



Integrating Community Paramedicine in Payson, AZ

Eastern Arizona Health Education
Center

2019-2021 Cohort

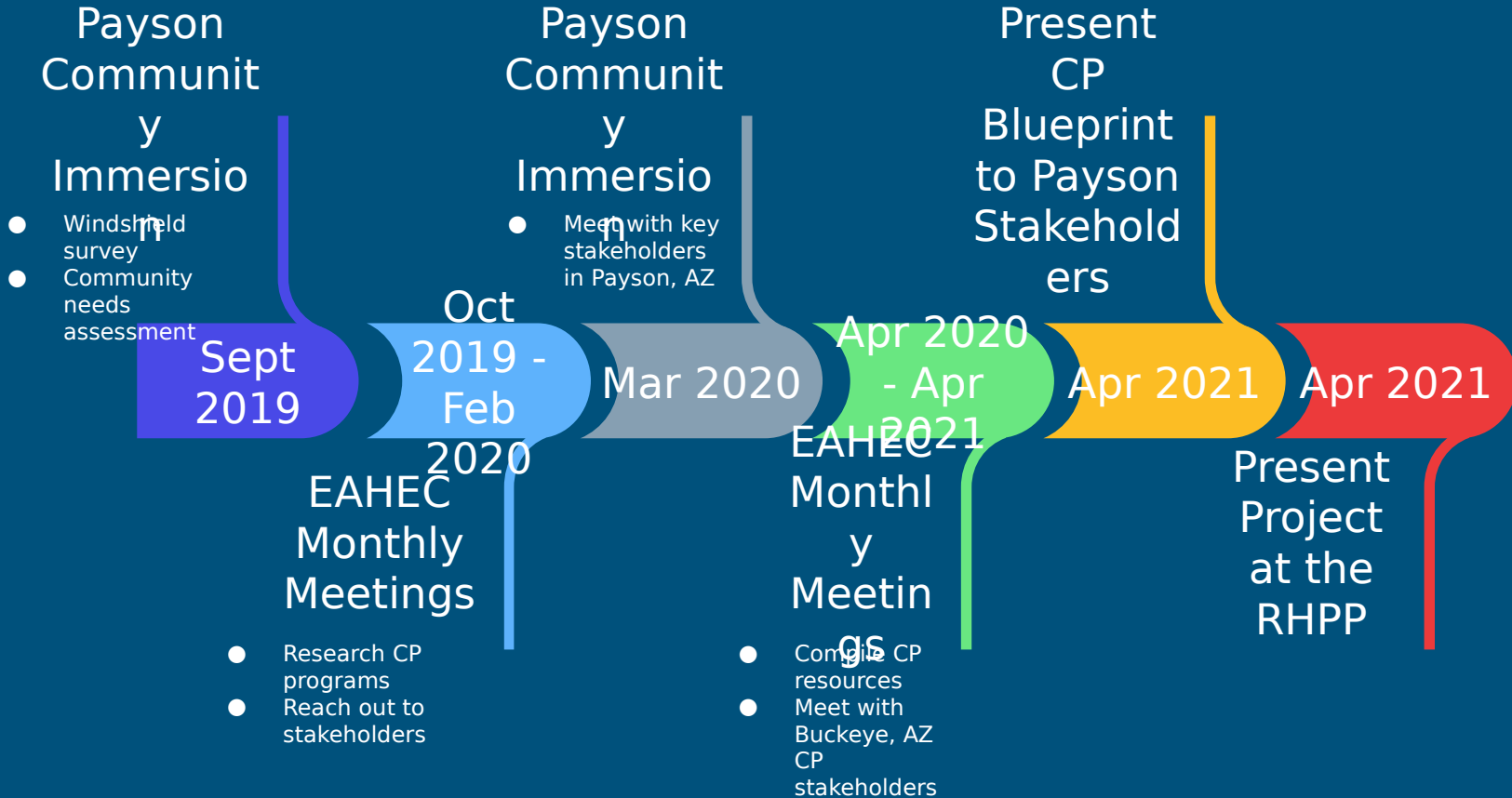
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Introduction

- What is the definition of Rural?
- Rural areas obstacles
- Healthcare in Rural Areas
- How to solve the issue?



EAHEC 2019-2021 Cohort Project Timeline



Social Determinants of Health (SDOH)

- Termed the “causes of the causes” of disease
- Some of the key drivers of health or ill health are income, education, occupation, geographic region, race, etc.
- Drawing a direct line of causation between a social factor and ill health is difficult



Rural ED Overload

- Per a 2019 cross-sectional study of ED visits using survey data from 2005-2016 the National Hospital Ambulatory Medical Care Survey nearly 20% of all ED visits in 2016 occurred in a rural setting.
- ED visits in rural areas increased by almost 50% from 35.5 to 64.5 visits per 100 persons from 2005-2016.
- Over the same time period urban ED visits only increased from 40.2 to 42.8 visits per 100 persons.

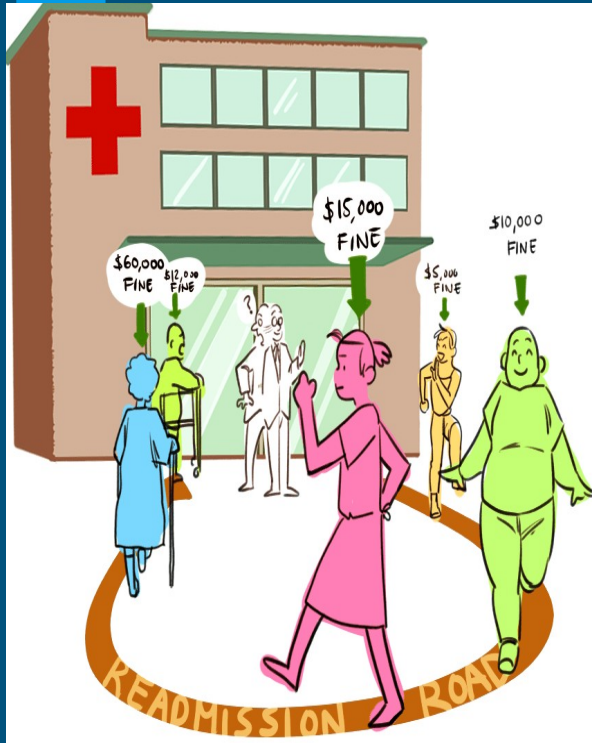


Impact on rural elderly population and correlation to Payson's population

A systematic review of 8 studies on ED admission in geriatric patients found frequent ED visits were associated with

- Domicile in a rural area adjacent to an urban area
- Low income
- Polypharmacy
- History of heart disease
- Median age in Payson, Arizona is 60
 - 37% of residents are over 65
 - 50 % of residents are over 60
 - 63% of residents are over 50
- \$31,109 is the average per capita income and 10.8% of residents live below the poverty line.
- Payson is a rural-urban

Local Problem in Payson, AZ



- Payson statistics

- Population of nearly 16,000
- 37% of the population >65 years of age

- Hospital Readmission

- Not just a Payson specific problem. Facilities are financially penalized for readmission within 30 days for the same medical issue.
 - COPD: Payson 20.8%, national 20.2%
 - PNA: Payson 17%, national 16.9%
 - HF: Payson 20.9%, national 22%
 - CVA: Payson 12.3%, national 12.7%
- Factors that contribute to this include...
 - Older age
 - Prior missed appts
 - Longer hospital stay
 - Comorbidities
 - Communication deficits
 - SDOH that inhibit their outpatient follow up

Community Paramedicine

- A healthcare model that allows paramedics & emergency medical technicians to operate in expanded roles outside the 911 response system or emergency medical services
- Goals
 - **Improve access to care**
 - **Improve health outcomes**
 - **Decrease health care costs**
- Implemented in rural AZ communities with varying degrees of success
 - Rio Rico, AZ
 - Buckeye, AZ



Community Paramedicine in Rio Rico, AZ

Community Healthcare Integrated Paramedicine Program (CHIPP) of 2015



- Multidisciplinary referrals for in-home paramedicine services
 - Patients age 55+ with chronic conditions identified as “super-utilizers”
- Provide free, in-home services:
 - Monitoring vital signs, disease education, medication delivery, home safety inspections, medication management, referral to community resources

Community Paramedicine in Buckeye, AZ

- Mr. Robert Garza, Chief Costello and the rest of the Buckeye team worked to build their CP program from the ground up. These gentlemen were kind enough to share what they considered to be a “cookbook” for getting started.
- While no process is simple and several systems must interact in order for CP to work well, the following is useful stepwise guideline.
- This cookbook can provide the Payson and area stakeholders with steps to start quality CP program, as many initial barriers and issues faced by the Buckeye team may be mitigated in Payson.

Community Paramedicine in Buckeye: The Cookbook Recipe

1. Clearly identify the need in your community
 - a. Target Patients.
2. Determine the type and level of service to be delivered
 - a. This drives the protocols for the program's service delivery.
3. Determine Medical Control Provider and Base
 - a. Base is a hospital that will be utilized for approval of coverage and personnel for CP.
4. Create formal policies, procedures, and protocols
 - a. AZDHS currently does not recognize the Paramedic on the CP level, so your Medical director should set the parameters



The Cookbook Recipe; continued

5. Training of personnel

- a. Based on what services/ level of care.

6. Determine expenses and budget

- b. Apparatus, Dispatch, Equipment, Charting software, Phones, Data storage, Personnel

7. Referral process during roll-out of CP

- c. Protocols developed on what qualifies a patient to be enrolled and the criteria

8. Find continued funding

- d. The future of CP will provide more evidence for it's cost effectiveness and value added, until then- grants and local support.

Literature Synthesis

9 research articles pertaining to CP were identified between 2016-2019.

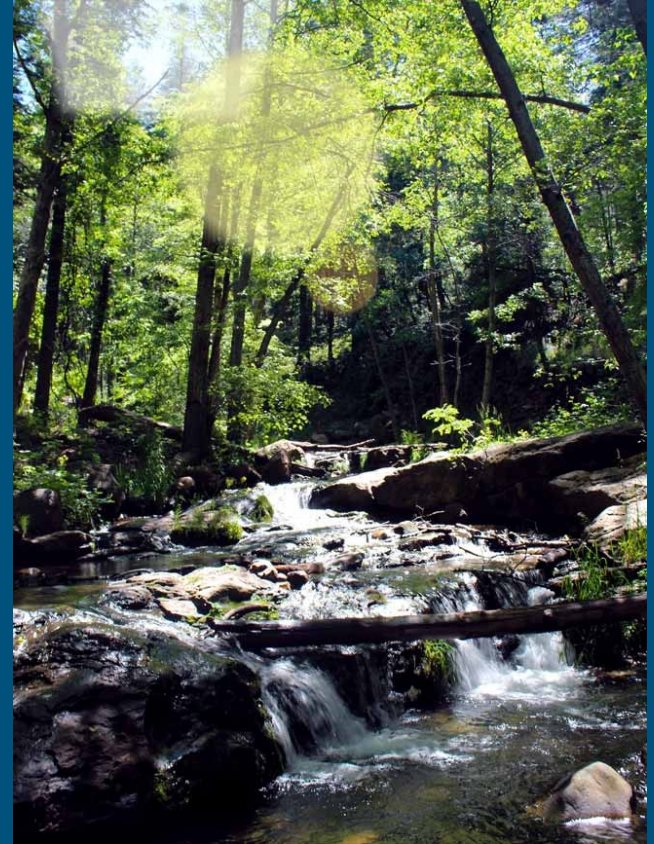
Key findings include:

- Adaptability
- Physician Driven Care
- Patient Empowerment
- Reduction in ED visits & Hospital readmissions
- High patient satisfaction rates



Limitations

- Resources to compile a plan
- Additional EMS training programs for the identification and management of chronic diseases, communication skills and cultural sensitivity
- Limited resources available for the regulation, research and payment
- Information related to programs in Arizona



Barriers and Hope for Change!



1. Mis- or distrust of this new program... *so many questions!*
 - a. Over time, the goal would be to earn patients' & community's trust
2. Buy-in & funding
 - a. There is currently buy-in from outpatient healthcare providers and patients who learn that this may be arriving in Payson!
 - b. Would need grant \$ to kick-start
 - c. Benefits the hospital with less financial burden due to readmission penalty
 - d. Would ideally be sustainable with the help of insurance companies
3. Staffing
 - a. Would need experienced paramedics to volunteer to work overtime and pilot this program
 - b. Volunteer based vs paid?
 - c. Goal is that the program will eventually sustain itself and profit the paramedics and hospital by reducing their penalties

Resources and Recommendations

1. Buckeye, AZ CP Recipe

- https://docs.google.com/document/d/1TC9pZcPbHpHiWUpjx_lyq5bN2J3I7nMOOyH_3nZr8i0/edit?usp=saring

2. Buckeye, AZ CP Synopsis

- https://docs.google.com/document/d/1g1FIZIpiONCMaIjt0r7g_rbmHOSw2KfMJ3UoOX8JpU0/edit?usp=saring

3. Certificate of Necessity (CON)

- <https://www.azdhs.gov/gis/adhs-certificates-of-necessity/index.php>

4. Rural Community Paramedicine Toolkit

- <https://www.ruralhealthinfo.org/toolkits/community-paramedicine>



Questions for the EAHEC
team members?

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