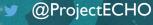


Sanjeev Arora, MD, MACP, FACG Director ECHO Institute TM University of New Mexico





f UNMProjectECHO

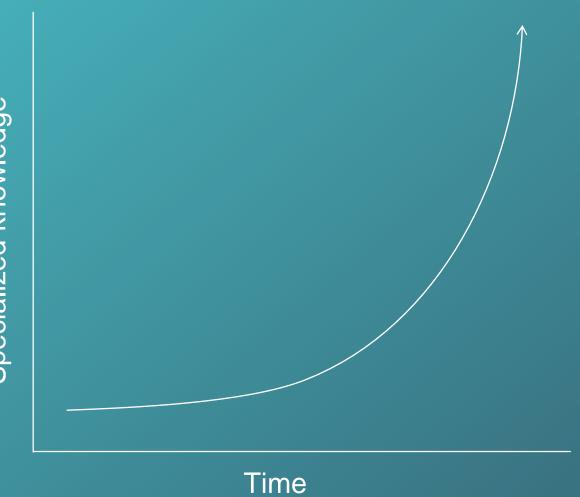
Project ECHO reduces disparities in health by moving knowledge instead of people.

Project ECHO
democratizes knowledge
to get best practices in care
to underserved people
all over the world

Our goal: to improve the lives of 1 billion people by 2025



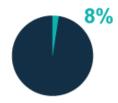






This is a national problem

Rural communities losing care

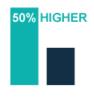


Less than 8% of all physicians and surgeons are practicing in rural settings.

Minorities hit hard



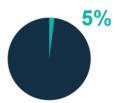
Black women in the U.S. die of breast cancer at a rate 40% higher than non-Hispanic white women.



Risk of drug overdose, unintentional injury, or death is 50% higher in rural areas.



Black men have the highest rates of cancer (587.7 per 100,000 men, between 2007-2011).



At least 85 rural hospitals — about 5 percent of the country's total — have closed since 2010.



Approximately 30% of total direct medical expenditures for Blacks, Hispanics, and Asians are excess costs due to health inequities.

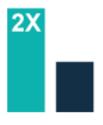
This is a global challenge



Approximately 70% of worldwide cancer deaths occur in low- and middle-income countries.



Low-income countries have 10x fewer physicians than high-income countries.



Children from the poorest 20% of households are nearly twice as likely as children in the richest 20% to die of treatable diseases before their fifth birthday.



WHO estimates that by 2020, NCDs will account for 80% of the global burden of disease, causing seven out of every ten deaths in developing countries, about half of them premature deaths under the age of 70.

ECHO moves knowledge, not people



ECHO is all teach, all learn



Interactive



Co-management of cases



Peer-to-peer learning



Collaborative problem solving





Traditional telemedicine



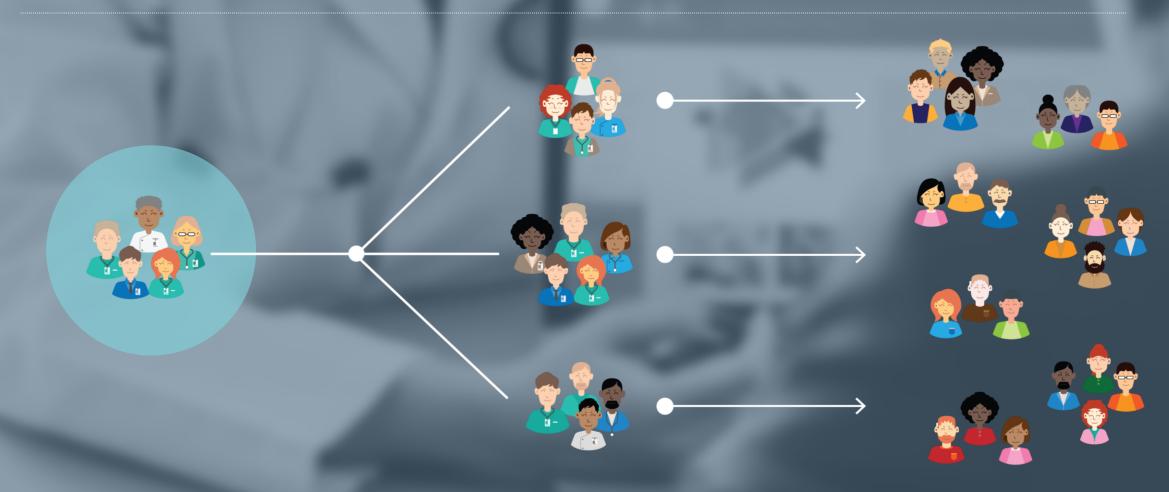
Specialist manages patient remotely



The ECHO model builds capacity

Creates connection between specialist teams of doctors and primary care

To benefit many patients in many communities





Initially focused on one disease: Hepatitis C

In 2004:



28,000 infected with HCV

in New Mexico



Zero treatment of prison population

2,300 prisoners were HCV positive, representing 40% entering corrections system



wait list for Dr. Arora = 8 months

What we learned: ECHO works

- Patient cure rates equal to those of UNM specialists
- Patients stay in communities treated by people they know and trust
- Many more people getting treatment



Patient Viral Response							
Outcome	ЕСНО	UNMH	P-value				
	n = 261	n = 146					
Minority	68%	49%	p < 0.01				
SVR* (Cure) Genotype 1	50%	46%	ns				
SVR* (Cure) Genotype 2/3	70%	71%	ns				

*SVR = sustained viral response Arora S. Thornton K., Murate G., et al. N Eng J Med. 2011; 364(23): 2199-207

Clinicians felt connected and happier

- Improved clinician self-efficacy
- Diminished professional isolation
- Enhanced job satisfaction
- Increased collaboration

Community Clinicians N=25	Before MEAN (SD)	After MEAN (SD)	Paired Difference MEAN (SD) (p-value)	Effect Size for the change
Ability to treat HCV patients and manage side effects.	2.0 (1.1)	5.2 (0.8)	3.2 (1.2) (<0.0001)	2.6
Serve as local consultant within my clinic and in my area for HCV questions and issues.	2.4 (1.1)	5.6 (0.9)	3.3 (1.2) (<0.0001)	2.8
Overall Competence (average of 9 items)	2.8* (0.9)	5.5* (0.6)	2.7 (0.9) (<0.0001)	2.9

*SVR = sustained viral response Arora S. Thornton K., Murate G., et al. N Eng J Med. 2011; 364(23): 2199-207

Knowledge is democratized

Expert

Team

Primary Care Doctor Nurse Physician Assistant Community Health Worker

ECHO now reaching a breadth of areas

- Antimicrobial Stewardship
- Autism
- Behavioral Health
- Bone Health
- Cancer
- Cardiology
- Chronic Lung Disease
- Chronic Pain
- Crisis Intervention
- Diabetes and Endocrinology
- Education
- Geriatrics
- Good Health and Wellness in Indian Country
- Hepatitis

- High-Risk Pregnancy
- HIV/AIDS
- Infectious Disease
- Integrated Addictions & Psychiatry
- Laboratory Medicine
- LGBT Health
- Opioid Use Disorder
- Palliative Care
- Pediatrics
- Prison Peer Education
- Quality Improvement
- Rheumatology
- Sexually Transmitted Diseases
- Trauma-Informed Care
- Tuberculosis







Opportunity to improve cancer care



Prevention

- Smoking cessation
- HPV vaccination
- Hepatitis B vaccination
- Sun safety & skin cancer prevention
- Community cancer intervention & prevention



Screening

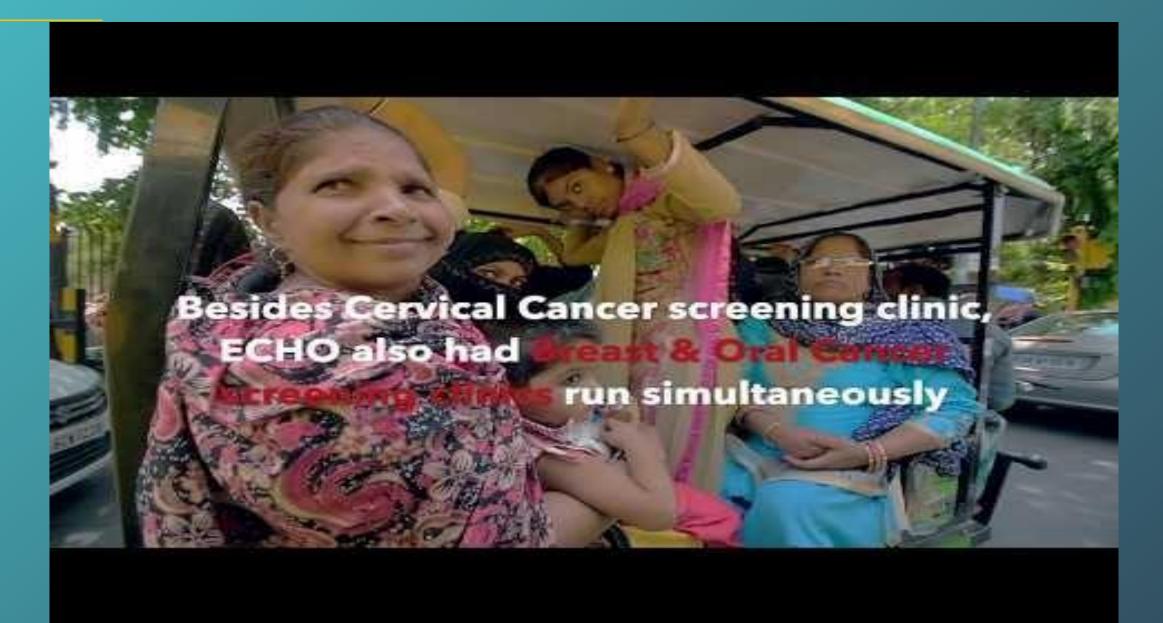
- Dermatology
- Breast cancer
- Cervical & colorectal cancer
- Oral & lung cancer
- Pathology best practices
- Training peer and community health advocates



Treatment

- Hepatitis B and C
- Pain & toxicity management
- Cancer care navigation
- Precision medicine & cancer genomics
- Palliative care
- Survivorship
- Clinical trial enrollment

Cancer ECHO in India





Microsoft Power BI

NCI Designated Cancer Centers

- Cancer Center Support Grants for NCI-designated Cancer Centers (P30) mandate:
 - An NCI-designated Cancer Center is a local, regional, and national resource, directly serving its
 community and, through the knowledge it creates, the nation as a whole.
 - Comprehensive Cancer Centers [...] integrate cancer training and education of biomedical researchers and **community health care professionals** into **programmatic efforts** to enhance the scientific mission and potential of the Center.
 - Cancer Centers occupy a unique role in their communities. [...] To decrease cancer incidence and
 mortality among populations within its catchment area, including minority and underserved
 populations, Centers also establish partnerships with other healthcare delivery systems and state
 and community agencies for dissemination of evidence-based findings.
- NCI will consider requests for supplements for the following types of activities:
 - Implementation and utilization of telehealth or similar systems and capacity to support and sustain cancer control research programs in rural clinics (including primary care clinics) and cancer centers

UT MD Anderson
Cancer Center
ECHO Superhub

12 ECHO Programs



Current MD Anderson ECHO Programs

- Tobacco treatment (US)
- Early melanoma diagnosis (US)
- Cervical cancer prevention (US)
- Cervical cancer prevention (Cameroon)
- Gynecologic cancers (Latin America)
- Cancer Treatment (4 programs, Mozambique)
- Radiation Oncology (Zambia)
- Survivorship (2 programs, US)
- Pharmacy (3 countries in Africa)
- Palliative Care (5 countries in Africa)







ICGS Fellowship

- A two-year Gynecologic Oncology training and education program to train gynecologists in gynecologic oncology in countries with no formal training program
- Partner with international mentors
- Web-based curriculum, regular assessments
- International faculty provide in-country training
- Fellows work in mentor's country for 2-3 months
- Monthly tumor board (Project ECHO)
- Final exam with certificate





Project ECHO and ICGS

IGCS Global Fellowship Sites:

- Vietnam (Mayo Clinic, FL)
- Ethiopia (U Mich/U Minn)
- Kenya (Toronto/U Mich)
- Mozambique (MDA/Brazil)
- UWI Jamaica (N. Ireland)
- Bahamas (U Miami)
- Liberia (Mt. Sinai, NYC)
- Zambia (UNC)
- Nepal (India)
- Fiji (Australia)
- Uganda
- Belarus
- Kazakhstan
- Latin America





University of New Mexico Cancer Center ECHO

FOSTER: Facilitating enrollment Of community cancer patientS on Therapeutic clinical trials using project ECHO Resources

Ursa Brown-Glaberman, MD (PI)
Assistant Professor



UNM MU-NCORP Site

• The New Mexico Cancer Care Alliance (NMCCA) is a statewide cancer clinical trials research network based at the UNMCCC. All practicing community-based oncologists in Albuquerque and most community-based oncologists in the state of New Mexico are NMCCA members.

UNMCCC Clinical Trial Racial/Ethnic Actual Accrual 2017

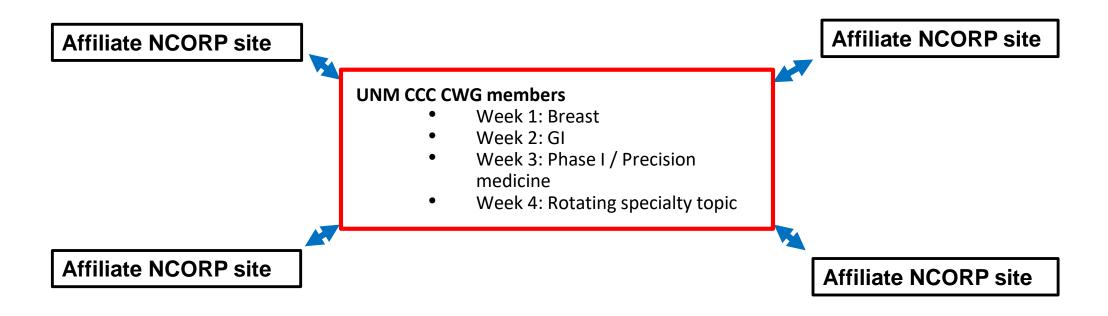
Patient Category (percent)	Interventional/ Therapeutic Accruals	Intervention Non-Therapeutic Accruals	Epidemiologic Observational and Outcome Accruals	Total Accrual
Female persons	64.0%	72.9%	60.5%	67.60%
RACES				
White persons	83.1%	85.1%	89.6%	84.8%
Black or African American persons	0.90%	2.2%	0%	1.5%
American Indian and Alaska Native persons	8.5%	7.8%	7.2%	7.7%
Asian persons	1.6%	1.1%	0.4%	0.9%
ETHNICITIES*				
Persons of Hispanic or Latino origin	28.6%	27.2%	61.1%	49.0%
White persons, not of Hispanic/Latino origin	68.5%	71.5%	37.9%	51.0 %



UNMCCC Clinical Sites (Albuquerque, Las Cruces, Silver City) and NMCCA Sub-Affiliate Sites (shown in Yellow). NMCCA Developing Sites in Green.



FOSTER: Overcoming barriers to community clinical trial enrollment



<u>Hub</u>: UNMCCC CWG leaders + CWG research nurse + regulatory coordinator + nurse navigator

Spokes: A representative from each affiliate site (research RN, midlevel or medical oncologist)

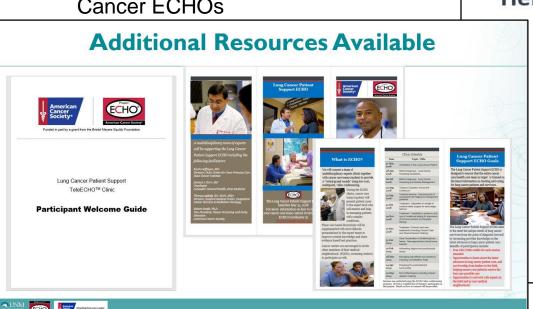


FOSTER

- Primary Objective: Demonstrate that using the ECHO® model to personalize communication between the UNMCCC CWGs and NMCCA affiliate sites will lead to an increase in the number of community oncology patients enrolled on clinical trials.
- **Primary Endpoint**: Number of patients at the affiliate sites of interest enrolled on:
 - 1) UNM CCC NCORP clinical trials
 - 2) UNM CCC therapeutic clinical trials
 - Comparisons will be made between historic enrollment numbers (6 months prior to baseline), enrollment numbers after first 6 months and enrollment numbers after second 6 months.

American Cancer Society ECHO

- Lung Cancer Patient Support ECHO
- Smoke-Free Public Housing ECHO
- ECHO Programs in design:
 - HPV Vaccination & Screening, CHW Training, Multiple Myeloma, Bone Health in Patients with Breast and Prostate Cancer, and Colorectal Cancer ECHOs









Lung Cancer Patient Support ECHO Clinic: Helping You Provide The Best Care For Your Patients





Kimberley Hospital Complex ECHO

- Lung Cancer & Mesothelioma ECHO serving the Norther Cape of South Africa
 - Addressing the entire Continuum of Care: Prevention, Screening, Diagnosis, Treatment, Survivorship and End of Life Care







ECHO Workshop

- What expertise does your organization have?
- What are the unmet needs of your community?
- What skills will your spokes be able to do, and do better, as regular attendees of this ECHO?
- How do you evaluate impact?



Build Capacity in Your Organization with ECHO

- What is the topic you would like to tackle with ECHO?
- What kind of expertise would you put on your ECHO hub team?
- Who are the community participants or learners/"spokes" for this envisioned ECHO?
- What do you hope your community participants will be able to DO –
 or DO BETTER after one year of participating in your ECHO on a
 regular basis?
- How will you assess impact?



Cancer ECHO: Additional Resources

Cancer ECHO Webpage: echo.unm.edu/initiatives/cancer-echo/

Join our Cancer Collaborative: Connection Information

Learn More About Project ECHO

Attend Introduction: Join us for a 90 minute <u>ECHO Introduction</u> videoconference to learn more about the ECHO model (held monthly).

Become an ECHO Partner: Learn how to <u>Start an ECHO</u> and attend <u>ECHO</u> <u>Immersion</u> (a free, three day on-site training at the ECHO Institute in Albuquerque, New Mexico, U.S.A.)

Contact us at cancerECHO@salud.unm.edu and learn more about our partnership with the Bristol-Myers Squibb Foundation and their support of this initiative.

ECHO Institute and UNM Cancer Center ECHO:

cancerecho@salud.unm.edu

MD Anderson ECHO Superhub:

ECHOinfo@mdanderson.org

Join Us

Be part of the movement to improve 1 billion lives

Thanks to our supporters





























The ECHO Institute Team

