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Message from our Founder

Charles Prober, MD
Senior Associate Vice Provost for Health Education at Stanford University, Founding Executive Director of the Stanford Center for Health Education, and Professor of Pediatrics, Microbiology and Immunology at Stanford School of Medicine

I am honored to be leading the Digital MEdIC program, an initiative of the Stanford Center for Health Education, a University-wide program supported by Stanford Medicine and the Office of the Vice Provost for Teaching and Learning. Our core mission is captured in four words: Expanding Knowledge. Improving Health.

As an academic institution committed to advancing healthcare, we believe that health education saves lives. It is not only our desire, but it is our responsibility to extend our knowledge to less privileged communities across the country and around the world. With the support of generous philanthropic partners, we launched Digital MEdIC in 2016. Most of our content is created for community health workers and their trainers. Our strategy focuses on the design of high-impact, digital content in consultation and collaboration with end-users.

Throughout our journey, I have been impressed with the number of non-profit organizations and government agencies that share a vision of improving health through knowledge. Our strategy is to partner with these like-minded organizations to create a sustainable infrastructure in which our learners are supported and empowered to improve health outcomes in their regions.

We are committed to ensuring that we continue to learn as we grow. Our research and evaluation team is dedicated to assessing our success through rigorous evaluation of learners’ knowledge gain and health outcomes. We can then adapt our approach to optimize the effectiveness of our education content.

We are invigorated and inspired by the life changing work carried out by community health workers around the world. Supporting their professional development and effectiveness is an honor and a privilege. We are thankful for the collaborations that have enriched us over the last year. And we are grateful to our generous donors who support our work. We know that 2019 will be a year of expanded impact.
Why we exist

Our mission is to make engaging, evidence-based health education more accessible globally and, in doing so, empower communities to **improve their own health outcomes.**
Our Strategic Goals

➔ Enable digital learning opportunities.

➔ Create high-quality health education content.

➔ Advance our research as a learning lab, studying the effectiveness of our education approaches in improving health outcomes and health-related knowledge.

➔ Facilitate the development of infrastructure to ensure overall programmatic success and sustainability.
2018: Finding our strategic focus

Launched 100% Breastfed Campaign in South Africa

Received ELMA grant for Digital MEdIC South Africa, and hired in-country team

Formalized collaboration with Noora Health

Completed India Pilots

Launched Philani Community Health RCT

Launched Digital MEdIC App on Android

Formalized collaboration with Noora Health

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Expanding Knowledge. Improving Health.
What we do

**EDUCATION DESIGN**
We design high-impact health education content that changes behaviors. Our human-centered design process yields engaging content that is scalable, adaptable and evidence-based.

**GLOBAL COLLABORATION**
We build strategic collaborations to increase global access to targeted health education. Our Digital MEdIC content currently reaches hundreds of thousands of learners.

**IMPACT EVALUATION**
We conduct rigorous impact evaluations to measure health outcomes. We are at the forefront of health education and creating the next generation of digital teaching tools.
It’s all about human-centered design.

We aim to engage our audience using human centered design—we tell stories, we provide rich medical illustrations, and we create localized learning experiences that connect emotionally with our learners.

We use a community-based, human-centered design approach to yield a new generation of interventions, better aligned with the needs and contexts of target communities. We tell stories, we provide rich medical illustrations, and we create localized learning experiences that connect emotionally with our learners.

Drawing on 5 years of experience, we have honed our approach to designing, producing and disseminating video health education programs.

The participation of target communities and local stakeholders in the production and design process fosters ownership and increases the likelihood that interventions will resonate with their intended audiences.
Our education design process involves community engagement at each step, from initial instructional design conversations to delivery to the end user.
Our Education Design

100% Breastfed
Grow Great
The Road to Health
Alcohol Avoidance
Intro to Food and Health
Gender Health

Expanding Knowledge. Improving Health.
The impact of stunting reaches far beyond height.

Stunting prevents children all over the world from achieving their full potential – it impairs a child’s brain development, performance in school, and learning ability for the rest of their life – and it can begin even before a baby is born. Although stunting is largely irreversible, it is preventable.

Stunting results from a number of factors, including inadequate nutrition for the expectant mother and her child. But it can also be the result of substandard living environments that lead to frequent illness or even lack of psychosocial stimulation. Believe it or not, love, play and early stimulation of a child’s mind, may be as important as healthy food in helping that child thrive. The Grow Great educational series promotes impactful health behaviors among caregivers during the most critical development period in a child’s life: the first 1,000 days (conception – 2 years old).

We launched the Grow Great series on YouTube, in collaboration with DG Murray Trust, the Perinatal Mental Health Project, Philani Nutrition, the Western Cape Dept. of Health, UNICEF, and the South African National Department of Health. The Grow Great campaign is a national movement to end stunting in South Africa by 2030.
1 in 4 children in South Africa is stunted.

The videos help the healthcare workers. It legitimizes the message that they’re sending. So it becomes a confirmation.

NOMZAMO MATODLANA
PROGRAM MANAGER - PHIHLANI MATERNAL, CHILD HEALTH AND NUTRITION PROJECT
In South Africa, rates of exclusive breastfeeding remain among the lowest in the world.

823,000

The estimated number of under-5 lives that could be saved from exclusive breastfeeding globally.

8%

The percentage of mothers who are exclusively breastfeeding in South Africa.

The 100% Breastfed Initiative is the result of a collaboration between the Stanford Center for Health Education and numerous local stakeholders including: The Western Cape Dept. of Health, The University of Cape Town, Stellenbosch University, UNICEF, Philani Child Health and Nutrition, The University of the Witwatersrand, University of Limpopo and the First 1000 Days Initiative.

Raising awareness around the benefits of breastfeeding as well as improving maternal knowledge about how to best feed their babies is a critical part of the solution to this public health problem. Our goal is to reach 100% rate of exclusive breastfeeding in South Africa by 2030.
Global Collaboration

“Our vision is a shared one - sustainable solutions will only be achieved if we work together with organizations and empower our communities.”

-Aarti Porwal, Managing Director, Stanford Center for Health Education

Together we reach the most remote areas of the world.

Through strategic collaborations with local organizations, including government and non-profit organizations, we work to identify priority health needs, develop accessible content, deliver and evaluate the impact of each educational asset.

We are leveraging technology to reach the most remote areas of the world. Even without internet, learners can use our content in multiple languages via the Digital MEdIC mobile app. Our App analytics allow us to better understand our reach and ways to refine our approach. We customize our educational interventions to the needs and contexts of the communities we aim to serve.
2018 by the numbers

16 COLLABORATORS

244 VIDEOS

3,844,400 LEARNERS

Expanding Knowledge. Improving Health.
Our Reach

While all of our content is publicly available, we rely on delivery through established local partners in order to maximize reach. Our current collaborators are based in the US, South Africa, India, Cambodia, Myanmar, Rwanda, Uganda, Liberia, Guatemala, and China.
Impact Evaluation

We aim to challenge assumptions about what works in digital learning to continually test and identify tangible ways in which health content can be used to improve lives.

— Jamie Johnston, PhD, Evaluation Lead, Digital MEdIC

Our Learning Lab measures inputs, outcomes, and impact.

Our collaboration with local organizations does not end with the creation of content. We continue to work closely with our collaborators to deploy and measure the impact of our work.

Engaging Stanford faculty experts across academic disciplines, we function as a learning lab to identify ways to improve on digital learning models. We leverage both quantitative and qualitative methods to pilot and rigorously evaluate the use of digital health content.

From smaller-scale case studies to large-scale randomization evaluations, we examine a continuum of outcomes to understand the mechanisms of our educational interventions, recognizing that changes to long-term health improvements must follow immediate changes in knowledge, skills acquisition, and behavior change.
Example: The role of Digital MEdIC evaluation in the Philani RCT project

**Content Creation:** We conducted interviews with community members and key local stakeholders to understand the needs of the community.

**Content Distribution:** We found, through focus groups, that providing community health workers with tablets loaded with our health education videos, was a feasible and acceptable way to disseminate content to communities without access to smartphones.

**Knowledge & Beliefs:** We are measuring maternal knowledge and other infant feeding practices.

**Behavior:** We are measuring exclusive breastfeeding at 1 and 5 months.

**Health Outcomes:** We are reviewing impact on several child health indicators.
Case Study: Video-based Community Health Training in Rajasthan

In recent years, India has made strides in improving maternal and neonatal health; however the risks to mothers and newborns are still far greater in India than most places in the world. Community health workers serve as the first point of care for the majority of mothers and children in India, and yet they often have limited knowledge and support to address the needs of the populations they serve.

To address this gap, we collaborated with the Antara Foundation and the Government of Rajasthan to pilot video-based maternal and child health training content via our offline app to 40 community health workers serving 18 villages and a population of roughly 15,000 in rural Rajasthan.

We created the videos as part of a foundational series that covers key topics in maternal child health including recognizing danger signs in late pregnancy and delivery, nutrition for new mothers and babies, breastfeeding, and early newborn care. While the series was first created for use in South Africa, using inputs from experts and community members in India, we adapted the images, narration and content to ensure relevance and cultural appropriateness.

Community health workers expressed a strong desire for additional training in the content areas. Among the health workers that work directly with pregnant mothers, we observed statistically significant gains in knowledge (based on pre and post knowledge tests) four months after providing access to the training videos.
The videos were good refreshers for us. They help us remember all the things we need to tell the mothers as we often forget some of the things.

-Community Health Worker

During interviews and focus group discussions, the health workers expressed that the videos served as a useful knowledge refresher. While they also shared that the offline app would be useful as a tool to communicate with their patients, during the pilot observation period, we observed low levels of usage in the field through analytics collected via the app. Health workers explained that the low usage was primarily due to limitations on time during patients visits, as well as barriers to using the technology. The pilot revealed the necessity to provide scaffolding to better integrate digital learning tools into the everyday practices of health workers.
Exploratory Pilot: Investigating Components of Hospital Caregiver Training

Family caregivers play an integral role in the well-being of individuals in need of medical care. However, they are often ill-equipped to recognize and meet the needs of their family members, particularly after hospitalization. A growing body of work suggests that educating family caregivers is a cost-effective way to improve patient outcomes and reduce hospital readmission rates, particularly in low-resource areas where follow-up care options are limited.

Noora Health is a not-for-profit organization, founded at Stanford University and based in Bangalore, India that has recognized the importance of integrating family caregivers into the health delivery process. Noora Health developed an in-hospital caregiver training model that they currently deliver in dozens of urban and rural hospitals across India.

Starting in May 2018, Stanford Digital MEdIC and Noora Health entered a collaboration to better understand how the different components of the family caregiver training model contribute to improved patient practices and outcomes. Currently, we are piloting a variety of model modifications that can be robustly tested in a large-scale randomized trial aimed at increasing the effectiveness of Noora Health’s patient and caregiver engagement.

In the area of maternal and neonatal health, we are also currently surveying mothers and caregivers to learn more about patients’ knowledge, behaviors and existing beliefs, as well as the social networks of new mothers to give us a better understanding of the population served by Noora. The survey also collects information on mobile phone access and usage to inform feasibility of a text message intervention."
A Noora Health trainer delivers a lesson on postpartum care. Topics covered include hygiene, breastfeeding, thermal care, recognizing danger signs, postpartum nutrition, and umbilical cord care.
Despite progress in reducing maternal, newborn and child mortality, more than 5 million children globally die before reaching their fifth birthday. A majority of these deaths are the result of preventable diseases, the incidence of which could be reduced by implementing health-promoting maternal-child behaviors, such as exclusive breastfeeding.

Narrative, story-based entertainment-education approaches to health education have emerged as potentially powerful strategies for promoting positive health behavior change. The characteristics of particularly impactful entertainment education include appealing narratives, high-quality production, persuasive and unobtrusive messages, and high potential for involvement or identification with the presenters or characters portrayed.

To better understand how such approaches can be used to promote exclusive breastfeeding, we are collaborating with the Philani Maternal Child Health and Nutrition Trust to conduct a cluster randomized trial measuring the effect of story-based video intervention developed by Stanford Digital MEdIC.

The trial is currently ongoing in the Western Cape of South Africa, an area that has one of the lowest exclusive breastfeeding rates in the world. The intervention is being delivered via Philani community health workers. In the control arm, health workers will provide standard of care perinatal in-home counseling, while health workers in the treatment arm will provide standard of care plus the video intervention.

The study will include over 1000 new mothers, and mother-child pairs will be followed until 5 months post-delivery. The primary outcomes of the study are exclusive breastfeeding at 0-1 and 4-5 months of age. Secondary outcomes are other infant feeding practices and maternal knowledge. We will also conduct supplementary qualitative focus groups to contextualize the quantitative findings and unpack the mechanisms of the intervention. The study and its outcomes are registered at clinicaltrials.gov.
We are really thankful for your partnership and openness, openness in terms of content to ensure there is alignment...the open relationship to be able to say ‘this needs tweaked here’. It’s really co-creation.

HILARY GOEIMAN
WESTERN CAPE DEPARTMENT OF HEALTH - SOUTH AFRICA
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