

MOBILE INTEGRATED HEALTHCARE of Charles County

*Paving the way to a healthier
community*



UNIVERSITY of MARYLAND
CHARLES REGIONAL MEDICAL CENTER



What is Mobile Integrated Healthcare?

- In its simplest definition, Mobile Integrated Healthcare (MIH) is the healthcare that uses patient-centered, mobile resources in the out-of-hospital environment.
- Also known as community paramedicine, it originally started with use of paramedics in the home.
- This initiative has involved years of planning and initially started when the Charles County Department of Emergency Services presented the concept of MIH to the local hospital and department of health.
- The strong partnership that exists in this county contributed to launching this initiative.

What is Charles County Mobile Integrated Health?

- Free, voluntary program
- Patient-centered
- Personalized care coordination
- Mobile resources
- Out-of-hospital environment
- Help members of the community manage their healthcare needs without frequent use of the 911 system and the Emergency Department
- A “touch” of Community Paramedicine mixed with Community Nursing
- Team includes Paramedic, Community Health Nurse, Community Health Worker

Structure

Stakeholders

- Charles County Department of Health
- University of Maryland Charles Regional Medical Center
- Charles County Department of Emergency Services

The MIH Team

- Nurse
- Paramedic
- Community Health Worker



Meet our MIH Team



Pam (NREMT-P), Jenny (BSN, RN), Wanda (Community Outreach Worker)

How is the program funded?

- Community Health Resources Commission
 - 3 year, \$400,000 grant
- Maryland Department of Health: 1 year grant for telehealth
- Roles/Responsibilities:
 - CCDoH – Management of the grants, Nurse, CHW, CRISP, office space for the team
 - CCDES – paramedic, vehicle, diagnostic/communication equipment, office space for team
 - UM CRMC- funding, referral source

Goals of MI Health

- Decrease the percentage of ED visits and 911 system calls among participants by **25%**
- Increase the number of participants who visit their primary care provider **twice a year** for routine care
- Increase health literacy by educating participants on **prevention/management** of their disease processes
- Make at least one **referral** per participant to a needed community, health, or social service
- Give people the tools to **self-manage** their disease processes
 - zone sheets; record sheets; scales; automatic blood pressure cuffs; daily medication organizers; File of Life

Long Term Goals

- Reaching long term goals of this project includes a reduction in the UM CRMC readmission rates and a reduction in the use of CCDES for transports of high utilizers for non-emergent transport. These goals are important for proving the return on investment with this project, yet the initial goal is to invest in and help transition one person at a time.



Referral Sources



- Hospital nurse navigators and discharge planners
- EMS referrals
- Primary Care
- Area Office on Aging

Criteria for Enrollment

Appropriate candidates:

- Must be:
 - 18 years of age, or older (and)
 - Charles County resident (and)
 - 1 or more chronic health condition

ALL 3 MUST APPLY

High utilizers of Emergent Care:

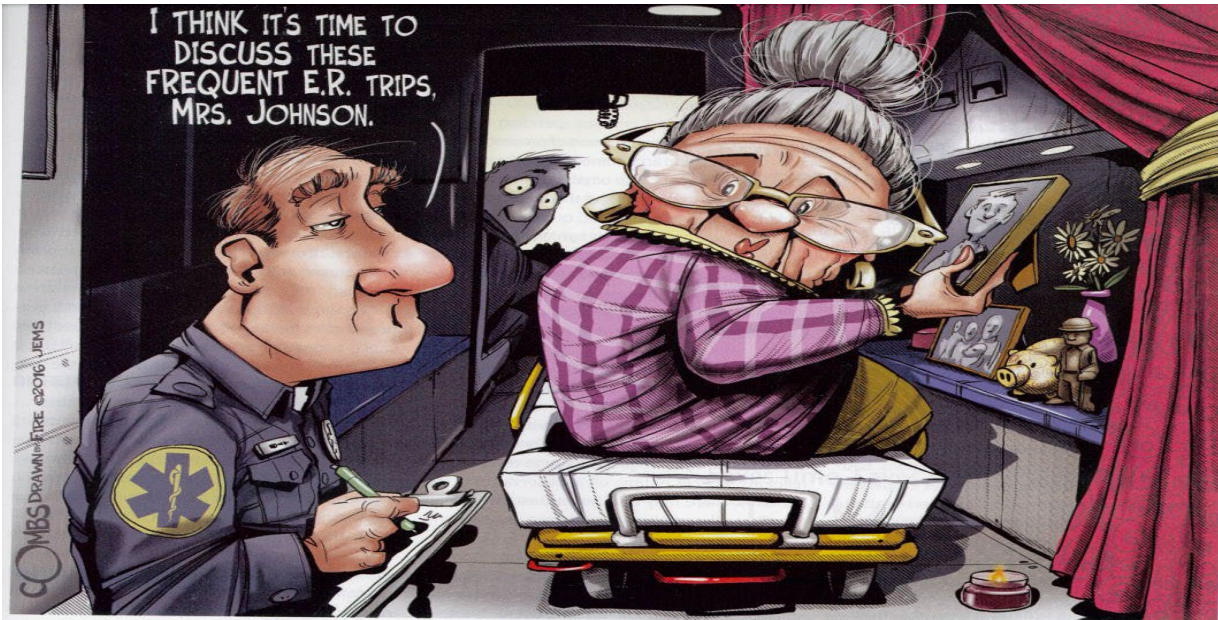
- 6 or more visits to the ED in 3 months or
- 6 or more calls to EMS in 3 months

Referrals from primary care must display one (or more) of the following:

- 2 missed appointments/no-show's to scheduled appointments (and/or)
- Have not followed up with recommended specialists/agencies pertaining to health needs (and/or)
- Poor medication adherence

Office on Aging Referrals:

Those on the senior care waiting list with chronic conditions



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Visits

- **Goals:**
 - Help reach wellness through resources and education
 - To help the patient take control of their health
- **Initial visit:**
 - Usually within 48 working hours of referral
 - Enrollment requires consent from patient (verbal consent is ok prior to initial visit when informed consent will be received)

Follow up visits are scheduled on an as-needed basis according to the recognized needs of the patient/client

Initial Visits

- Medical history review
- Individual concerns regarding health conditions
- Social and Emotional Health Questionnaire
- Physical Assessment
 - Vital signs
 - Respiratory/Neuro/Integumentary/GI/GU
Cardiovascular/Musculoskeletal/Pain Assessments
- Immunization history review
- Assessment of ADL's
- Medication reconciliation
 - Ability to safely dispose of unused/unwanted medications
 - Carbon copied lists for convenience

- Thorough Home Safety Assessments
 - Ability to address safety needs with little to no cost to patient
 - Smoke detectors / Carbon Monoxide detectors
- Individualized “To-Do” lists for patients
- Recognize needs for county Interdisciplinary team discussions where applicable
- File of Life
- Personalized binders with accessible educational materials/references for clients health conditions
 - Zone Sheets; Blood Pressure, blood sugar, weight charts

Renal Failure Zone

EVERYDAY

- ❖ WEIGH YOURSELF IN THE MORNING BEFORE BREAKFAST AND WRITE IT DOWN
- ❖ TAKE YOUR MEDICINE AS DIRECTED
- ❖ CHECK FOR SWELLING IN YOUR FEET, ANKLES, LEGS, AND ABDOMEN (WAIST AREA)
- ❖ MAKE FOOD CHOICES AS DIRECTED FOR RENAL DIET
- ❖ BALANCE ACTIVITY AND REST PERIODS

GREEN ZONE – ALL CLEAR: THIS IS YOUR SAFE ZONE

YOUR SYMPTOMS ARE UNDER CONTROL IF YOU HAVE:

- ❖ NO SHORTNESS OF BREATH
- ❖ NO SWELLING OF YOUR FEET, ANKLES, LEGS, OR ABDOMEN
- ❖ NO CHEST PAIN
- ❖ NO CHANGE IN NORMAL URINATION

YELLOW ZONE – CAUTION: THIS ZONE IS WARNING

CALL YOUR DOCTOR'S OFFICE IF YOU HAVE:

- ❖ NAUSEA, VOMITING, OR LOSS OF APPETITE
- ❖ MORE SHORTNESS OF BREATH OR HICCUPS THAT WILL NOT STOP
- ❖ MORE SWELLING OF YOUR FEET, ANKLES, LEGS, OR ABDOMEN
- ❖ NO ENERGY OR FEELING MORE TIRED
- ❖ ITCHY SKIN OR A RASH
- ❖ DECREASED URINATION OR DARK-COLORED URINE
- ❖ FEELING UNEASY, YOU KNOW SOMETHING IS NOT RIGHT
- ❖ ABDOMINAL OR LOW BACK PAIN

RED ZONE - *EMERGENCY*

GO TO THE EMERGENCY ROOM OR CALL 911 IF YOU HAVE ANY OF THE FOLLOWING:

- ❖ STRUGGLING TO BREATHE
- ❖ RACING HEART RATE AND/OR PALPITATIONS
- ❖ CHEST PAIN
- ❖ SEIZURE OR CONFUSION (CAN'T THINK CLEARLY)
- ❖ ABILITY TO URINATE SUDDENLY DECLINES

Behind the Scenes

- Make contact with appropriate resources
 - MD Access Point line, dental, mental health
 - Schedule appointments
- Arrange transportation when necessary
 - Complete Medical Assistance Transportation Forms, Provide VanGo passes, Arrange transportation with Lifestyles
- Send “needs list” to providers offices regarding needs of patient
 - Refill requests, referrals, Durable Medical Equipment requests, etc.
- Insurance companies
 - Coverage specifications
 - Case Manager access
- Schedule for home safety modifications when applicable

Organizations We Work Closely With

- Charles County Health Department
 - AERS
- Charles County Department of Emergency Services
 - Home safety modifications
- Lifestyles of Southern Maryland
 - Homeless (shelter)
 - Utility bill assistance
 - Food Pantry/Donated clothing
 - IDT meetings
 - transportation
- Charles Regional Medical Center
 - Diabetes Education Center
 - Cardiac/Pulmonary Rehab Center
 - Community Physicians Group
 - Specialist Physicians
 - Case Managers/Social Workers
- Department of Social Services
 - FSA, TCA, etc.
- QCI Behavioral/Mental Health
 - New referrals/ mobile treatment
- Department of Community Services
 - Loan closet for Durable Medical Equipment
- Health Partners/Greater Baden
 - New referrals for primary care
- Office on Aging
 - MAP line
- Local Pharmacies
 - High Street
 - LaPlata Pharmacy
 - Home-delivery services
- Volunteer Rescue Squads



Discharge process

- First month:
 - MIH is “hands-on,” doing tasks for clients/family and informing them before and after tasks are completed (i.e.- appointment scheduling, etc.)
- Second month:
 - Clients/family are encouraged to take initiative in completing necessary tasks to manage healthcare needs, reflecting level of involvement from MIH in first month
- Third month - onward:
 - MIH monitors ability of client/family to manage healthcare needs independently and provides assistance/guidance when needed
 - Discharge (successful/unsuccessful)
 - Self-manages, or remains non-compliant

Success Story



Lessons learned

- The MOU process can be time intensive and cumbersome, especially once legal teams are involved.
- Take the time to explore other programs that have launched (e.g. Queen Anne's County and Prince Georges County). This allowed for sharing of best practices and preparation of charting tools.
- Be adaptable. As you plan, you will not think of every possible scenario. The team will need to make changes as they go.

Strengths

- Good reputation and trust with participants
 - Compliance with plan of care
- Excellent partners and community agencies to refer patients for services
 - QCI Behavioral Health
 - Dental (CCDOH)
 - Health Partners
 - Lifestyles of Maryland
 - Office on Aging

Barriers/Challenges

- Transportation
 - Established relationship with Black and White Cab to get patients transported to urgent primary care visits
 - \$40 one-way
 - Enlisted help from volunteer EMS to get transport of bedbound patient to primary care visits
- Mental health needs
 - Unrecognized, or undermanaged
- Many community programs have long waiting lists
- Complicated patients such as those on dialysis that affect the hospital readmission and high utilization rates but are not necessarily appropriate for MIH services.
- Cost of medications
- Reduction of food stamp allowance
 - Clients requiring strict nutritional needs

New Telehealth Project

- **UMMS-Primary Care at La Plata and Health Partners Inc.**
- Both practices will be provided with the equipment to conduct telemedicine visits with their patients. The MIH team will be present in the home with the patient where they can take vitals, assess the patient, provide recommendations and information to the provider, and help the patient to ask questions and advocate for their health.
- This can reduce the need for in-person follow-up visits when transportation and travel are an issue.
- **La Plata Pharmacy**
- A pharmacist will be available to conduct telehealth visits with MIH clients to answer questions about medications, conduct medication reconciliation, review their insurance coverage for medications, etc.

Current Program Measures

- Number of patients enrolled: 122
- Number of home visits: 229
- Number of patient encounters: 3544
- Number of home assessments completed: 100
- Number of participants receiving health education: 146
- Number of participants linked to social services: 72
- Number of participants connected to specialists: 57

Charles County MIH

Timeframe: May 2018 – April 2019

- **95** clients with 3 months pre/post data for evaluation
 - **58%** reduction in EMS call volume
 - **56%** reduction in ED visits
 - **67%** reduction in inpatient admissions
 - **90%** reduction in 30-day readmissions

EMS Calls and Hospital Utilization 3 Months Pre- and Post-Enrollment in Charles County MIH Program



Demographics of MH Participants:

- Average Age: 60 years
- Average Number of Prescriptions: 8
- Average Number of Chronic Conditions: 5
- Prevalence of Mental Health Disorder: 44%
- Gender: 46% Male, 54% Female
- Race/Ethnicity: 54% African American, 42% White, 4% Hispanic
- Payer Source: 46% Medicaid, 52% Medicare, 27% Private, 9% Self Pay

Contact Information

Feel free to contact us if you have questions, or need any additional information!

- Phone: 301-609-5748
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