

Project ECHO®

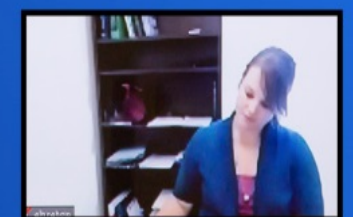
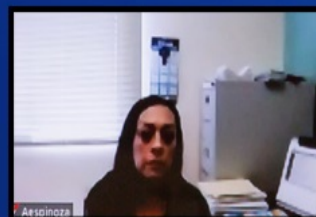
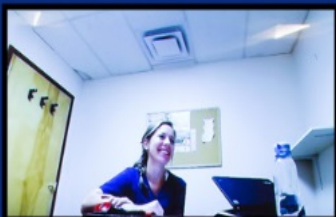
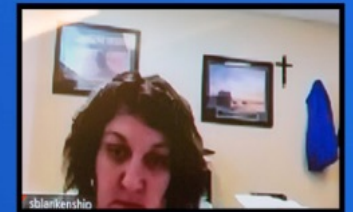
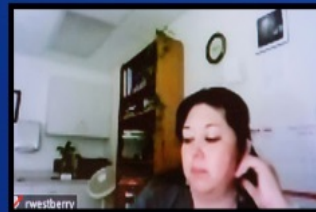
The role of ECHO in expanding access to medication treatment for opioid use disorder

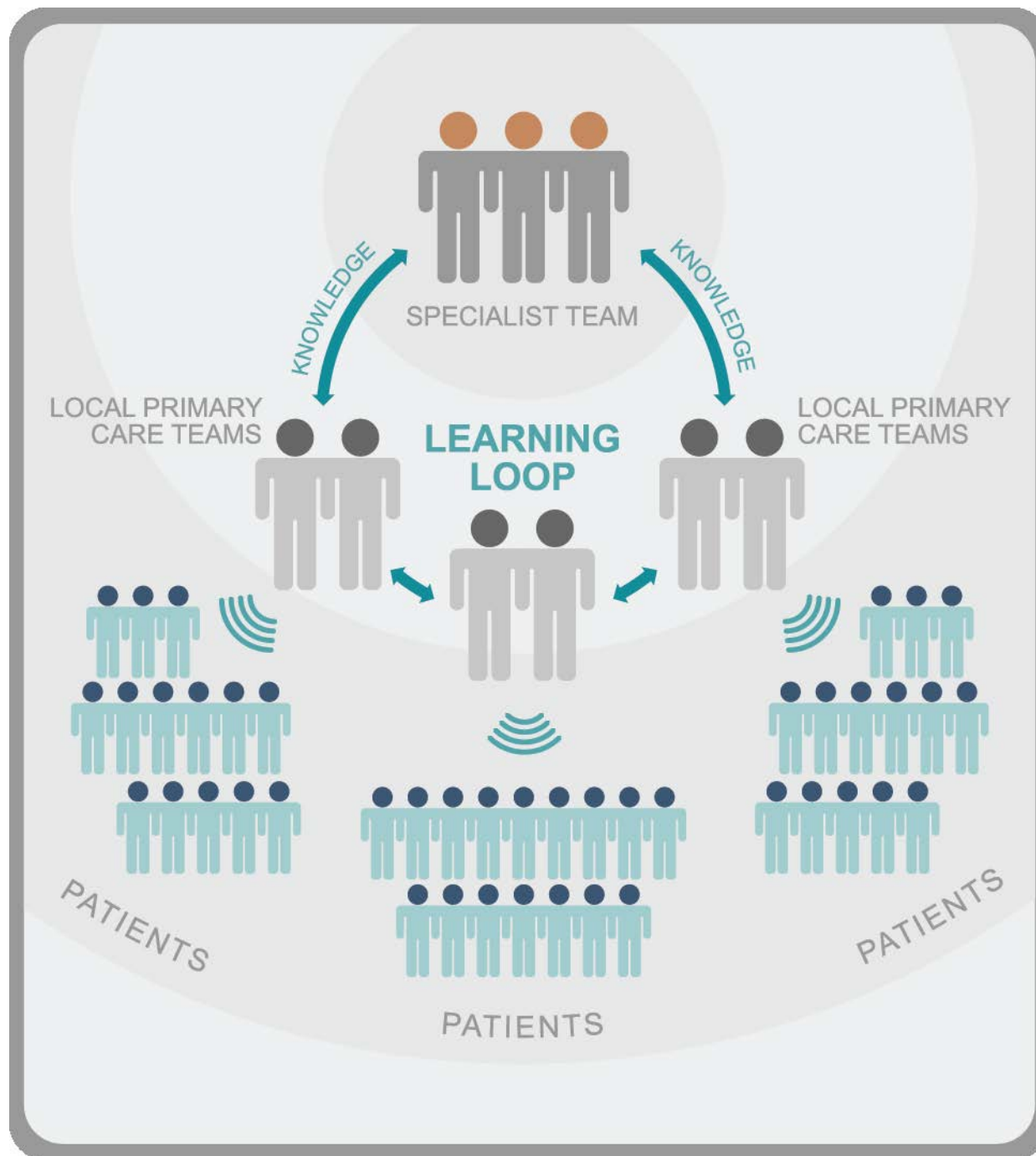
October 28, 2016

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University of New Mexico Health Sciences Center







Methods

- **Use Technology** to leverage scarce resources
- **Sharing “best practices”** to reduce disparities
- **Case based learning** to master complexity
- **Web-based database to monitor outcomes**

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

ORIGINAL ARTICLE

Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers

Sanjeev Arora, M.D., Karla Thornton, M.D., Glen Murata, M.D.,
Paulina Deming, Pharm.D., Summers Kalishman, Ph.D., Denise Dion, Ph.D.,
Brooke Parish, M.D., Thomas Burke, B.S., Wesley Pak, M.B.A.,
Jeffrey Dunkelberg, M.D., Martin Kistin, M.D., John Brown, M.A.,
Steven Jenkuskus, M.D., Miriam Komaromy, M.D., and Clifford Qualls, Ph.D.

ABSTRACT

BACKGROUND

The Extension for Community Healthcare Outcomes (ECHO) model was developed to improve access to care for underserved populations with complex health problems such as hepatitis C virus (HCV) infection. With the use of video-conferencing technology, the ECHO program trains primary care providers to treat complex diseases.

METHODS

We conducted a prospective cohort study comparing treatment for HCV infection at the University of New Mexico (UNM) HCV clinic with treatment by primary care clinicians at 21 ECHO sites in rural areas and prisons in New Mexico. A total of 407 patients with chronic HCV infection who had received no previous treatment for the infection were enrolled. The primary end point was a sustained virologic response.

RESULTS

A total of 57.5% of the patients treated at the UNM HCV clinic (84 of 146 patients) and 58.2% of those treated at ECHO sites (152 of 261 patients) had a sustained viral response (difference in rates between sites, 0.7 percentage points; 95% confidence interval, -9.2 to 10.7; $P=0.89$). Among patients with HCV genotype 1 infection, the rate of sustained viral response was 45.8% (38 of 83 patients) at the UNM HCV clinic and 49.7% (73 of 147 patients) at ECHO sites ($P=0.57$). Serious adverse events occurred in 13.7% of the patients at the UNM HCV clinic and in 6.9% of the patients at ECHO sites.

CONCLUSIONS

The results of this study show that the ECHO model is an effective way to treat HCV infection in underserved communities. Implementation of this model would allow other states and nations to treat a greater number of patients infected with HCV than they are currently able to treat. (Funded by the Agency for Healthcare Research and Quality and others.)

From the Department of Internal Medicine (S.A., K.T., G.M., P.D., S.K., D.D., B.P., T.B., W.P., M. Kistin, J.B., M. Komaromy) and the Clinical and Translational Science Center (C.Q.), University of New Mexico; and Presbyterian Healthcare Services, Adult and Geriatric Behavioral Health Clinic (S.J.) — both in Albuquerque; and the Department of Internal Medicine, University of Iowa, Iowa City (J.D.). Address reprint requests to Dr. Arora at Project ECHO, 1 University of New Mexico, MSC07-4245, Albuquerque, NM 87131, or at sarora@salud.unm.edu.

This article (10.1056/NEJMoa1009370) was published on June 1, 2011, at NEJM.org.

N Engl J Med 2011;364:2199-207.
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Treatment Outcomes

Outcome	ECHO	UNMH	P-value
	N=261	N=146	
SVR* (Cure) Genotype 1	50%	46%	NS
SVR* (Cure) Genotype 2/3	70%	71%	NS
Minority	68%	49%	P<0.01

*SVR=sustained viral response

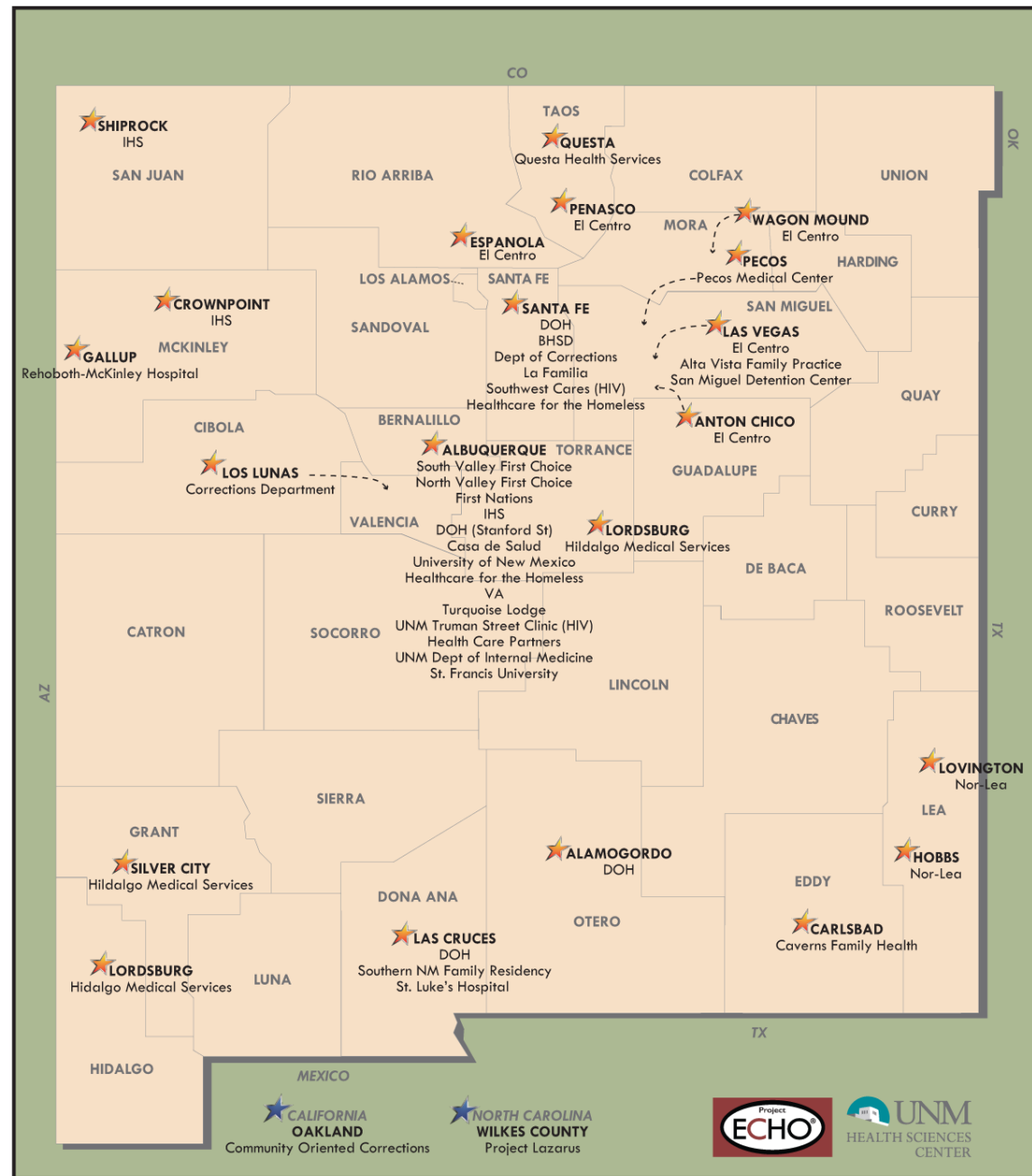
NEJM : 364: 23, June 9-2011, Arora S, Thornton K, Murata G

Successful Expansion into Multiple Diseases

Mon	Tue	Wed	Thurs	Fri
<u>Hepatitis C</u> <ul style="list-style-type: none"> • Arora • Thornton 	<u>Namibia HIV</u> <ul style="list-style-type: none"> • Struminger 	<u>IHS Navajo HIV</u> <ul style="list-style-type: none"> • Iandiorio 	<u>Hepatitis C in Prisons</u> <ul style="list-style-type: none"> • Thornton 	<u>Nurse Practitioners</u> <ul style="list-style-type: none"> • Van Roper
<u>Rheumatology</u> <ul style="list-style-type: none"> • Bankhurst 	<u>Partners in Good Health and Wellness</u> <ul style="list-style-type: none"> • Struminger 	<u>Endocrinology & Diabetes</u> <ul style="list-style-type: none"> • Bouchonville 	<u>Chronic Pain and Headache</u> <ul style="list-style-type: none"> • Shelley 	<u>Integrated Addictions and Psychiatry</u> <ul style="list-style-type: none"> • Komaromy
<u>HIV</u> <ul style="list-style-type: none"> • Iandiorio 	<u>Bone Health</u> <ul style="list-style-type: none"> • Liewicki 	<u>Crisis Intervention for Community Policing Agencies</u> <ul style="list-style-type: none"> • Duhigg 	<u>Improving Clinical Flow</u> <ul style="list-style-type: none"> • IHI • Clewett 	<u>Tuberculosis</u> <ul style="list-style-type: none"> • Struminger
<u>Complex Care</u> <ul style="list-style-type: none"> • Komaromy 	<u>Prison Peer Educator Training</u> <ul style="list-style-type: none"> • Thornton 	<u>Epilepsy</u> <ul style="list-style-type: none"> • Immerman 		

ECHO for Behavioral Health and Substance Use Disorders

Integrated Addictions & Psychiatry teleECHO clinic



Integrated Addictions and Psychiatry teleECHO clinic

- Operating in NM weekly for 11 years
- Average 147 participants per year
- Opioids > Alcohol > Cannabis

Impact of case-based learning

- For those who presented a case:
 - Value of input received 4.8/5
 - 73% say input changed management plan
- Learning from cases presented by others:
 - 82% learned something new
 - 92% said it would change their care of their own patients

Focus on Medication Treatment for opioid use disorder

- Which medications are approved for opioid use disorder?
 - Methadone—full activator of brain opioid receptor; only available through federal OTP clinic
 - Buprenorphine—partial activator of brain opioid receptor, and very low overdose risk
 - Injectable naltrexone—opioid receptor blocker—lacking long term data, but appears to decrease opioid use; may be less acceptable to patients; no overdose risk
- Why is it important to increase access to these medications?

Impact of medication treatment of opioid use disorder

(buprenorphine and methadone)

- Life-prolonging
- Reduce overdose death
- Reduce infection with HIV, hep C
- Reduce crime
- Reduce drug dealing

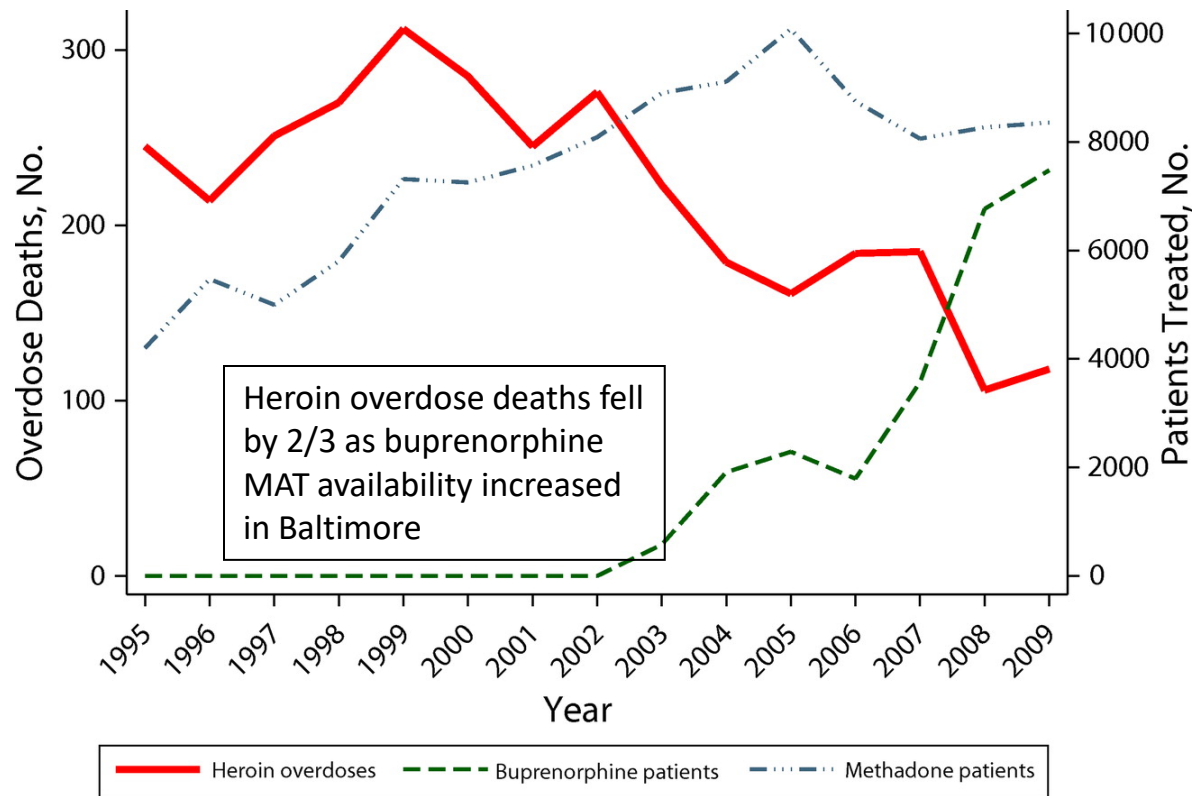
The WHO lists buprenorphine and methadone among the 100 essential medications that must be available worldwide

Trial of buprenorphine

- 40 pts w/Heroin use disorder
- Buprenorphine 16 mg/day vs taper + placebo
- All received counseling, groups
- Followed for 1 year

	Buprenor-phine	Placebo
Retained at 1 yr	70%	0
% died	0	20%

Kakko et al, Lancet 2003



Schwartz, AJPH, 2012

Training in use of buprenorphine (MAT) for opioid use disorder

- In 2006 only 36 physicians on bup waiver list in NM
- Since then ECHO has trained >500 physicians
- This has correlated with a change in NM's status
 - Increase in bup-trained physicians per capita (13th to 4th in US)
 - Increase in bup-trained physicians in underserved areas

Cumulative number of buprenorphine-waivered physicians per million population in traditionally underserved zip codes in NM versus US

Currently there are 1582 Zip Codes in the US with the following characteristics:

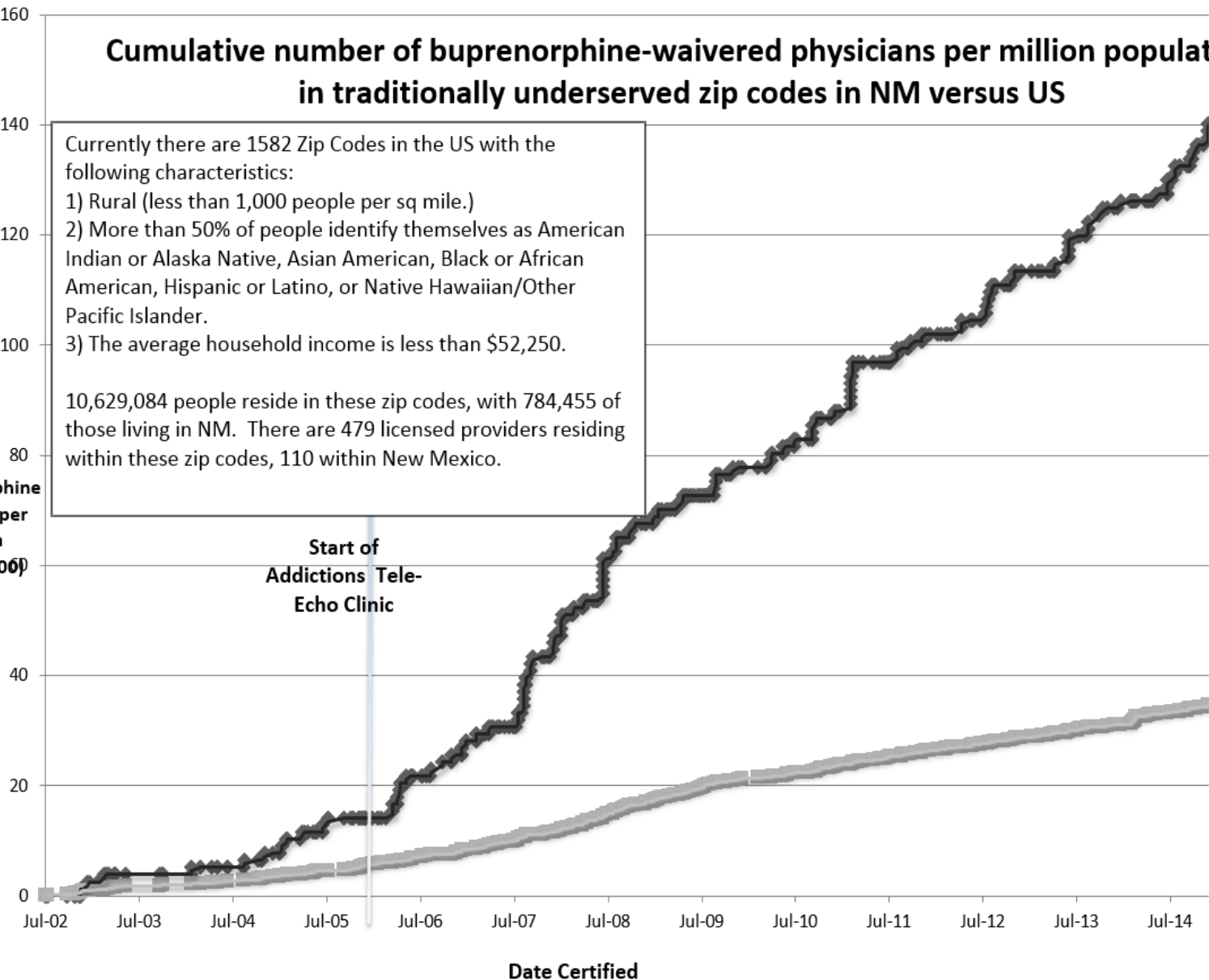
- 1) Rural (less than 1,000 people per sq mile.)
- 2) More than 50% of people identify themselves as American Indian or Alaska Native, Asian American, Black or African American, Hispanic or Latino, or Native Hawaiian/Other Pacific Islander.
- 3) The average household income is less than \$52,250.

10,629,084 people reside in these zip codes, with 784,455 of those living in NM. There are 479 licensed providers residing within these zip codes, 110 within New Mexico.

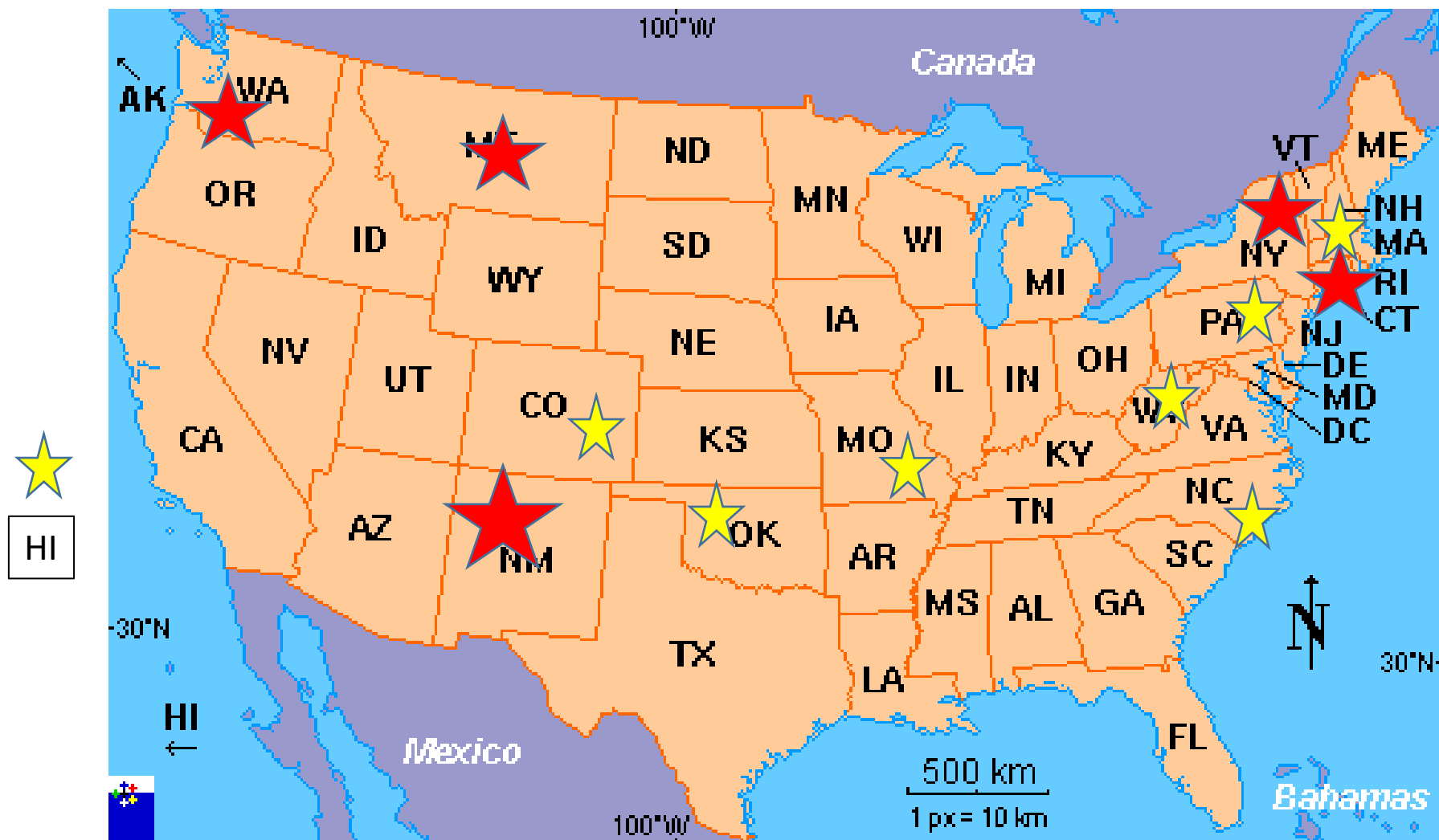
Buprenorphine
Waivers per
Capita
(1,000,000)

Start of
Addictions Tele-
Echo Clinic

◆ New Mexico
■ Other States



Addictions teleECHO replication



“I feel incredibly privileged to have been invited to this kind of learning and multiple collaborative education systems. This has been really over the top ...and I am just very grateful.”

Psychiatrist from Michigan

“Living in Alaska, the resources for substance abuse treatment are probably not as diversified as in other areas of the country, so this ECHO clinic has been valuable to me ----providing the information and talking, collaborating with other professions in the field to help provide the best care of the patients. “

Nurse Practitioner from Alaska

Coming in January!

ECHO RECOVERY

Funded by HRSA

- 4 new national teleECHO programs focused on treatment of **opioid use disorder**
- Specifically aimed at FQHC teams

Earn free CME/CEUs, and a certificate from the ECHO Institute and the American Society of Addiction Medicine!

2 additional Special teleECHO clinics for counselor/ social workers and for CHW/MA's

Sign up at
ECHOrecovery@salud.unm.edu

About ECHO

Initiatives

NM TeleECHO Clinics

Locations

Updates

Start an ECHO

MetaECHO

ECHO Superhubs



US Surgeon General Grand Rounds at UNM on June 14th



WHITE HOUSE Announces Project ECHO's Dr. Leslie Hayes as One of Their "Champions of Change"



MetaECHO 2016 Post-Conference Information #MetaECHO2016

Project ECHO: A Revolution in Medical Education and Care Delivery

Project ECHO is a lifelong learning and guided practice model that revolutionizes medical education and exponentially increases workforce capacity to provide best-practice specialty care and reduce health disparities. The heart of the ECHO model™ is its hub-and-spoke knowledge-sharing networks, led by expert teams who use multi-point videoconferencing to conduct virtual clinics with community providers. In this way, primary care doctors, nurses, and other clinicians learn to provide excellent specialty care to patients in their own communities.