

Telehealth: Using technology
in the delivery of healthcare

Using Telemedicine to Treat Chronic Disease in Rural Communities

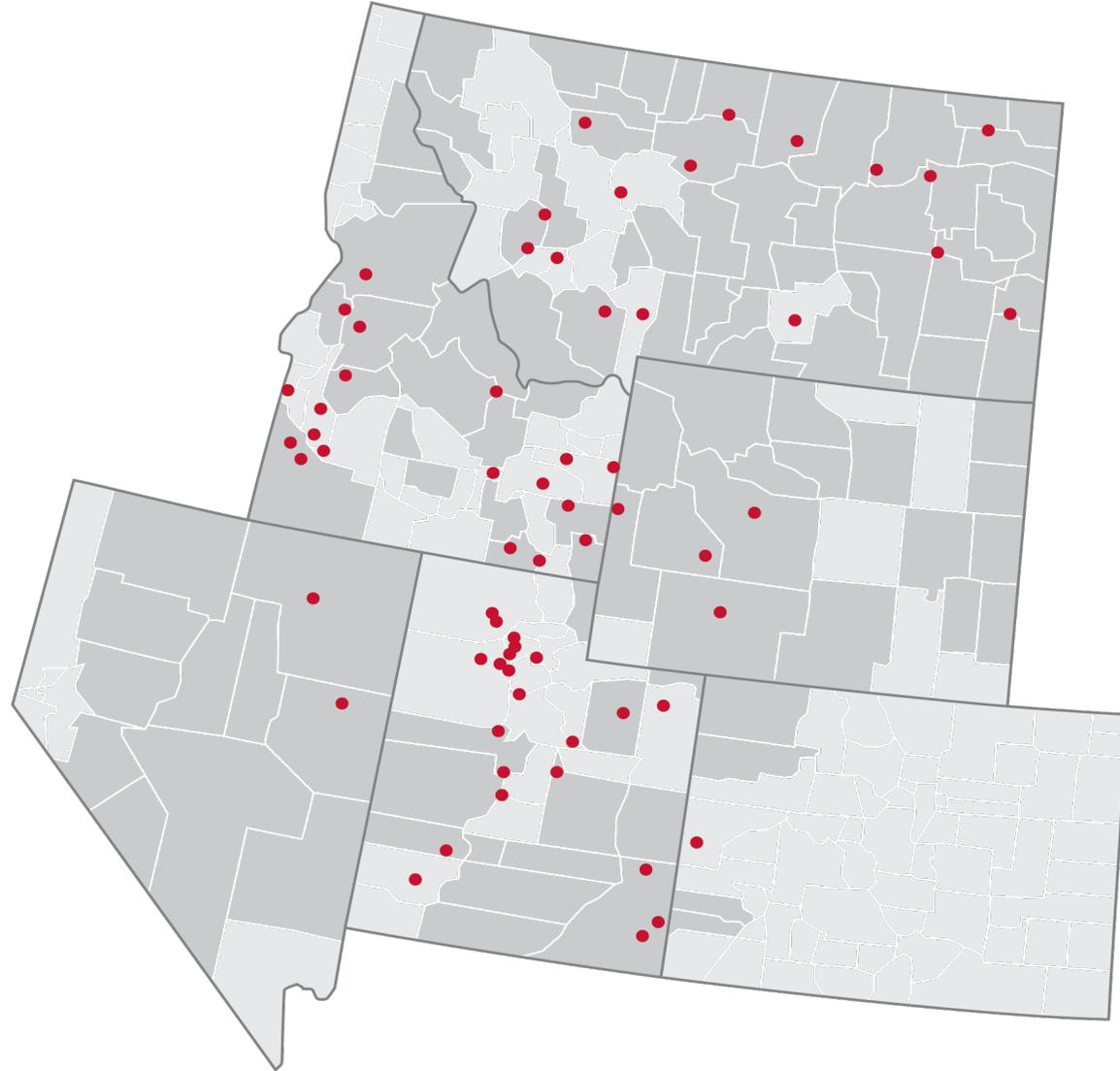
"Rural Americans face a unique combination of factors that create disparities in health care not found in urban areas. Economic factors, cultural and social differences, educational shortcomings, lack of recognition by legislators, and the sheer isolation of living in remote rural areas all conspire to impede rural Americans in their struggle to lead a normal, healthy life."⁺

- In 2010, the U.S. Census estimated that 59.5 million people – 19.3% of the population – lived in rural areas.⁺
- 10 percent of physicians practice in rural America*
- 401 specialists per 100,000 people in rural US, compared to 910 in urban areas*

⁺Altarum Institute March 22, 2016

*National Rural Health Association

THE ONLY ACADEMIC MEDICAL CENTER IN UTAH
We Serve 10% of the Continental U.S.

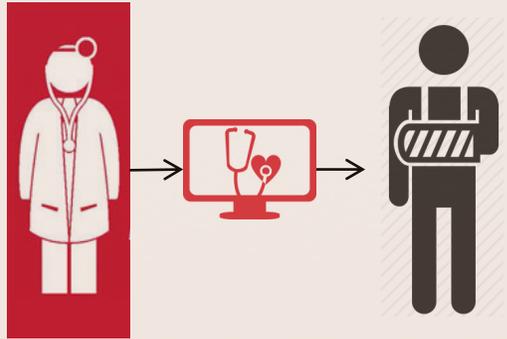


● TeleHealth Sites

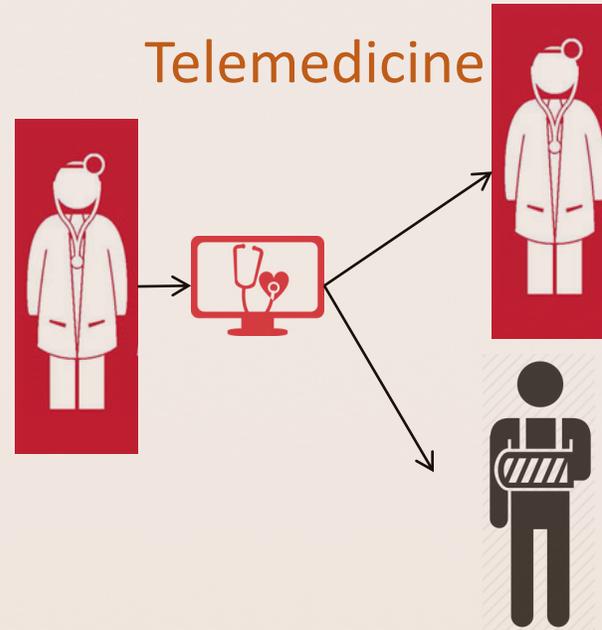


TELEHEALTH

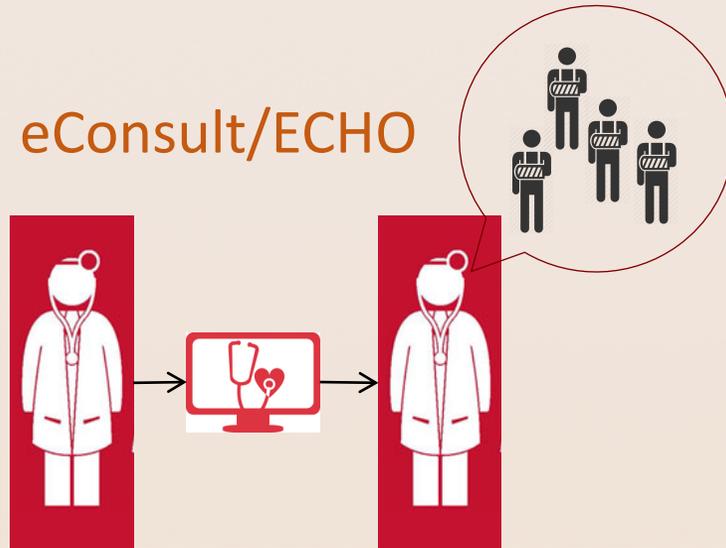
Telemedicine



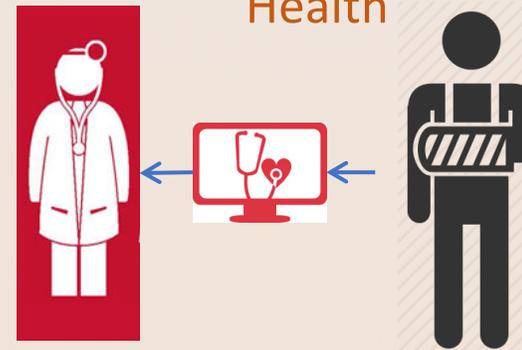
Telemedicine



eConsult/ECHO



Virtual Visit and Digital Health





The doctor will see you now.

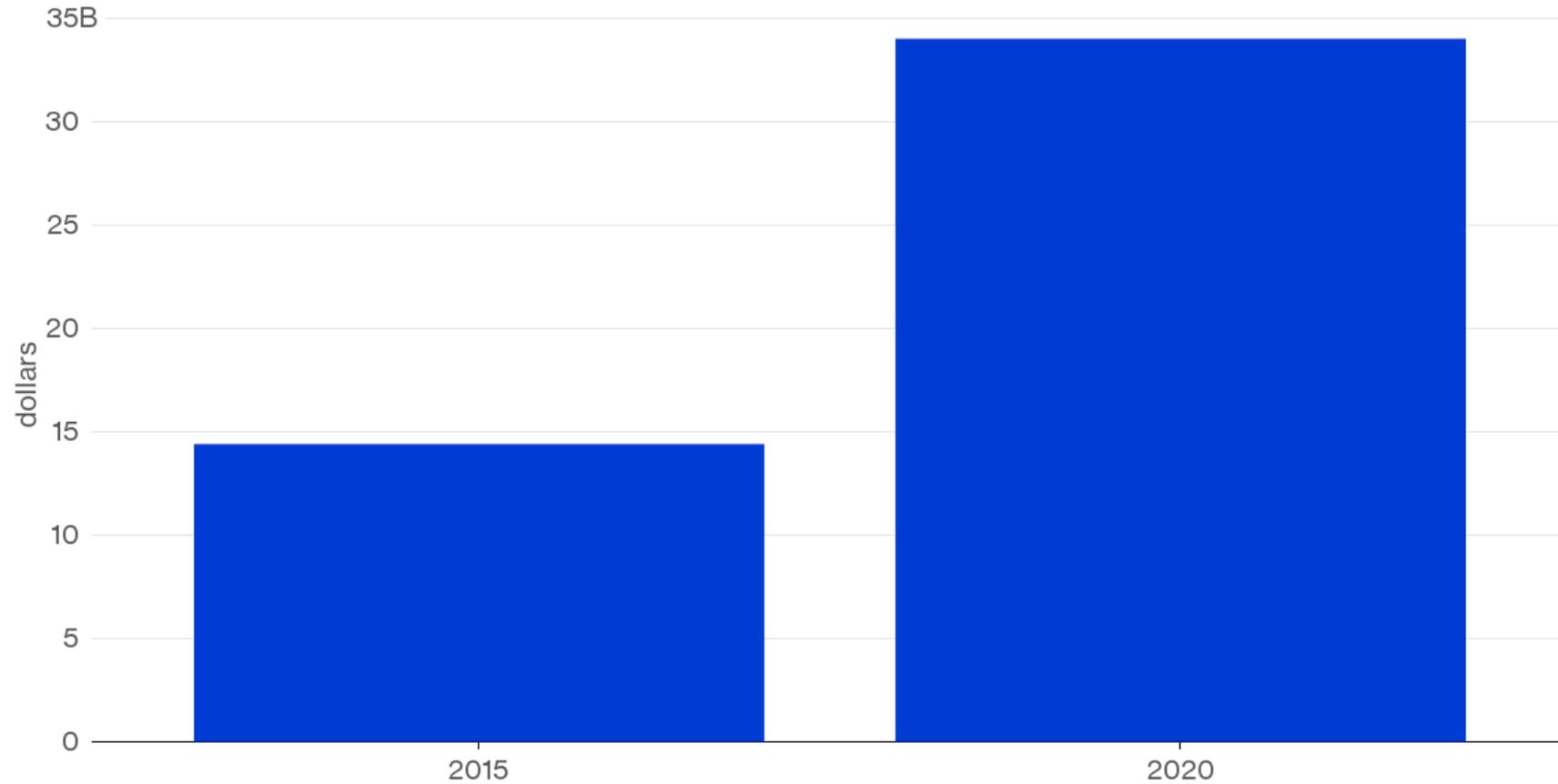
Introducing **Virtual Visits** — online care from the expert providers at University of Utah from your phone, tablet or computer.

To start a virtual visit, call **801-213-8669 (UNOW)**

<http://uhealthplan.utah.edu/virtualvisits/>

The Doctor Will Virtually See You Now

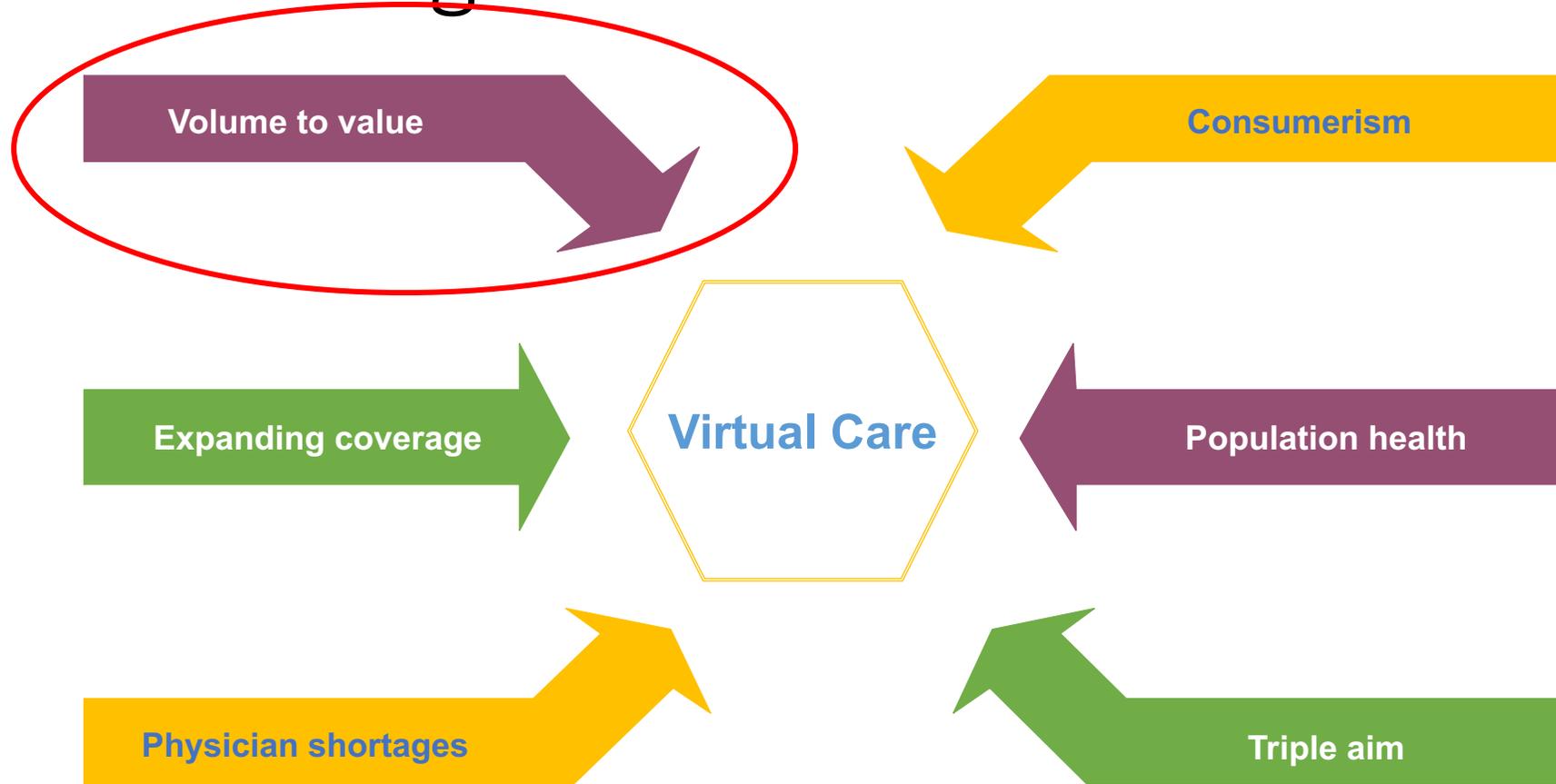
Projected growth of the global telemedicine market



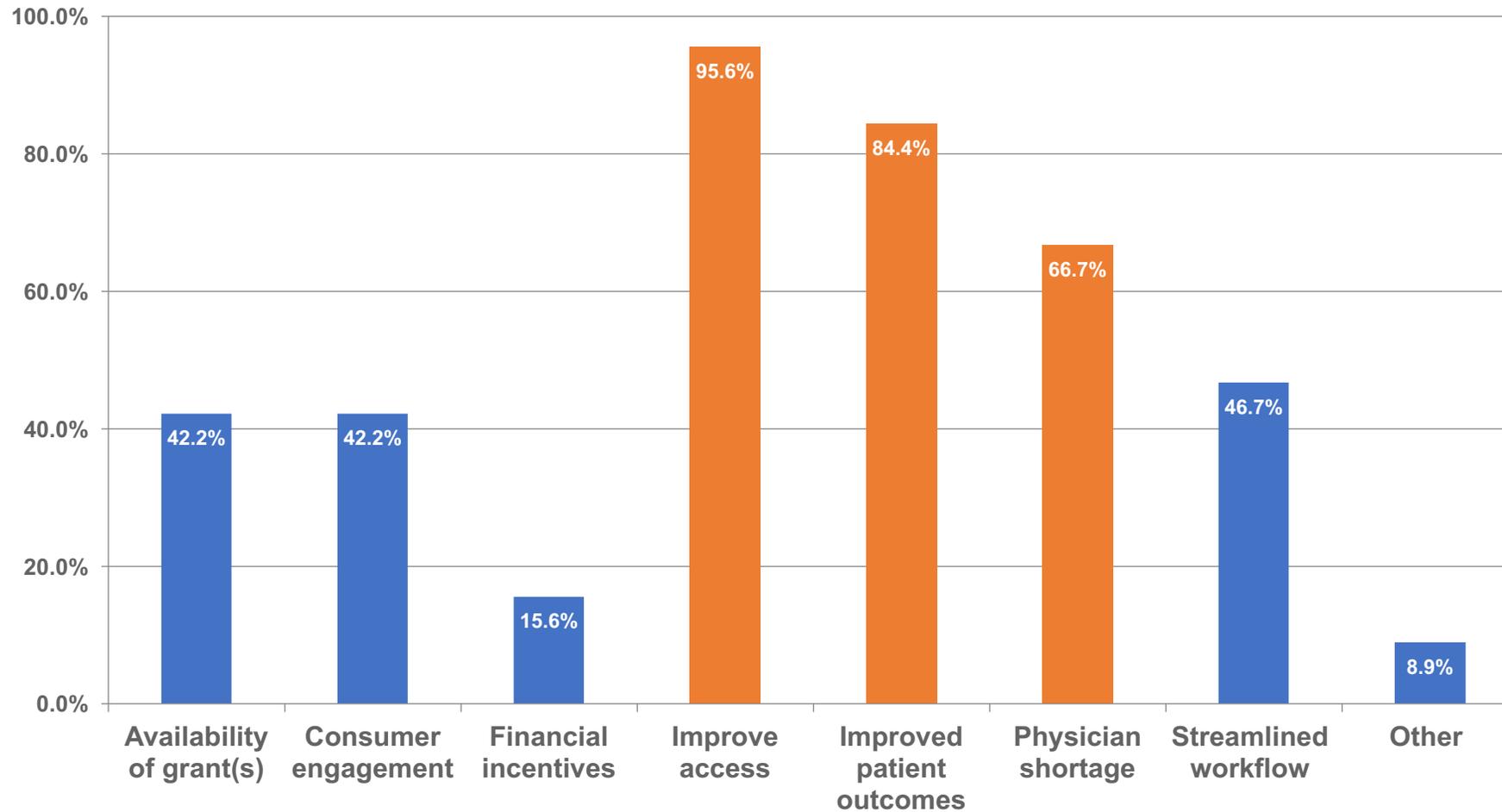
Source: Mordor Intelligence

Bloomberg 

Factors driving Virtual Care



Most Common US Objectives for Virtual Care



TeleHealth Services

Telemedicine

Stroke **Critical Care**
Burn **OBGYN**
Crisis **Rehab**
Plastics **Cardiology**
Psychiatry **Pediatrics**
Wound Care **Neurology**
Orthopedics **Oncology**
Genetic Counseling

Project ECHO

Hepatitis C **NP Program**
Advanced Liver Care
Chronic Pain and Headache
Immune Disorders of the Gut
Med/Peds Residency
Genetic Counseling
Pregnancy Care
Behavioral Health

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TeleStroke



TeleBurn



TelePlastics



Project ECHO

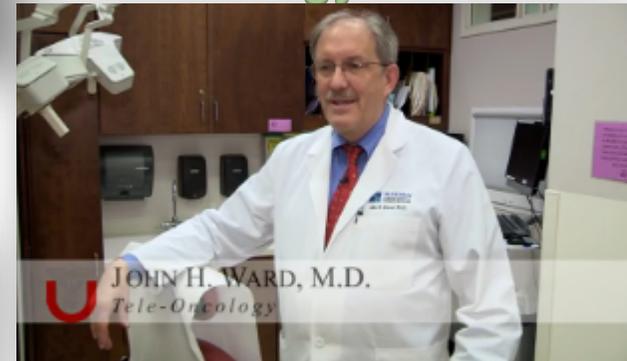


Terry D. Box, M.D.

TeleMental Health



TeleOncology



Many others...

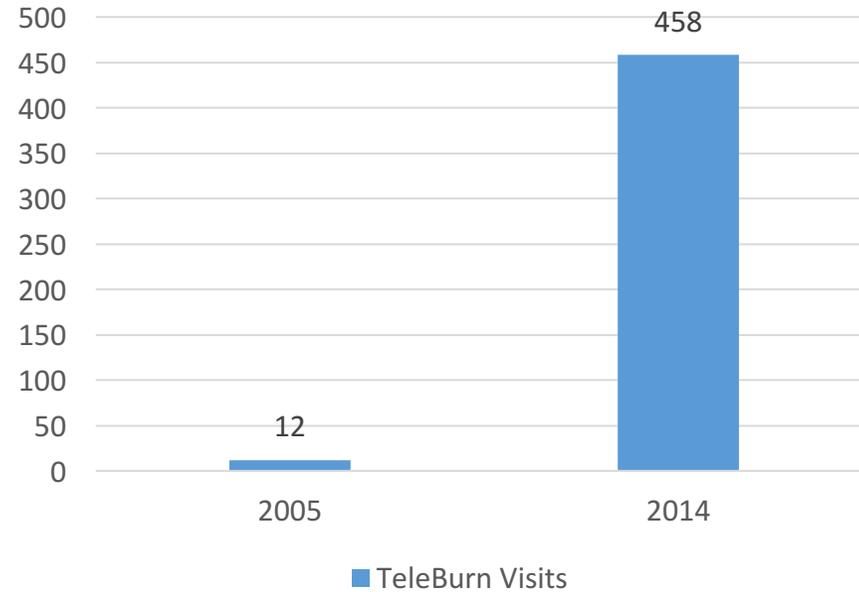
TeleBurn



Launched in 2005 on a granted funded project
Today is fully-self sustaining

2005
0.26% of all clinic visits
via telemedicine

TeleBurn Visit Growth



2014
14% of all clinic visits
via telemedicine

Must Haves for Successful Launch and Longevity

- Clinical Champion
- Operational Workflow
 - On both ends
- Technology strategy
 - Developed to meet clinical needs (not in reverse)
 - Support program in place
- Need to see the people/location
 - People need to know and trust the other side
- Clear focus on Outcomes
 - What are we trying to accomplish?
 - How will we measure success?

TeleHealth Services

Telemedicine

Stroke Critical Care
Burn OBGYN
Crisis Rehab
Plastics Cardiology
Psychiatry Pediatrics
Wound Care Neurology
Orthopedics Oncology
Genetic Counseling

Project ECHO

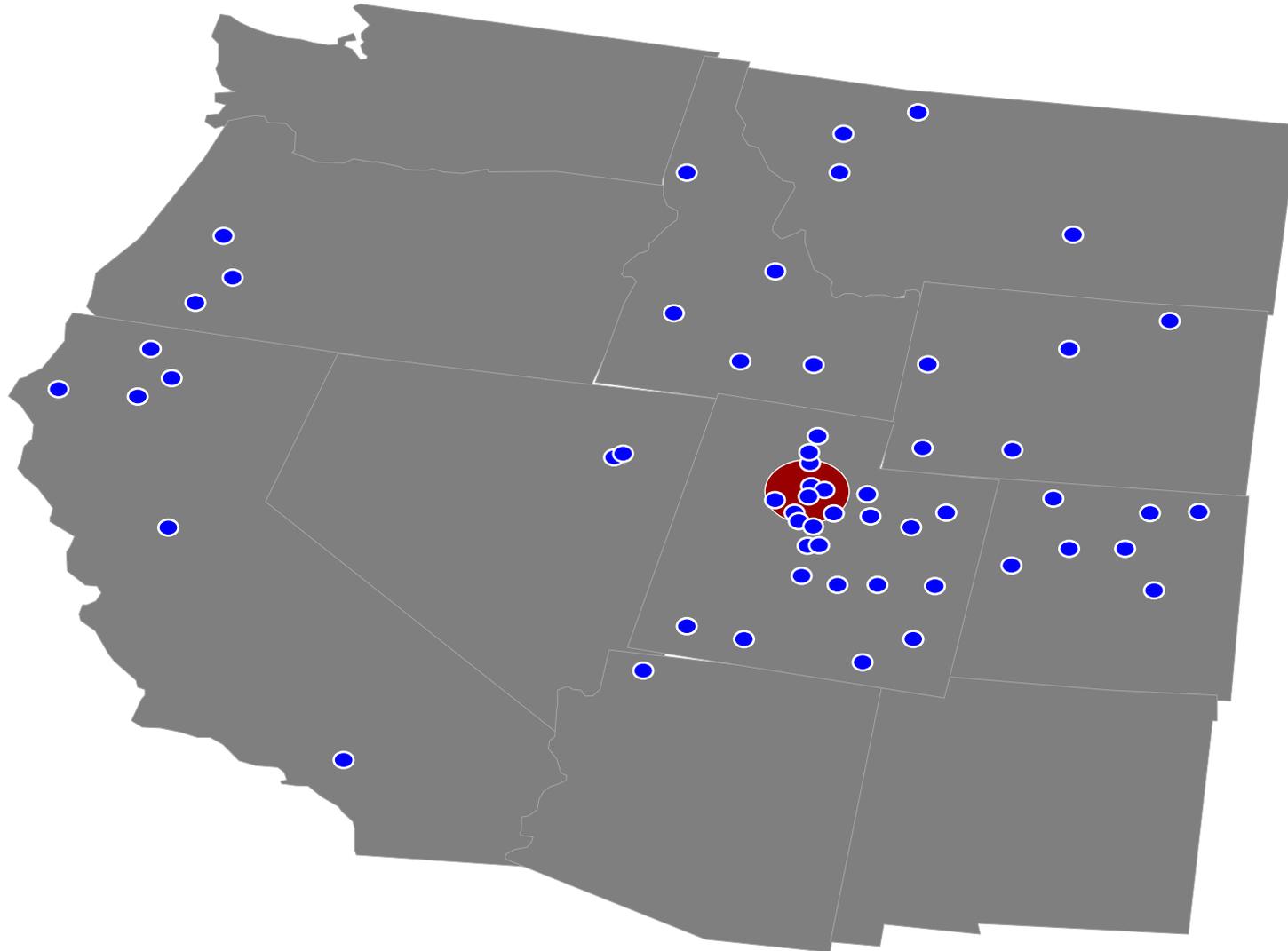
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What does an ECHO look like?

Project ECHO



Project ECHO Partners



Using Telemedicine to Treat Chronic Disease in Rural Communities

- Perpetuated by the inability to find and afford care, rural populations face higher incidences of chronic disease.
- **Obesity, diabetes, heart disease, and alcohol and substance abuse** are all chronic conditions that disproportionately affect rural populations.
- 86% of all health care spending in 2010 was for people with one or more chronic medical conditions.
- Medical costs linked to obesity ~ \$147 billion in 2008.
 - Annual medical costs for people who are obese were \$1,429 higher than those for people of normal weight in 2006.
- Total estimated cost of diagnosed diabetes in 2012
 - \$245 billion (\$176 billion in direct costs & \$69 billion in decreased productivity)

2010 U.S. Census: States with the Highest Rural Populations Compared to States with the Highest Rates of Adult Obesity and Diagnosed Diabetes

Highest Rural Population		Highest Rate of Adult Obesity		Highest Rate of Diagnosed Diabetes	
Rank	State	Rank	State	Rank	State
1	Maine	1	Mississippi	1	Mississippi
2	Vermont	2	Alabama	2	Alabama
3	West Virginia	3	West Virginia	3	West Virginia
4	Mississippi	4	Tennessee	4	Louisiana
5	Montana	5	Louisiana	5	Tennessee
6	Arkansas	6	Kentucky	6	Kentucky
7	South Dakota	7	Oklahoma	7	South Carolina
8	Kentucky	8	South Carolina	8	Texas
9	Alabama	9	Arkansas	8	Georgia
10	North Dakota	10	Michigan	10	Ohio

Using Telemedicine to Treat Chronic Disease in Rural Communities

- Telemedicine as a solution to rural health care delivery:
 - helps eliminate distance barriers to medical services that would often not be consistently available in distant rural communities
 - potential to increase accessibility to providers and specialists who can remotely monitor and treat chronic disease
 - without the hassle or costs associated with traveling
 - used most effectively to monitor and manage chronic conditions and preventive health care costs

Using Telemedicine to Treat Chronic Disease in Rural Communities

- Challenges of telemedicine in health care delivery:
 - In many states telemedicine services are not covered by insurance to the same extent as in-person services.
 - Plan administrators and providers need to work together to discuss telemedicine benefits and determine coverage options and reimbursement policies.
 - Mimic the Mississippi State Legislature passing a bill requiring private insurance to pay for telemedicine services at the same rate as it does for in-person care.
 - Medicare reimburses for telehealth services with relatively stringent requirements.
 - Medicare pays for telemedicine services only when patients live in Health Professional Shortage Areas (HPSAs) and those who engage in "face-to-face" interactive video consultation services
 - Telemedicine is not a replacement for an annual, in-person physical.
 - rules governing the practice of medicine do not need to be the same rules that govern the practice of telemedicine
 - Issues of licensure are problematic when services cross state lines
 - Consent is a vital component of health care and is more complicated with a telemedicine platform.

Top Federal Priorities

- Reimbursement assistance
 - Medicare Parity would be ideal but progress in positive direction is slow
 - Adoption of telehealth and avoiding SSA restrictions in Medicare
- Fostering Innovation
 - Allowing health care systems to implement value-driven digital solutions
 - Expanding Access for Health Outcomes (ECHO) Act created by Senators Hatch (R Utah) and Schatz (D Hawaii) requires Project ECHO type platforms to be evaluated
- Clearing/Avoiding artificial non-medical restrictions
 - i.e. "only rural", "place of service", etc.
 - Focus on medical professional discretion

Vision of the future

- Creation of a high-functioning network capable of connecting care between providers and patients:

