



# 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**



**Zoll Medical Corporation**

# Funding



**UMMS Shore Regional Health**



**Queen Anne's County Government**



**Queen Anne's County Dept. of Health**



**Dept. of Health and Mental Hygeine**



**QAC Addictions and Preventions Services**

# 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.**

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## 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.**
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# 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**

# 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

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# 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**



**The Physical Environment Assessment Tool**



**Alcohol Use Disorder Identification Test**



**Drug Abuse Screening Test**

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# Data and Demographics

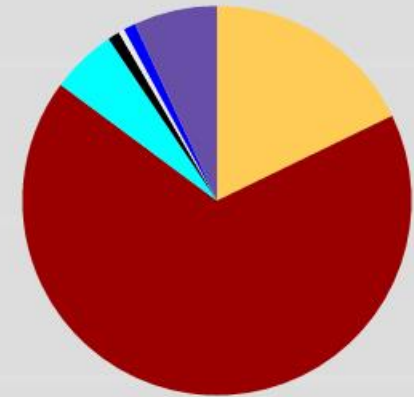
Total time spent on home visits

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%)

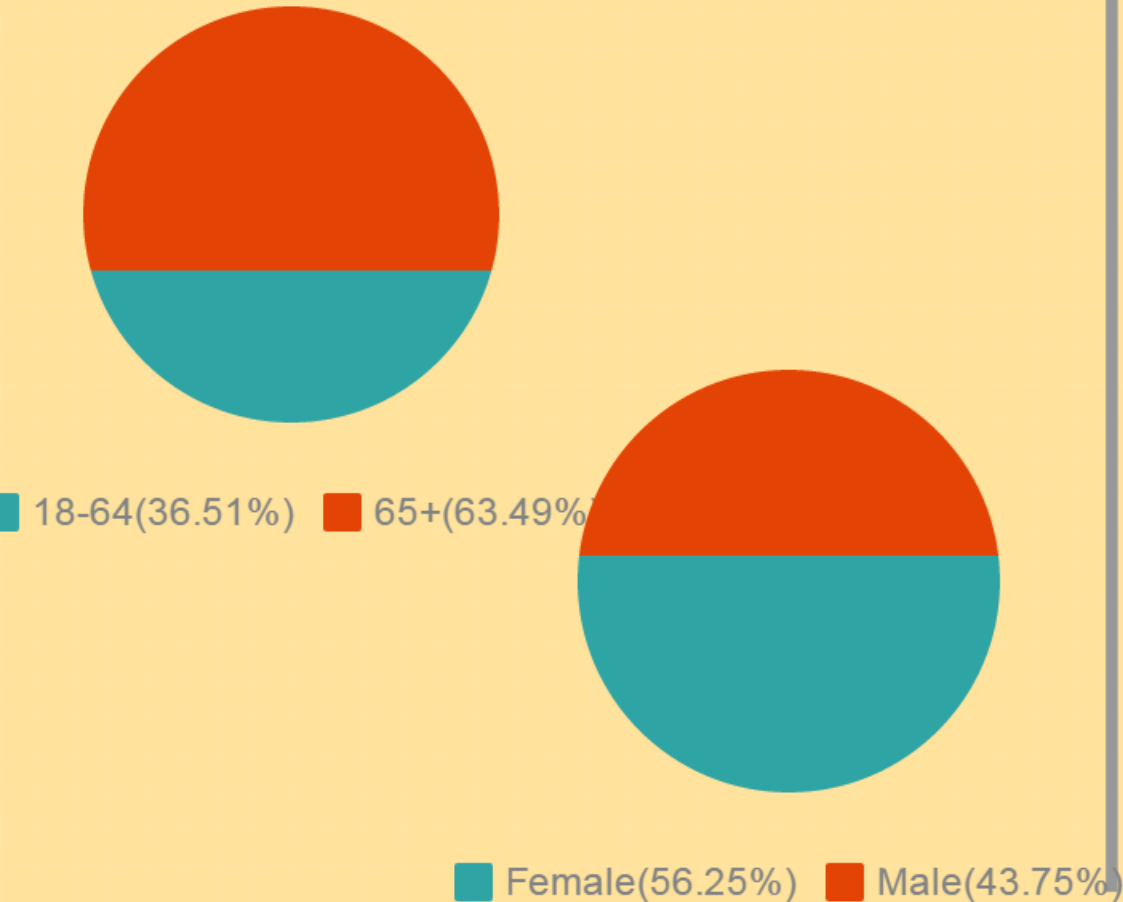
Chestertown ED(0.50%)

AAMC D/C(0.99%)

Easton SPACC(6.93%)

# Data and Demographics

## Age and Gender Breakdown



## Age Statistics

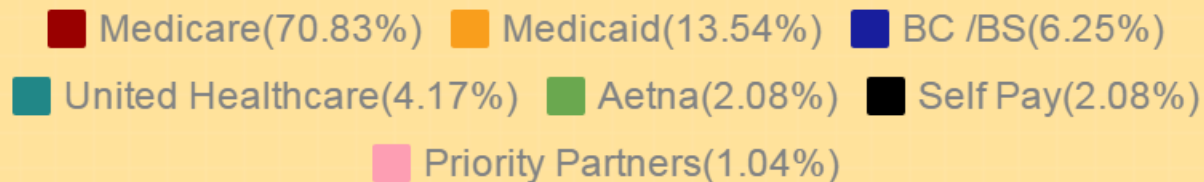
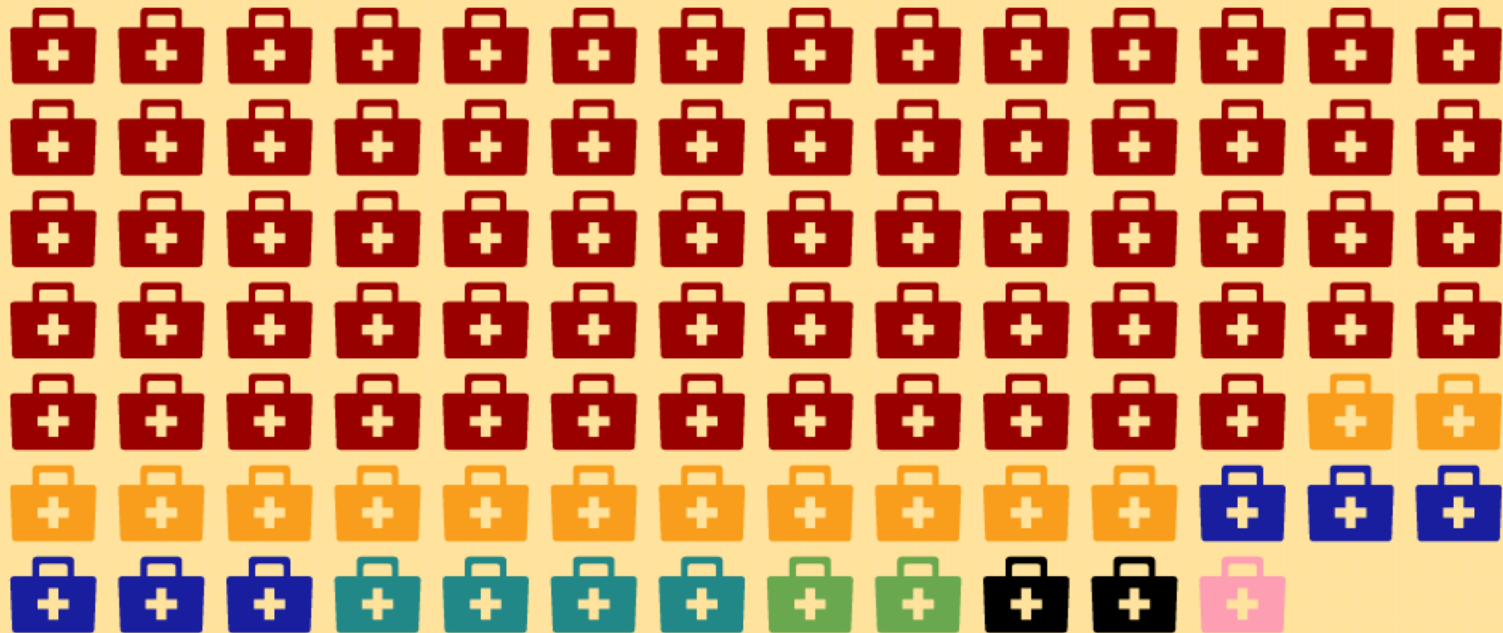
Oldest Patient: 97

Average Age: 69

Youngest Patient: 32

# Data and Demographics

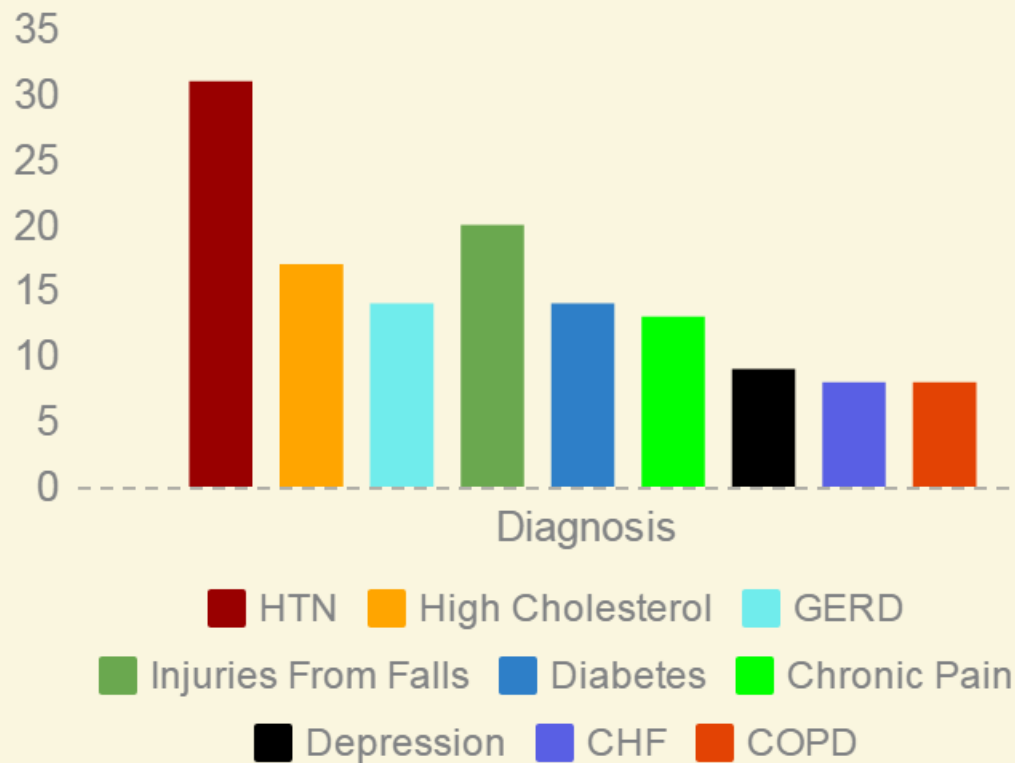
## Insurance Breakdown





# 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%)

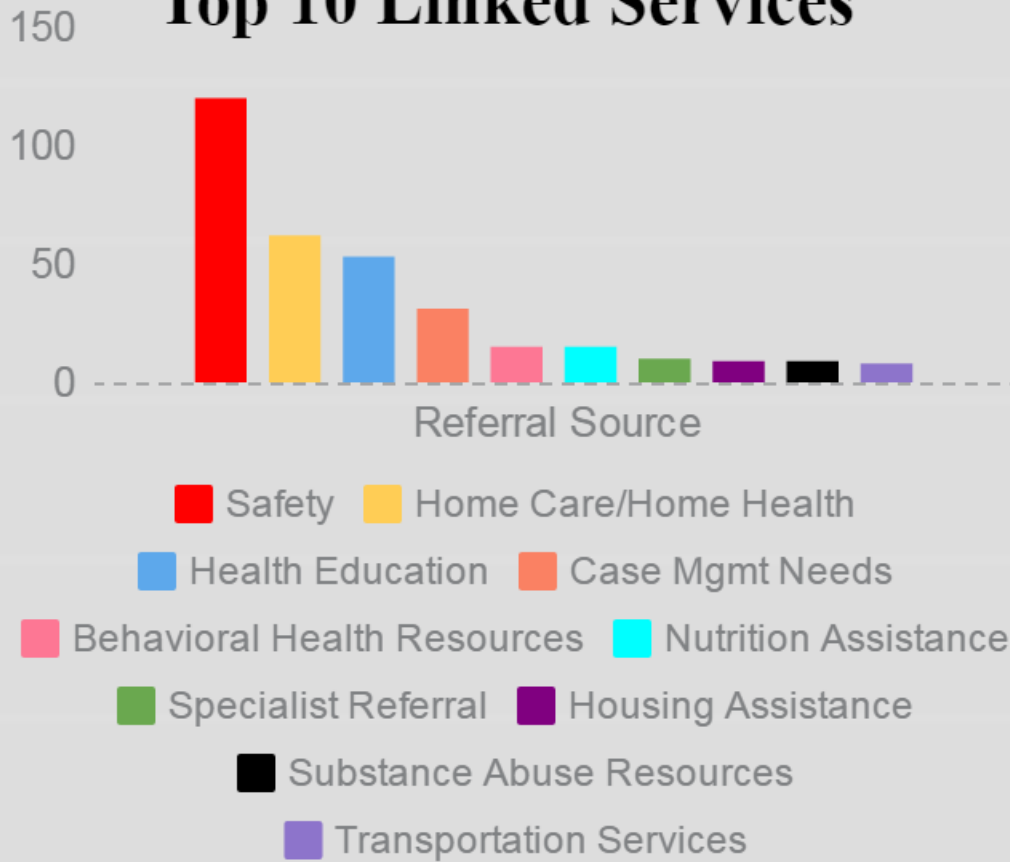
## Avg. Number of Medications/Patient

9.74

A stylized illustration of a blister pack containing several capsules. The number 9.74 is overlaid on the pack, representing the average number of medications per patient.

# 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**

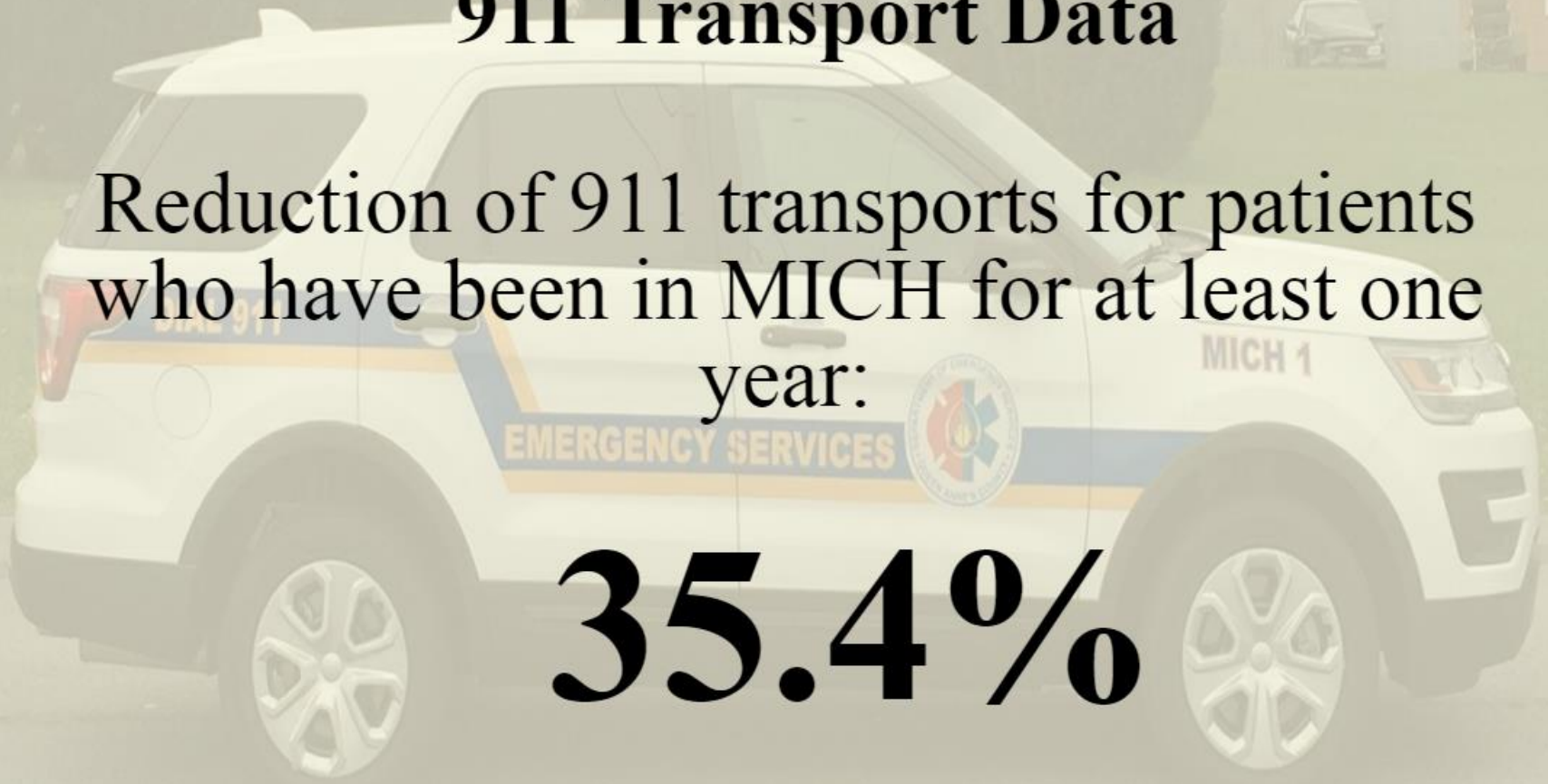
**Extension cords running across rooms from wall to wall**

# 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

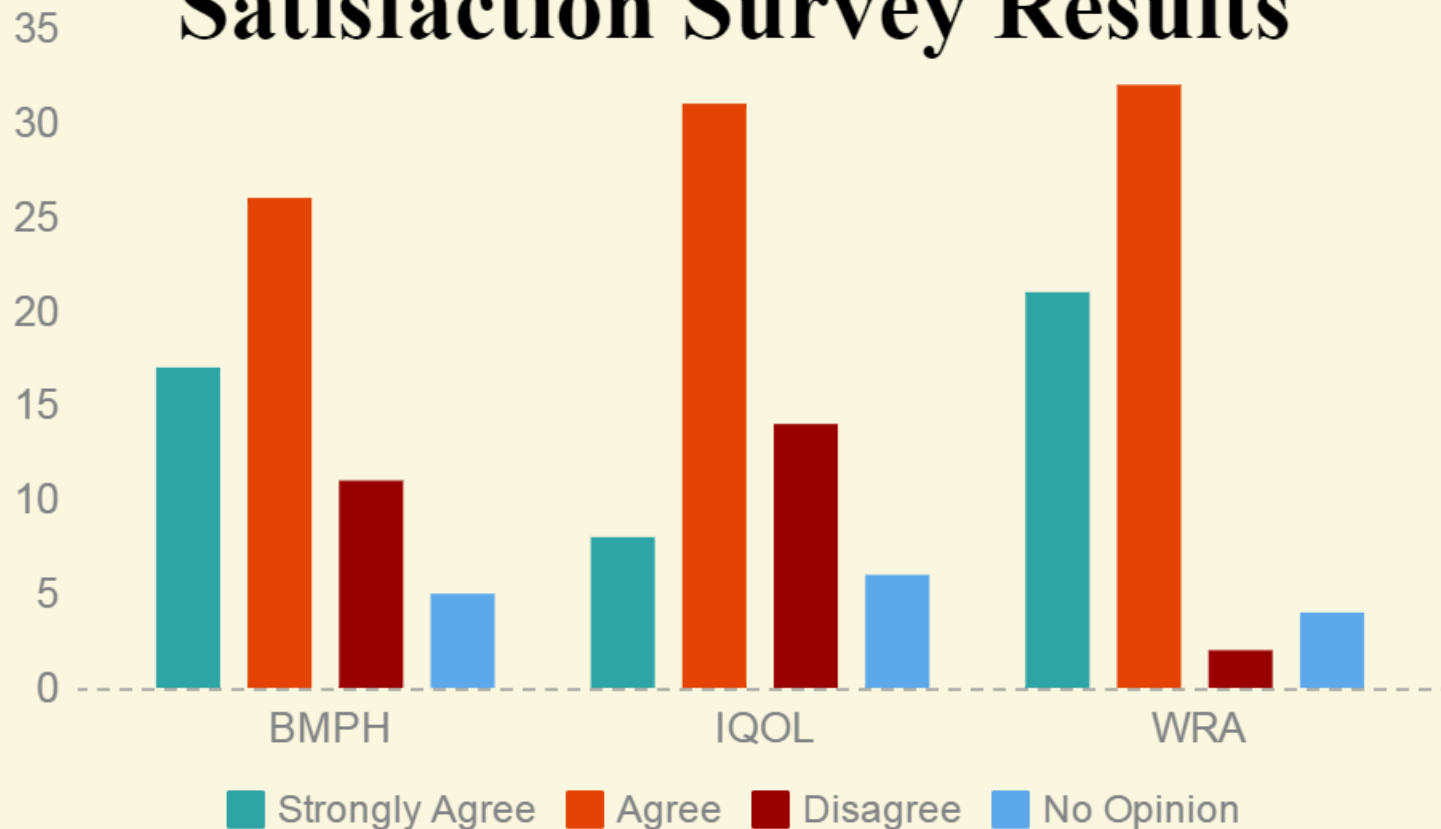
## ED Utilization Data

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**

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# 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.**

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# 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**



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# 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**

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# 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?**

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# 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**



**Linking with post discharge clinics**



**Search for financial sustainability**



**Investigate and plan for the utilization of telemedicine**

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Questions?

