# The Impact of a Family Medicine Residency Program's Rural, Free Primary Care Clinic on Hospital Utilization & Costs

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## **Learning Objectives**

- Upon completion of the session, participants will understand how access to free primary care can reduce hospital utilization in rural areas.
- 2. Upon completion of the session, participants will be able to identify ways in which affordable and/or free primary care can benefit rural communities.
- Upon completion of the session, participants will have an understanding of the benefits of access to free primary care in terms of utilization and reduction of patient costs.



# UAB Selma Family Medicine Residency Program

- Consists of 5 UAB medicine faculty members and 18 family medicine residents
- Program Aims
  - graduate dedicated, empathetic, well-rounded, board certified family physicians capable of self-learning, leadership and community engagement; provide uncompromisingly high-quality care to the under-served in the Black Belt; raise health awareness for the community; train and retain physicians in the rural south; support research interests of the faculty and residents that addresses health disparities in the Black Belt (UAB, 2021).
- Residents and faculty from this program serve as hospitalists for local hospital (VRMC)



The University of Alabama at Birmingham



## Vaughan Regional Medical Center

- Sole community hospital in Selma
- 175-bed acute care facility
- Staff consists of 75 physicians in 22 different medical specialties
- Joint Commission Accredited





### Selma, Alabama

- 50 miles west of State Capital of Montgomery and 80 miles south of Birmingham
- Rich civil rights history
  - Selma to Montgomery march
  - Bloody Sunday
- Majority African-American community (70%)







## Selma, Alabama

- Current population of 18,804
- 41% of the population lives under the poverty line
- Median household income is \$24,820 per year (census.gov)



Community Demographics		
Average Age	39	
% Female	54	
% Male	46	
% African American	70	
% Caucasian	28	
% Other Race	2	



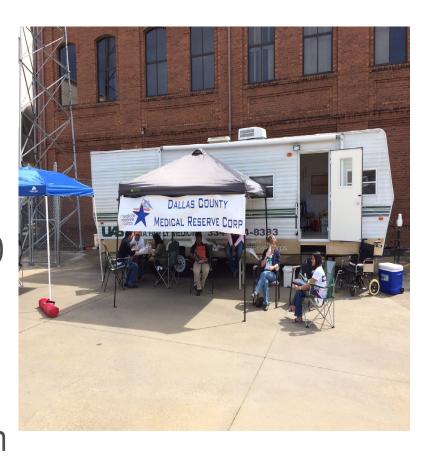
#### Alabama Medicaid

- One of 12 states that did not expand Medicaid
- Who qualifies? Low or very low income people
  - Who are pregnant
  - Responsible for children 18 years of age or younger
  - Who are blind
  - Who have a disability or who have a family member with a disability



## The Clinic's Conception

- Director of UAB Family Residency program in Selma and the director of the United Way in Selma saw a need in the community in the aftermath of Hurricane Katrina
- Initial grant from ADPH for \$47,000
- Run by volunteers from the UAB Family Medicine Residency Program located in Selma, AL
- Administrative staff volunteers from United Way





## Background

- In rural areas, barriers to healthcare, as well as lack of healthcare providers, leave patients without primary healthcare, or seeking other methods, such as emergency departments (Douthit et al., 2015).
- From 2005 to 2016, there was an increase in emergency department visits in rural areas from 16.7 million to 28.4 million (Greenwood-Ericson et al., 2019).



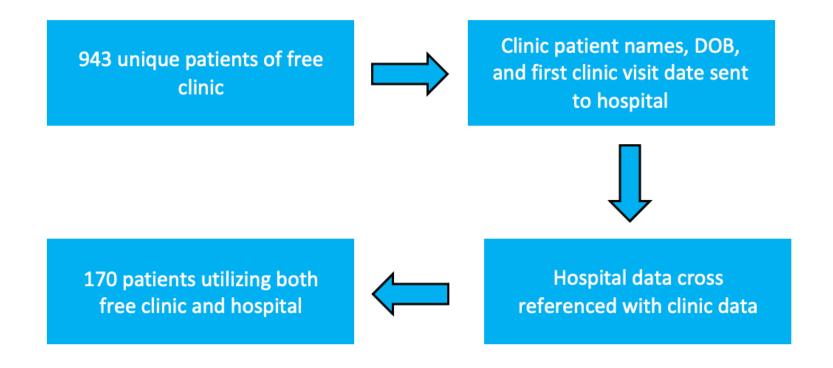
## Background

- Geller and colleagues note that free clinics provide free or low-cost healthcare to uninsured or underinsured individuals while simultaneously relying on volunteer physicians and other healthcare providers (Geller et al., 2004).
- Patients who have access to free clinics are less likely to use emergency rooms for non-emergent conditions, such as dental issues or injuries, compared to those who do not have access to primary care (Hwang et al.,2012)
- Patients without insurance tend to use EDs for non-emergent ambulatory conditions as well (Kramer et al., 2019).



#### Methods

• A small (~ \$6K) internal grant from The University of Alabama's Research Grants Committee provided funding for data entry to transition the paper medical records to a very rudimentary electronic medical record – an Excel spreadsheet.





#### Methods

- With this patient population (n=170), we extracted the following hospital utilization data
  - Number of inpatient visits
  - Number of outpatient visits
  - Number of emergency department [ED] visits
  - costs of inpatient services for each patient
- We then evaluated the utilization patterns and costs for one year prior to the patient's initial clinic visit and for one year following the initial visit.



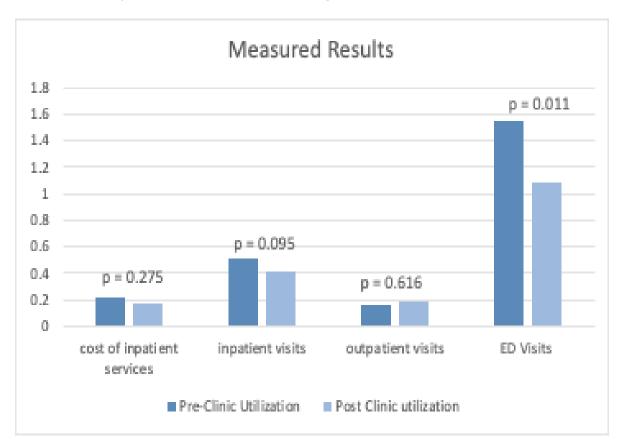
## Results

Measured Demographics	Patients Utilizing Free Clinic	Patients Utilizing Free Clinic and Hospital
Average Age	49	45
Percent Female	61	53
Percent Male	39	47
Percent African American	85	86
Percent Caucasian	14	14
Percent Other Race	1	0



#### Results

**Primary Finding:** Patients of the free clinic (n=170) utilized the hospital's ED less than they did prior to being seen at the free clinic.





#### **Discussion**

- Outpatient services increasing
- Low operating costs of the clinic should encourage similar clinics in underserved communities like Selma
- Impact on the Selma, AL community
  - Getting people back to work



#### **Future Directions**

- Continue to access hospital data to determine longer impacts on hospital utilization
- More funding for primary care and family medicine
- More funding for rural healthcare
- More programs that urge medical students to practice in rural areas







#### References

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