Our mission is to create engaging high-need digital health education that can scale quickly and cost effectively to communities worldwide.
Access to health education is a human right. We believe health education is a key lever that will drive systems-level change in health outcomes around the world.

"This course is very beneficial for all mothers...due to this our children will have the best health with correct nutrients and vitamins. Thank you for providing this course to society."
The Problem

Lack of access to health education in low and middle income countries for both providers and community members.

9 million
Every year, there are 9 million preventable deaths globally, many of which could be prevented by basic health education.

22%
of the global population lives in fragile communities without access to basic healthcare.

The Opportunity

The community health worker model is a promising way to address these issues, BUT we have not done enough to arm the 1.3 million CHWs with the information they need to reverse these trends.
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Digital Medic is a global initiative of the Stanford Center for Health Education, a Center that I am proud to lead with the support of Stanford Medicine. Our mission is to improve health in under-resourced parts of the world through increased access to health education. Since our founding in 2016, our global footprint has expanded and our content is being viewed by an ever-increasing number of learners.

As I have had the opportunity to dedicate more time and energy in the digital health promotion space, it has become increasingly evident that improved health education will drive improved health outcomes. The reasons are self evident — more informed people will make better health choices and their health outcomes will improve. This was the driving force that led to the creation of the Stanford Center for Health Education, in which the Digital Medic program exists.

Our 2020 Annual Report summarizes the breadth of our programs, the types of learners reached, and our strategy for measuring success, continuing our expansion, and assuring sustainability. We are grateful for the support of our donors, the collaborations with local NGOs and governmental agencies, and the health workers who serve their local communities.

We continue to make important strides in developing our ability to scale. Even in remote areas of the world, our content is accessible on iOS and Android phones by way of our mobile app's offline mode. And our talented creative teams at Stanford and in Cape Town have worked to create content that is readily modifiable to serve diverse populations using local languages and regionally-specific images.

We continue our commitment to learning as we grow. Our research team is dedicated to assessing our success through rigorous evaluation of learners’ knowledge gain and health outcomes. This allows us to adapt our approach to optimize the effectiveness of our education content.

We are inspired by the life changing work performed every day by community health workers around the world. Supporting their professional development and effectiveness is a privilege. We are thankful for the collaborations that have enriched us over the last year and to the generosity of those who support our work.
Our Journey 2016 - 2020

- Developed our first high-need digital health education series for a global audience
- Launched our website and learning platform
- Established Digital Medic South Africa in Cape Town
- Completed initial pilot projects in India

Digital Medic was founded in 2016.
Launched 100% Breastfed Campaign in South Africa

Formalized collaboration with Noora Health in India

Launched the Digital Medic App on iOS and Android

Content endorsed by South African National Department of Health

Launched Maternal Child Health RCT in South Africa with 1500 participants
1. Enable digital learning opportunities.
2. Create high-quality health education content.
3. Advance our research as a learning lab.
# Five Reasons Why Our Approach Works

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<td><strong>Accessible</strong>&lt;br&gt;The Challenge: Public-facing educational content is often limited and, if available, usually delivered in text-heavy formats that exclude individuals with literacy barriers.</td>
<td><strong>Engaging</strong>&lt;br&gt;The Challenge: Health education materials are often presented using a traditional, didactic pedagogical approach, leading to lower engagement and reduced knowledge retention.</td>
<td><strong>Adaptable</strong>&lt;br&gt;The Challenge: Health education content is often created for specific audiences with context-specific visuals and does not efficiently or economically adapt for new populations.</td>
<td><strong>Scalable</strong>&lt;br&gt;The Challenge: The delivery of content often does not leverage new widespread forms of communication that allow us to directly reach target audiences.</td>
<td><strong>Credible</strong>&lt;br&gt;The Challenge: In our current era of global misinformation, many people do not know who to trust for their health information. What appears to be credible is often not accurate, leading to lack of trust.</td>
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| The Solution: Our video-based content overcomes literacy barriers. | The Solution: Our story-based learning increases knowledge retention. | The Solution: Our animated avatars are easily adapted for new populations. | The Solution: Our content is widely accessible on the Digital Medic app. | The Solution: Our content is vetted by Stanford health experts. |
Digital Medic by the numbers

20 COLLABORATORS

299 VIDEOS

530,593 LEARNERS
Our Approach

In collaboration with local NGO’s and governments, we identify high-need health topics and design content that engages learners through using human-centered design. Our videos employ thoughtful illustrations and storytelling to create learning experiences that emotionally resonate.

The participation of target communities and local stakeholders in the production and design process fosters ownership, increasing the likelihood that the content will resonate with the intended audiences.

A Scalable Solution

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

Our adaptable design allows for a video to be translated into multiple languages with a simple voiceover. This model is currently being evaluated and optimized.
Improved Nutrition Will Reduce Child Mortality

How Complementary Feeding Can Help

According to the World Health Organization, “In many countries faulty complementary feeding practices - primarily nutritionally inadequate and frequently contaminated foods that are introduced too early or too late - are a major contributing factor to infant and young child malnutrition, growth failure, and high morbidity and mortality.”

To address this issue, our team created a complementary feeding educational series in collaboration with UNICEF, the South African National Department of Health, and Phila.

The series of videos provides an introduction to the basic principles of complementary feeding - the addition of solid foods to a baby’s diet at 6 months.
Demystifying Nutrition Science for Tanzanian Families

Making Guidelines Actionable

The Food and Agriculture Organization together with the World Health Organization developed the concept of Food-Based Dietary Guidelines (FBDG) in 1995. Country-specific FBDG are evidence-based recommendations based on the country’s local food availability and culture. They serve to guide consumption of a healthy, optimal diet, designed to protect against the development of lifestyle-related conditions and non-communicable diseases. In collaboration with the United Nations Food and Agriculture Office and Stellenbosch University, we are assisting in:

- Refining the 12 nutritional themes into actionable food-based dietary guidelines.
- Producing culturally-representative visual illustrations for each message for low literacy audiences.
- Evaluating the understanding, acceptability, and feasibility of the proposed FBDG and food guide.

Research question:
Are the proposed FBDG and food guide understandable, acceptable, and feasible among consumers in Tanzania?
Nutrition Science + Art = Actionable Guidelines

In collaboration with the United Nations Food and Agriculture Office and Stellenbosch University, our team produced culturally-representative visuals containing photographs of local foods for each key message. These learning tools are designed to be accessible to low literacy audiences.
Safeguarding the Mental Health of Child Immigrants to the United States through Trauma-Informed Interviewing Techniques

A Video Toolkit for Immigration Attorneys

The Gap
Hundreds of lawyers and physicians have volunteered their services to the victims of family separation but the resources available to support these professionals are scarce and often inaccessible to busy professionals in need of practical advice and emotional support.

Our Approach
Through a series of short video interviews with lawyers and physicians who have years of experience working with separated families, we created a compact “toolkit” to offer these professionals efficiently delivered, just-in-time support that will leave them with the strategies and coping skills they need.
“Good intentions are not sufficient. The approaches and strategies outlined in this video, will help transform good intentions into effective legal representation.”
The Impact

5,460
The estimated number of immigrant children who have been separated from their parents at the Mexico border.

86%
The percentage of immigrant children who do not have legal representation.

Most of the attorneys report they had little to no training in working with children, much less trauma-informed interviewing of children.

Illustrations from one of the five videos in the series depicting examples of appropriate body language for trauma-informed interviewing.

“100% of the new volunteer attorneys need this content. Even those who have some prior experience with trauma-informed interviewing, can use these videos to refresh their knowledge.”

-Dr. Marsha Griffin, Professor of Pediatrics at UTRGV, Director of Community for Children
Through strategic collaborations with local organizations, including government and nonprofit organizations, we work to identify priority health needs, develop accessible content, and deliver and evaluate the impact of each educational asset.

We are leveraging technology to reach the most remote areas of the world. Even without the 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.

Collaboration with local NGOs allows us to reach exponentially more learners by working with local talent to produce new voiceovers for our health education videos. For example, the Complementary Feeding series below was co-created with collaborators on three different continents at minimal expense.
Our Collaborations

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, Burkina Faso, and China.

Our on the ground teams in California and Cape Town work together across time zones to design, deliver, and evaluate high impact health education initiatives. Having a base in the Global South allows us to facilitate south-to-south collaborations.
Working with Global Leaders in Community Health

“For the new generation this [tablet intervention] is very helpful because everything is digital these days. At home, people tend to look more toward the videos than looking at books. I think there is a future with this work, and the more meaningful information we provide the clients the better. Training them, equipping them ... is an opportunity that I see.”

Nokwanele Mbewu, Senior Program Manager of the Mentor Mother Program at Philani Maternal Child Health and Nutrition in South Africa
Spotlight Collaboration: Noora Health

Noora Health’s mission is to train patients and their families with high-impact health skills to improve outcomes and save lives.

Together we are collaborating to create and test health education content utilizing a universal design. We are also investigating the use of video education in hospital trainings and via WhatsApp.

In the field: collecting initial feedback on maternal and child health content.
National Department of Health in South Africa calls on Digital Medic to translate maternal and child health content into priority languages.

For example, our easily-adaptable design allows for a Mandarin Complementary Feeding video to be translated for Spanish-speaking learners with a simple voiceover and slide update.
An app that increases access to vital education, even in remote areas without WiFi access.

The Digital Medic app allows community health workers to meet at a central location to access WiFi, download health education content, and then go out into their communities to deliver videos and assessments offline. The health workers can then reconvene and send analytics back to the Digital MEdIC team to understand impact and improve quality.
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.
RCT: Effectiveness of equipping community health workers with breastfeeding education videos

Measuring Behavior Change

This trial will be among the first to explore a video-based, entertainment-education intervention delivered by CHWs and created using a community-based, human-centered design approach. As such, it could inform health policy, with regards to both the routine adoption of this intervention and, more broadly, the development of other entertainment-education interventions for health promotion in under-resourced settings.

Khayelitsha, South Africa

5,460 Pregnant Mothers

Data collection in-action and onsite at Philani Maternal Child Health and Nutrition in Khayelitsha, South Africa.
“Glocalization” of video-based health literacy interventions: Exploring designs for globally scalable health communication.

Health literacy researchers have issued urgent calls to health educators and health promoters to enhance the accessibility of health information by making it easier for target audiences to understand and adopt. They emphasize the critical need for health promotion materials that are universally acceptable to culturally and educationally-diverse global audiences. This study aims to explore the acceptability of various designs and approaches to creating health education materials optimized for “glocalization” (global adaptation for local resonance).

Through an online survey, we presented participants with the eight animation still frames representing different animation prototypes that had been proposed by a style team and/or used in prior health messaging campaigns (see Fig. 1). Respondents sorted, ranked, and rated the styles. The survey respondents included 330 people from over 60 countries.
Examining the role of contextualization when scaling health education

How do we scale health education quickly and cost-effectively?

The need for health education content is global, spanning diverse populations across geographic, racial/ethnic and linguistic lines. Our team seeks to address the challenge of creating video content that includes the necessary cultural/contextual nuance for effective instruction, but that can also be quickly and cost-effectively adapted for other audiences worldwide.

Our prior experience suggests that a decontextualized visual approach (devoid of visual cues such that the setting does not belong to any one specific location) is less costly to produce and easier to adapt quickly across audiences. Contextualization can be brought in through audio adjustments when dubbing into local languages.

We aim to test the effectiveness of a decontextualized visual approach through a mixed-methods study in three different countries: South Africa, China, and India.

1. We will conduct a randomized evaluation to compare learning and satisfaction across prototype videos on newborn care. The videos will be identical in audio and length, but with differing visual cues.

2. We will conduct an in-depth qualitative case study, documenting the costs and challenges associated with creating and adapting content for the different learners in the three countries. We will also collect in-depth feedback from learners and stakeholders about the different approaches.
To date, the evidence on the effectiveness of video-based health education is limited, with the majority of studies examining the use of videos alongside a broader set of mobile health education tools. Even less is known about the best approach for creating content that is easy to scale across populations in a quick and cost-effective manner.

The study will commence during the summer of 2020, with early results expected in late 2020. At the conclusion of the study, we will have a better understanding of the importance of contextualization in digital health education content.
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