



Mobile Integrated Community Health



Overview



A team approach to population health.

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Mission Statement

To improve health outcomes among citizens of Queen Anne's County through integrated, multi-agency, and intervention-based healthcare.

Vision Statement

To provide mechanisms for citizens to have better access to healthcare and to enhance individual health outcomes.

Demographics



Statistics

Population:

47,798

Population 65+ years:

8,269

Median age:

42.6

Population 65+ living alone:

2,420

Persons per square mile:

128.5

"Medical Desert"



Queen Anne's County is one of only two counties in Maryland without a hospital



One free-standing emergency department



The Queen Anne's Emergency Center in Queenstown

Partnerships



QAC Dept. of Emergency Services



QAC Department of Health



MIEMSS



UMMS Shore Regional Health



QAC Commissioners



QAC Addictions and Prevention Services



QAC Dept. of Health and Mental Hygeine



QAC Area Agency on Aging



Anne Arundel Medical Center

Funding



UMMS Shore Regional Health



Anne Arundel Medical Center



Queen Anne's County Government



Queen Anne's County Dept. of Health



Carefirst Telehealth Grant



QAC Addictions and Preventions Grant

MICH Criteria

Inclusion



Adults 18 years and older.



Five 911 calls in any 6 month interval



Resident of Queen Anne's County

Exclusion






Receiving Home Health Care or Visiting Nurse Agency services.



Refusal to participate in the program.



Performance Measures

-  **To reduce the number of 911 calls by program participants by 25% during the fiscal year.**
 -  **To ensure that 75% of program participants have a primary care provider**
 -  **To ensure that 90% of program participants will receive at least one referral to a community resource as the result of a MICH home visit.**
-

Referral Phases



First Phase - Frequent 911 Callers



Second Phase - EMS Referrals



Third Phase - ED Referrals and QA ER Referrals



**Fourth Phase - Shore Regional Health Post Discharge
&
AAMC Post Discharge**

911 Referrals



Addition of a service defined question to the eMEDS patient care report.

Electronic Patient Care Reporting System



Answering the question is mandatory to achieve 100% completion of the report.



A referral report is ran every other day.

MICH Team

Combination Field Team



Department of Health Nurse / Nurse Practitioner



Queen Anne's County Paramedic



Behavioral Health Professional

Management



**Health Officer / EMS Medical Director
Joseph A Ciotola, Jr., M.D.**

MICH Home Visit

QAC DES Paramedic



Program introductions and overview



Physical examination assessment of physical health



Health and home safety assessment



Discuss home safety issues with the patient and need to modify identified hazards

QAC DOH NP / RN



Program introductions and overview



Assessment of health history, Rx inventory, review of systems and current status



Assessment of patient education and assessment of support system



Referrals to appropriate health and community services

Health and Home Safety



The EMS Provider utilizes three evidenced based scales to determine home and personal safety of each patient.



The three assessment scales that will be utilized are:



The Hendrich II Fall Risk Model [ex.](#)



The Physical Environment Assessment Tool [ex.](#)



Alcohol Use Disorder Identification Test [ex.](#)



Drug Abuse Screening Test [ex.](#)

Data and Demographics

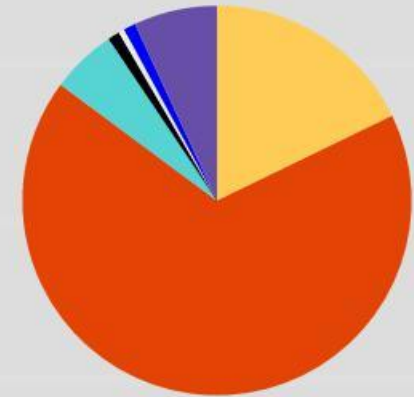
Total time spent on home visits

211.2 hours

Avg. time spent per home visit

78 minutes

Referral Sources



911 CAD Data(17.82%)

QA DES(67.33%) QA ER(5.45%)

Self-Referral(0.99%)

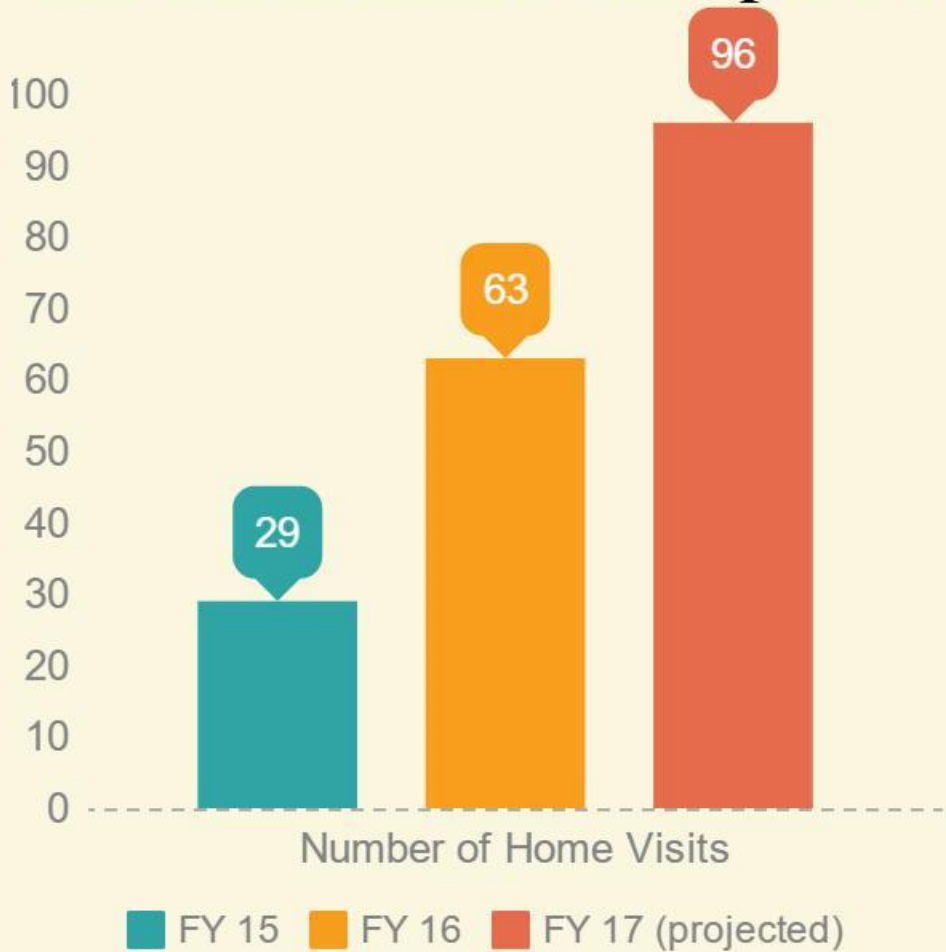
Chestertown ED(0.50%)

AAMC D/C(0.99%)

Easton SPACC(6.93%)

Data and Demographics

Growth in Home Visits per FY



Growth Percentage

From FY 15 to FY 16: **117%**

From FY 16 to FY 17: **52%**

From FY 15 to FY 17: **231%**

Data and Demographics

Age



■ 18-64(36.51%) ■ 65+(63.49%)

Race



■ African American(21.52%)
■ Caucasion(78.48%)

Gender



■ Female(56.25%) ■ Male(43.75%)

Age Statistics

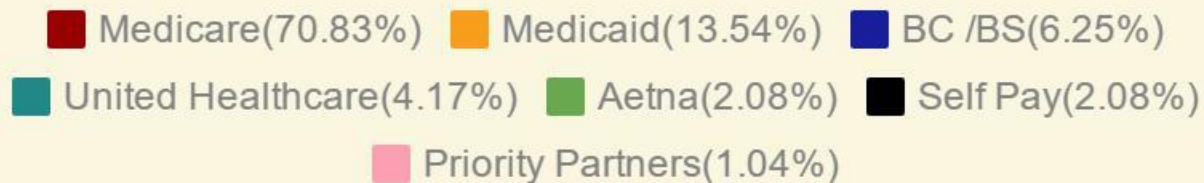
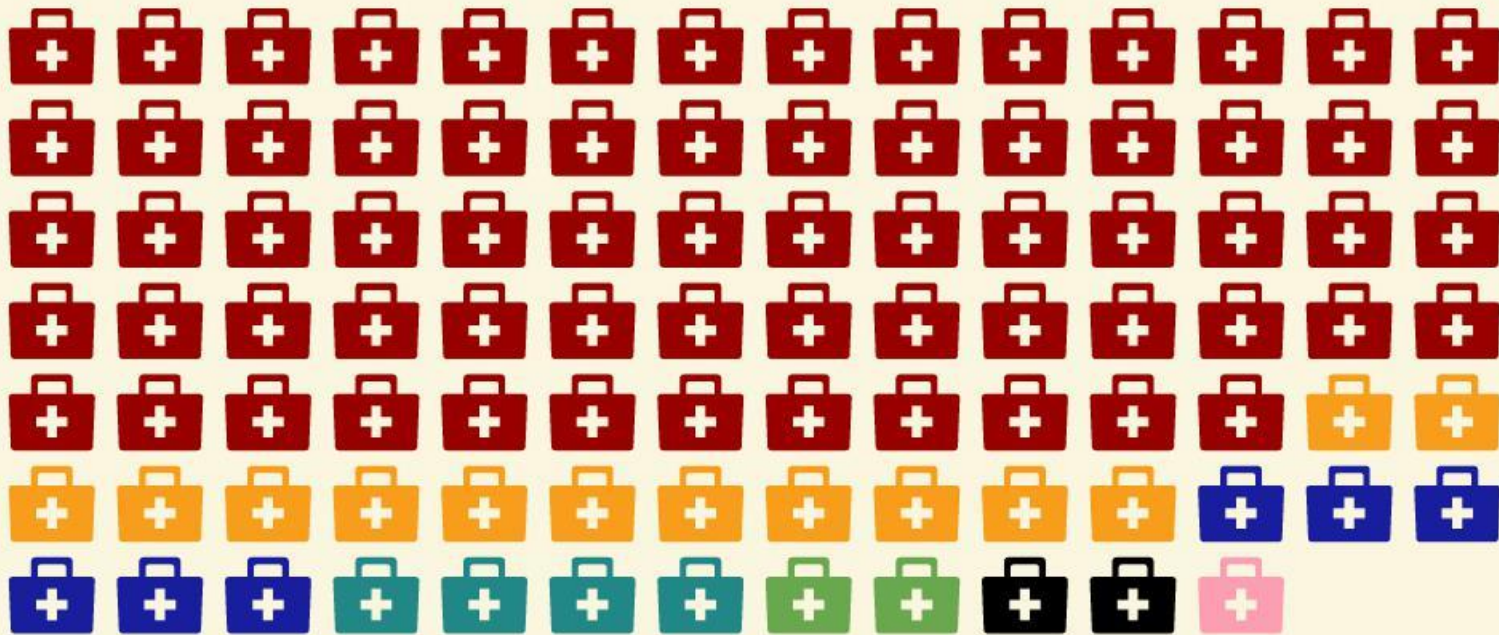
Oldest Patient: 97

Average Age: 69

Youngest Patient: 32

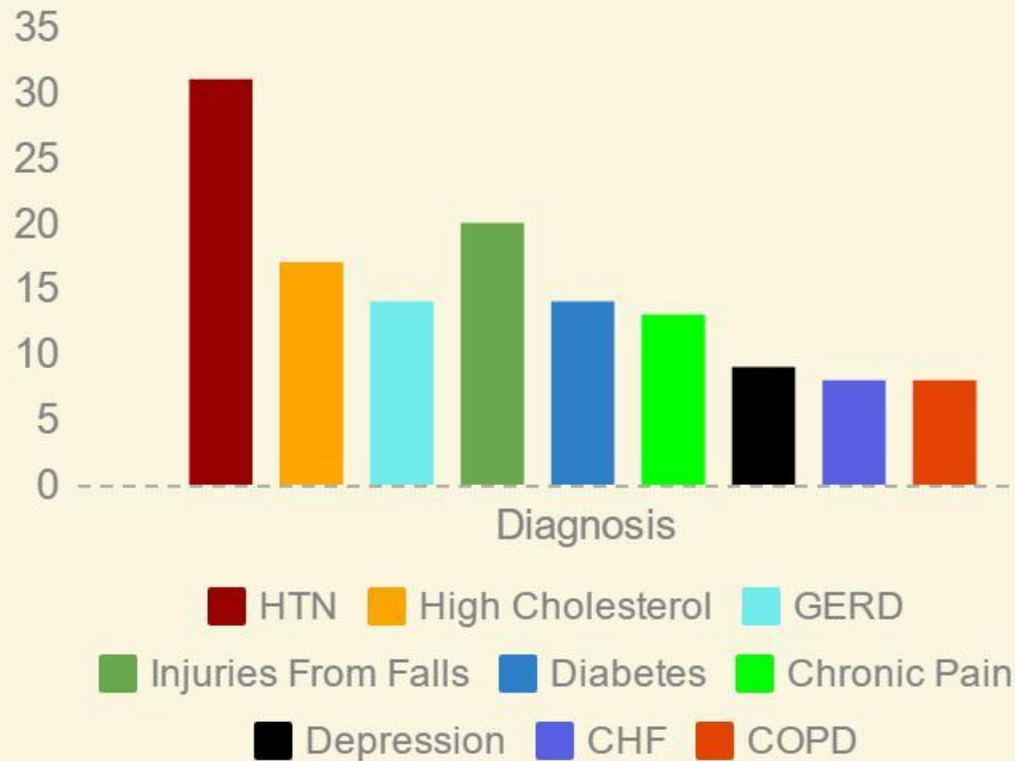
Data and Demographics

Insurance Breakdown



Data and Demographics

Top 10 Existing Diagnosis



Avg. Number of Comorbidities

5.93

Data and Demographics

Results From Rx Inventories



■ No Problems Identified(77.50%)

■ Problems Identified(22.50%)

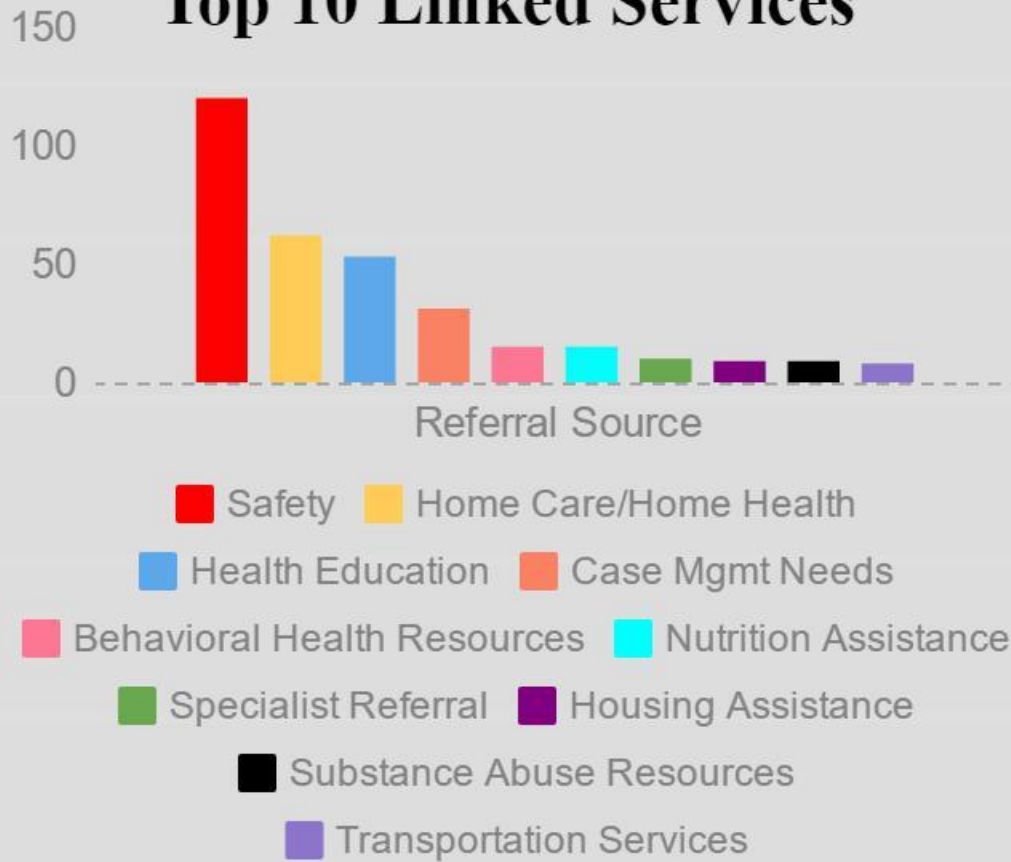
Avg. Number of Medications/Patient

9.74

A stylized illustration of a grey blister pack containing several capsules. The capsules are white with a red band. The number 9.74 is overlaid in large black font on the blister pack.

Data and Demographics

Top 10 Linked Services



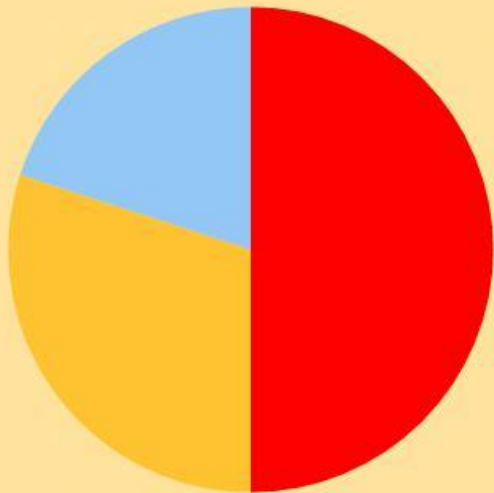
Total Services Linked to Patient

376

Avg. Linked Services/Patient: 4.7

Data and Demographics

PEAT Score Results



■ Healthy(50%) ■ Less than Optimal(30%)
■ Referral Assistance(20%)

Safety Hazards

Unmarked prescription pill bottles

Space heaters next to curtains

Complete lack of smoke detectors

A light plugged into an outlet and dangling over the bath tub

Soft floors and sagging ceilings

Multiple layers of throw rugs

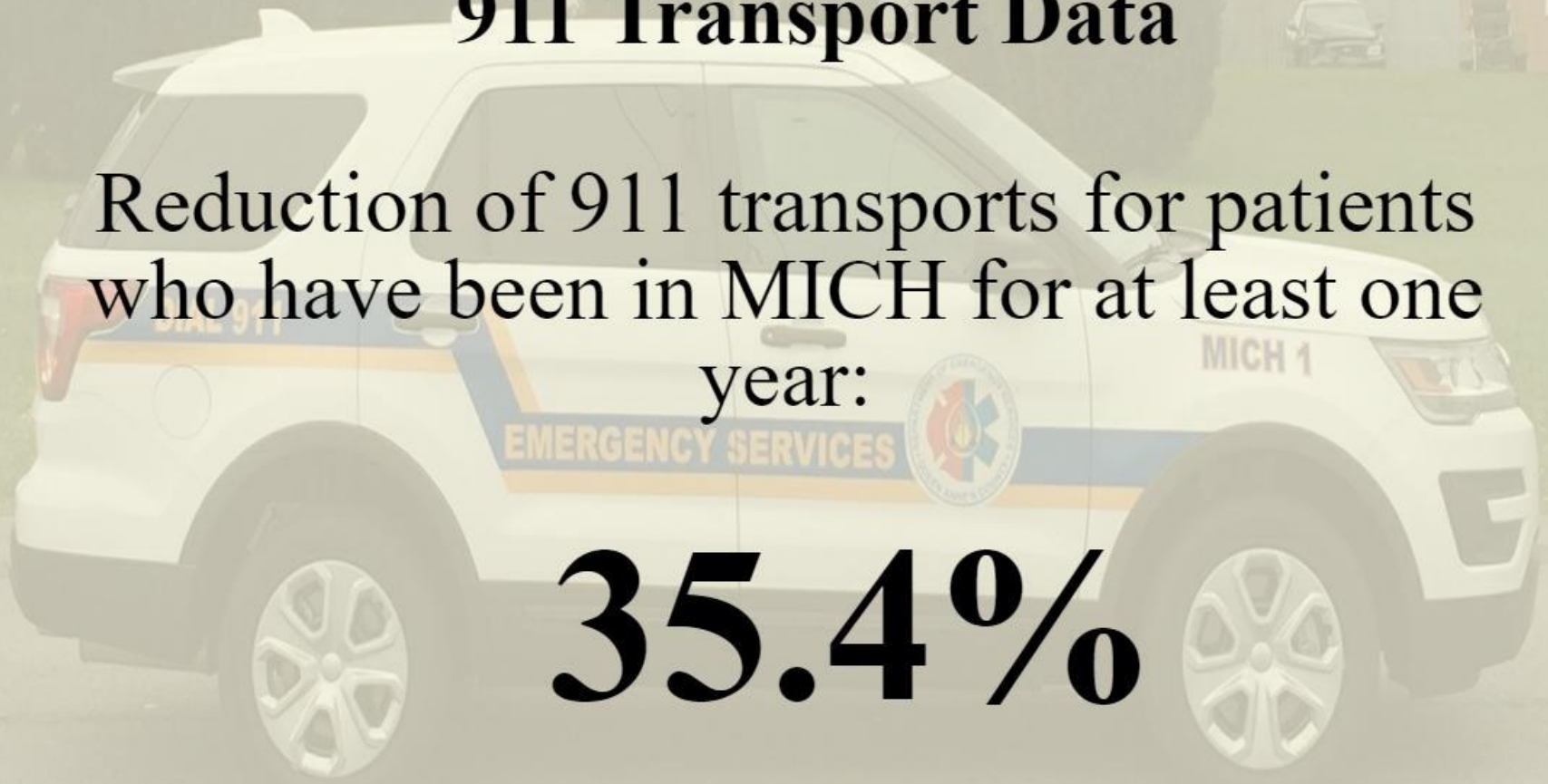
Extension cords running across rooms from wall to wall

Data and Demographics

911 Transport Data

Reduction of 911 transports for patients who have been in MICH for at least one year:

35.4%



Data and Demographics

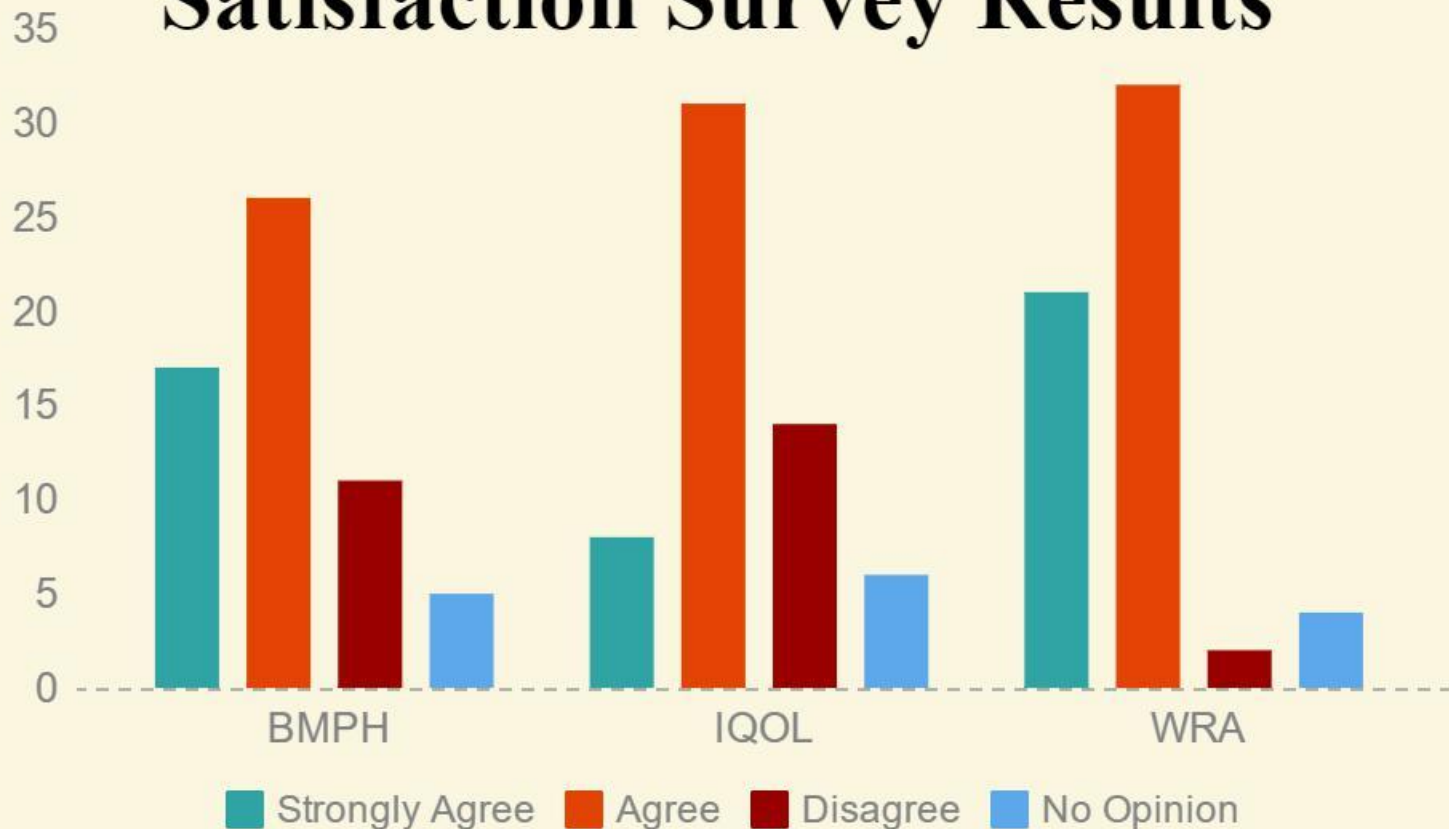
ED Utilization Data

Total number of ED visits that were avoided in one year by patients post-MICH enrollment

136.2

Data and Demographics

Satisfaction Survey Results



BMPH - Better able to manage your personal health

IQOL- Improved Quality of Life

WRA - Were referrals appropriate/useful

Challenges Faced



Data Collection



Dealing with Declinations



Social Isolation and Mental Health



Financial Sustainability



Medically Complex Patients

Data Collection



Deciding what data to capture.



Consolidating data from multiple different systems/ services.



Determining baseline data and control groups.



HIPAA and data sharing

Declinations



Getting people to say "yes" to a home visit often proves challenging.



Many patients are difficult to contact.



Disconnected numbers.

Won't answer when called.



Many patients are too proud to accept help from outside sources.



Make sure the program is adequately explained.

Social Isolation and Mental Health



Resistance to Senior Centers



Senior Centers are stigmatized



A large proportion of our elderly patients have undiagnosed depression



Ageism.



Ignorance.



Shortage of services.



Affordability



Transportation



Many patients have expressed frustration and despair with the inability to leave their house



The lack of transportation contributes to feelings of loneliness



Lack of transportation also contributes to noncompliance with medication refills and physician visits



Home Safety Issues



Many of our patients have been found to be living in less than ideal conditions.



Some conditions are deplorable and unsafe.



With a limited budget, what can be done?

Medically Complex



Many patients who are frequent 911 and ED users have long lists of ailments and comorbidities



Complex medical patients will require multiple visits and resources



An action plan will need to be developed with frequently scheduled follow-up visits

What Does the Future Hold?



Broadening referral sources

Closing the loop with PCPs

Search for financial sustainability

Continue to investigate uses for telehealth



Questions?

