Extension for Community Healthcare Outcomes

Project ECHO®

Ellen Baker, MD, MPH

UT MD Anderson Cancer Center

UNM HEALTH SCIENCES CENTER

The University of Texas MD Anderson Cancer Center

Project ECHO®

No financial relationships to disclose

"In the U.S. and around the world, people are not getting access to the specialty care they need, when they need it, for complex and treatable conditions"

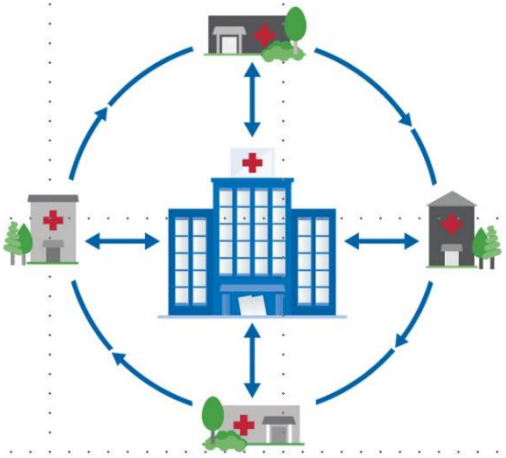
-Sanjeev Arora

Hepatitis C in New Mexico

- 121,356 mi^2
- Population - 2.08 million
- Estimated > 28,000 infected with HCV
- In 2004 less than 5% had been treated
  - 2,300 prisoners were HCV positive (~40% of those entering the corrections system), none were treated
- **No primary care physicians treating HCV as of 2004***

Project ECHO
Extension for Community Healthcare Outcomes

- In response to Hepatitis C crisis in New Mexico Dr. Arora developed Project ECHO
- Patients in rural areas unable to travel to University clinics
- Community providers not comfortable treating HCV
- Identified primary care providers from 16 rural clinics and 5 prisons in New Mexico



Started a telementoring program

*Goal to demonopolize knowledge

Steps

- Conduct regular teleECHO™ videoconferences with multidisciplinary team at UNM and providers in partnering clinics in rural areas
- Through regularly scheduled videoconferences, train physicians, physician assistants, nurse practitioners, nurses, pharmacists in under-resourced regions, in best practice HCV treatment
- Initiate case-based guided practice
- Collect data and monitor outcomes, assess cost and effectiveness of programs

Project ECHO – Hepatitis C

- Prospective study of 407 patients with HCV
- Compared patients treated at the University with patients treated at 21 rural clinics/prisons
- No difference in Hepatitis C cure rates (SVR) between the two groups
- No significant differences in serious adverse events between UNM and rural clinics
- Improved patient satisfaction and physician and provider self-efficacy

Arora, *et al*., *NEJM*, 364(23); 2011

Telemedicine vs. Telementoring

Telemedicine
Provider to Patient Communication

Telehealth/mentoring
Provider to Provider Mentoring

Goals of Project ECHO

- Demonopolize knowledge- Share knowledge between specialists at academic medical centers and providers in low resource regions that lack specialty care.
- Capacity Building - Develop local capacity to safely and effectively treat complex conditions in regions without specialty expertise by connecting specialists with local providers.
- Reduce disparities - Develop a model to treat complex diseases in rural and underserved locations.

Methods
The Four Pillars of ECHO

- **Use Technology** to leverage scarce resources
- **Share "best practices"** to reduce disparities
- **Case based learning** to master complexity
- **Monitor outcomes**

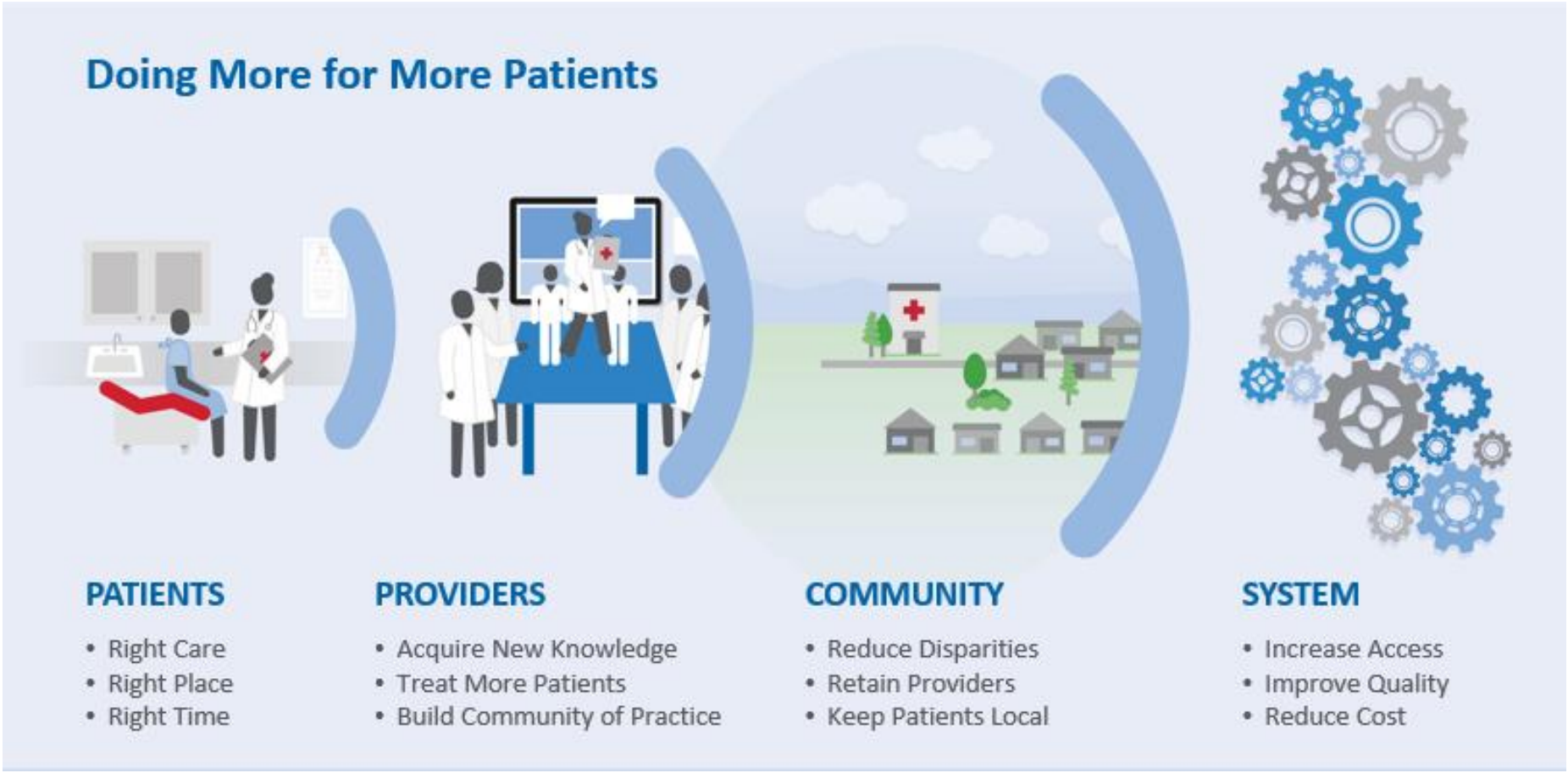
Arora S, Geppert CM, Kalishman S, et al: Acad Med. 2007 Feb;82(2): 154-60.

Project ECHO Format

- Weekly/monthly/regular videoconferences
- Community providers present cases (hx/pex, lab, treatment, challenges)
- Feedback and guidance provided by the specialists
- Community providers and specialists work together to provide quality care
- Short didactics to complement case presentations

Telementoring not Telemedicine

Summary of benefits of Project ECHO



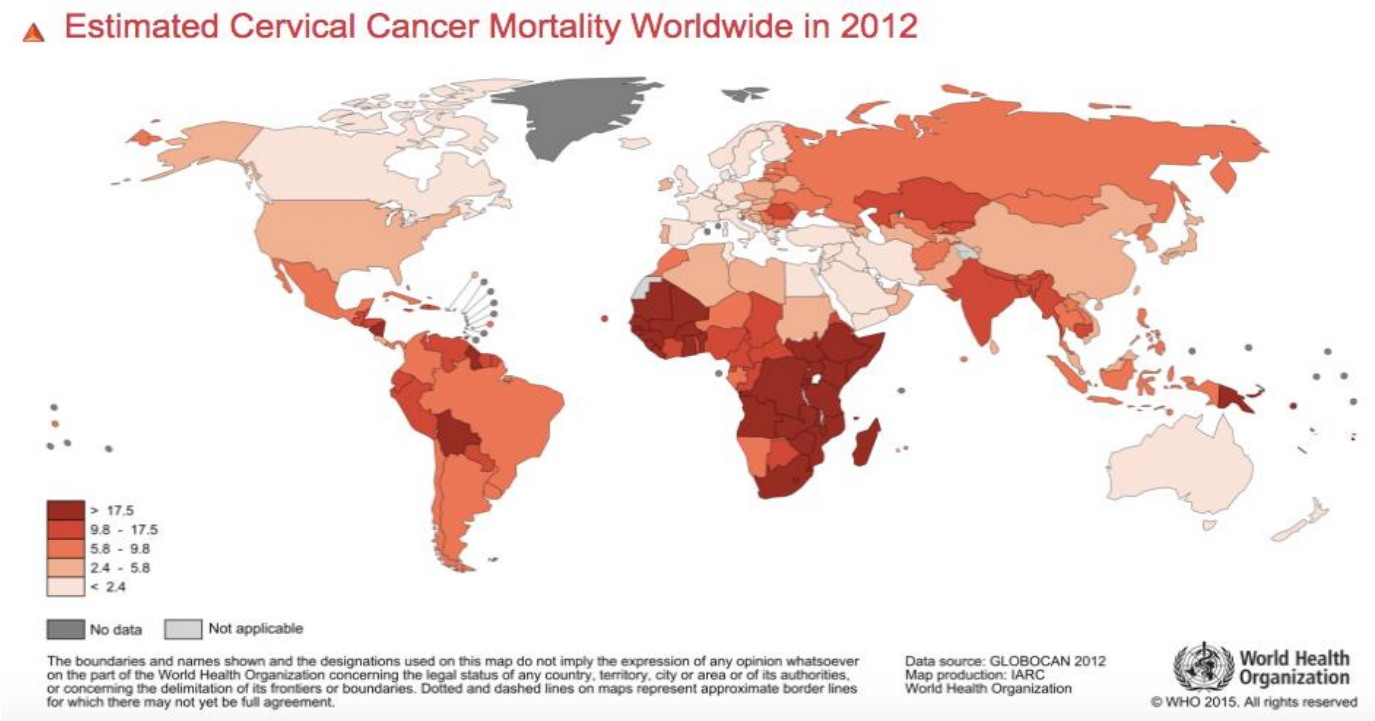
Expanding Project ECHO

Dr. Sanjeev Arora
U. of New Mexico

Dr. Ernest Hawk
OVP CP&PS

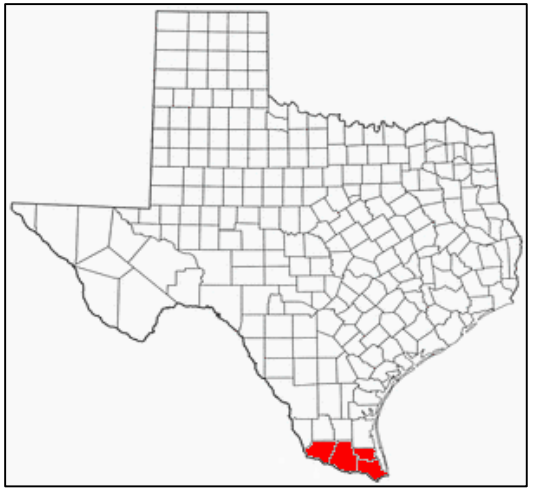
Dr. Kathleen Schmeler
Gyn Onc

Inequity of Cervical Cancer



85% of cervical cancer cases occur in the developing world

Texas-Mexico Border



Rio Grande Valley:

- Population of ~1.3 million
- 90% of population is Hispanic
- 40% below the poverty line
- <10% of eligible women receiving cervical cancer screening
- Limited number of providers
- Cervical cancer rates are 30% higher compared with non-border counties in Texas

Cervical Cancer Prevention South Texas

- **Goal:** Partnerships to increase local capacity and improve access to specialty consultations in management of cervical dysplasia
- **Leaders:** Kathleen Schmeler, MD Anderson and University of Texas faculty in gynecology and gynecologic oncology
- **Local Partners:** FQHCs along the Texas-Mexico border, and other clinics in underserved regions
- **International Partners:** Brazil, El Salvador, Mexico

Tobacco Treatment

- **Goal:** Partnerships with local mental health clinics in Texas to provide tobacco treatment services for patients with mental illness. Now opened to other providers

Cancer Survivorship in Texas

- **Goal:** Partnerships with Family Medicine Residency Programs to teach cancer survivorship to residents

- **Goal:** Train community health workers to provide support for cancer survivors, teaching and encouraging physical activity and good diet.

Palliative Care - Africa

- **Goal:** Partnerships to improve delivery of palliative care services in Africa
- **Leaders:** MD Anderson palliative care team
- **Partners in:** Kenya, Nigeria, Ghana, Zambia, South Africa, Brazil

Early Melanoma Diagnosis

- **Goal:** Partnerships to increase diagnostic accuracy and provider self-efficacy through clinical skill development using dermoscopy.
- **Leaders:** MD Anderson dermatology team
- **Partners:** 7 dermatology residency programs in Texas and Missouri

Mozambique: Cervical, Breast, Head &Neck and Hematologic Cancers

- **Goal:** Partnership with Maputo Central Hospital and MOH, Mozambique for cancer management.
- **Brazil Partners:** Hospital Israelita Albert Einstein, Hospital de Cancer de Barretos, A.C. Camargo Cancer Center
- **Mozambique Partners:** Hospital Central de Maputo, Mavalane Hospital
- **Clinics:** Multidisciplinary clinics conducted in Portuguese, once a month. Training and exchange of personnel.
- **Research:** Cervical cancer screening using primary HPV testing

Management of Gynecologic Cancers in Latin America

- **Goal:** Partnerships to provide guidance in the management of gynecologic cancers.
- ECHO serves as a foundation to increase communication and promote collaboration among the partners.
- **Leaders:** MD Anderson and Universidad de la Republica- Montevideo
- **Partners:** Physicians in Bolivia, Guatemala, Chile, Colombia, Ecuador, El Salvador, Paraguay, Peru, Uruguay, Mexico, Argentina
- **Clinics:** Multidisciplinary clinics conducted monthly in Spanish, since September, 2015

IGCS Gynecologic Oncology Fellowship Program

- ECHO is part of a larger, comprehensive program that includes trainee exchanges, country visits, and a structured curriculum
- 5 Pilot sites identified: Vietnam, Kenya, Ethiopia, Mozambique, The Caribbean
- Other IGCS programs using ECHO in Belarus, Kazakhstan

IGCS

DaNang Oncology Hospital

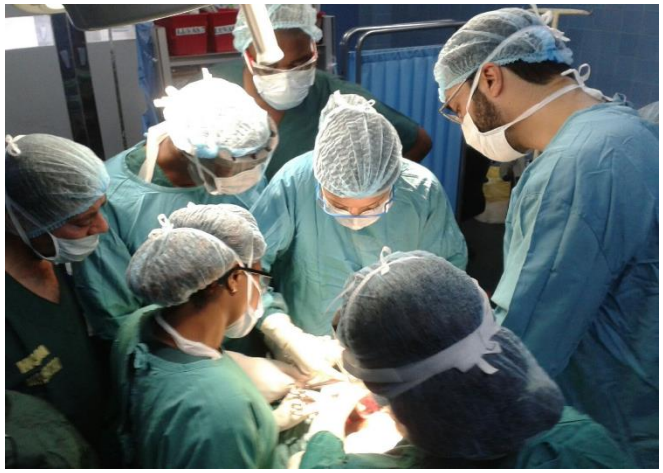
IGCS

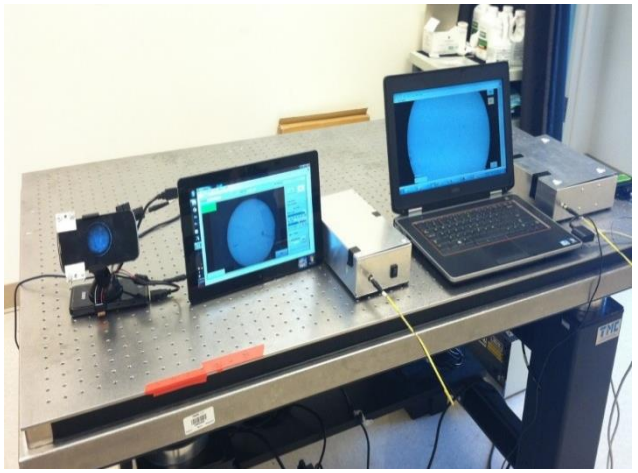
Hospital Central de Maputo

Moi University, Kenya

ECHO is Part of a Larger Strategy

- Provider capacity building including hands-on training
- Development of affordable technologies for cancer prevention, diagnosis and treatment
- Health system strengthening through partnerships





Provider Capacity Building

- Hands-on Training:
- Surgical/medical onc
- Technical courses
  - LEEP and colposcopy
- Trainee Exchanges:
- For example: Brazil and Mozambique
- IGCS Global Curriculum:
- 2-year training program in Gynecologic Oncology
- Twinning approach
- Five pilot sites for 2017-18
  - - Vietnam, Ethiopia, Kenya, Mozambique, Caribbean

IGCS INTERNATIONAL GYNECOLOGIC CANCER SOCIETY
Uniting the Globe in the Fight Against Gynecologic Cancer
www.igcs.org

Health System Strengthening

- National Cancer Control Planning
- Education of the public and government officials
- Partnering with policy makers, MOH, universities, NCI, international organizations, NGOs

Isaura Nyusi
First Lady of Mozambique

NCI- Center for Global Health

- Partnerships and knowledge-sharing among cancer control and research professionals to support improvements in strategic cancer control including incorporation of evidence into national cancer control plans
- Focus may vary depending on country/region
- Generally includes representatives from several countries in the region

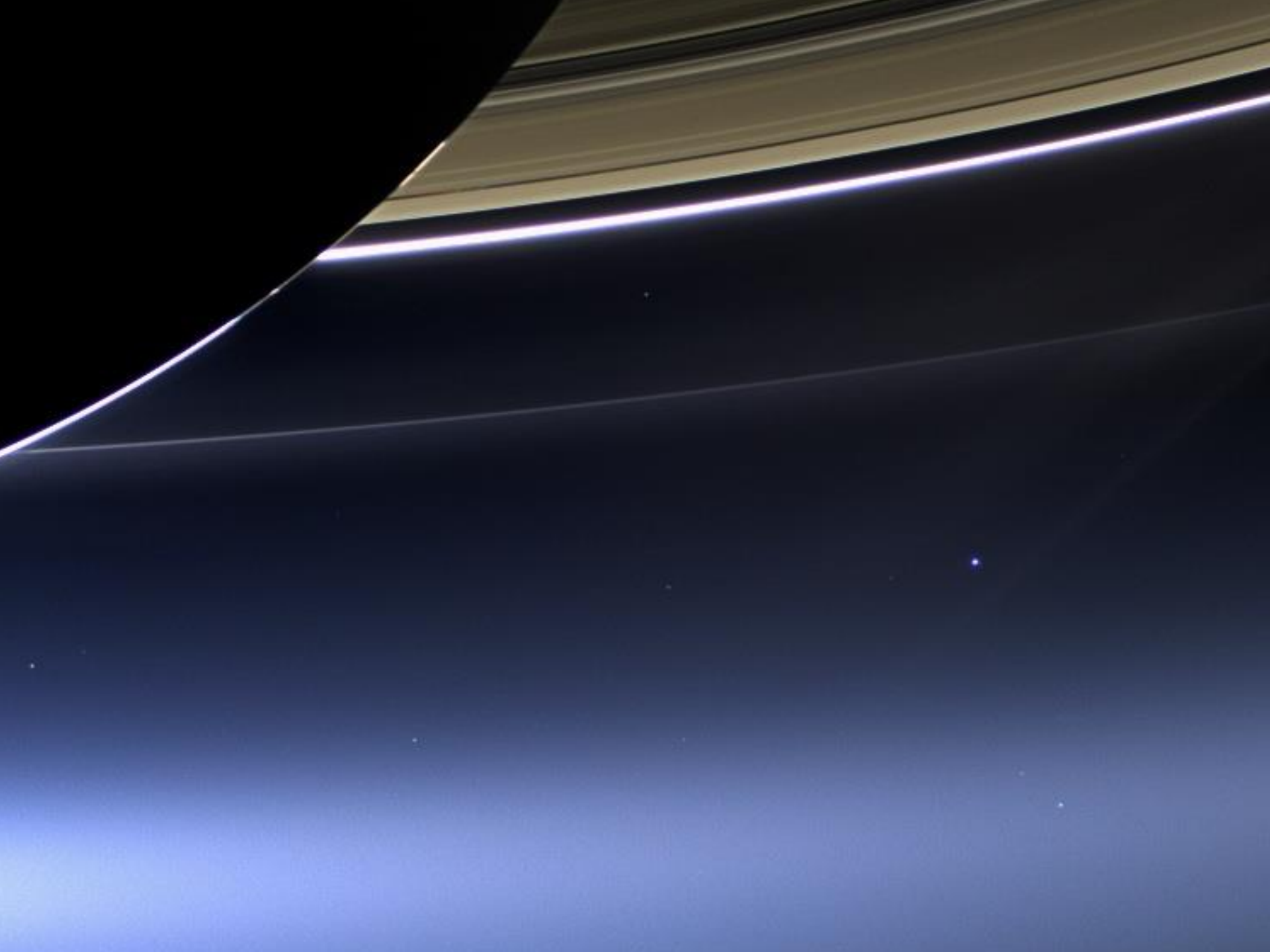
Project ECHO Globally

- Expanded across diseases and specialties, across rural and urban areas, to different types of delivery services
- 10 Superhubs – Centers that train other institutions to use the ECHO model. MD Anderson is a training center focused on oncology.
- ~170 hubs for more than 65 diseases in 23 countries

Moving Knowledge, not Patients

* This program is under development and some of the locations might change in the future

** This program is currently under early discussions with Sister Institutions in Latin America



Thank you!

Ellen Baker, MD MPH Program Director
Ebaker1@mdanderson.org

Melissa S. Lopez, MS Program Manager
Mslopez1@mdanderson.org

Kathleen Schmeler, MD
kschmele@mdanderson.org

The University of Texas
MD Anderson Cancer Center
Project ECHO®