rather than an implementer. CEL co-developed the KMC Lounge Ecosystem with the government so that delivery was owned by the public health system. CEL worked sufficiently inside the health system to build trust, while remaining sufficiently outside to stay independent and challenge actors to improve.

### **A problem identified by government**

CEL focused their early work on understanding why neonatal mortality remained high and why evidence-based newborn care was not being delivered at quality and scale. These were priorities the Government of Uttar Pradesh was actively seeking to address, with explicit targets to reduce neonatal mortality. This alignment, combined with CEL's research expertise, positioned them as a natural partner when the government set out in 2016 to co-develop a scalable KMC delivery model in public health systems<sup>5</sup>.

### **Success owned by government**

CEL deliberately deprioritized organizational branding so that the KMC Lounge Ecosystem was visibly owned by public health facilities, district leaders, and frontline staff. This reinforced local ownership and reduced the perception of the KMC Lounge Ecosystem as an externally driven program.

### **Takeaway**

Scaling with government requires designing for government ownership and aligning with existing mandates from the start.

5. Kumar, V., Kumar, A. et al. (2022) 'A scalable health system model to achieve high coverage and quality of Kangaroo Mother Care', *Acta Paediatrica*. [Available here](#).

## LESSON 02

# Design for health system integration

CEL knew that government budgets were limited. They therefore reverse-engineered both the KMC Lounge Ecosystem model and CEL's own role so that delivery could be absorbed into existing public systems without creating new budget lines, staffing posts, or long-term dependencies on CEL.

- **Place delivery where authority and resources already sit:**

CEL anchored delivery at the district level, where responsibility for facility performance, neonatal outcomes, and control over operational resources already sat. District leaders could invite technical partners, allocate funds, and operationalize new facilities. CEL's role was to support districts to mobilize resources, including existing district health budgets, CSR, and in-kind contributions.

- **Keep infrastructure minimal and standardized:** CKMC Lounges were designed to require only basic furniture and fittings. As a result, establishing a Lounge costs approximately USD \$200 per facility.

- **Use existing staff roles and budget:** CEL did not create or fund new posts. Instead, they developed and delivered updated training curricula, coaching, and mentoring for existing facility staff, specifically nurses, pediatricians, obstetricians, and administrators.
- **Design absorption into the model:** CEL designed their role and presence to diminish over time:
  - Training district-level master trainers to take responsibility for ongoing facility training and mentoring
  - Transferring administration and customization of the KMC App to district teams
  - Handing over quality-improvement checklists and monitoring processes for routine use by district authorities.

As the KMC Lounge Ecosystem becomes integrated, districts maintain facilities through their operating budgets, while CEL plays a supporting role through providing refresher training, backend app infrastructure and light-touch technical support.

### Takeaway

Scaling effectively with government requires delivery to fit within existing authority, budgets, and workforce capacity, without ongoing dependence.

## LESSON 03

# Start with the problem and prioritize system fit, not innovation

CEL's team brought deep research expertise and a working understanding of the public health system. Rather than designing a new intervention, they began by diagnosing why neonatal mortality persisted despite the existence of proven solutions. They examined how newborn care was actually delivered in practice, how facilities operated, who made day-to-day decisions, and why evidence-based approaches were failing to become routine.

KMC emerged as the priority because it already had strong evidence and policy backing. CEL's role was therefore to simplify and adapt KMC to fit the public health system, rather than introduce something new.

This required an iterative, problem-led process, which continues to this day. The KMC Lounge Ecosystem model is not delivered using a cookie cutter approach: it is adapted across facilities, districts and states so it addresses the specific barriers in each setting. The model therefore evolves in response to local needs to tackle context-dependent problems rather than being standardized from the outset.

This adaptive approach was enabled by patient, flexible support from Grand Challenges Canada. CEL did not exist before receiving their initial Saving Brains funding, which enabled the organization to establish and launch the KMC Lounge Ecosystem with government. Subsequent Transition to Scale funding, venture advisory support, and participation in the Saving Brains platform supported CEL's growth as demand increased.

### Takeaway

Innovation at scale does not always mean creating something new. It can also mean incrementally adapting delivery in response to real-world problems so proven solutions can thrive within existing systems.

## LESSON 04

# Create value at every level to drive adoption

As CEL designed the KMC Lounge Ecosystem, the team actively problem-solved alongside nurses, clinicians, facility managers, and district teams to ensure all stakeholders saw value in adopting the solution. Adoption had to make sense within every actor's daily routines and responsibilities.

The clearest example was the **KMC App** for improving newborn quality of care. Early uptake was low because nurses perceived it as a surveillance tool that increased reporting burden and exposure to blame. Rather than enforcing adoption, CEL collaborated with nurses to redesign it so that it supported care routines rather than adding administrative pressure.

**As a result, app adoption across facilities increased to 90%.**

**By designing around the value proposition for each actor, adoption became the rational choice at every level:**

- **Mothers**  
Greater agency in caring for their babies and improved chance of survival for their babies
- **Nurses**  
Reduced burden of care and clearer routines
- **Health facilities**  
Improved outcomes for newborns with low operational pressure
- **District leaders**  
Visible improvements across facilities, improved neonatal outcomes, progress against policy goals using existing resources

## Making change visible

By redesigning existing spaces within public facilities, change was immediately visible on the ward. KMC became something staff could see, explain, and demonstrate, rather than a guideline to interpret. For district leaders, these physical spaces provided proof of progress within their jurisdiction. Alongside improved neonatal outcomes, visibility made it easier to justify investment and encouraged other districts to adopt the KMC Lounge, shifting KMC from a policy ambition to something deliverable.

**“The innovation was powerful because it made the care visible. Not just a practice - an environment. That visibility created value for everyone.”**

– Dr Pramod Singh, Director of Program Impact & Community Partnership

### Takeaway

Adoption accelerates when delivery models are built around the incentives and daily realities of key stakeholders.

# WHAT'S NEXT

CEL is looking for an investment of USD \$5 million over the next five years to extend their model beyond facilities and address the next barriers of scaling KMC.

## Scaling impact on two levels: breadth and depth



### Increasing reach across India and beyond

CEL's next phase focuses on reaching every mother and baby who can benefit from KMC, against a backdrop of growing interest in the model from other Indian states and African countries.

**Target:** 500,000 low-birth-weight babies annually by 2030, across 1,000 health facilities

Investment would enable CEL to strengthen their training, including integrating KMC into medical education and establishing a KMC Leadership Lab. This would upskill healthcare providers and build a network of champions who influence peers and ensure facilities adopt the KMC Lounge Ecosystem.



### KMC as an entry point for deeper impact within facilities and beyond

*"We never talk about KMC as a single intervention in isolation. It's a gateway strategy. The need is to transform the entire facility for mothers and babies." - Dr Pramod Singh, Director of Program Impact & Community Partnership*

Once district and facility leaders see the change created by KMC Lounge Ecosystems, they actively seek support to implement improvements in other areas of maternal and newborn health, such as labor rooms and outpatient departments. In response to this, CEL is already supporting the rollout of immediate KMC (iKMC), which extends mother-led care into the Neonatal Intensive Care Unit rather than just postnatal wards. This builds on the spaces, routines, training, and monitoring systems already established.

Investment would support CEL to implement KMC beyond the hospital, ensuring babies continue receiving care at home. This would create a continuum of care from facility to community so that KMC is sustained for as long as needed and reaches all babies that need it.

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# GET IN TOUCH

Want to explore a partnership  
with CEL or learn more?



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