# Dear Friends,

In 2023, our work reached a critical milestone we touched more than 133 million patient lives in more than 185 countries around the world. In 2023, our work reached a critical milestone – we touched more than 133 million patient lives in more than 185 countries around the world. We are humbled to see the reach of our work across the globe and are deeply grateful to our supporters, partners, staff, and champions who continue to support us in our mission to save lives and reduce suffering.

We know that this level of spread would be unachievable without our commitment to meticulous human-centered design and rigorous testing and iteration. With each of our tools, our goal is widespread adoption. But, at the heart of any effective spread is an effective tool. We center design and testing processes from the outset to ensure that every innovation we produce has the potential to make a meaningful impact. We aim to create prototypes that function effectively in the real world, on the frontlines of health care, and we rigorously test those tools to ensure their reliability.



In this year's annual report, you'll find numerous examples of this process in action. We are actively designing new tools to help low birthweight infants around the world survive and thrive; we are testing modalities of care that will bring acute, hospital-level care to patients in their homes, regardless of where they live; and we are building our pipeline of innovations to meet the challenges of our health care system today and into the future. At the same time, we are forging ahead to build global partnerships, leverage digital technologies, and cultivate relationships with implementation partners to spread our existing tools to patients and clinicians around the world.

In the ever-evolving landscape of health care systems, we know that our work is never done. We've reached more than 133 million lives and will continue to design and test solutions that work in the real world to reach the millions more in need of access to safe, dignified, high-quality health care.

Asaf Bitton, MD, MPH Executive Director, Ariadne Labs

# **GLOBAL SCALE**

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ARIADNE LABS

# **BY DESIGN**

# In 2023, our solutions touched more than 133 million patient lives.

And that's not by chance. It's by design. When solutions are designed with the end-user in mind and rigorously tested for real-world success, they can reach hundreds, thousands, and even millions of people around the world.

In this year's annual report, read more about the solutions we're designing and testing to solve health care challenges now and in the future. Through our commitment to effective human-centered design and testing, we set our solutions up to be spread around the world.

# Designing and Testing Spreadable Solutions

Human-centered design and rigorous testing are at the heart of all we do. We know that to create solutions capable of reaching millions, they need to be well-designed and well-tested. We focus on crafting solutions that align with the needs of users in the real-world contexts where they'll use them. Then, we meticulously test and iterate on our solutions to ensure that they can reliably deliver results to improve health care for populations at scale.

### Human-Centered Design for Low Birthweight Infants

BetterBirth continued work on study design for the Low Birthweight and Infant Feeding Trial and Supportive Care Package (LIFT-UP) in India, Malawi, and Tanzania. The team has used a humancentered design approach to better understand facilitators and barriers to human milk feeding in each of the three geographical contexts and to co-design an intervention package. Data collection will begin in 2024. LIFT-UP is funded by the Bill & Melinda Gates Foundation.

BetterBirth also continued efforts to improve quality and safety in childbirth across the spectrum of care, including work to assess the Manyata program for quality accreditation in private childbirth facilities in India and completion of a research strategy for Noora Health to support the organization's goal to scale their patient and caregiver education program to reach 70 million people over the next five years. The **BetterBirth trial** earned recognition from Oxford Academic Press as one of the "50 studies every global health practitioner should know," highlighting the study's tremendous impact and contributions to global maternal and newborn health.

# Home Hospital Enrolls 150 Patients in Randomized Controlled Trial

The **Home Hospital** team continues to test their Rural Home Hospital model and this year completed enrollment of 150 patients across three sites for the first international randomized controlled trial of the model. The results will add new context to the rural home hospital experience and may help inform next steps of the CMS Acute Hospital Care at Home Waiver.

The team also began work to assess feasibility of delivering acute behavioral health care at home and convened an advisory board of leaders in inpatient and outpatient psychiatric care, psychology, multimodal therapy, social work, case management, and more. Dr. Michael Montalto, PhD, MBBS was selected as the inaugural International Home Hospital Fellow.

## Spark Grants Fuel Innovation Pipeline

Spark Grants fuel Ariadne's innovation pipeline, funding promising ideas in health care innovation while giving grantees access to Ariadne's expertise in human-centered design, rigorous testing, and more. All five Spark Grants awarded for 2022-2023 successfully engaged in the design phase of the Ariadne Arc. Projects included work to improve maternal health equity, revise morbidity and mortality conferences, measure equity in oncology, and optimize community health worker supervision. Four of the projects closed with solution prototypes for further testing, and two published systematic reviews on their research. A project in its second year of funding focused on developing a triage checklist for stroke care saw significant outcomes improvement in feasibility testing. Spark Grant funding for 2023-2024 will support work in improving care in nursing homes and childbirth.

527M 133M

PATIENT LIVES TOUCHED **SINCE 2018** 

PATIENT LIVES TOUCHED IN 2023

**6 LIVES TOUCHED** FOR EVERY DOLLAR **INVESTED IN ARIADNE LABS** 

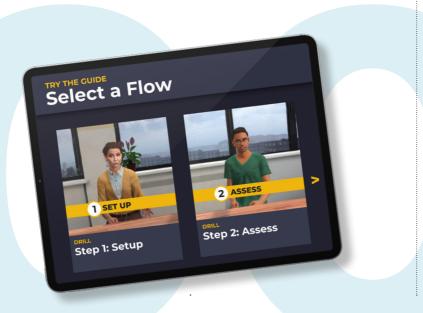
# Ready for Spread: Leveraging Technology

Digital technology connects people – to each other and to new resources—whether they're down the street or on the other side of the world. It transcends barriers in geography and time to allow our solutions to reach more people, more equitably.

## Serious Illness Care Program Launches Digital Training to Improve Accessibility

The **Serious Illness Care** team launched a suite of digital implementation resources and avatar-based simulation trainings to enhance accessibility of the Serious Illness Care Program. The resources will allow health systems to implement the Program with significantly lower cost and time barriers.

The team also held their inaugural Virtual Summit, "Driving Equity in Serious Illness Communication and Care," which drew more than 200 participants. The Summit featured keynotes and presentations from national leaders in palliative care and health equity, whose talks focused on increasing access to high-quality



communication and care, fostering greater representation in research, building interprofessional teams, engaging caregivers and community, and supporting clinician well-being.

# Better Evidence Accelerates Global Scale of Digital Decision Support Tools

Better Evidence, which brings evidencebased digital tools to current and future clinicians, facilitated more than 70,000 subscriptions to clinicians working in low resource settings across 176 countries this year. They launched an online curriculum to standardize onboarding for local Champions and accelerate scale. The curriculum trains Champions to effectively use digital tools and serve as experts to support implementation within their medical institutions. More than 55 medical schools from 16 countries are now participating, with more than 90 Champions supporting use of the tools at their respective universities. Better Evidence staff and 17 Champions participated in the The Association for Health Information and Libraries in Africa (AHILA) conference in Botswana in October 2023, with several presenting about the program and the importance of consulting the evidence for better care decisions.

# OUR SOLUTIONS WERE ACCESSED IN 185 COUNTRIES



Countries who have accessed Ariadne Labs' work

# Ready for Spread: Building Global Partnerships

The most effective way to reach patients around the world is often through partners working directly with the people we aim to serve. We build partnerships and convene global leaders to help spread our solutions throughout countries and communities.

# Primary Health Care Co-Hosts First-of-Its-Kind International Conference

The Primary Health Care team co-hosted the first International Primary Health Care Conference, convening national and international leaders and government agencies to spur global action on primary health care improvement. Asaf Bitton, MD, MPH, was named to the NASEM Standing Committee on Primary Care, which convenes experts in primary care delivery, research, and policy to help drive forward the federal government's Initiative for Strengthening Primary Health Care. The team also advised on the scale-up of a pediatric behavioral health integration model across Massachusetts and presented work on subnational primary health care measurement at the International Conference on Primary Health Care in Ethiopia.

Through the MOMENTUM Knowledge Accelerator, the team co-developed a Measurement for Action Framework and indicators set to support Primary Impact, USAID's effort to advance integrated and well-coordinated primary health care services. The framework is anchored on previous work from the Primary Health Care Performance Initiative and global guidance from WHO/UNICEF with an emphasis on subnational measurement.



# Safe Surgery/Safe Systems Concludes Multi-Year International Partnership

The **Safe Surgery/Safe Systems** team concluded a multi-year partnership with Singapore General Hospital (SGH) and Johnson & Johnson to evaluate, update, and reimplement the WHO Surgical Safety Checklist. Results of the reimplementation, published in *JAMA Surgery*, showed improvements in team behavior, safety culture, patient safety, and patient outcomes.

The team also launched an updated, customizable suite of digitized Operating Room Crisis Checklists, which will allow for broader adoption of these lifesaving tools. The update process drew on the expertise of an international review board of leading physicians, pharmacists, and patient safety leaders. In addition, the team collaborated with the Brigham and Women's Stratus Center, Abt Associates, and experts in team training to co-develop a video-triggered simulation curriculum for AHRO's updated TeamSTEPPS 3.0 curriculum, including three simulation videos, to support training on strategies to enhance team performance and patient safety.

# BetterBirth Informs National Strategy on Uterotonics Use in India

Through the **MOMENTUM** Knowledge Accelerator, BetterBirth synthesized research on how uterotonics are currently being used in India to inform the national research agenda and community advocacy efforts to address preventable causes of neonatal mortality.

# 60 TOOLS

DESIGNED, TESTED, AND SPREAD IN 2023

# IN 2023 WE WORKED WITH

# GOVERNMENT BODIES





HEALTH CARE PROFESSIONALS

# Ready for Spread: Partnering for Implementation

We work directly with health systems across the country and around the world to bring our solutions to life in their facilities.

# TeamBirth Surpasses 100 Hospital Milestone

The **Delivery Decisions Initiative** reached an important milestone as TeamBirth was implemented at its 100th hospital in the U.S., along with six hospitals in Sweden. To expand the impact of TeamBirth across the continuum of perinatal care, the team began designing and testing tools in prenatal and NICU care. The team also launched a TeamBirth training curriculum for nursing students and education modules for medical residents to support efforts to build a pipeline of TeamBirthtrained clinicians.



# Precision Population Health Launches Preventive Genomic Screening with Alaskan Natives

Precision Population Health began work with the Southcentral Foundation. an Alaskan Native-owned, nonprofit health care organization, to bring preventive genomic screening to Alaskan Native People. The team also shifted into the next phase of implementation of a 1,000 patient pilot at the largest health system in Michigan, Corewell Health, The International Consortium on Newborn Sequencing (ICoNS), a body of global leaders in newborn genomic sequencing affiliated with Precision Population Health, grew in membership by 700% and now includes over a dozen of the leading global projects in newborn sequencing. ICoNS hosted its 2nd annual conference in London at the Royal Institution of Great Britain.

# PACT Convenes National Leaders to Support Communication and Resolution Program Implementation

The Pathway for Accountability, Compassion, and Transparency (PACT) initiative was created to improve the way health care organizations respond to and learn from harm events. PACT is a collaboration between Ariadne Labs, the Institute for Healthcare Improvement, and the Collaborative for Accountability and Improvement. In 2023, PACT convened a second cohort of health systems to support implementation of patient harm response programs. Each of the 10 participating systems gained access to new tools for measurement, communication, process improvement, and patient and family education; and faculty, coaches, and peer organizations to support learning and improvement. In 2023, PACT recruited 13 founding members of the PACT Leadership and Innovation Network which brings together a network of thought leaders, national experts, and organizations committed to improving how health care systems respond to patient harm.

# PEER-REVIEWED PUBLICATIONS IN 2023

# <u>13</u>K-

NUMBER OF TOOLS DOWNLOADED

# **5** MEMBERS OF THE ARIA

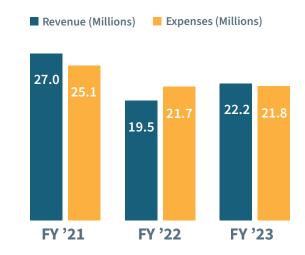
ONLINE COMMUNITY OF IMPLEMENTERS

### **2023 BY THE NUMBERS**

# **Financials**

Ariadne's programmatic work continued to expand and make an impact in FY23. Our financial outlook remains positive as we increased annual revenue by \$2.7 million year over year. It was a particularly strong year for Non-Federal Grants and Contracts, adding more than \$4 million over FY22 revenue from those sources. We held expenses relatively steady while increasing revenue in FY23.

We headed into FY24 with a positive financial outlook, anticipating increased levels of grant funding to further offset expenses.



### FY23 REVENUE BY SOURCE S— \$22.2M



### FY23 EXPENDITURE BY TYPE—\$21.8M



# **Our Supporters**

This list includes grants and donors with gifts and pledges totaling \$50,000 or more during our 2023 fiscal year (October 1, 2022 and September 30, 2023).

### Abundance Fund

Agency for Healthcare Research and Quality through Abt Associates

Anonymous (multiple)

Ballmer Group through the Washington State Hospital Association

Charina Endowment Fund

Connie Mao, Ben Kahrl, and Julia Kahrl, PhD

Corewell Health

George Kaiser Family Foundation

Health Resources and Services Administration through Oklahoma Perinatal Quality Improvement Collaborative

Laura and Scott Malkin

Livelihood Impact Fund

March of Dimes Birth Defects Foundation

Medical Devices and Diagnostics Global Services, LLC

Noora Health

Point32Health

Richard and Susan Smith Family Foundation

Risk Management Foundation of the Harvard Medical Institutions Incorporated

Sarah François-Poncet

**Skyline Foundation** 

Surgo Foundation

Susan and Digger Donahue

The Boston Foundation

The Doctor's Company Foundation

The Donner Foundation

The Gates Foundation, formerly known as the Bill & Melinda Gates Foundation

The Klarman Family Foundation

The Pew Charitable Trusts

The Spivy Family

The Thompson Family Foundation

United HealthCare Services, Inc.

United States Agency for International Development through Population Reference Bureau

W. Yen Liow and Eeling Lim

# If you would like to become a supporter

Learn more at our website https://www.ariadnelabs.org/ about-us/support-us/

Or contact Margaret Ben-Or at mbenor@ariadnelabs.org.

# **2023 Advisory Board**

Our Advisory Board includes world-class leaders in science, education, health care, and business. They support Ariadne Labs by contributing expertise on research priorities, scientific plans, implementation approaches, and collaborations.

### PAUL J. ANDERSON, MD, PHD

Chief Academic Officer, Mass General Brigham

Interim Chief Academic Officer and Senior Vice President of Research & Education, Brigham and Women's Hospital

K. Frank Austen Professor of Medicine, Harvard Medical School

Academic Dean for Mass General Brigham, Harvard Medical School

### ANDREA BACCARELLI, MD, PHD

Dean of the Faculty, Harvard T.H. Chan School of Public Health

### **DONALD M. BERWICK, MD, MPP, FRCP**

President Emeritus and Senior Fellow, Institute for Healthcare Improvement Former Director of Medicaid and Medicare

### GILES W.L. BOLAND, MD

President of Brigham and Women's Hospital and Physicians Organizations

Executive Vice President of Mass General Brigham

### **KATE CALVIN**

Executive Dean for Administration, Harvard T.H. Chan School of Public Health

### **ELLIOT COHEN, MBA**

Co-founder and Former Chief Product Officer, PillPack

### ANDREW DREYFUS

Former President and Chief Executive Officer. Blue Cross Blue Shield of Massachusetts

### PETER HECHT, PHD

Co-founder and CEO, **Cyclerion Therapeutics** 

Medical Director of Quality Improvement and Population Health, East Boston Neighborhood Health Center

### AMBASSADOR ROMAN F. MACAYA

Menschel Senior Leadership Fellow, Harvard T.H. Chan School of Public Health

Former Executive President of the Costa Rican Social Security Fund

Former Ambassador of Costa Rica to the United States

Founding CEO, Alnylam

### **JASON YEUNG, MPHIL**

Founding Managing Director and Portfolio Manager, Morgan Stanley

### **GWILL E. YORK, MBA**

Founding Managing Director, Lighthouse Capital Partners



Brigham and Women's Hospital Founding Member, Mass General Brigham





Ariadne Labs is a joint center for health systems innovation at Brigham and Women's Hospital and the Harvard T.H. Chan School of Public Health.