Center for Global Health Delivery

The Harvard Medical School Center for Global Health Delivery—Dubai is addressing some of the most pressing health challenges in the region by focusing on research, medical education, and training that promises to improve health care delivery systems and patient outcomes for diseases prevalent in the United Arab Emirates, Middle East, North Africa, and neighboring regions in Africa, Asia, and Europe. The Center, established by Harvard Medical School in Boston and Dubai in 2014, is a hub for training, research, analysis, and policy formation that optimizes the last phase of health care delivery, ensuring that care providers have the systems and tools necessary to alleviate human suffering caused by disease.

ABOUT US

In much of the world, there’s a wide gap between what we know about health care and what we’re able to deliver. It can be fixed.

In order to make progress—to close this gap that affects so many—we must first build and strengthen global capacity to bring knowledge from bench to bedside in the diverse communities where people live and work.

Piece by piece, layer by layer, the Harvard Medical School Center For Global Health Delivery—Dubai and its partners are building capacity for change.

This is our work in progress.
PROGRESS AND ASPIRATIONS

Building On and Up
Developing systems that share the fruits of modern medicine with the diverse communities where people live and work

RESEARCH AND EDUCATION

Tools
Preparing a network of scholars, practitioners, and policy makers to drive progress

WORKSHOPS AND SYMPOSIA

Blueprint
Galvanizing scholars, practitioners, and policy makers for improved health care delivery

INTRODUCTION

Foundation
Carrying on a legacy in a thriving global crossroads

APPROACH AND STRATEGY

Breaking Ground
Constructing a global ecosystem that supports improved health care delivery

PHOTO: SHEHZAD NOORANI

CENTER FOR GLOBAL HEALTH DELIVERY-DUBAI
HARVARD MEDICAL SCHOOL
When Harvard University was founded 380 years ago, the world’s population was 500 million people. Many of those people died from diseases such as tuberculosis, plague, diarrhea, and upper respiratory infections. Since then the University, named after John Harvard—who himself succumbed to an early death from tuberculosis—has dedicated itself to the pursuit of knowledge and the betterment of human kind. With a focus on alleviating suffering caused by disease, Harvard Medical School has carried on this legacy by working at the frontiers of laboratory and clinical sciences, translating the latest findings into state-of-the-art medical care.

Yet, for some, the gap between scientific knowledge and healthy lives remains as wide today as it was when Harvard University was founded. Although health is a human right, today many of the world’s 7.4 billion inhabitants still succumb to illnesses for which there are solutions. Tuberculosis, for example, has been curable since 1947, yet it remains the biggest infectious killer of adults globally, causing 1.8 million untimely deaths annually. One in fifty suffers from disease caused by the hepatitis C virus, which is also curable. Unaddressed mental illness causes disability in millions, yet proven interventions exist. Almost 415 million suffer from diabetes and its sequelae, nearly five billion cannot access safe surgery, and the list goes on. Gaps in health care delivery represent the biggest challenges we face in ensuring a just and healthy world in the 21st century.

Harnessing knowledge for the betterment of human kind is as critical today as it was four centuries ago. We are driven by a vision of a modern world where no human being dies from treatable or preventable diseases. To ensure that all people—rich and poor, north and south, male and female, young and old—are able to lead healthy lives, we must take the next step in translational medicine: bringing knowledge to bear on ensuring high quality health care delivery in the communities where people live and work.

Since our founding in 2014, the Harvard Medical School Center for Global Health Delivery–Dubai has been catalyzing a movement to translate knowledge into systems, tools, and policies that improve the last phase of health care delivery around the world. We do this through capacity building in research and education, through collaborations with colleagues who share our drive to advance the health care delivery equity agenda, and by creating an environment where the best minds can come together to challenge the status quo. Building a knowledge ecosystem is critical to Harvard Medical School’s mission and the cornerstone of our work. This is a vision we share with our colleagues in Dubai.

For centuries, Dubai has been an important global crossroads. Today, it sits at the nexus of Asia, Africa, and Europe—a significant global hub for commerce, innovation, and sharing ideas. Together with our collaborators in Dubai and the region, we have made the Center into a hub for advancing health care delivery. Our space draws from the spirit on which Harvard University was founded and Dubai was built.

We invite you to explore this report, ask questions, and get involved with our mission.
Our mission to alleviate human suffering

Harvard Medical School’s mission is “to create and nurture a diverse community of the best people committed to leadership in alleviating human suffering caused by disease.” The Center fulfills this mission through a focus on optimizing the last phase of health care delivery.

Dubai as a Global Hub

Formerly called Al Wasl, meaning “connection,” Dubai has a rich, centuries-long history of linking people, places, and ideas. Today it is one of the world’s foremost hubs. There are few better places for an international community of global health leaders to meet, work, and flourish.
Constructing a global ecosystem that supports improved health care delivery.

The Center exists not to be the change, but to build the capacity for change. We are teachers, practitioners, and advocates working alongside collaborators to develop systems that help people and communities receive the health care they need to achieve their full potential.
Our Approach

We build capacity piece by piece, layer by layer, with the aim of improving health care delivery in diverse communities where people in need live and work.

Through research, education, and collaboration, we are addressing some of the most pressing health care delivery challenges facing our world today. We do this with a focus on disease areas that are emblematic of the challenges faced in delivering high quality health care.
Anesthetic-related mortality was three times higher in developing countries compared to developed.

Access to Surgical Care

The Problem
Access to surgical care refers to a patient’s ability to get surgery—like emergency operations and those necessary to treat chronic conditions—when he or she needs it. More than five billion people do not have access to necessary surgical care, and demand for care is rising.

The Goal
To improve access to necessary surgical care globally

The Center’s research and policy work in this area focuses on equipping care providers with knowledge and skills necessary to handle demand and improve conditions that typically hinder access, including:

• Surgical infrastructure
• Safe surgical care
• Geographic proximity of patients to surgical facilities
• Affordability of surgical procedures
• Access to anesthesia

5 BILLION PEOPLE LACK ACCESS TO SAFE, AFFORDABLE SURGICAL AND ANESTHESIA CARE GLOBALLY

MORBIDITY AND MORTALITY

1.5 million
Deaths per year could be averted with full provision of surgical procedures.

ECONOMIC COST (USD)

LOSS OF ECONOMIC PRODUCTIVITY WILL BE $20.7 TRILLION GLOBALLY BETWEEN 2015–2030

EXTENT OF GAP

5 BILLION PEOPLE LACK ACCESS TO SAFE, AFFORDABLE SURGICAL AND ANESTHESIA CARE GLOBALLY

EXTENT OF SUB-GAP

3x
Anesthetic-related mortality was three times higher in developing countries compared to developed.

PHOTO: SHEHZAD NOORANI

PHOTO: SHEHZAD NOORANI

APPROACH AND STRATEGY
Mental Health

The Problem
The category of mental disorders encompasses conditions ranging from schizophrenia to autism to eating disorders. Mental health disorders cause more than 25% of health-related disability globally. Because of lack of infrastructure and health professionals, many of these diseases remain undiagnosed and untreated.

The Goal
To develop systems to diagnose and treat mental disorders in the communities where patients live and work

Many mental disorders are eminently treatable, with outcomes ranging from an increased ability to live productively to complete recovery. The Center’s efforts focus on ensuring that people suffering from mental disorders are able to access care. Our research focuses on models of community-based diagnosis and care.

MENTAL DISORDERS CONSTITUTE THE LARGEST PROPORTION OF THE GLOBAL BURDEN OF DISEASE, ACCOUNTING FOR ALMOST ONE IN THREE YEARS LIVED WITH DISABILITY GLOBALLY
Diabetes and Obesity

The Problem
Diabetes and obesity, once considered diseases of high-income settings, are now global epidemics. Type 2 diabetes is a chronic condition characterized by resistance or lack of production of insulin, the hormone that regulates the body’s sugar levels. Diabetes usually requires lifelong management. People with diabetes are at higher risk of developing a number of serious health complications, including cardiovascular disease, blindness, nerve damage, kidney failure, and limb amputation. Unfortunately, Type 2 diabetes is on the rise, particularly in the Center’s region. Obesity, which affects a shocking 3 million adults in the United Arab Emirates alone, is part and parcel of this phenomenon: it increases one’s risk of diabetes, as well as the rise of hypertension, stroke, cancer, and death.

The Goal
To identify and eliminate risk factors for diabetes and obesity, reduce progression to disease, and ensure necessary care for all.

In most cases, diabetes and obesity are preventable and treatable conditions. The Center focuses on addressing factors that contribute to the creation and prevention of disease, ranging from an examination of the food supply to urban planning needs. Because diabetes contributes to significant death and disability from heart disease, kidney disease, limb amputation, and blindness, our research examines how to ensure that people are able to access and adhere to necessary care.
Infectious Disease

The Problem
While many infectious diseases deserve global attention, two of the most concerning for the Center’s region are tuberculosis and hepatitis C. Tuberculosis, an airborne disease caused by bacteria, kills more adults worldwide than any infectious disease, including HIV/AIDS. Hepatitis C is a viral disease that attacks the liver. Although some infected people may eliminate the hepatitis C virus without treatment, others develop chronic infection that can lead to cirrhosis or liver cancer. Both diseases are preventable and curable, yet barriers to treatment remain. The absence of point-of-care diagnostics, a long duration of treatment, increasing levels of drug resistance, and history of poor epidemic control strategies have hampered the global struggle against tuberculosis, while the cost of new, highly effective hepatitis C treatments is prohibitive for many.

The Goal
To make effective care readily available throughout the region and globally

The Center’s research initiatives are designed to advance high-quality disease prevention strategies and treatment options for tuberculosis and hepatitis C, thereby reducing complications and fatalities and stopping continued transmission of these diseases.

1.8 million
People died from tuberculosis in 2015 although it is a curable disease.

10.4 MILLION PEOPLE DEVELOP TUBERCULOSIS EVERY YEAR
↓
40%

4.3 million people, or 40% of those who fell sick with tuberculosis, were missed by health systems in 2015.

580,000
Of the 580,000 people estimated to have fallen sick with drug-resistant tuberculosis in 2015, 78% did not receive any treatment.

AN ESTIMATED $12 BILLION IS LOST FROM THE GLOBAL ECONOMY EACH YEAR DUE TO LOST WAGE-EARNING POTENTIAL OF PEOPLE WHO FALL SICK WITH OR DIE FROM TUBERCULOSIS

TUBERCULOSIS IS BOTH THE RESULT OF POVERTY AND A DRIVER OF POVERTY

AN ESTIMATED $12 BILLION IS LOST FROM THE GLOBAL ECONOMY EACH YEAR DUE TO LOST WAGE-EARNING POTENTIAL OF PEOPLE WHO FALL SICK WITH OR DIE FROM TUBERCULOSIS

TUBERCULOSIS IS BOTH THE RESULT OF POVERTY AND A DRIVER OF POVERTY
APPROACH AND STRATEGY

Committed

Ensuring access to high quality health care through research, training and policy development

Poverty, disease outbreaks, natural disasters, political upheaval, and changing lifestyles: these and so many other circumstances determine the issues that must be addressed in order to ensure the delivery of necessary health care. It is the Center’s goal to remain aware and responsive, ensuring that our body of work encompasses the world’s most pressing health care needs.

Many of our researchers, educators, and partners place a special emphasis on women and youth. Their work examines one or more of the Center’s areas of focus through the lens of maternal and child health in order to innovate care delivery solutions that serve this population’s unique, often unmet, needs.
Preparation of a network of scholars, practitioners, and policy makers to drive progress and equity.

Working alongside global partners to research cutting-edge health care delivery solutions.

The Center’s approach to health delivery research relies on a unique model of accompaniment. Both our Cooperative and Faculty Awards programs pair investigators from the Center’s region with experienced Harvard faculty and provide support from the Center’s research team. With funding and resources at their disposal, the Center’s awardee pairs collaborate to conduct, publish, and apply high quality research to the last phase of health care delivery—all while benefiting from mutual learning that shapes future efforts. Together, we’re not only innovating groundbreaking health care delivery solutions, we are also equipping each other with tools for continued discovery.
Cooperative Awards

Preparing scholars to conduct research that impacts lives.

In keeping with our mission to build capacity for high-quality health care delivery research, the Center launched the Cooperative Awards program in 2014. The program seeks qualified researchers from Dubai and the region who demonstrate promise in the areas of diabetes and obesity, surgical care delivery, infectious disease, and mental health. The grants are cooperative because they offer investigators the opportunity to work closely with an established Harvard faculty member and to draw from the assistance of the Center’s research core.

The Center will support each project with appropriate funding as well as biostatistical, epidemiological, data programming, and other methodological and analytical resources. We work closely with awardees and partners to prepare work for publication and dissemination.

The Impact

The long-term impact of the Cooperative Awards program is:

TO CONTRIBUTE substantively to addressing diseases of global concern through high-quality research that translates to real-world practice.

TO ADVANCE knowledge and best practices related to the delivery of existing or new interventions that can cure or prevent disease.

TO LEARN from and teach the region’s most promising global health scholars, thereby accelerating their careers and preparing them to disseminate new knowledge and skills.

TO POSITION the Harvard Medical School Center for Global Health Delivery—Dubai as a premier hub for innovative thinking and productive health policy discussion.

ALAWI ALSHEIKH ALI
Dean of the College of Medicine, Professor of Cardiovascular Medicine, Mohammed Bin Rashid University of Medicine and Health Sciences, Dubai, UAE
Consultant Cardiologist, Sheikh Khalifa Medical City, Abu Dhabi, UAE

The focus of my project is to understand risk factors for cardiovascular disease and barriers to therapy among young patients with heart disease in the UAE. In Aim 1, we propose to conduct a case-control study among patients presenting with a first premature heart attack in order to quantify the relative contribution of clinical risk factors, lifestyle, psychosocial, and biological factors to premature heart attack in the UAE. We hypothesize that a large contribution to premature heart attacks will be derived from diabetes and obesity. In Aim 2, we will conduct a prospective evaluation of the premature heart attack cases (from Aim 1) in order to identify barriers to adherence to life-saving secondary preventive therapies (including post-heart attack medications, lifestyle therapies, cardiac rehabilitation, and risk factor control). We will follow patients for up to six months after hospital discharge and hypothesize that differential non-adherence to secondary prevention therapies will be associated with lower socioeconomic status and financial barriers, resulting in worse clinical outcomes. Overall, this will be the first study to focus on premature heart attacks in the UAE, and will provide much-needed insights into future targets for cardiovascular preventive efforts.

I am looking forward to the opportunity to conduct a regionally relevant study in collaboration with colleagues from HMS—one that, I hope, will expand to include other countries and a larger sample size in the future.

PHOTO: ELENA DEVYASHINA FOR PARTNERS IN HEALTH
Faculty Awards

In 2014, the Center awarded grants to three faculty members from the Harvard Medical School Department of Global Health and Social Medicine to conduct health care delivery research in the region alongside local project investigators. Still underway, their work is establishing the Center’s reputation as a global innovation hub, strengthening the region’s research ecosystem, and addressing the world’s most pressing health issues.

HARVARD FACULTY AWARDEE
Mercedes C. Becerra, ScD

LOCAL CO-INVESTIGATORS
Hamidah Hussain, MBBS
Farhana Amanullah, MBBS

AREA OF FOCUS
Infectious Disease

Screening and Treatment of Children and Adults Exposed at Home to Drug-Resistant Tuberculosis

Tuberculosis kills more adults worldwide than any other infectious disease. And, although it has been treatable for years, rising levels of drug-resistant tuberculosis pose an ever-growing threat. By identifying, educating, treating, and monitoring household contacts of patients diagnosed with drug-resistant tuberculosis at Pakistan’s Indus Hospital, this study will test the effectiveness of preventive therapy in children and adults who have been exposed to drug-resistant tuberculosis and who are at risk of developing tuberculosis disease. Moreover, it will illuminate the feasibility of preventive therapy implementation in a programmatic setting.

Because the program has enrolled participants so quickly, we will have 12-month outcomes in 2017 and be able to rapidly disseminate groundbreaking results.  
MERCEDES C. BECERRA, ScD

We are working rapidly to determine how we can scale this intervention to the entire city of Karachi, which has a population of 20 million. 
HAMIDAH HUSSAIN, MBBS, CHAIR, INDUS HOSPITAL TUBERCULOSIS CONTROL PROGRAM
**Time Driven Activity Based Costing: Total Knee Replacement Surgery at the Indus Hospital**

**HARVARD FACULTY AWARDEE**
John G. Meara, MD, DMD, MBA

**HARVARD CO-INVESTIGATORS**
Swagato Mukhopadhyay, MD
Kimberly M. Daniels, MS
Ronald Heald, MBA
Sarah Greenburg, MD, MPH

**LOCAL CO-INVESTIGATORS**
Hamidah Hussain, MBBS, MSc
Rahim Ali Khan, MBBS, MS
Mansoor Ali Khan, MBBS, FCPS (Orthopedics)
Muhammad Amin Chinoy, MBBS, FRCS

**AREA OF FOCUS**
Access to Surgical Care

Sometimes surgical interventions are more affordable and effective than non-operative management. This is often the case for total knee arthroplasty (TKA), or knee replacements. Nevertheless, perceived high costs have led to rationed services at Pakistan’s Indus Hospital, where patients routinely wait five years for TKA. In an effort to prove and improve the value of TKA delivery at Indus, this study maps the process from beginning to follow-up. Findings will clearly define costs versus benefits, illuminate potential efficiencies, and inform removal of impediments to care delivery.

**Patient Monitored Assessment of Surgical Site Infection: A Pilot Study**

**HARVARD FACULTY AWARDEE**
John G. Meara, MD, DMD, MBA

**LOCAL CO-INVESTIGATOR**
Lubna Samad, MBBS

**AREA OF FOCUS**
Access to Surgical Care

A surgical site infection (SSI) is a wound infection that occurs at a surgical incision and is common in countries around the world. Although SSI rates are declining in high-income settings, low-income countries continue to suffer from high rates of infection. Furthermore, post-operative screenings for SSIs can be difficult, time-consuming, and expensive for patients and health care systems where resources are limited. This project evaluates the validity and predictive value of patient SSI self-assessment tools and health worker screenings in an effort to identify safe, effective, simple, and time-saving methods of diagnosis. Findings could preserve health care resources and, more importantly, decrease patient morbidity.

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**Building a Model for Comprehensive Mental Health Care**

Yogyakarta, Indonesia, with a population of nearly 3.5 million people, is a middle-income province with a rich set of universities, public and private hospitals, and a public health system. However, its small pool of psychiatrists and lack of integrated mental health services severely hinder its ability to serve the mentally ill. This study—which is linked to a larger program attempting to build comprehensive service systems in five primary health care centers—endeavors to construct and evaluate culturally compatible models for improving services for persons with psychiatric illness in settings with extremely limited resources. As a result, it will help to increase the percentage of persons with psychotic illness that receives regular, appropriate care.
Research Applicants

This map represents letters of intent received by country.

LETTERS OF INTENT

204

AREAS OF FOCUS

Access to Surgical Care
Infectious Disease
Maternal + Child Health
Mental Health
Obesity + Diabetes
Other

PROJECTS TO BE FUNDED AND BEGIN IN 2016–2017

25

NUMBER OF COUNTRIES REPRESENTED

20
Training and connecting the next generation of health care leaders.

We believe there’s immense power in education—power to uplift and uphold not just individual minds, but entire communities, systems, countries, and regions. That is why education is vital to our efforts to build capacity for better health care delivery research and implementation. Through scholarships, courses, and training opportunities, we aim to teach and connect a collaborative network of students, academics, policy makers, and innovators. It is our vision and hope that they will become the next generation of global health leaders, optimizing care delivery for patients.

Scholarships

Disseminating knowledge, forging lifelong connections.

The Center offers a variety of scholarship opportunities to UAE and non-UAE health care and non-health care professionals who are interested in pursuing structured training opportunities through Harvard University. We are proud to form relationships with talented students from around the world and grateful for the valuable role they play in spreading knowledge.

2016 Global Scholars Program

In July 2016, the Center welcomed twelve accomplished practitioners and professionals to Harvard University. Three scholars participated in the Program in Clinical Effectiveness, which hones quantitative and analytic skills necessary for clinical research and health care administration, and nine participated in the Global Health Delivery Intensive Program, a rigorous non-degree summer program that trains public health leaders and health practitioners.

As a health professional working to prevent cardiovascular diseases, I feel responsible to people seeking care in my country. Attending the intense and challenging Program in Clinical Effectiveness was a life and mind-changing experience that taught me leading methods of clinical epidemiology and biostatistics. I am confident that the skills, knowledge, and practical techniques I gained will make a huge difference in my career and will bring me one significant step closer to my long-term aspiration—to deliver better health care in Egypt.

ANNIE OHANESSIAN, MSED, MBBCH

Internal medicine and clinical nutrition specialist and Clinical Researcher Egypt

2016 Global Scholars Program

NUSRAT KHAN, FCPS, MBBS
Neonatologist, Tawam Hospital
Pakistan

FARHAD KHERADMAND JANAH, MB BCH, MD, MBA
Assistant Professor, Mohammed bin Rashid University of Medicine and Health Sciences
Consultant Urological and Transplant Surgeon at Mediclinic City Hospital
United Arab Emirates

ANNIE OHANESSIAN, MSED, MBBCH
The Center for Global Health Delivery—Dubai has put itself at the forefront of the effort to meet the region’s immense need for medical and health care related research. Learning and working with some of the global leaders in our field allows us to bring the best to our context—what we do today will be our legacy in the region.

TREY HULSEY, PRESIDENT, OASIS HOSPITAL

The Center for Global Health Delivery—Dubai has put itself at the forefront of the effort to meet the region’s immense need for medical and health care related research. Learning and working with some of the global leaders in our field allows us to bring the best to our context—what we do today will be our legacy in the region.

TREY HULSEY, PRESIDENT, OASIS HOSPITAL
Scholarship Collaborations

We were pleased to collaborate with the Global Clinical Scholars Research Training Program (GCSRT) and to offer three scholarships to leaders in health care delivery.

MEET OUR GCSRT SCHOLARS

ZAID MAMSER
Royal College of Surgeons in Ireland
United Arab Emirates

ARAL SURMELI
Acibadem University School of Medicine
Turkey

ASISH SUBEDI
B. P. Koirala Institute of Health Sciences
Nepal

VIJAYRAM MALLADI
Masachusetts General Hospital
India

ASMA AHMED
Aga Khan University Hospital
Pakistan

We are delighted to be collaborating closely with the Master of Medical Sciences Program (MMSc) in Global Health Delivery and the Al Jalila Foundation. The Foundation awarded a scholarship for one UAE student to attend the MMSc program starting this past July at Harvard Medical School.

Upcoming Opportunities

The Center offers a broad range of educational opportunities for students, faculty, practitioners, and policy makers in pursuit of optimized health care delivery.

Opportunities for Practitioners and Policy Makers

UAE AND GLOBAL SCHOLARS PROGRAM
Funds summer courses at Harvard University that instruct students on how to optimize the last phase of health care delivery.

STRATEGY AND VALUE MEASUREMENT FOR GLOBAL HEALTH CARE DELIVERY
To be offered in Dubai in March 2017, this three-day intensive course is designed to educate senior clinical, financial, and management leaders on the three main components of value-based health care for global health care delivery:

• Measurement of outcomes at the medical condition level
• Measurement of costs at the medical condition level over complete episodes of care
• Innovation for health care delivery in emerging markets

Opportunities for Students

UAE STUDENT SUMMER INTERNSHIP PROGRAM
Students will participate in design, implementation, or analysis of a research project funded by the Center for four weeks in Dubai, beginning summer 2017. Qualifying participants may serve as co-authors on one or more resulting publications.

HARVARD MEDICAL SCHOOL STUDENT RESEARCH AWARD
Supports Harvard Medical School students (MD, PhD, and MMSc) working on research that optimizes health care delivery.

HARVARD GRADUATE STUDENT AWARD
Supports advanced graduate students from Harvard University working on a dissertation or thesis research that addresses health care delivery challenges in Dubai, the UAE, and the Center’s region.

Opportunities for Faculty

HARVARD FACULTY FUND
The Harvard Faculty Fund supports Harvard faculty interested in traveling to existing projects on which they are a co-investigator or meet with potential collaborators to assess the feasibility of new joint research endeavors. In addition, funds are available to support course development for faculty interested in offering courses through the HMS Center for Global Health Delivery–Dubai.

FACULTY-IN-RESIDENCE PROGRAM
Faculty-in-residence at the Center in Dubai will fully devote themselves to completing a research or writing project during a period of up to 12 months. Faculty-in-residence are self-funded.

For more information, visit ghd-dubai.hms.harvard.edu

MEET OUR CENTER INTERNS

ZAID MAMSER
Royal College of Surgeons in Ireland
United Arab Emirates

ARAL SURMELI
Acibadem University School of Medicine
Turkey

ASISH SUBEDI
B. P. Koirala Institute of Health Sciences
Nepal

VIJAYRAM MALLADI
Masachusetts General Hospital
India

ASMA AHMED
Aga Khan University Hospital
Pakistan

For more information, visit ghd-dubai.hms.harvard.edu
Fellow Spotlight

Why did you choose to pursue a research fellowship at the Center?
As a truly international hub, the Center offered me an opportunity to pursue my passion for global health research across numerous borders. It has also allowed me to develop relationships with my partners in India and Pakistan through unique cooperative grants.

What is your area of focus? What inspired you to pursue it?
I had a strong interest in global health even before I started medical school. When I fell in love with the surgical disciplines, I started thinking about how the two could overlap. Spending time in Haiti after the earthquake and traveling to remote hospitals in Angola were formative experiences, helping me understand that—just as in all health care—there must be equity in surgical care.

Tell us about your project. What do you hope it will accomplish?
Right now, we are developing a training for medical officers to deliver spinal anesthesia and measuring their ability to do so. This project brings a rigorous methodological approach to a low-resource environment that would benefit from innovative solutions for workforce expansion. We hope our study demonstrates non-inferiority and supports the idea that there are creative ways to safely provide care.

What has been the most valuable aspect of your fellowship experience so far?
The partners I work with in India, Pakistan, and elsewhere have been inspirational. They have been champions of surgical care and equity since before I knew how to say the words.

SAURABH SALUJA
Center Fellow, 2016–2017
Program in Global Surgery and Social Change, HMS; Weill Cornell Medicine, Department of Surgery, USA
Research Interests
Quality of surgical care, surgical system development
Area of Expertise
Global health, disaster response, and surgical system development

MEET OUR FELLOWS

Global Surgery

SARAH GREENBERG, MD
Center Fellow, 2014–2015
Area of Expertise: Strengthening of surgical education, the development of trauma systems, and the improvement of pediatric surgical care delivery in low-resource settings

SWAGOTO MUKHOPADIYAY, MD
Center Fellow, 2015–2016
Area of Expertise: Systems strengthening, innovation, education, cost-effectiveness, value, and outcomes-based research in global surgery

YIHAN LIN
Center Fellow, 2016–2017
Area of Expertise: Increasing surgical access in developing nations, building research capacity, and improving surgical education in low and middle-income countries

"Working with the Center has helped me understand the nature of collaboration, the complexity of health system strengthening, and the benefits of international work in ways I could not have imagined. My future aspirations are being shaped daily."

SAURABH SALUJA, CENTER FELLOW
Galvanizing scholars, practitioners, and policy makers for improved health care delivery.

The Center’s workshops and symposia bring together communities of scholars, practitioners, and policy makers to expand thinking on improving access to health care. Here, expertise is exchanged, connections are made, and blueprints for progress are disseminated to countries all over the world.

Already, we’ve seen these events yield lasting results. Many have led to academic proceedings and policy briefs that are driving local and national governments to take action on specific health care delivery topics. All have inspired great minds to build capacity for change.
Workshops and Symposia

Publications and Events

Thanks to the efforts of so many collaborators, the Center’s workshops and symposia have already moved the needle on health care delivery. The following events and publications lay the groundwork for progress, addressing gaps and encouraging dialogue at the local, regional, and global levels.

2014

- **The Lancet Commission on Global Surgery**
  - NOVEMBER 11–13, 2014
  - Contributor

- **Stemming the Tide of Drug-Resistant Tuberculosis: Best Practices from Global Fund to Fight AIDS, Tuberculosis, and Malaria Tuberculosis Grants in Eastern Europe and Central Asia**
  - DECEMBER 4–6, 2014
  - Published

2015

- **Post-Exposure Management of Multidrug-Resistant Tuberculosis Contacts: Evidence-Based Recommendations**
  - APRIL 12–13, 2015
  - Published

- **The Emerging Role of Municipalities in the Fight Against Tuberculosis**
  - APRIL 14, 2015
  - Published

- **Global Consultation on Best Practices in the Delivery of Preventive Therapy for Households Exposed to Drug-Resistant Tuberculosis**
  - APRIL 12–13, 2015
  - Published

- **Innovating Tuberculosis Care Delivery in High-Burden Settings**
  - APRIL 15, 2015
  - Published

2016

- **Innovations and Positive Disruptions in the Supply Chain for Second Line Drugs**
  - APRIL 18, 2015
  - Published

- **Delivering Health Globally: Examining the Challenges and Opportunities in the 21st Century**
  - OCTOBER 20, 2015

- **Towards Zero Tuberculosis Cities: Building Community-Based Health Care Delivery Models for the Twenty-First Century**
  - OCTOBER 20–21, 2015
  - Published

All Proceedings and Briefings available at ghd-dubai.hms.harvard.edu/papers-reports-summaries.
Workshops and Symposia

This map represents countries for which we have had representation at our events, meetings, and workshops.

- **Number of Major Events**: 14
- **Event Attendees**: 1,000+
- **Number of Countries Represented**: 73
Developing systems that share the fruits of modern medicine with the diverse communities where people live and work.

In our first two years of operation, the Harvard Medical School Center for Global Health Delivery–Dubai has taken important steps to create a space for scholars, practitioners, and policy makers dedicated to closing the health care delivery gap. Our work is the work of many hands. It has just begun. Creating a knowledge ecosystem that catalyzes innovative health care delivery solutions requires a number of important elements. First and foremost is a commitment to the goal of using knowledge to ensure that every person on this planet receives timely and correct treatment for preventable and treatable diseases. Second is the human and financial support that will make this a reality. Our mission is both intellectual and moral. We hope you will join us in making it happen.
Our Global Footprint

This map represents the worldwide reach of our collaborators.

**PROGRESS AND ASPIRATIONS**

### RESEARCH AND EDUCATION
- **Research Letters of Intent Received**: 204
- **Research and Education Projects to Be Funded and Begin in 2016–2017**: 25

### WORKSHOPS AND SYMPOSIA
- **Number of Workshops or Symposia**: 14
- **Event Attendees**: 1,000+

### SCHOLARS
- **Number of Scholars**: 15
- **Countries Represented**: 7

### IN TOTAL
- **Number of Countries Represented**: 99
Meet Our Team

SALMANA KESHAVJEE, MD, PhD, ScM
Executive Director, HMS Center for Global Health Delivery–Dubai
Associate Professor of Global Health and Social Medicine

JENNIFER S. PUCCETTI, MPP
Executive Director for the Harvard Medical School Department of Global Health and Social Medicine and the Harvard Medical School Center for Global Health Delivery–Dubai. As Executive Director, Ms. Puccetti is responsible for the administrative oversight of all Department and Center activities, and for fostering collaborative relationships across the school and beyond. She provides strategic leadership and management, ensuring that the vision is implemented, operations run smoothly, and information is communicated clearly among multiple internal and external stakeholders. Previously, Ms. Puccetti worked for Boston University in a variety of administrative positions. She worked with the faculty and staff at the School of Education to develop and administer new initiatives. In addition, Ms. Puccetti has nine years of experience with the Boston University/Chelsea Partnership, a joint educational initiative with the Chelsea Public Schools.

Dr. Keshavjee is also very involved in global policy discussions around the treatment of drug-resistant tuberculosis. He was a member (2005–2007) and Chair (2007–2010) of the World Health Organization/Stop TB Partnership’s Green Light Committee for MDR-TB Treatment, the co-author of an Institute of Medicine white paper on overcoming barriers to expanding treatment for MDR-TB, and an active consultant to a number of projects globally. Currently, he leads Harvard Medical School’s initiative for zero tuberculosis-related deaths, and is a founder of the global Zero TB Initiative. In addition to his role at the Center, Dr. Keshavjee is an Associate Professor of Global Health and Social Medicine at the Department of Global Health and Social Medicine at Harvard Medical School, an Associate Professor of Medicine in the Division of Global Health Equity at Brigham and Women’s Hospital, and an attending physician at Brigham and Women’s Hospital.

Jennifer Puccetti, MPP
Director, HMS Center for Global Health Delivery–Dubai
Associate Professor of Global Health and Social Medicine

Our sincere thanks to the Harvard University faculty who play a key role in building capacity in Dubai, the UAE, and the region.
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The Steering Committee serves as an advisory board to the leadership of the Harvard Medical School Center for Global Health Delivery–Dubai.

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