Rural Policy Forum

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FACTS ABOUT RURAL ARIZONA

Department of Health and Human Services defines an urban area as 50,000 people or more.

“Rural” presumably <50 000

In Arizona...

There are 304 “rural” communities in Arizona

Of those rural communities the following breakdown occurs...

- 76 Arizona communities have between 6,000 and 49,999 residents
- 86 Arizona communities have between 1,000 and 5,999 residents
- 142 Arizona communities have less than 1,000 residents
What is telemedicine?

Medical Information exchanged from one site to another via electronic communication

What Does This Translate to for Arizonans?

- Initial and follow-up appointments within remote communities – “Access and Efficiency”
- Access to high-end services without having to travel great distances
- Access for local physicians to higher levels of care
RURAL ARIZONA AND HEALTHCARE

Arizona Statistics
Premature Deaths (defined as death before age of 75): 6,850
Poor Health: 16%
Adult Smoking: 17%
Obesity (BMI > 30): 24%
Preventable Hospital Stays (PHS): 51
Poor Health Days (PHD) (for the past 30 days): 3.4

Mohave County
5 Hospitals
18 Rural Communities
Premature Deaths: 9,828
Poor Health: 20%
Adult Smoking: 27%
Obesity: 27%
PHS: 71
PHD: 4.4

Coconino County
3 Hospitals
24 Rural Communities
Premature Deaths: 7,342
Poor Health: 13%
Adult Smoking: 15%
Obesity: 23%
PHS: 56
PHD: 3.1

Navajo County
4 Hospitals
44 Rural Communities
Premature Deaths: 11,848
Poor Health: 18%
Adult Smoking: 17%
Obesity: 32%
PHS: 63
PHD: 4.1

Apache County
4 Hospitals
32 Rural Communities
Premature Deaths: 14,039
Poor Health: 18%
Adult Smoking: 19%
Obesity: 32%
PHS: 110
PHD: 3.8

Yavapai County
4 Hospitals
32 Rural Communities
Premature Deaths: 7,372
Poor Health: 20%
Adult Smoking: 18%
Obesity: 32%
PHS: 110
PHD: 4.2

Statistics taken from countyhealthratings.com for 2014
**SCENARIOS**

1. 24 yr old female in Page with “lung nodule” on routine CXR

2. 66 yr old Male smoker with Lung Mass and hemoptysis

3. 70 yr old Male with dysphagia and esophageal cancer on endoscopic biopsy

4. 52 yr old female with lung fibrosis and worsening shortness of breath
SCENARIOS

1. 24 yr old female in Page with “lung nodule” on routine CXR
   CT scan – clearly calcified and old and no treatment or further films needed

2. 66 yr old Male smoker with Lung Mass and hemoptysis
   Needs PET-CT scan, lung biopsy, and pulmonary function tests

3. 70 yr old Male with dysphagia and esophageal cancer on endoscopic biopsy
   Needs cardiac and pulmonary work-up. Likely needs preoperative chemo-radiation and then possibly esophagectomy

4. 52 yr old female with lung fibrosis and worsening shortness of breath
   Transplant?
OPPORTUNITY FOR TELE-HEALTH

• Access and Efficiency!

• Access
  – Access to quaternary opinions and services not otherwise available locally (remote e-consultations)
  – Access to new services not otherwise known (Transplant)
  – Access for local physicians to remote consultations for tertiary and quaternary services
  – Access for patients to specialist physicians from a remote site for follow-up

• Efficiency
  – Consultations, work up and treatment
    • Limit visits to central hospital, continuity of care post surgery
  – Cost Efficiency in an era of healthcare cost containment
    • Limit unnecessary consultations and unnecessary preoperative testing
HOW DO WE DO THIS?

• Satellite offices with physician extenders
  – Virtual consults
  – Radiographic images
  – Plan testing and possible surgery
  – Face to face communication with patients

• IT in existing physician offices (e-consult with thoracic surgeon in primary care physician office)

• Patients with home computer access / cell phones / tablets
ACCESS TO NEEDED SERVICES

Rural Arizonans...

- Poorer, older and sicker than urban Arizonans
- More likely to be self-employed or hold low-wage seasonal jobs
- Less access and knowledge regarding IT

Complex Procedures

- Necessary to treat complicated diseases
- Rural community hospitals do not have the necessary experience or infrastructure
- Patient options: long commutes to urban hospitals or forgoing necessary treatment
Did you know?

One million Arizonans are uninsured
¾ of the million reside in metropolitan Phoenix and Tucson
Uninsured rural residents less likely to take advantage of programs like AHCCCS

There are six ACS (American College of Surgeons) verified Level 1 trauma centers in Arizona
- Five of the centers are located in the Phoenix metropolitan area
- One is located in Tucson
Comparing Numbers – Implications for The Norton Institute

Lung Transplant

First lung transplant in metropolitan Phoenix in 2007
Only lung transplant program in Arizona
Sixth largest lung transplant program in the country
70 transplants in 2013
56 transplants in 2012
BARRIERS AND CHALLENGES

Challenges

- Small town inability to implement large technological infrastructure

- Lack of remote access for patients

- Finding the right location that provides easy access to all those in remote communities
Barriers

** Rural communities seek medical attention once situation is dire
** Treatment options no longer exist; disease has progressed
** Mindset change: seek treatment at onset of symptoms
** Lack of access to necessary facilities
** Lack of access to higher level of care for primary physicians

CONSIDER THIS:
Apache County has one of the highest premature death rates in Arizona
Highest number of preventable hospitalizations
Satellite clinic located in Flagstaff is still three hours one way for residents of Apache County to travel
IS ARIZONA USING IT’S RESOURCES?

Rural medicine resources and telemedicine programs remained largely under utilized in Arizona

2011 Federal Report

A total of $404,697,307 was awarded to Arizona in 2011 to aid in rural development.

Of the $404,697,307:

- Loans accounted for: $379,106,527
- Grants accounted for: $25,590,780

However...
Did You Know?

A total of 61 Arizona communities received loans/grants

Of the 61, only one loan was granted towards healthcare (building expansion of a behavioral health facility)
Satellite Clinics:

- Satellite clinics (rented office space or pre-existing PCP office)
- Staffed with a nurse practitioner/physician assistant for initial assessment
- Physician/surgeon joins conversation remotely and places orders for testing

E-Consult – Existing commercial infrastructure

- Patient can visit local CVS, Walgreens and login
- Patient types in symptoms and questions
- Patient connected to specialized physician who consults on patient
- Physician corresponds with PCP to ensure continuity of care
**Project ECHO**

- Started in 2003 by Dr. Sanjeev Arora
- Means to treat Hepatitis C in rural areas of New Mexico

- As of 2011:
  - Project ECHO includes: diabetes, high-risk pregnancy, asthma and chronic pain

- Satellite facilities in Washington State and Chicago

**Funding**

- 2009: grant awarded Project ECHO five million dollars to set-up the program and help run its many satellite clinics

- 2014: Project ECHO was awarded $8.5 million by the Centers for Medicare and Medicaid Services (CMS) to continue funding the work of Project ECHO
Telemedicine is the future of medicine with it’s many benefits but requires buy in from individuals at all levels including community partners

Working together with local industries and communities can overall improve life for those in some of Arizona’s most rural towns
Thank You