

Northwest Community/Northern Lake County Community Paramedicine Mobile Integrated Healthcare Program



Plan 2024 (Rev 8-22-24)

Prepared by:

Connie J. Mattera, MS, RN, Paramedic
NCH Administrative Director Emergency Services

and

Lt. Erik Christensen, Paramedic
Wauconda Fire Protection District

Approved by:

Matthew T. Jordan, MD, FACEP
NWC/NLC EMS/MIH Medical Director

Participating Agencies

Wauconda FPD
First FPD of Antioch
Countryside FPD
Greater Round Lake FPD
Libertyville FD

Project Coordinator &
MIH Case Manager
Lt. Erik Christensen
Wauconda FPD



Northwest Community/North Lake County MIH Program

Table of Contents

Topic	Page
Table of contents	1
Acronyms and Abbreviations.....	2
Mission, vision, values	3
Current Healthcare Challenges and Priorities AHA Advocacy Agenda	4
Person-centered Quality Healthcare; Integrated, Value- and Population-based care	5
Social Determinants of Health; Healthy People 2030; Healthy Vision Illinois 2028; EMS Agenda2050.....	6
Preventing Avoidable Readmissions	6
Hospital Readmissions Reduction Program (HRRP) ECRI Safety Issues (data).....	7
National MIH Overview History and planning for MIH in Illinois	8
Legislative and Regulatory Authority for MIH in Illinois	9
NWC/NLC Program: Planning, Priorities; Participants; Stakeholders.....	10
Community needs assessment Market analysis and determination	11
Service Area by Zip Code Ethnicity/Race data	12
Chronic Disease Growth.....	13
MIH Program goals	14
Program Design. Scope of services: Workflow; Hours of operation; Volumes; Visit times; Staffing	15
Staffing configuration; Types of clients accepted; Eligibility for MIH Services	16
Common Workflow: Sources of Referrals; Timing/number of visits; Duties & processes prior to 1 st visit.....	17
Scope of Care MIH Services Provided	18
Prevention, Education, Care Coordination Acuity Rating; Communication; Documentation in general	19
Operational infrastructure: Capital equipment; Vehicles; Supplies/equipment; IT/Communications resources;	20
Administrative structure/reporting relationships Medical Direction MIH Medical consultation	21
MIH Education	22
MIH Clinician Scope of Practice; Position Description Credentialing	23
Clinical Care MIH Practice Guidelines/SMOs and Service Level Commitments	24
Medication reconciliation.....	25-26
Patient Education Prevention Resources.	27
MIH Documentation and Care Delivery Platform – HealthCall®.....	28-30
Quality Assessment and Performance Improvement / Data Collection & Reporting:	31-33
Program Financing Revenue sources Insurance	34-35
Communications and Marketing.....	36
References	37-38

Appendix

- A: Intergovernmental Agreements
- B: On Call Schedule for MIH-CPs
- C: Dr. Matthew Jordan CV
- D-F MIH-CP Position Description; Application & Agreements
- G-H: MIH Brochure & MIH-CP roster
- I: MIH Clinical Guidelines/SMOs; EMS/MIH MD attestation
- J: MIH Assessment template (electronic version in HealthCall® as is Medication Reconciliation form)
- Intake referral form, Meridian contract; HealthCall® agreements; available upon request

Policy distribution: All current NWC/NLC MIH Administrators, Agencies, clinicians, educators, and other stakeholders have open access to this plan and these policies via the NWC EMSS website: www.NWCEMSS.org . The NWC EMSS reserves the right to change this policy at any time.

Violation of plan: All allegations of misconduct relative to this plan shall be investigated in compliance with the System Just Culture framework. Any person found to have willfully or grossly violated this plan shall be in noncompliance with the Program's Ethics Policy, and shall be subject to the provisions of System Policy D1 Due Process: Corrective coaching/Disciplinary action.

MIH Acronyms and Abbreviations

AHA	American Hospital Association
CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare and Medicaid Services
COPD	Chronic Obstructive Pulmonary Disease
CP	Community Paramedic or Paramedicine
DC	Discharge
EB	Evidence-Based
EMR or EHR	Electronic Medical Record or Electronic Health Record
EMS MD	EMS System Medical Director
EtCO₂	End tidal carbon dioxide (quantitative and qualitative waveform capnography)
HCW	Healthcare workers
HF	Heart Failure
H&P	History and physical exam
HIPAA	Health Insurance Portability and Accountability Act
HRRP	Hospital Readmissions Reduction Program
IDPH	Illinois Department of Public Health
IHI	Institute for Healthcare Improvement
IOM	Institute of Medicine
MIH	Mobile Integrated Healthcare
NAEMSP	National Association of EMS Physicians:
NAEMT	National Association of EMTs
NAMIHP	National Association Mobile Integrated Healthcare Providers
NAEMSO	National Association of State EMS Officials
NEMIS	National EMS Information System
NHTSA	National Highway Traffic Safety Administration
NREMT	National Registry of EMTs
PCP	Primary care practitioners
PDSA	Plan, do study, act
QAPI	Quality Assessment and Performance Improvement
SDoH	Social Determinants of Health
SNF	Skilled nursing facility
SOPs/SMOs	Standard Operating Procedures / Standing Medical Orders
SpO₂	Pulse oximetry
VS	Vital signs

Evidence-Based Practice: Practices, methods, interventions, procedures and techniques that are based on high-quality scientific evidence and proven improvement in outcomes (Ham-Bayoli et al., 2020)

Evidence-Informed: An evidence-informed approach blends knowledge from research, practice and people experiencing the practice. (Australian Institute of Family Studies, 2022)

Emerging Practice: An activity, procedure, approach or policy that leads to, or is likely to lead to, improved outcomes (Health Resources and Services Administration, 2022).

Document Conventions

The terms “should” and “should not” indicate that, among several possibilities, one is recommended as particularly suitable without mentioning or excluding others, that a certain course of action is preferred but not required, or that (in the negative form) a certain possibility or course of action is discouraged but not prohibited.

The terms “may” and “need not” indicate a course of action permissible within the limits of the document.

The terms “can” and “cannot” indicate a possibility and capability, whether material, physical, or causal.

The term “client” is used throughout the document, but is interchangeable with participant or patient.

MIH MISSION – VISION - VALUES

MISSION The MIH program exists to deliver 6 R service: Right care, Right place, Right timeframe, Right resources, Right quality, and Right cost.

VISION All clients receive safe, seamless, and personalized MIH care by competent clinicians.

VALUES *We live our values - ICARE + JF*

Integrity We do the right things, the right way **with honesty, humility, transparency and moral courage.**

Commitment **One team: One message: Clients first.** For over 50 years, the NWC EMSS has generated trust by keeping promises, smashing through barriers, tackling challenges, and being an ever-present force for good when and where needed. Wise choices, intelligent planning, responsiveness to feedback, and consistent disciplined practice lead to spectacular results. We diligently support, resource, and empower others to **serve with care, concern, and distinction** in accomplishing our mission.

Citizenship We conduct all business in alignment with codes of ethical conduct and conformity with applicable laws, rules, standards, and guidelines.

Accountability **Each person is accountable for their actions** and performing in conformity with Program standards and values. We promote safety and strive to reduce variation and error in a culture that “Owns our moment” and seeks ways to ever improve design, education, practice, and outcomes.

Advancing knowledge **Ideas matter.** We are a hub of thought leadership and rigorously curate credible literature and adopt best practice models. We think critically to solve complex problems, foster a growth mindset, scaffold learning to zones of proximal development, coach to competence, advance professional development, and optimize results. Quality education and a continuously learning community is fundamental to practice excellence.

Respect, kindness, collaboration **Each person has equal value and is treated with dignity, kindness, and respect.** MIH initiatives are collaborative endeavors involving multidisciplinary teams. We champion diversity, equity, belonging, collaboration, and cultural humility without bias or prejudice.

Excellence without compromise **If a thing is worth doing, it’s worth doing well.** We unite around a vision grounded in the EMS Agenda 2050 and CAMTS MIH Accreditation standards within a Culture of Safety. We use appreciative inquiry and quality assessment and performance improvement to meet or exceed key metrics. Accurate data, creativity, and excellent communication fuels **innovation that continually reinvents and improves our processes and outcomes.**

Empathy & Wellbeing We advocate for each person’s physical, mental, emotional, and spiritual well-being by seeing through their lens. We listen to understand, withhold judgment, validate feelings, consider multiple perspectives, and build relationships. We support self-care, healthy choices, mitigating stress, and achieving balance, holistic wellness, and resilience.

Justice Fair and equitable engagement, opportunity, and due process undergirds a **Just Culture**

Fiscal responsibility **Careful stewardship of all resources** is the cornerstone of business operation.

These tenets are the foundation of all MIH planning and activities. As we collaboratively address care navigation and coordination, clinical processes and outcomes, operations, costs, reimbursement, quality, risk, and person and stakeholder satisfaction, we strengthen our System of care and achieve the best possible client experience across Regional, EMS System, Hospital corporate, and procedural boundaries.

Eff. 5/1/24

HEALTHCARE TRENDS and CHALLENGES

External Forces Impacting MIH PLANNING

Executive Summary

America's health system aspires to provide high-quality care to all patients in every encounter. This commitment to advancing health in an increasingly complex environment was never more apparent than during the recent COVID-19 pandemic which ignited the greatest public health crisis in a century.

The path to recovery has been a steep climb for the healthcare industry. We have faced unprecedented challenges posed by crashing profit margins, historic workforce shortages, unbridled cost increases, broken supply chains, gross underpayment by 3rd party payers, major shifts in and polarized public opinion, and bloated regulatory burdens that have crippled recovery and reform efforts. Doing more with less has become the new normal.

Despite these obstacles, hospitals, health systems, EMS and Mobile Integrated Healthcare (MIH) programs, community partners, and clinicians are leading the greatest transformation in medical history. They are working to provide coordinated and convenient evidence-based practice that is responsive to patient preferences and community needs. Multiple approaches are designed to help people attain and maintain their highest potential for health while promoting affordability and value.

Health care resources are expanding into the community to make them more accessible. Technology investments and coordinated care models are harnessing the power of data to address population needs and social determinants of health to promote health equity and wellness in all of its dimensions.

CURRENT HEALTHCARE CHALLENGES AND PRIORITIES

Hospital CEOs' biggest concerns and average rankings in 2023			
1. Workforce challenges	2.3	7. Patient satisfaction	6.4
2. Financial challenges	2.6	8. Technology	7.3
3. Behavioral health/addictions	5.3	9. Physician-hospital relations	7.6
4. Access to care	5.6	10. Population health mgt	8.7
5. Governmental mandates	5.7	11. Reorganization	9.3
6. Patient safety and quality	5.9		

<https://www.advisory.com/daily-briefing/2024/02/12/ceo-concerns-ec>

The AHA 2024 Advocacy Agenda focuses on **ensuring access to care**, addressing government underfunding, providing financial sustainability; strengthening the health care workforce; advancing quality, equity and innovation; and enacting regulatory and administrative relief. <https://www.aha.org/advocacy-agenda>

Service value is measured against national and international standards and personal expectations by all stakeholders. Emerging practices must expand from acute and chronic condition management to promoting optimal wellness. As healthcare transitions to a value, outcomes and evidence-based model, we must align with the **Institute for Healthcare Improvement's (IHI) Quintuple Aims**



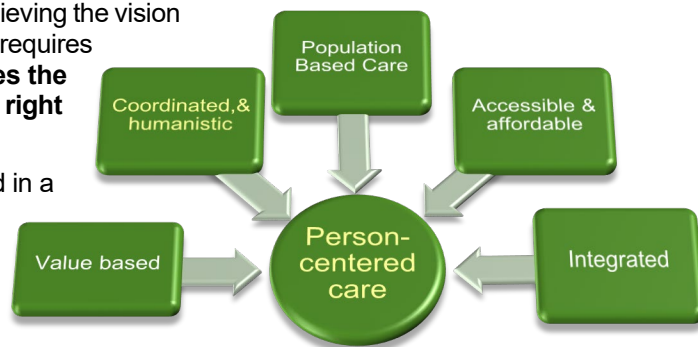
<https://twitter.com/ACCinTouch/status/1510242555149144065>

Achieving the Quintuple Aim will require rethinking our approach to healthcare, with an eye towards person-centered care, digital integration, data-informed planning, careful stewardship of resources, teamwork and community partnerships, meeting the social determinants of health, supporting clinician wellbeing, and ensuring health equity.

PERSON-CENTERED QUALITY HEALTHCARE

Best practice asserts that quality healthcare must be safe, seamless, personal, digitally-enabled, effective, efficient, equitable, highly integrated, evidence-based, timely, accessible, and affordable. Providers must be internally nimble to rapidly adapt to changing conditions. Achieving the vision for cross-continuum person-centered quality care requires transformative models to ensure that **every person receives the right standard of care, at the right resource level, at the right time, and in the right and most cost-effective setting.**

Person-Centered Care: Health care services are delivered in a setting and manner that is responsive to individuals and their goals, values and preferences in a system that supports good provider–patient communication, and empowers individuals receiving care and providers to make effective care plans together ([cms.gov](https://www.cms.gov)). It is population-based, considers the social determinants of health, all the dimensions of wellness, and is reliable, transparent, humanistic, comprehensive, and continuous.



Person-centered care includes:

- Care that's guided and informed by patients' goals, preferences, and values
- Managing chronic and complex conditions
- Success outcomes measured by patient and provider-reported data
- Integrated and coordinated care across health systems, providers, and care settings
- Relationships built on trust and a commitment to long-term well-being (CMS.gov)

Integrated Care: Coordinated services that address a client's physical, mental, behavioral and social needs.

Value-based Care: Health care providers deliver high-quality care using a person-centered approach. In a value-based care economy, reimbursement is tied to how effectively providers address efficiency and cost reduction; person experience of care; care coordination; and safety measures.

Current data

In 2023, 30.8 million people were enrolled in a Medicare Advantage plan that provided care coordination services, accounting for more than half, or 51%, of the eligible Medicare population, and [\\$454 billion \(or 54%\)](#) of total federal Medicare spending (net of premiums)

More than 190 million Americans (~59% of the population) are affected by one or more chronic diseases. Having one chronic condition can increase the risk of developing another. The number with ≥3 chronic diseases is expected to reach 83 million by 2030 and overall costs will rise to >\$42 trillion (<https://www.fightchronicdisease.org/latest-news/new-national-data-shows-projected-total-cost-chronic-disease-2016-2030-america-42>).

Persons with five or more complex chronic conditions account for more than 75% of total Medicare spending (<https://www.kff.org/medicare/issue-brief/medicare-advantage-in-2023-enrollment-update-and-key-trends/>)

POPULATION BASED CARE

DEFINITIONS

Population: Collection of individuals who share one or more personal or environmental characteristics

Population-of-interest: A population that is essentially healthy but could improve factors that promote or protect health.

Population-at-risk: A population with common risk factors or risk-exposure that pose a threat to health.

Population-based care begins with identifying all in the population-of-interest or the population-at-risk. It is not limited to those who seek service or who are otherwise vulnerable. Planning and service delivery is grounded in an assessment of the population's health status and reflects the priorities of the community.

"Community priorities are determined through an assessment of the population's health status and a prioritization process. Population health involves understanding and addressing the diverse factors that influence health outcomes across different populations. Unlike the broad scope of public health, population health zeroes in on targeted interventions tailored to specific communities or population groups. This approach considers a range of determinants, including social, economic, environmental, and behavioral factors that affect the health of these groups." <https://online.umn.edu/story/population-health-what-it-and-why-it-important>

Healthy People 2030 (<https://health.gov/healthypeople>)

The Department of Health and Human Services sets data-driven national objectives to improve health and well-being and includes 359 core plus developmental and research objectives. One of five overarching goals is related to **Social Determinates of Health (SDoH)**: **“Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all.”**

About 80%-90% of modifiable health outcomes are affected by social factors. SDoH are environmental conditions where people live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

Social Determinants of Health are grouped into 5 domains

Economic Stability | Education Access and Quality | **Health Care Access and Quality**
Neighborhood and Built Environment | Social and Community Context

Healthy Vision Illinois 2028

Pursuant to Illinois Public Act 102-0004, Illinois develops a state health assessment (SHA) and a state health improvement plan (SHIP) every five years. A collaborative public/private cross-agency effort, the SHA and SHIP assess and recommend priorities and strategies to improve the public health system and the health status of Illinoisans, to reduce health disparities and inequities, and to promote health equity. <https://dph.illinois.gov/topics-services/provider-partner-resources/healthy-illinois.html>

Priorities: Address structural and SDoH through a unified public health system, community engagement, collaboration, a strong workforce, and sustainable and flexible local funding. MIH addresses these priorities.

EMS Agenda 2050 Envision the Future

Published in late 2019, this document was designed to guide EMS planning for the next 30 years (<http://emsagenda2050.org/>). Forecasters envisioned that EMS agencies would need to expand scopes of services to include community health screenings, illness and injury prevention outreach activities, mitigation strategies for high utilizer groups, well-being checks, routing patients to appropriate healthcare resources and access points, eliminating transport when appropriate, and strengthening bonds between patients and PCPs. The MIH Program addresses each of these.

EMS shall be based on six guiding principles

Inherently safe and effective Integrated and seamless Sustainable and efficient
Reliable and prepared Socially equitable Adaptable and innovative

https://www.ems.gov/assets/EMS_Agenda_2050_Guide_to_the_Vision.pdf

PREVENTING AVOIDABLE READMISSIONS

Under pending Illinois legislation, an **"Eligible recipient" for MIH services** means an individual who has received **hospital ED services 3 or more times in a period of 4 consecutive months in the past 12 months** or an individual who has been identified by a health care provider as an individual for whom MIH services would likely **prevent admission or readmission** to or would allow discharge from a hospital, behavioral health facility, acute care facility, or nursing facility.”

To prevent unscheduled readmissions, we must **identify those who are at high risk**, enable individualized planning, appropriate post-discharge care, and effective use of community and social resources. <https://www.cms.gov/priorities/innovation/files/x/tcpi-changepkgmod-edvisits.pdf>

The top patient-specific characteristics making handoffs to post-acute facilities challenging are acuity/complexity level (63%), comorbidities (51%), behavioral and mental health issues such as dementia (50%), and unmet social needs such as housing (49%) (NEJM Catalyst, 2024)

Reasons for frequent, inappropriate, or avoidable Emergency Department use

- Patients with three or more chronic conditions and a functional limitation use the ED over three times more frequently than the average adult, often unnecessarily.
- Patients believe they need prompt attention and they lack a PCP or timely access to a PCP
- Chronic care management is inadequate or gaps in care coordination exist among multiple sites
- **Complex medication regimen:** The average person with 3-4 chronic conditions takes 24 prescription medications, often resulting in drug-drug interactions and acute S&S requiring care
- **Financial hardship:** Socioeconomic vulnerability

Conditions posing high risk for frequent ED use and/or readmission

- Abuse/neglect; risk of self-harm/suicide risk; behavioral health and substance use disorders
- ACS/AMI | Coronary artery bypass graft (CABG) surgery | Heart failure; HTN
- Chronic Obstructive Pulmonary Disease (COPD)/asthma | Pneumonia (high risk for sepsis)
- Chronic conditions with technology-dependent care
- **Diabetes** (epidemic impact): See [CMS 2024 OMH Diabetes Strategy English V2.pdf](#)
- Frail elderly/person with impaired ADLs; fall risk | Mobility/transportation impairments/challenges
- High-risk OB | Post –surgical major joint replacement (hip-knee) | Stroke/TIA
- Neurodivergent conditions; cognitive delays/impairments, special needs

Additional factors contributing to readmission risk

Number of past admissions	On antipsychotic meds	Hemoglobin low	Sensory impairments
Duration of recovery	On anticoagulant(s)	Chronic Kidney Dx	Previous restraints
Age/gender	INR high	Electrolyte disorder	Presence of caregivers
Medical comorbidities	On pain meds	Non-adherence	Functional dependency
Need for F/U visits	On ulcer meds	Cancer	Living arrangement

HOSPITAL READMISSIONS REDUCTION PROGRAM (HRRP)

The HRRP is a Medicare value-based purchasing program that encourages hospitals to better engage patients and caregivers to reduce avoidable early readmissions. The program links payment to the quality of hospital care. <https://www.cms.gov/medicare/payment/prospective-payment-systems/acute-inpatient-pps/hospital-readmissions-reduction-program-hrrp>

Under the CMS HRRP, hospitals receive reduced payments for excessive unplanned readmission of adults within 30 days of discharge for the following **index conditions or procedures**:

- Acute myocardial infarction (AMI)
- Heart failure (HF)
- Coronary artery bypass graft (CABG) surgery
- Elective primary total hip arthroplasty and/or total knee arthroplasty (THA/TKA)
- Chronic obstructive pulmonary disease (COPD)
- Pneumonia

Suggested strategies

Ensure effective follow-up for complex and vulnerable patients including transition support and ongoing management. Connect patients to a PCP, case management, MIH, and community resources. MIH scope of services includes clients under the HRRP program with the goal of reducing avoidable readmissions.

SAFETY ISSUES and CONCERNS

ECRI Institute ranking of 10 top patient safety concerns for 2024 ©ECRI Institute | www.ecri.org

1. Challenges transitioning newly trained clinicians from education into practice
2. Workarounds with barcode medication administration systems
3. Barriers to access maternal and perinatal care
4. Unintended consequences of technology adoption
5. Decline in physical and emotional well-being of Healthcare Workers
6. Complexity of preventing diagnostic errors
7. Providing equitable care for people with physical and intellectual disabilities
8. Delay in care resulting from drug, supply, and equipment shortages
9. Misuse of parenteral syringes to administer oral liquid medications
- 10. Ongoing challenges with preventing patient falls**

Current data

- Care transitions are susceptible to lapses in quality and gaps in key information exchange
- ~76% of the elderly are confused about or non-compliant with their discharge plan (“discharge amnesia”)
- Every second, an adult age 65+ suffers a fall and every 11 seconds an older person in the U.S. is treated in an ED for a fall-related injury making falls the leading cause of injury and injury death in this group. One out of four older adults will fall each year, making falls a huge public health concern.

MIH safety improvement strategies will include team-based care at alternative sites of care, mitigating client safety and fall risks, and addressing factors that influence medication safety.

Mobile Integrated Healthcare (MIH) Overview

Mobile Integrated Healthcare (MIH) is an innovative and expanding field providing healthcare using mobile resources and a wide array of healthcare entities and practitioners that are administratively or clinically integrated with EMS agencies to deliver a coordinated, continuum of person-centered, evidence-based, and holistic care at the most appropriate level and at a safe out-of-hospital location of the client's convenience.

MIH programs support patients' needs in the community and vary widely in goals and scope of services based on population needs, available resources, and delivery models (NAMIHP, 2024).

Examples of providers: MIH clinicians range from EMTs to physicians, and may include social workers, behavioral health specialists, and community partners. Mobile Integrated Healthcare–Community Paramedicine (MIH-CP) Programs use paramedics in expanded roles. EMS is a present, expected, trusted, and welcome source of care in our communities. EMS personnel have pre-existing relationships with community members and are experts in out-of-hospital responses.

The international consensus definition of a Community Paramedic:

“One who provides person-centered care in a diverse range of settings that address the needs of the community. Their practice may include the provision of primary health care, health promotion, disease management, clinical assessment, and needs-based interventions.” (Shannon et al., 2023).

General services provided: Programs provide primary and preventive care to vulnerable populations with the goals of increasing access to care; improving the health and wellness of the population, and reducing non-emergency 911 responses, avoidable ED visits and hospital readmissions, and costs.

MIH clinicians collaborate with Primary Care Practitioners (PCPs) and community resources to help people navigate the healthcare system. Advancing health equity requires us to reduce healthcare disparities, increase accessibility, build partnerships, modify practices where needed, and be uncompromising patient advocates for culturally tailored services (<https://www.cms.gov/priorities/health-equity/minority-health/equity-programs/framework>).

Properly educated CPs can reduce ambulance transport and ED visits by as much as 78% among patients with commonly encountered conditions such as dementia, diabetes, heart failure, and chronic obstructive pulmonary disease, with less than 6% of such patients requiring ambulance transport within 48 hours after a CP provides care to them at home (Abrashkin et al, 2024).

HISTORY and PLANNING for MIH in Illinois

State planning started in 2013 with a desire to meet the Institute for Healthcare Improvement's (IHI) Triple (now quintuple) Aim for US Healthcare. Extensive Committee work over several years created a State MIH plan (documents available upon request). MIH was designed to enhance **safe, seamless, and personalized care** by addressing socially marginalized populations, including racial and ethnic minoritized groups, older adults, and individuals who were at higher risk and needed better access to healthcare resources.

Early MIH models varied widely in scope, purpose, and design. Illinois planners recommended that pilots be based on local needs and resources. Some focused on identifying frequent 911 callers and reducing inappropriate use of EMS services. Others promoted home safety checks and installation of smoke detectors. Still others worked with hospitals to prevent avoidable readmissions. Few provided long-term patient care using sophisticated diagnostic tools and interventions and telehealth technology to communicate with PCPs.

An ongoing challenge has been funding. MIH services were not compensated by 3rd party payers. Many of the early programs were funded by Federal Innovation Grants. When grant funding ceased, programs were forced to close without ongoing revenue streams. Authorizing CPs to enroll in CMS as billers or having legislative support for insurance compensation for MIH services would afford a critically needed mechanism for program sustainability.

On March 23, 2015, Jack Fleearty, Chief of the Illinois Department of Public Health Division of EMS and Highway Safety penned a letter to Valerie Phillips, MD, chair of the Mobile Integrated Healthcare Committee, approving MIH programs in Illinois that follow the state guidelines. An IDPH MIH Template and Application was approved in November of 2015.

LEGISLATIVE and REGULATORY AUTHORITY in ILLINOIS

MIH Programs in Illinois must operate in compliance with state laws, rules, regulations, and guidelines that apply to and/or support EMS and Mobile Integrated Healthcare. See the following:

Emergency Medical Services (EMS) Systems Act (210 ILCS 50)

<https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1226&ChapterID=21>

Emergency Medical Services, Trauma Centers, Pediatric Emergency and Critical Care Centers, Stroke Centers Hospital Code (77 Ill. Adm. Code 515) [Proposed title change]

<https://www.ilga.gov/commission/jcar/admincode/077/07700515sections.html>

EMS Rules Section 515.361 Mobile Integrated Health Care Program (MIHP) (Proposed)

An EMS MD shall submit to the Department a program plan covering the following for the EMS Systems Mobile Integrated Healthcare Program:

- a) The Department's Mobile Integrated Health application form;
- b) Statement from the provider that they have the resources and personnel to meet both their response area and to support the MIHP;
- c) MIH System Policy;
- d) MIH Quality Improvement Plan to be submitted to the Department on a quarterly basis;
- e) MIH Orientation and training plan;
- f) MIH Equipment list; and
- g) List of EMS personnel that participate in the program.

The **Authority Having Jurisdiction (AHJ)** over EMS and MIH in Illinois:

Illinois Department of Public Health Office of Preparedness and Response
Division of EMS and Highway Safety
422 South 5th Street, 3rd floor, Springfield, Illinois 62701 | (217) 785-2080
Attn: Bobby Van Bebber, MSN, RN; Division Chief

LEGISLATION

Senators Mary Edly-Allen (D) 31st District, Dan McConchie (R) 26th District, Adriane Johnson (D) 30th District, and Neil Anderson [R] 47th District co-sponsored INS-MOBILE INTEGRATED HEALTH [IL SB3599 | 2023-2024 | 103rd General Assembly | LegiScan](#) which passed out of the Senate unanimously.

In the House, the bill was co-sponsored by Rep. Jackie Haas [R] 79th District; Rep. Amy Elik; Rep. Rita Mayfield; Rep. Nicole La Ha; Rep. Natalie A. Manley; Rep. Dave Severin; and Rep. Anthony DeLuca and others. It also passed the House unanimously on 5-21-24 and was approved by the Governor on 08-09-24 and became **Public Act 103-1024** Effective Date January 1, 2025.

As defined, **"Mobile integrated health care services"** means medically necessary health services provided on-site by emergency medical services personnel, as defined in Section 5 of the Emergency Medical Services (EMS) Systems Act."

"Mobile integrated health care services" includes health assessment, chronic disease monitoring and education, medication compliance, immunizations and vaccinations, laboratory specimen collection, hospital discharge follow-up care, and minor medical procedures as approved by the applicable EMS Medical Director.

"Mobile integrated health care services" does not include nonemergency ambulance transport.

"Eligible recipient" means an individual who has received hospital emergency department services 3 or more times in a period of 4 consecutive months in the past 12 months or an individual who has been identified by a health care provider as an individual for whom mobile integrated health care services would likely prevent admission or readmission to or would allow discharge from a hospital, behavioral health facility, acute care facility, or nursing facility.

This Act amends the Illinois Insurance Code and provides that a group or individual policy of accident and health insurance or a managed care plan that is amended, delivered, issued, or renewed on or **after January 1, 2026 shall provide coverage for medically necessary services provided by emergency medical services providers operating under a mobile integrated health care model.**

This legislation will make sustainable MIH services possible for Illinois.

Northwest Community/Northern Lake County MIH Program

The MIH Program Plan was planned, researched and designed after analyzing current healthcare challenges and priorities; the elements of person-centered and population-based care, social determinants of health, and the challenges posed by inappropriate non-emergency use of 911 and ED services, and avoidable readmissions. We also identified national safety concerns, our populations of interest, those at risk, and local healthcare needs. Other MIH programs, current literature, and the CAMTS Accreditation Standards for MIH were studied to determine trends, drivers, best practices; and barriers to achieving successful outcomes.

NWC/NLC MIH PROGRAM PRIORITIES

- **Build healthy communities:** Help maintain or enhance the overall quality of life, dignity, and optimal health, well-being, and safety of each person needing planned and non-emergent out-of-hospital healthcare within our service area
- **Create an equitable, accessible, effective, and affordable MIH system of care that delivers 6R service** (mission statement). Work with stakeholders to provide high quality, safe, seamless, and personal MIH services to clients that meet eligibility criteria in conformity to all relevant statutes, rules, guidelines, standards, and scopes of services.
- **Ensure clients and caregivers are engaged as partners in their care:** Clients shall execute strategies to optimize their wellness and engage appropriate support structures while effectively navigating through their episodes of care
- Promote effective communication and collaboration among all participants and stakeholders

Service design and delivery is based on local community needs assessment and market analysis data. The diversity of cultures, customs, languages and preferences are considered when working with clients to address multiple dimensions of wellness while partnering with them to optimize their health management and minimize or eliminate health care disparities and reduce costs of care.

“The blurring of boundaries creates opportunities to show up in fundamentally different ways. Organizations and workers should challenge prior assumptions and adopt a new set of management and workplace fundamentals built for a dynamic, boundaryless world rather than the stable, compartmentalized one we are leaving behind.”

Deloitte 2023 Human Capital Trends: A Public Sector Perspective

PROGRAM PARTICIPANTS

The MIH plan includes EMS Agencies partnering with the NWC EMSS and other key stakeholders to implement a multi-Community, cross-System, and cross-Regional MIH Program. These unique partnerships enable broad community-based support and access to resources. A unified network ensures quality MIH education and credentialing of CPs, and provides medical direction, evidence-based policies, protocols, and performance measures across a wide service area for the benefit of multiple populations and community members.

EMS/MIH AGENCIES

Agencies were selected based on their desire to participate. They have a long history of working well together with mutual aid agreements that allow for a smoothly integrated plan. **Inter-governmental Agreements (IGAs)** have been signed that affirm their commitment to each other and the Program. [See Appendix A.](#)

- Wauconda Fire Protection District (lead agency)
- Greater Round Lake Fire Protection District
- First Fire Protection District of Antioch
- Countryside Fire Protection District
- Libertyville Fire Department

Additional Program Stakeholders

- **Hospitals:** Endeavor Health Northwest Community Hospital, Advocate Condell Hospital; Advocate Good Shepherd Hospital
- **MIH clinicians:** CPs and others as the program evolves
- **Healthcare practitioners:** PCPs; Village nurses, Social Workers, Behavioral health clinicians, Social services, and community impact and engagement partners
- **Community partners:** Elected officials; United Way of Lake County <https://www.liveunitedlakecounty.org/>; Lake County 211 <https://211lakecounty.org/> | Lake County Health Dept | Lake County Board
- **Third party payers:** Meridian and others by 2026.

COMMUNITY NEEDS ASSESSMENT/MARKET ANALYSIS

Quality health care practice, education, and systems management is evidence based and obtained from rigorous scientific study. To make MIH care truly safe, seamless, personal, we must know our populations of interest and populations at risk. The Program integrated data from multiple sources to understand local needs so MIH services appropriately support health promotion and coordinated care management.

Regional needs, wants, gaps, key health issues and opportunities in healthcare delivery were identified by conducting MIH focus group discussions at NCH, gleaning information from Endeavor Health **NCH Community Health Needs Assessments (CHNA)**, and by collecting historical data with respect to hospital readmissions.

The most significant health concerns expressed by survey participants (N=10,000 responses) in the 2024 Endeavor Health CHNA were Access to affordable care (includes primary, specialty, screenings, diagnostic, Rx); Behavioral health (includes mental health, alcohol use, prescription drug misuse, suicide and access to treatment); Diabetes/Pre-Diabetes (includes obesity/adults and children, nutrition, food insecurity); Heart disease/High BP/Stroke; and Cancer (includes smoking/tobacco-all forms).

NCH's secondary service areas include many of the communities in the MIH plan. Data was also collected from **Lake County 211 Counts**. Projections were made as to how MIH could assist in meeting population-based needs while considering the SDOH.

FOCUS GROUP RESPONSES

Convenience sample focus group discussions were facilitated by an unbiased moderator with community members and PCPs to obtain their input, identify why MIH may be important to them, and determine if the planned scopes of service and operation of the MIH Program would be positively received.

Community members - Unanimously positive in supporting MIH - Reasons:

- ✓ Supports effective care transitions across the continuum of inpatient and outpatient locations
- ✓ Prevents avoidable communication gaps and promotes better understanding of care plans and how to use medical equipment or prescribed interventions
- ✓ Allows them to receive simply explained instructions and have their questions answered by CPs
- ✓ Reduces their fear and anxiety about providing correct self-care at home
- ✓ Reduces their fear of being alone without help during times of pain, transitions, or uncertainty
- ✓ Helps them to make better and healthier choices without embarrassment
- ✓ Maintains their independence for as long as possible and promotes autonomy
- ✓ Optimizes their quality of life in their preferred or required housing location
- ✓ Helps them to access needed community resources more rapidly than they could on their own
- ✓ Convenience: care comes to them; saves time, reduces unnecessary cost and risk
- ✓ Improves their compliance, safety, and security

Plus, they universally expressed a love of their local paramedics and would welcome them any time.

PCPs - Little skeptical (concern about patient poaching), but generally supportive

- ✓ Will improve longitudinal quality, access, and continuity of care
- ✓ Will identify patients not meeting targets so they can see them earlier and intervene more rapidly
- ✓ Will optimize outcomes through risk stratified and coordinated care by the healthcare team
- ✓ Will maximize productivity; PCPs can provide care for more patients if avoidable recidivism is reduced
- ✓ Value realized in decreased costs and increased value-based reimbursements
- ✓ Should improve patient engagement and satisfaction

MARKET DETERMINATION

The populations of interest and populations at risk were forecasted by gathering data on the northern Lake County demographics and community needs to project potential demand for MIH services. See <https://uwlc.211counts.org/> for specific data on service requests by community.

Ongoing quantitative (demographics, utilization rates) and qualitative (other care options, clinical or technological advances that may affect demand) assessments will occur to match person needs and program resources after the Program launches.

SERVICE AREA

Community	Population	Zip Codes	Land area	EMS Calls
Wauconda FPD	40,000	60084, 60042	50 sq. miles	3,312
Greater Round Lake FPD	61,721	60030, 60073	18.47 sq. miles	4,422
First FPD of Antioch	26,000	60002	36 sq. miles	2,377
Countryside FPD	35,000	60061	24 sq. miles	4,800
Libertyville Fire Department	29,353	60048	28.4 sq. miles	3,336

Clients may also reside in the following Zip code areas served by the MIH agencies

Wauconda FPD also covers:

- 60042 (Island Lake)
- Parts of 60030 Grayslake, Gages Lake, Hainesville, Third Lake, Wildwood, Round Lake Park, Round Lake Hts;
- Parts of 60010 Gurnee, Waukegan, Gages Lake, Grandwood Park,
- Parts of 60047 Lake Zurich, Long Grove, Hawthorn Woods, Kildeer, Forest Lake
- Parts of 60013 Cary, Oakwood Hills, Trout Valley, Algonquin, Lake in the Hills
- Parts of 60051 McHenry County, Johnsburg, Lakemoor, Holiday Hills, Pistakee Highlands, Ferndale

Greater Round Lake FPD also covers parts of 60030

Countryside FPD serves: 60061 Vernon Hills, parts of Long Grove, Hawthorn Woods, Kildeer, Indian Creek and other unincorporated areas of Lake County

ETHNICITY/RACE DATA

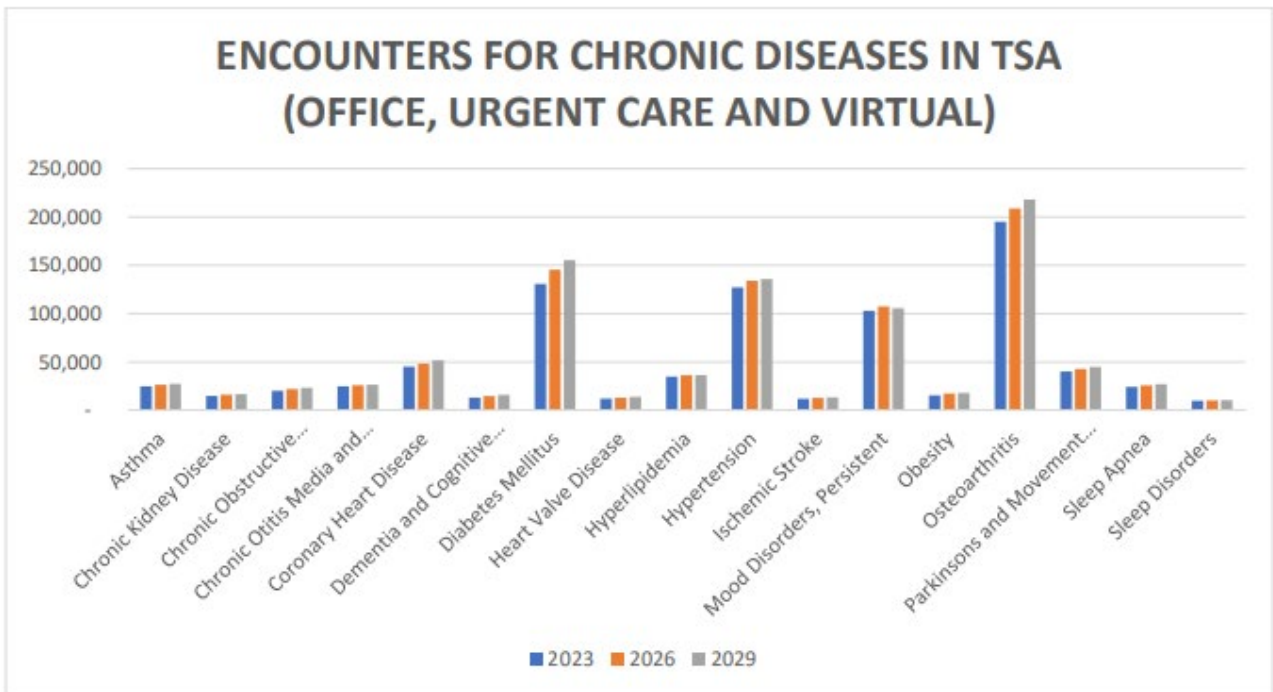
Our service area is populated by predominately non-Hispanic White persons (72%), but also has substantial numbers of Hispanics (20%) and Asians (16%). The Hispanic/Latino population is expected to grow 6.6% over the next five years. The number of Black and White Non-Hispanics is projected to decrease 0.4% and 6.8% respectively. This is further validated by data provided by Community Consolidated School District 15 (CCSD15), the second largest school district in the state, and located in NCH's primary service area. **There are more than 80 languages spoken throughout the area** and although 39% of its students are white, there are a significant number of Hispanic (35%) and Asian (19%) students. Source: Sg2 Market Demographic

Ethnicity/Race	2023	% of Total	2028	% Change
Hispanic/Latino	193,021	20%	205,678	6.6%
American Indian/AK Native	7,053	1%	7,367	4.5%
Asian	825	0%	863	4.6%
Black/African American	1,346	0%	1442	7.1%
Multiple Races	67,075	7%	71,719	6.9%
Native HI/PI	99	0%	105	6.1%
Other	88,095	9%	94,661	7.5%
White	28,528	3%	29,521	3.5%
Not Hispanic/Latino	796,466	80%	775,731	-2.6%
American Indian/AK Native	936	0%	954	1.9%
Asian	161,308	16%	173,032	7.3%
Black/African American	27,387	3%	27,285	-0.4%
Multiple Races	30,562	3%	36,193	18.4%
Native HI/PI	221	0%	238	7.7%
Other	4,088	0%	5,065	23.9%
White	571,964	58%	532,964	-6.8%
Grand Total	989,487		981,409	-0.8%

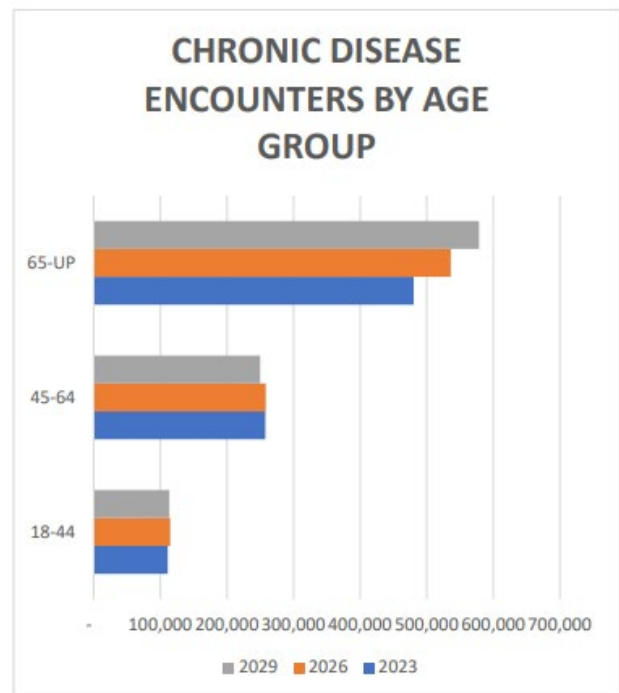
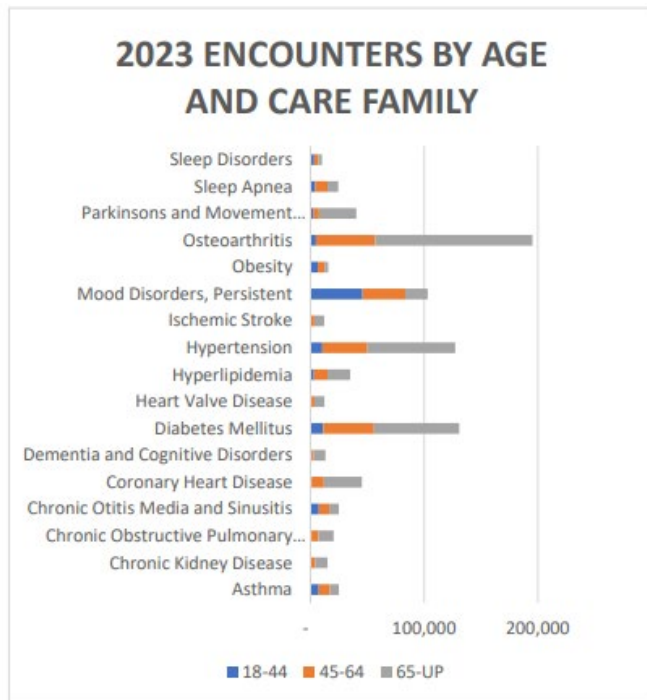
Source: Sg2 Market Demographics

Chronic Disease Growth

Areas of notable concern include diabetes, hypertension, osteoarthritis and persistent mood disorders by persons 18 and older.



Source: Sg2 Analytics; Ages 18+; Office/Clinic, Virtual, Retail Site of Care; E&M Visits



Source: Sg2 Analytics; Ages 18+; Office/Clinic, Virtual, Retail Site of Care; E&M Visits

MIH PROGRAM GOALS

PRIMARY GOALS:

1. **Build healthy communities:** Meet or exceed the IHI Quintuple Aims.
2. **Deliver 6R Service:** Right care, place, timeframe, resources, quality, and cost with strong consideration for client convenience and choice through patient defined goals and personalized care.
 - **Encourage appropriate use of healthcare services** to improve health system capacity. Decrease non-emergency use of 911 and EDs; assist clients to safely transition from hospital to home, reduce preventable readmissions, and complications. Navigate clients to destinations such as primary care, mental health or substance use disorder centers instead of EDs to avoid costly, unnecessary hospital visits.



Pillars of performance

- **Population health:** Provide person- and family-centered, integrated and value-based care across the continuum that meets population needs, addresses the social determinates of health; is culturally and linguistically competent, and based on client social, economic, environmental, and behavioral factors. Identify barriers to meeting goals of care.
- **Access:** Reduce health disparities and improve health equity. Provide clients access to care and resources when and where needed including access to preventive services
- **Customer service:** Provide MIH care that is attentive, kind, reliable, responsive and builds trust
- **Patient safety and mobility:** Perform consented home safety checks; institute fall abatement strategies, optimize client mobility, install working smoke detectors, and connect to education and resources.
- **Facilitate chronic disease management and care transitions** to optimize health at home or in a safe and stable housing location.
- **Enterprise Performance Management/Financial Stewardship and Stability:** Set, monitor, and measure Program goals against business performance to inform operations. EPM includes planning, budgeting and forecasting, revenue and cost stewardship, analytics, and reporting.
 - Ensure labor costs that are fair, role equitable, and balanced to workflow within the financial plan
 - Control competitive supply, equipment, and operational costs to meet the financial plan
 - Accurately invoice appropriate payers for MIH services; track and document accounts receivable
 - Explore the Program's value chain for new opportunities as they arise; address resource availability
- **People**
 - Recruit, educate, credential, equip, support, empower, deploy, and retain competent MIH clinicians to meet or exceed program goals and staffing plan.
 - Mitigate MIH Clinician risks for illness/injury during MIH activities
 - Engage, support, and empower competent MIH leaders and educators to execute the Program plan.

PROGRAM DESIGN and SCOPE of SERVICES

An effective system of care for healthcare delivery requires structure (people, equipment, education) and processes (policies, protocols, procedures) that, when integrated, produce a system (programs, organizations, cultures) that leads to optimal outcomes (client, safety, quality, satisfaction) within a framework of continuous quality improvement (AHA, 2020).

The NWC/NLC MIH Program provides end-to-end services within a Community System of Care using a person- and family-centered approach that meets the needs of clients, families and healthcare providers.

The NWC/NLC MIH Program



Of note, MIH partners with and does not compete with existing care models and/or services. MIH services will not substitute for, nor take the place of, other care practitioners or programs currently serving our clients.

WORKFLOW OPTIMIZATION and STAFFING

All MIH Services are contingent on resource availability. Workflow optimization and staffing matches demand and capacity for MIH services across Program patient populations. The program will launch with a narrow scope and initial operating capacity and grow into full operating capacity as resources allow. A defined process may add new services, healthcare entities and providers based on data, business opportunity, and population health needs.

HOURS OF OPERATION

- **Initial operating capacity:** MIH visits may be scheduled on M-W-F from 0800-1400
- **Full operating capacity goal:** Expand to 0800-16:30 M-W-F and then to five days a week as resources allow and demand for services increase:

PROJECTED SERVICE VOLUMES and CAPACITY

Based on projected volumes and initial staffing, the Program will need to cover at least **2 visits per day** with surge capacity for **4 visits/day** if personnel and resources allow.

- Anticipate up to 20 visits per month
- 240 visits per year (may be very high estimate for first year)

VISIT TIME ALLOWANCES: Vary depending on the nature and complexity of each client

- Enrollment visit patient contact time: 1.5 hours; follow-up visits: 45 minutes
If translation services are required, the visit may take longer to allow for 3-way communication.
- 15 min for travel each way | 30 min for documentation and communication

MIH STAFFING RESOURCES

The MIH Program maximizes efficiencies while preserving effectiveness to achieve our goals. Needed human resources have been forecasted, resourced, and readied for action.

- MIH-Community Paramedics (MIH-CPs): Initial operating capacity requires a minimum of 9 MIH-CPs to allow for scheduled and unscheduled time off | Future MIH clinicians could include educated and MIH credentialed RNs, physician assistants (Pas), or social workers.
- MIH Agency leaders; Project Coordinator (Erik Christensen, Wauconda FPD)
- NWC EMS System EMS MD (EMS/MIH MD), NWC EMSS MIH Program Director, MIH educators
- Physicians who assist the EMS/MIH MD in taking consult calls from MIH clinicians by phone if they have questions during a visit
- Community Outreach and Engagement partners | Interpretive services
- Persons assigned to complete data collection/extraction/coding/reporting; secretarial support

MIH-CP STAFFING CONFIGURATION

- A team of two MIH clinicians shall respond to each visit. Ideally, at least one of the same MIH-CPs completes all visits for an individual to enhance continuity of care.
- **Master calendars:** A centralized On-call schedule and visit calendar is maintained in HealthCall software. Volumes are trended to determine if additional capacity is needed. **See Appendix B**
- **Cross coverage:** Agencies perform MIH-CP visits across the entire service area (Ex MABAS).
- If need is known in advance, attempts will be made to have a translator accompany the MIH-CPs.

TYPES of CLIENTS ACCEPTED: Eligibility for MIH services

All ages with appropriate legal decision-maker's consent; living in the geographic catchment area served by a participating MIH Agency, in a structurally sound and safe dwelling, and meeting one or more of the following eligibility criteria with an analysis by the MIH Coordinators at Wauconda FPD that the program is safe and appropriate for them:

Initial operating capacity: High utilizer group (HUG) (See below) or EMS encounters with a person having an imminent safety risk to achieve better care navigation and connection to needed resources

Expanding operating capacity as resources allow:

- Individuals who have received hospital ED services ≥ 3 times in a period of 4 consecutive months in the past 12 months or an individual who has been identified by a health care provider as an individual for whom MIH services would likely prevent admission or readmission to or would allow discharge from a hospital, behavioral health facility, acute care facility, or nursing facility.
The location to which a patient may be discharged should be based on the person's clinical care requirements, available support network, and person and caregiver treatment preferences and goals of care (CMS Final Rule, 2019).
- Adults at risk for unplanned readmission within 30 days of discharge for index conditions or procedures under the CMS HRRP Program and other high-risk diagnoses such as **diabetes**, HTN, and stroke
- Persons at risk due to behavioral health conditions and substance use disorder
- Persons with medical complexity, identified service needs, severe chronic clinical conditions, functional limitations, high utilization of health resources, and those with special needs.
- Previous EMS client requests assistance with services that fall within the scope of MIH
- Client's primary care practitioner (PCP) or discharging facility requests MIH services to assist in transitions of care from a hospital, behavioral health facility, acute care facility, or nursing facility.

High Utilizer Group (HUG)

When a person is unable to meet basic health, safety, and/or wellness needs, they often become reliant on EMS or ED services until the need is met more appropriately. The HUG program aims to reduce reliance on non-emergency 911 and/or ED care that should be more appropriately managed by other resources.

Eligible recipients are identified via multiple modes of surveillance. An MIH Case Manager will reach out to frequent 911 users based on the thresholds listed below and complete a universal needs-assessment. They will work with other partners to develop a plan to address gaps and connect the client with needed resources. This may include primary and/or alternate options for medical care, mental health and substance use disorder (SUD) care, immunizations, pharmacy services, housing stability, and nutritional sources etc.

Eligibility and enrollment based on frequent EMS use:

- **≥ 20 EMS calls/90 days (>5/month):** Automatic contact for possible enrollment as a HUG client
- **10 – 19 EMS calls/90 days:** Explore the cause of frequent 911 use. Determine if due to a failure to meet addressable causes or basic needs; lack of primary or specialty medical care, need for social services, mental health/SUD care, prescription or nutritional services, or transportation.
- **< 10 calls in 90 days** with a recent change in their ability to address possible causes. MIH will contact the person as a potential HUG-Prevention client in an effort to resolve the issue before they become a high utilizer.

Adults at risk for unplanned readmission under the HRRP: See pp. 6-7

- Status post-Acute Myocardial Infarction | Heart failure | Coronary artery bypass graft (CABG) surgery
- Chronic obstructive pulmonary disease (COPD)/asthma | Pneumonia (high risk for sepsis)
- Elective primary total hip arthroplasty and/or total knee arthroplasty (THA/TKA)

These clients are identified as an individual for whom MIH services may prevent avoidable readmission or would allow discharge from a hospital, behavioral health facility, acute care facility, or nursing facility. They may need evaluation of post-discharge status, achievement of targets, MIH interventions, education, routing to appropriate resources; housing/food stability, and coordination with PCPs.

Managed Populations Program

The managed populations program addresses specific groups of persons who, because of their situation, tend to be reliant on 911 and a hospital system for non-emergent healthcare needs. An MIH Case Manager may be requested to evaluate new at risk “members of the community” to complete a universal needs-assessment/screening exam. The MIH Case Manager will attempt to connect the person to resources necessary to help them proactively manage their medical, social, and mental health needs without reliance on the 911 system. When pediatric clients are accepted, additional standing medical orders shall be developed and approved specifically for that age group.

Exceptions to the types of clients for which a visit may be requested shall be considered on a case by case basis and approved by the MIH Coordinators at Wauconda in consultation with the EMS/MIH MD.

COMMON WORKFLOW

MIH SOURCES OF REFERRALS for Eligible Clients

- **HUG clients** will be contacted by the MIH Coordinator at the Wauconda FPD and offered the option of MIH visits to address care gaps and connect them with needed resources.

- **OTHERS:** Referrals may be initiated by individuals; family/friends; community and social service workers; counselors, clergy, chaplains, law enforcement, or health care providers

Contact the **MIH Call Center** at Wauconda Station 1: **(847) 526-2821** | This number brings the caller to a phone tree that forwards calls to the MIH Coordinator(s): Erik Christensen and Mike Wagner.

Erik Christensen cell: (847) 276-7329. OR

Access an **online Referral Form** by going to: https://hctxt.us/Wauconda_referral | This opens a **link** to a HIPAA compliant and secure site where demographic and medical information can be entered and uploaded. Once the referral form has been submitted, the request will be sent to the MIH coordinator(s).

- Future program expansion may include referrals from home health organizations, hospice, mental health care facilities, nursing homes, Public Health agencies, community health clinics, urgent care facilities, or addiction treatment centers. Expansion will require adequate resources and sustainable revenue.

NUMBER and TIMING of VISITS per Client

Depends on the client’s degree of acuity, potential for risk, unsatisfied resource needs, or continued calls for non-emergency EMS assistance. The total number of visits must be approved by the MIHCs at Wauconda.

Typically, 4 visits are planned

- 1st (enrollment) visit: Baseline full H&P; targeted care based on diagnosis and MIH Clinical Guidelines; dwelling safety assessment & risk mitigation; client education, and connection to resources
- 2nd & 3rd: Follow-up visits (if needed); assess progress towards meeting healthcare targets
- 4th (discharge) visit: Provide MIH CP satisfaction questionnaire to client/caregiver.

DUTIES and PROCESSES PRIOR to ENROLLMENT VISIT

MIH-CP Call Center- Wauconda FPD

t

- Confirm 1st visit date, time, location, and site-specific considerations relative to parking, access, presence of animals, etc. with client/caregiver.
- Determine if interpretive services are needed and plan to have interpreter available.
- Determine if any DC instructions, medical records, POLST orders, advance directives, or patient care plans are available for the team to review prior to the visit. Ask about special needs, technology use by client.
- Consult the on-call calendar; affirm the availability of two MIH CPs to conduct the visit
- **Confirm scheduled date, time, and location of visit with MIH-CPs;** inform them of any site-specific concerns or instructions; and make previous medical records/care plans available to them for advance review.
- **Inform the client** regarding the names of the MIH-CPs, send them photos if they can receive an electronic file; explain the type and branding of the MIH vehicle, uniform and ID badge that will be worn by MIH-CPs.

MIH-Clinicians

- Review client health history, previous EMS encounters, ED visits, hospitalizations, baseline status, and desired outcomes/health targets if available. Suggested sources: PCP notes; discharge summary; outpatient medical record; and previous PCRs. Note name and contact info for the PCP if known. If HUG client: assess previous calls for etiology, time of day, etc. for possible trends or causes.
- Review MIH protocols for client’s condition(s); prep for assessments, care, education, community resources that may be needed

SCOPE of CARE | MIH SERVICES PROVIDED

“Together, we must work to identify the social determinants of health; target prevention through multiple channels by identifying the intersections of various diseases; use data to understand the individuals and the populations we serve; be diligent about removing implicit bias and structural barriers; and harness technology to move health care from episodic, siloed “sick care” to continuous and integrated “health care.” (Itchhaporia, 2021)

“Mobile integrated health care services” includes health assessment, chronic disease monitoring and education, medication compliance, immunizations and vaccinations, laboratory specimen collection, hospital discharge follow-up care, and minor medical procedures as approved by the applicable EMS Medical Director.”

The clinical range of MIH services provided are broadly grouped into three categories and are defined thoroughly in the MIH Clinical Guidelines/Standing Medical Orders, educational materials, HealthCall® Assessment tool, and MIH Clinician Position Description.

1. ASSESSMENT and EVALUATION

- **Obtain the best possible history | Client demographics:** See SMOs for detail.
- **Complete Medication reconciliation:** Ensure client/caregiver understanding regarding medications and need for adherence to instructions.
- Conduct a targeted **MIH physical exam** using the maneuvers of inspection, palpation, percussion, and auscultation and other assessment tools based on the client’s diagnoses/alterations from health. Additional screening tools used prn: Columbia Suicide Severity Rating Scale; AHA Life’s Essential 8; Dimensions of Wellness; COPD Assessment Test (CAT) questionnaire; Wagner-Meggitt Classification of Diabetic Foot Ulcer System; Braden Risk Assessment Scale for Pressure Ulcers; Pneumonia Acuity Assessment Worksheet.
- **Chronic disease monitoring:** Review discharge instructions and health targets with client/caregiver if known and progress in meeting health targets. Explore challenges or barriers, identify therapy failures, and narrow or close care gaps. Support clients in setting their own health goals. [An individual has the right to get involved in the development and implementation of their plan of care which includes establishing goals (CMS regulatory text of tag F553)].
- **Assess Social/Emotional and Functional Needs**
 - **Dimensions of Wellness:** Identify each person’s highest level of well-being in the physical, social, emotional, spiritual, intellectual, financial, environmental, and occupational dimensions of wellness
 - **Social Determinants of Health (SDoH):** Assess need for services or care navigation to support safety and self-management in 5 domains: Economic stability | Education access and quality | Health care access and quality | Neighborhood & built environment | Social & community context.
 - **Functional independence: Activities of daily living (ADLs)/Instrumental ADLs**
 - **Assess disabilities/accommodations needed or in place; safety needs**
 - Assess if patient is connected to life support systems
 - **Assess if medical equipment** resources are needed, available, and working properly

2. **MIH INTERVENTIONS:** Provide care as authorized by the EMS/MIH MD within the MIH Clinical Guidelines/ Standing Medical Orders and MIH-CP Job Description

Psychomotor skills may include, but not be limited to competently measuring height and weight, measuring limb circumference; assessing for jugular vein distention, performing a neuro exam; auscultating lung, heart, and bowel sounds and carotid bruit; obtaining accurate vital signs (VS) including systolic/diastolic and mean arterial pressures, trending pulse pressures and checking for orthostatic changes; applying leads/sensors correctly and monitoring SpO₂; EtCO₂, ECG (rhythm strip and 12 L) and interpreting numeric readings and waveforms, obtaining a capillary glucose reading; assessing limb ROM, skin, wounds, and changing dressings.


3. PREVENTION, EDUCATION, CARE COORDINATION

- **Making healthy choices:** Affirm understanding and compliance with the AHA’s Life’s Essential 8: abstaining from unhealthy substances; hydration, nutrition, hygiene, skin, and oral care; stress reduction; and mitigating risks (including compliance with vaccinations).
- **Nutritional resources:** Determine if client has access to adequate healthy foods and is compliant with diet appropriate for their condition(s)/needs. Explore root causes of noncompliance. Work with Community Impact & Engagement and social services resources to acquire.

- **Psychosocial needs:** Anxiety, stress, fear, education, poverty, social exclusion, discrimination, violence, developmental problems, disability, pain, and limitations in daily living. Work with Community Impact & Engagement and social services resources to address.
- Client/caregiver’s **competent ability to perform self-care assessments and interventions**
- **Connect clients to appropriate OB and postnatal care** to reduce maternal and infant mortality.
- **Dwelling safety check; mobility/fall risk assessment:** Conduct an environmental safety assessment using the HealthCall® STEADI Fall Risk evaluation tool if authorized by client/legal decision maker; remove or mitigate hazards; observe if appropriate mobility assist devices are present and used, and discuss needs with clients/caregivers.
 - **Smoke detectors:** MIH clinicians will inspect dwellings for working smoke detectors, offer to install them if none are present, and exchange batteries if nonfunctioning.
- Note if client/caregiver has **any questions or needs** that MIH clinician cannot answer or provide; direct them to appropriate resources. Note resources or information provided.
- **“Self-neglect”:** Means a condition that is the result of an eligible adult’s inability, due to physical or mental impairments, or both, or a diminished capacity, to perform essential self-care tasks that substantially threaten his or her own health, including: providing essential food, clothing, shelter, and health care; and obtaining goods and services necessary to maintain physical health, mental health, emotional well-being, and general safety. The term includes compulsive hoarding, which is characterized by the acquisition and retention of large quantities of items and materials that produce an extensively cluttered living space, which significantly impairs the performance of essential self-care tasks or otherwise substantially threatens life or safety. (320 ILCS 20/) Adult Protective Services Act.

"Emergency" under the above Act means a situation in which an eligible adult is living in conditions presenting a risk of death or physical, mental or sexual injury and the provider agency has reason to believe the eligible adult is unable to consent to services which would alleviate that risk. **Consider if a client meets the eligibility requirements for “Self-neglect” emergency. If yes, call 911 for an EMS response.**

Assign an MIH Acuity rating after assessment / related actions

Emergent (high risk): Client currently unstable/critical threat level	
S&S suggest a high probability of imminent risk of harm if intervention is not taken urgently to mitigate threat/provide emergency care; or client meets the requirements for a “Self-neglect” emergency. Initiate treatment within MIH resources available and immediately CALL 911 for EMS response and transport. Also Contact EMS/MIH MD (designee).	
Urgent (rising risk): Patient currently stable; Not meeting outcome targets	
Potential to deteriorate or experience complications w/ a high probability for morbidity if interventions are not begun quickly and sustained. Contact EMS/MIH MD (designee) for consultation. Notify PCP (if known) regarding risk findings. Notify community partners for access to needed resources prn.	
Routine (low risk): Patient currently stable; meeting outcome targets	
Answer questions, provide coaching/further instruction prn; ensure ongoing adherence to care plan	

- **Communication:** **Call the EMS/MIH MD or designee if client is rated as urgent to consult about best plan of care.** Document name and time of contact. All clients should receive a phone call within 24 hours of each visit to see if their healthcare needs have been met or whether they have additional questions.
- **Documentation:** **Note all assessments, interventions, and education/resources provided, and the need for additional resources into the client’s EHR using HealthCall® software.** Highlight need for social, behavioral, or dietician services, home care aide, or Pharmacist review of medication reconciliation. Send link to EHR with MIH-CP contact information to PCP if applicable. Note if the PCP changes the care plan. Provide client with HIPAA Notice of Privacy Practices and obtain signature.

Notes:

- No financial, technical, social, physical, or age-related barriers should exist for those eligible for MIH services unless the client refuses the visit, is not accessible at the time of the visit, exhibits violent behavior, or the scene is unsafe.
- If a client requires lifting or moving: Call 911 for assistance
- If non-urgent transport to another location is needed: Offer transportation options to the client/caregiver based on community services agreements

OPERATIONAL INFRASTRUCTURE

CAPITAL EQUIPMENT/FACILITIES

Current building locations, space requirements, access to food and beverage, bathrooms, and utility amenities for administrative and clinical staff, inventory storage, vehicles, and vehicle parking have been determined to be adequate for the MIH Program.

MIH VEHICLES

All deployed vehicles are appropriate for the clinical encounter when responding to an MIH call and shall meet all Motor Vehicle standards for legal and safe operations. There are plans for replacement of vehicles and equipment as needed. No patient with a need (or the potential need) for immediate medical attention shall be transported by an MIH agency in any vehicle except by an ambulance.

As outlined in the Inter-Governmental Agreements (IGAs) and for insurance/liability related purposes, each entity will supply its own MIH pool vehicle such as an SUV or 4-door sedan that will have easily identifiable fire department markings and will also sport 2 vehicle magnets that identify it as an MIH vehicle. Vehicles will be deployed based on the operational plan and resource needs at the moment.

Agency	Vehicle	VIN #
Wauconda	Ford Fusion	1FA6POH76E5386186
Round Lake	2023 GMC Terrain	3GKALMEG4PL204410
Antioch	2013 Chevy Tahoe	1GNSK2E05DR341670

SUPPLIES/EQUIPMENT brought to client location

Supplies/equipment used in the delivery of MIH care are commensurate with the practice standards approved by the EMS/MIH MD and within the scope of practice for MIH clinicians. All equipment and medical devices stored on MIH vehicles shall be maintained in good working order at all times and in accordance with manufacturers' recommendations. These include, but may not be limited to the following:

- Appropriate size PPE for each responder; extra procedural masks for clients/caregivers
- **Assessment/diagnostic equipment**
 - Stethoscope (diaphragm & bell); aneroid sphygmomanometer (assorted size cuffs)
 - Thermometer (non-mercury); tongue depressors
 - Wound gauge card; near card for visual acuity assessment; eye occluder
 - Cardiac monitor designed for out of hospital use with NIBP, SpO₂, quantitative/waveform capnography, rhythm & 12 L ECG capability; spare rolls of paper for printing strips
 - ECG leads; alcohol wipes, dry cloth or 4X4s, hair clipper to prep skin
 - NC EtCO₂ sensor; peripheral and central sensors for SpO₂
 - Strong light source to assess pupils; nose, ears, mouth | monofilament line (sensory integrity)
 - Glucose meter; test strips; high/low test solution; chlorhexidine wipes; lancets
 - Portable scale (450 lb. rating); peds length-based tape; tape to measure limb circumference
- Hold harmless/consent agreements for home safety check (electronic option acceptable)
- Educational materials; community resource fliers, pill sorters
- Gorilla or duct tape to secure electrical cords and area rugs
- Smoke/CO detectors; spare batteries

MIH equipment is stored in thermally controlled spaces so it is kept at allowable temperature ranges. The Program uses "Aladtec" software that allows for a daily check of equipment inventory. This is required for all CP's to complete at the beginning of each shift day.

IT resource: An iPad with camera and microphone is provided by the Program with access to HealthCall® software. The device is cellular-capable, able to upload or download information, document client encounters, perform telemedicine with bidirectional contact with healthcare providers and an online interpreter if needed.

Communication equipment: A cell phone provided by the MIH Program is used by MIH-CPs to make incoming and outgoing phone calls and access a web browser during visits. Phone number: (779) 312-0287. Clinicians are discouraged from using their personal devices for MIH purposes.

ADMINISTRATIVE STRUCTURE

MEDICAL DIRECTION for the MIH Program

LEADING IN A BOUNDARYLESS WORLD

A new brand of leadership will be required that focuses on where you show up and how you show up, and the mindset you adopt to drive work forward. Leaders will need to use experimentation to inform better solutions, foster learning, accelerate value, cultivate deep and intimate relationships with workers, and widen the aperture of decision making to understand the full impacts.

Deloitte 2023 Human Capital Trends: A Public Sector Perspective

ADMINISTRATIVE STRUCTURE and REPORTING RELATIONSHIPS

MIH-CPs are employed or contracted by their EMS Agencies and report to designated Agency leaders. All Agency relationships, contracts, covenants and agreements remain in full force and effect for MIH clinicians unless altered or severed by one of the parties.

EMS Clinicians and MIH practice also fall under the authority and direction of the Program EMS/MIH Medical Director who derives their authority from two major areas:

- **State laws/regulations** that define external requirements all EMS MDs must meet such as licensure, experience, qualifications, credentialing, and education requirements.
“The EMS Medical Director or "EMS MD" is the physician appointed by the Resource Hospital who has the responsibility and authority for total management of the EMS System” (Title 77: Public Health Subchapter f: Part 535 Emergency Medical Services Code Section 535.100).
- **Contractual provisions** that may include the EMS MD’s terms of engagement, description of services, authority, qualifications, performance expectations, compensation, and insurance and indemnification coverage within the organization that engages or contracts their services (Kuzel & Kuhl, 2023).

The NWC/NLC EMS/MIH Program Medical Director is Matthew T. Jordan, MD, FACEP

Email: mjordan@nch.org | Phone: 847-962-6008 | See Appendix C for his CV

NWC EMSS Coordinator: Connie J. Mattera | Phone: 847-618-4485 | cmattera@nch.org

The EMS/MIH Medical Director agrees to:

- Safeguard and foster the rights, interests and prerogatives of all MIH clients and stakeholders;
- Determine the scope of practice of MIH clinicians and review, approve, and implement evidence-based MIH Program design, operation, scope of services, and Practice Guidelines/SMOs;
- Affirm MIH Clinician competency and credentialing;
- Actively participate in quality assessment and performance improvement strategies related to MIH;
- Provide, and delegate to other qualified physicians, phone consultation duties during MIH visits; and
- Approve alternate destinations/ dispositions of patients (future).

The EMS/MIH MD shall collaborate with the NWC EMS MIH Program Director, the MIH Project Manager at Wauconda FPD, MIH clinicians and educators, other Program participants, and community partners. Standing meetings with participating agencies allow a deeply integrated service delivery model and opportunities to share perspectives, problem solve, and collectively work to advance the Program toward meeting or exceeding its goals.

MIH MEDICAL CONSULTATION and ORDERS to MIH Clinicians

“The Department recognizes the MIH committee has made a tremendous effort to keep this program within the current scope of practice of EMS providers who function under the medical direction of the EMS System MD. Additionally, based on the program, the Department understands that no EMS provider will receive nor act upon any orders, whether verbal or written, from any of the collaborating physician(s) [PCPs]. All medical orders to EMS Providers must exclusively originate from the EMS System (originating the MIH program), under the authority of the EMS MD. The collaborating physician(s) (CPCs) may give instructions directly to the person or the patient’s authorized care provider, but not to the EMS Provider. **EMS Providers are not authorized to take medical orders from anyone other than the EMS MD or his/her designee, as described within the EMS Act and the Local System Program Plan**” (Jack Fleeharty, former Chief, IDPH Div. of EMS).

Dr. Jordan authorizes the following physicians to share MIH on-call duties and provide consultation during MIH visits as needed:

Dr. Michael Pearlman:	Michael.Peartlman@aah.org	(847) 736-8624
Dr. Mayank Shah:	Mayank.Shah@aah.org	(847) 414-4459

MIH EDUCATION | JOB DESCRIPTION SCOPE OF PRACTICE & CREDENTIALING

“Competence is how good you are when there is something to gain. Character is how good you are when there is nothing to gain. People will reward you for competence. But people will only love you for your character.” — Mark Manson

The System affirms that MIH clinicians are educated, competencied, and credentialed to the NWC/NLC MIH Program standards prior to assuming any new role or scope of practice.

The MIH Community Paramedicine course focuses on the knowledge, skills, and attitudes (KSAs) that EMS clinicians need to succeed in their role. Achieving educational objectives in all domains of learning is a fundamental first step to ensuring competent MIH clinicians. Curriculum design, assessments, and evaluation tools reflect local needs and national MIH guidelines. <https://www.naemt.org/education/CP>.

NWC/NLC MIH education consists of 40 hrs of initial classroom content supplemented by additional operational education and simulations to ensure practice competency in the use of HealthCall® software.

MIH EDUCATION CONTENT TOPIC OUTLINE

- MIH Program Mission, vision, and values
- **Healthcare Trends and Challenges:** External forces impacting MIH planning
Meeting the IHI Quintuple Aims, person-centered care; population health and value-based care; social determinants of health, Healthy People 2030 | Healthy Illinois 2028 | EMS Agenda 2050
Building healthy communities; optimizing healthcare resources, Hospital Readmissions Reduction Program (HRRP); Risk factors for frequent ED use/avoidable unplanned readmissions
Safety issues and concerns; optimizing mobility; fall risk assessment and abatement
- **General overview of Community Paramedicine and MIH:** Current models nationally; historical planning for MIH in Illinois | Legislative and Regulatory Authority for MIH in Illinois
- **NWC/NLC MIH Program** (local model): Planning, priorities and participants; Purpose & Program goals
- **Community needs assessment/Market analysis and determination;** Service area and demographics
- **Program design and scope of services** | hours of operation; staffing plan; client inclusion eligibility: high utilizer groups; Adults at risk for unplanned readmission under the HRRP; managed populations
- **Common workflow;** Sources of referrals; contact information; number & timing of visits; MIH-CP responsibilities before, during, and after visits; patient acuity rating
- **Operational infrastructure;** Capital equipment/facilities; MIH vehicles; supplies/equipment brought to client location; IT resources; communications equipment
- **MIH Medical Direction** | Management structure and reporting relationships
- **MIH-CP Position description;** scope of practice; credentialing
- **MIH Guidelines/SMOs:** Program policies and service level commitments; Interviewing and comprehensive assessment; with an emphasis on Respiratory, Cardiovascular; Metabolic, Neurologic, Orthopedic, Behavioral health, Substance Use Disorders; caveats for monitoring SpO₂, EtCO₂; and orthostatic VS, Life's Essential 8; Dimensions of Wellness; Fluid & Electrolyte disorders.
- **Treatment protocols** and patient instruction guidelines:
RESPIRATORY: COPD/Asthma [cough and sputum production, differential for SOB, COPD/HF]; Pneumonia [Pneumonia acuity assessment worksheet]
CARDIAC: Status-post AMI, HF [NYHA Classifications, definitions based on LV EF
Post-surgical Major Joint Replacement/surgical wound care
High Risk Conditions: Diabetes [Wagner-Meggitt Classification of Foot Ulcers/ self-care]
- **Pharmacology** review and Medication reconciliation procedure and documentation
- Conducting a **functional needs assessment** (ADLs and IADLs) | **Housing evaluation/safety check**
 - Patient Education and Injury Prevention
 - Healthy choices; and nutrition
 - Impact of Behavioral Health and Substance Use Disorder co-morbidities
 - Care of the Elderly | Clients with Special Health Care Needs/Special home equipment
- **Documentation:** HealthCall® platform; SMART CHARTS, documentation policy, and simulated calls
- **Community resource mapping/engagement** with partners; access options; client handouts
- **Quality Assessment/Performance Improvement** / Data Collection & Reporting
- Program Financing; MIH compensation for services
- MIH marketing; brochure
- Scenarios and role-modeling

MIH CLINICIAN SCOPE OF PRACTICE/CARE

MIH practice is outside of the usual and customary paramedic duties and work schedule. The Scope of Practice is commensurate with the qualifications and level of initial and ongoing education required for MIH clinicians and the patient populations served. Duties may include assessments, discrete tasks and interventions or delivery of advanced clinical care services beyond the scope of traditional paramedicine. See the MIH Clinician Position Description and Clinical Guidelines/ SMOs for more detail.

The Program currently uses Community Paramedics (CP) who function with all rights and privileges granted by their Paramedic license and enhanced System-awarded MIH-CP credentialing. They operate within MIH policies, procedures, and protocols approved by the EMS/MIH Program Medical Director and IDPH.

The focus of MIH shifts from episodic acute emergency evaluation and care to longitudinal assessment and monitoring to optimize each client's' health, wellness, and safety. MIH CPs transition from emergency unplanned responses under the EMS Program Plan to scheduled planned responses under the MIH Program Plan.

MIH Clinician POSITON DESCRIPTION - See Appendix D

Includes a general summary of the position and reporting relationships; range of duties and services; procedures performed; required qualifications and competencies; credentialing steps; working environment; disclaimer; and a Functional Job Analysis including essential skills, abilities, and aptitudes

MIH-CP CREDENTIALING

All EMS personnel functioning in Illinois must hold an active unrestricted license issued by IDPH. The diversity of clinical and operational protocols, scopes of practice, and equipment used in MIH programs requires local credentialing as MIH clinicians by the Program MD.

The MIH credentialing processes shall be fair, consistent, objective, unbiased, and based on clearly communicated, evidence-based performance standards that are accessible to any EMS clinician seeking MIH practice privileges within the NWC/NLC MIH Program.

Credentialing in the NWC/NLC MIH Program involves at a minimum

A. APPLICATION, AGREEMENT, and PHOTO

Submit the following to the MIH Program Director at Northwest Community Hospital:

1. A completed MIH Application listing all required demographic information, paramedic and/or nursing licenses & certifications (CPR, ACLS, ITLS, etc.), levels of academic preparation, length of EMS experience, a statement of interest, and verification of qualifications, practice excellence, and competency rating endorsements from an authorized agency leader **(See Appendix E)**
2. Copy of a current Illinois EMS license and AHA CPR for Healthcare Provider card
3. MIH Education completion certificate
4. Signed MIH Clinician Agreement form **(See Appendix F)**
5. Recent and high-resolution quality head and shoulders photograph in color.

B. VERIFICATION

The NWC EMSS MIH Program Director shall verify that the candidate has a complete file, meets all qualifications, has completed all required MIH education, has achieved objectives in all three domains of learning, and meets minimum competency requirements and performance prerequisites:

1. Cognitive knowledge and critical thinking skills meet or exceed MIH standards;
2. Competently performs MIH psychomotor assessments and interventions
3. Characterizes Program values, and behaviors | demonstrates social & emotional intelligence
4. Competencies: Conceptual, technical, contextual, adaptive, integrative, social, and communicative
5. Demonstrated ability to use HealthCall® software

C. AUTHORIZATION of MIH PRACTICE PRIVILEGES

Successful candidates are credentialed by Dr. Matthew T. Jordan, EMS MD as an approved MIH clinician in the NWC/NLC MIH Program for a period of no less than four years before renewal or recredentialing is required. Continuing education and ongoing competency evaluation shall be determined and published. The credentialing process shall undergo continuous review to ensure that education and measurement activities are adaptive to the evolving practice of MIH.

CLINICAL CARE: See MIH Practice Guidelines / Standing Medical Orders Client Engagement Plan

As patient populations become increasingly diverse, providing culturally and linguistically competent care is more important than ever (H&H Networks; The 2023 Environmental Scan).

Service level commitments

- MIH Clinicians shall comply with and abide by all federal, state, and local laws, rules, regulations, and Program standards now in force, or which may hereafter be in force, pertaining to MIH healthcare in the jurisdictions in which they are located or conduct MIH professional activities.

- **Clinical excellence is the uncompromising cornerstone for our existence**

MIH Clinical Guidelines/Standing Medical Orders (SMOs) are evidence-based, justifiable based on community health care needs, and defined by the EMS/MIH MD. See Document appended to MIH Plan.

MIH assessments and care shall be subject to ongoing evaluation to determine their impact on target patient outcomes. The Program shall follow evolving literature and make practice changes to the MIH-protocols as needed.

The MIH program advocates for a **Just Culture and fosters mindfulness** in MIH clinicians. Weick and Sutcliffe (2001, p. 42) describe **mindfulness** in terms of 5 components:

1. Ongoing scrutiny of existing expectations
2. Continuous refinement and differentiation of expectations based on newer experiences
3. Ability to invent new expectations that make sense of unprecedented events
4. Nuanced appreciation of context
5. Identification of new dimensions of context that improve foresight and current functioning

Specific National Accreditation Standards Addressed in the SMOs:

NPSG.07.01.01 Comply with either the current Centers for Disease Control and Prevention (CDC) and/or the current World Health Organization (WHO) hand hygiene guidelines.

According to the CDC, each year, millions of people acquire an infection while receiving care, treatment, and services in a health care setting. Consequently, health care–associated infections (HAIs) are a patient safety issue. One of the most important ways to address HAIs is by improving the hand hygiene of health care staff. Compliance hand hygiene guidelines will reduce the transmission of infectious agents by staff to patients, thereby decreasing the incidence of HAIs. To ensure compliance with this National Patient Safety Goal, an organization shall assess its compliance with the guidelines through a comprehensive program that provides a hand hygiene policy, fosters a culture of hand hygiene, monitors compliance, and provides feedback.

NPSG.15.01.01 Reduce the risk for suicide. Note: EPs 2–7 apply to patients being evaluated or treated for behavioral health conditions as their primary reason for care. In addition, EPs 3–7 apply to all patients who express suicidal ideation during the course of care. Identification of individuals at risk for suicide while under the care of or following discharge from a health care organization is an important step in protecting these at-risk individuals.

MEDICATION RECONCILIATION

Introduction to Reconciling Medication Information

“Patients often receive new medications or have changes made to their existing medications at times of transitions in care. Although most of these changes are intentional, unintended changes occur frequently for a variety of reasons. As a result, the new medication regimen prescribed at the time of discharge may inadvertently omit needed medications, unnecessarily duplicate existing therapies, or contain incorrect dosages. These discrepancies place patients at risk for adverse drug events (ADEs), which have been shown to be one of the most common types of adverse events after hospital discharge” (PSNet, 2019).

The large number of people who take multiple medications and the complexity of managing those medications make medication reconciliation an important safety issue. Patients often readmit to the hospital when they do not understand their medications, are unable to access them, or take them incorrectly. Taking multiple medications increases the risk for drug-drug interactions as side effects increase. Anything gained from reducing BP may be eroded by an increased risk for falls.

In medication reconciliation, a clinician identifies the most accurate list of all medications that the patient is taking, including name, dosage, frequency, and route and compares it to the medical record and/or discharge plan (if known) for what the client should be taking in the new setting of care and resolves any discrepancies.

The Joint Commission (TJC) recognizes that organizations face challenges with medication reconciliation. Best practice requires a complete understanding of what the patient was prescribed and what medications the patient is actually taking. It can be difficult to obtain a complete list from every patient in an encounter, and accuracy is dependent on the patient’s ability and willingness to provide this information. A good faith effort to collect this information is recognized as meeting the intent of the requirement.

These discrepancies place patients at risk for adverse drug events (ADEs), which are one of the most common types of adverse events after hospital discharge. Medication reconciliation refers to the process of avoiding such inadvertent inconsistencies across transitions in care by reviewing the patient's complete medication regimen at the time of admission, transfer, and discharge and comparing it with the regimen being used in the new setting of care.

As health care evolves with the adoption of more sophisticated systems (such as centralized databases for prescribing and collecting medication information), the effectiveness of these processes will grow. The National Patient Safety Goal (NPSG) focuses on the risk points of medication reconciliation. Some aspects of the care process that involve the management of medications are addressed in the standards rather than in this goal. These include **coordinating information during transitions in care both within and outside of the organization** (PC.02.02.01), **patient education on safe medication use** (PC.02.03.01), and **communications with other providers** (PC.04.02.01).

In settings where medications are not routinely prescribed or administered, this NPSG provides organizations with the flexibility to decide what medication information they need to collect based on the services they provide to patients. It is **important for clinicians to know what medications the patient is taking when planning care, treatment, and services**, even in situations where medications are not used” TJC National Patient Safety Goals® Effective January 2023 for the Hospital Program.

CP-MIH Program Medication Reconciliation Goals

- Mitigate patient risk factors and reduce adverse events and negative patient outcomes associated with transitions of care and/or medication discrepancies.
- Improve patient outcomes by avoiding preventable medication errors such as omissions, duplications, dosing errors, or drug interactions, improving safety and compliance, and enhancing communication related to medication use.

For the NWC/NLC MIH Program, the process involves the following steps:

- **Verification:** Consult the list of current medications (prescribed and over the counter) that the patient should be taking based on a known discharge plan. Inventory and make a list of the medications present in at the visit location; their concentrations, dose, and expiration dates.
- **Clarification:** Compare the two lists and note discrepancies; drug names (trade vs generic) or if dose in the packaging is different than the dose prescribed. Explore all discrepancies; confirm medications that they are currently taking; and their compliance with correct dosing.

- **Reconciliation:** The CP shall inform the PCP of record (if known) regarding medication discrepancies. Call the person who prescribed the medication if necessary. The PCP shall determine if the current prescribed medication list is accurate, document changes in the patient orders and discharge plan, and inform the client and CP of any changes.
- Additionally, the CP will evaluate the person's/caregiver's understanding of prescribed medications and their ability to access and take them as prescribed.

MEDICATION CHALLENGES

- Patients often receive new medications or have changes made to their existing medications at times of transitions in care. Caregivers at transition points may inadvertently omit needed medications, unnecessarily duplicate existing therapies, or note incorrect dosages. These discrepancies place patients at risk for adverse drug events, which are one of the most common types of adverse events after hospital discharge and a key driver of hospital readmissions (Comprehensive Pharmacy Services)
- People may not fill their prescriptions
- They may not understand how or when to take their medications properly
- Previous prescriptions or expired medications may still be present in the home so people have the potential for taking drugs that are not in the care plan. Old prescriptions may have different dosing from the current plan. Meds no longer prescribed or expired need to be appropriately discarded.
- They may not remember if they took their meds and omit or take additional doses by mistake
- People may electively skip doses or take additional doses, changing therapeutic blood levels
- People may have forgotten to bring meds with them when away from home and/or miss multiple doses or they may have been in a healthcare setting that temporarily omitted key medications causing acute clinical signs and symptoms.
- People may experience other health emergencies due to medication use. Example: Palliative care elderly patients are 40% more likely to experience delirium if taking medications with anticholinergic properties. Taking antihypertensive medications may lead to a significantly increased risk for serious fall injuries among older adults with HTN and multiple comorbidities. The risk may be doubled for those individuals who have had a previous fall in the past year.
- People may experience unknown altered effectiveness of current medications when taking new meds that impact their action (antibiotics may render BCPs ineffective)

MIH Best Practices:

- Engage client and/or caregivers/family members in obtaining a Best Possible Medication History
- Assess for knowledge deficits regarding medication regimens
- Using the **MIH Medication Profile Reference Guide**, provide education on the importance of maintaining a current and accurate medication history and safe compliance with the prescribed regimen.
- NPSG.03.05.01 **Reduce the likelihood of patient harm associated with the use of anticoagulant therapy.** Anticoagulation therapy can be used as therapeutic treatment for several conditions, the most common of which are atrial fibrillation, deep vein thrombosis, pulmonary embolism, and mechanical heart valve implant.

Anticoagulant medications are more likely than others to cause harm due to complex dosing, insufficient monitoring, and inconsistent patient compliance. To achieve better patient outcomes, patient education is a vital component of an anticoagulation therapy program and includes face-to-face interaction with a trained professional who works closely with patients to ensure that they understand the risks involved with anticoagulation therapy and the precautions they need to take to reduce the risk of adverse drug events associated with heparin (unfractionated), low molecular weight heparin, warfarin, and direct oral anticoagulants (DOACs).

Provide education to patients and families specific to the anticoagulant medication prescribed, including the following: Adherence to medication dose and schedule; importance of follow-up appointments and laboratory testing (if applicable); potential drug–drug and drug–food interactions; and the potential for adverse drug reactions.

PATIENT EDUCATION | PREVENTION | RESOURCES

Standard: MIH 01.01.03 - There is a comprehensive inventory that identifies the availability and distribution of current capabilities and resources for a variety of partners and organizations throughout the community.

The success of MIH is measured not only by the outcomes of client assessments and interventions, but also by the results of prevention efforts. EMS and MIH are ideally suited to serve key roles in multi-disciplinary community-wide prevention initiatives.

MIH will partner with impacted stakeholders to promote wellness and the appropriate use of EMS, MIH, and social services. MIH clients may be vulnerable based on their physical condition and/or have unfavorable social determinants of health. MIH clinicians shall identify possible community-based, prevention and resource-oriented services and make this information available as needed.

The importance of health and wellness is highlighted through educational efforts designed to inform clients about the dangers of smoking, substance use, unrecognized or undertreated diabetes, hypertension, and obesity, etc. and promoting the benefits of exercise, adequate sleep, healthy nutrition and stress outlets, etc.

Home safety checks will be conducted as consented and smoke detectors shall be installed where needed.

RESOURCES



United Way of Lake County

<https://211lakecounty.org/index.php/about-211/what-is-211>

211 is a 24-hour information and referral helpline that complements 911 by filling the gap between emergencies and non-public safety needs like food and shelter. Like MIH, 211 helps relieve the burden of non-emergency calls to 911, and reduces time and frustration for residents by acting as a central access point to the **health and human services** in Lake County communities. 211 creates efficiencies by helping individuals find the right solution in one call. This approach increases accurate referrals to service providers.

HOW THEY HELP

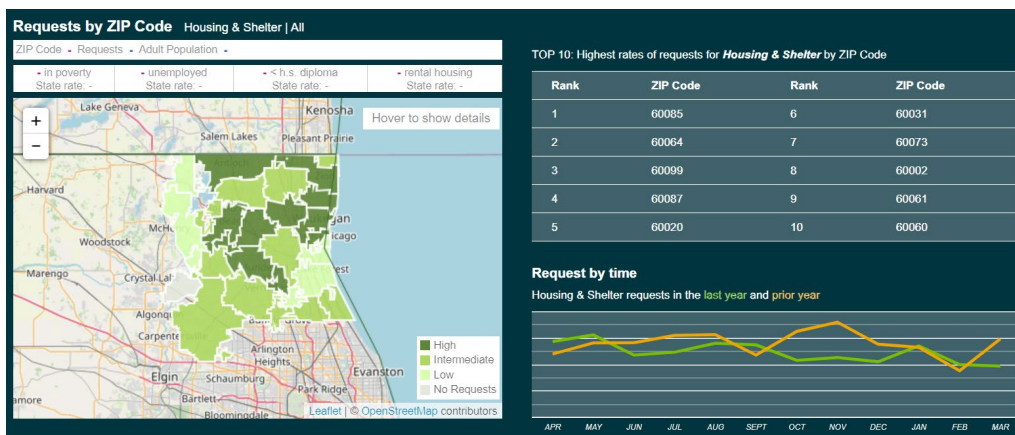
- Housing; utilities; food
- Crisis help; Mental Health & Addiction; Health care
- Financial support; education; personal, child & family support
- Employment; transportation; legal & immigration; government
- Volunteering; disaster Information

If looking for help in Lake County or cannot reach 211, call 1-855-677-5253 toll free.

Call: 211 - Multi-lingual with English and Spanish speaking staff, and a professional 24-hour phone interpretation service for over 150 languages.

Text a zip code to 898211. Two-way texting is available in English and Spanish. 211 contact center is staffed 24/7 and an expert navigator will text back. Person texts their question to begin getting the help they need.

211 is always free and completely confidential. It's also anonymous—the caller does not need to give their name or provide personal details to get information.



MIH DOCUMENTATION & CARE DELIVERY PLATFORM – HealthCall®

DEFINITIONS

ePCR or EHR: Electronic Patient Care Report or Electronic Health Record is any record of an EMS patient or MIH client assessment or care that is created on an electronic device and stored in an electronic data storage system and will serve as a medical record of the encounter.

MIH medical records: Include, but may not be limited to information related to a client's physical or mental health or condition including individually identifiable data that are collected, recorded and stored and directly used in documenting MIH care in any health-related setting. They also include all communications that are recorded in any form or medium between MIH clinicians and medical personnel. MIH records may be used for healthcare, administrative, business, payment, and QI purposes. EHRs and MIH data are also used for research purposes and serve an important role as a data repository.

"Medical records do not include investigations or reports that are prepared in connection with utilization review, peer review, or quality management activities" [What Constitutes a Medical Record? What are Oversight and Management Considerations? | Lorman Education Services.](#)

Protected health information (PHI): Information that is a subset of health information, including demographic information collected from an individual and; is created or received by a health care provider, health plan, employer, or health care clearing house; and relates to the past, present or future physical or mental health or condition of an individual; the provision of health care to an individual; or the past, present, or future payment for the provision of health care to an individual. This information identifies the individual or there is a reasonable basis to believe the information can be used to identify the individual.

The growth and reliance on technology in the healthcare industry to facilitate collection, storage, retrieval, use, disclosure, and reporting of data has made it imperative to use robust documentation platforms. Tools should be cost-effective and incorporate uniform data elements, employ standard definitions, integrate information systems with other healthcare providers, link multiple source databases, and generate valid, reliable, and accurate data. All healthcare providers are encouraged to invest in software that centralizes data, streamlines operations, and saves time.

The MIH Program complies with relevant statutes, rules and EB guidelines with respect to MIH healthcare records including, but not limited to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), Public Law 104-191 and Federal privacy rules for individually identifiable protected health information (PHI) (<https://www.hhs.gov/hipaa/for-professionals/index.html>).

- **Technologic safeguards:** Address how PHI is collected, stored, maintained, backed up, and retrieved. HealthCall has completed data security audits and is HIPAA compliant.
- **Physical safeguards:** All MIH members shall ensure the security of locations and equipment where electronic PHI is stored, transmitted, retrieved, etc. Only those with a legitimate right to access PHI shall have access to client data. Computers containing MIH PHI will be kept securely in areas where unauthorized individuals cannot access them.
- **Administrative safeguards:** Access codes are limited to MIH clinicians and administrators. MIH agencies shall maintain policies & procedures, conduct training, and enforce best practice models in the ways clinicians protect the security of PHI.

Healthcare platform

"The MIH EHR shall contain information that reflects a client's assessment, care, and services. The Program shall use sophisticated systems that support and enhance decision-making in clinical settings" (AHA Futurescan 2023: Healthcare Trends and Implications). **HealthCall®** is a fully integrated cloud-based care delivery platform that can be accessed on any device with an internet or cell phone connection. It meets these criteria and was selected to support the MIH program.

Care Coordination features: Care network; task collaboration; call center tools; care plans; task manager; decision support tools; and workflow management. HealthCall® has a suite of tools that allows the Program to receive and track referrals, assess and document client information, and coordinate care between MIH agencies, PCPs, and hospital partners. HealthCall's person-centric framework and goal-tracking tools help manage client's social determinants of health.

HealthCall supports real-time data sharing with information exchanges, EHR Systems, and direct import of NEMIS files. The Program will work with the vendor to develop interfaces between MIH, EMS and Hospital EHR software and advocate for linking and/or integrating patient data.

HealthCall Telehealth Video Service. Provides secure telehealth services with one-click launching that is fully integrated within the platform and enables tracking of each telehealth session.

Electronic health record features: SMART charts; clinical status; medication (reconciliation) record; client Past Medical History record; notes; document management; goals tracking; and patient portal. The vendor customized their software to include assessment data points requested by NCH. Client information is documented within one longitudinal record. Each MIH clinician can see entries from previous encounters to promote continuity of care, informed decision-making, and early identification of changes over time.

The MIH Program uses a variety of HealthCall® SMART Chart tools such as the STEADI Fall Risk evaluation with automatic scoring and decision-support; ANSWERS® Wellness Programs, Behavioral Health; Breathe Easy; Diabetic; Heart Health; High Utilizer Group (HUG); High Risk Care (HRC); Joint Replacement, Pregnancy Program, High Risk, and Resupply.

The Program has access to the HealthCall Care Network that allows engagement with the community care organizations who work with clients to track quality metrics and enable detailed reporting.

Workflow automation features: HealthCall® Programs enable clinical and administrative process automation that delivers consistent high-quality outcomes with greater financial efficacy. HealthCall® Programs are fully integrated within the clinical management platform to work seamlessly with the Automated Patient Response™ system, EHR, and SMART Charts.

The vendor completed multiple educational sessions for Program MIH CPs and each clinician was required to complete at least two simulated EHRs based on sample clients created by the MIH Project Coordinator & Case Manager at the Wauconda FPD. Technical support is provided as needed. <https://www.healthcall.com/>

POLICY

- I. An EHR, approved by the EMS/MIH MD, shall be initiated and full assessment completed and documented at the first encounter with every MIH client. Thereafter, each MIH client encounter shall be documented into the original record.
 - A. **Required MIH EHR software for all NWC/NLC MIH Agencies:** HealthCall®
 - B. EHRs shall contain sufficient, objective and accurate information to identify the client, support MIH impressions, justify interventions, document the time course and results of the encounter, and promote continuity of care among health care providers.
 - C. All are responsible for maintaining the integrity and security of MIH data and medical records in their possession under federal and state statutes and Program policies.
 - D. Each user has their own unique login information and password to gain access into the software. The iPad that will be used for documentation also has a password that only the community paramedics will have access to. This is a similar practice that we use for our current patient care reporting system in Image Trend.
- II. **Correcting or editing an entry**
 - A. Apparent errors or omissions in documentation shall be corrected promptly once detected. A report may be **corrected or edited** by MIH clinicians involved in the nonconformity.
 - B. If the edits provide new information that could impact continuity of client care, an alert shall be sent or a link to the amended report shall be provided to those who have a need to know.
 - C. Records involved in any open investigation, audit or litigation should not be modified or destroyed. Agencies shall have a **“litigation hold” program** in place to preserve all evidence and documentation existing at the time in the event of a known investigation or litigation being filed (<https://www.lorman.com/resources/medical-records-law-in-illinois-17231>).
- III. **Security and control relative to MIH EHR software and hardware**
 - A. Any person or entity that creates, receives, obtains, maintains, uses, or transmits protected health information (PHI) shall adhere to laws regarding the protection of and confidential access to MIH medical records. These include the Illinois Medical Records Retention laws, the Health Insurance Portability and Accountability Act (HIPAA), and Policies C7 Confidentiality of Patient Records and E-5 Code of Ethics.
 - B. Each MIH agency and clinician are responsible for insuring that all entered data, and electronic resources are appropriately protected against preventable or foreseeable mistakes in data entry, processing, intentional or inadvertent losses, and purposeful malfeasance.
 - C. Each MIH agency shall ensure that devices running MIH EMR software are maintained with all manufacturer mandated updates that prevent breaches in data security and integrity.
 1. Usernames and passwords used to access MIH EHR software or hardware shall not be transmitted through unencrypted unsecure communications mediums.

2. PHI, printed MIH EHRs, or other client data that contains patient identities shall not be transmitted through unencrypted or other unsecure communications mediums.
3. MIH Agencies may specify a limited number of users to have agency level administrator access to the MIH EHR software.
4. No individual shall make any unauthorized changes, additions, deletions, or corrections to any MIH templates, HealthCall® software configurations, or EHRs.
5. Each HealthCall® user is responsible for maintaining the security of MIH and associated data. These actions include, but are not limited to:
 - a. Logging out of the EHR software when not in use.
 - b. Securing or logging out of the electronic device when not in use.
 - c. Creating passwords that meet Agency complexity requirements.
 - d. Keeping login username/passwords strictly confidential.
 - e. Changing passwords if breached or suspected to have been breached.
 - f. Maintaining physical control of MIH electronic devices at all times.
6. MIH agencies are encouraged to enhance the security of MIH software by implementing additional security measures, including:
 - a. Configuring automatic lockout/sleep when a user/device has been idle
 - b. Require a password, pin, or other credential to access hardware after lockout or sleep periods
 - c. Require complex passwords that include combinations of upper case, lower case letters, numbers, symbols, etc.

D. MIH Software user management

1. User management of MIH software is primarily the responsibility of the MIH Agency.
2. **Creating users:** Once an MIH clinician is credentialed and granted MIH practice privileges, the MIH Coordinator at Wauconda FPD shall create a user account containing the person's name, license #, a username, and temporary password.
3. **User account permissions:** Users of the HealthCall® software must be assigned the most appropriate level of access for their role.
4. **Inactivating users:** MIH Agency administrators shall inactivate an MIH clinician's account at the time they leave the Agency or have practice privileges suspended. The MIH Coordinator at Wauconda shall inactivate an MIH Agency's account at the time they leave the Program or are suspended from operation. Those administrators are permitted to reactivate an account if prerequisites for active participation are met.
 Agency administrators may perform additional user account maintenance including resetting passwords and updating MIH clinician demographic/credential information

E. Appropriate uses of MIH computers

1. Use of all MIH electronic systems and devices must be compliant with Agency policies and not in violation of any legal regulations.
2. Users must not deliberately act in a manner that would negatively impact the operation of electronic devices or systems. This includes, but is not limited to tampering with components of the computers or network or installing or uninstalling applications that affect system operability
3. Users must not unfairly monopolize the MIH computer or system resources that prevents others from completing their assigned duties.
4. Users shall not use MIH equipment to access, store or publish materials which are pornographic, sexual, racist, sexist, or otherwise offensive.
5. Agencies have the right to monitor, filter, or track communications on their networks.
6. Agencies will audit system and application logs and processes as required by HIPAA and other applicable regulations.
7. All network traffic is subject to acceptable use policies of the network through which it flows.

- IV. **Medical records retention period in Illinois:** MIH Agencies shall preserve MIH-related medical records in a format and for a duration established Illinois law and by policy and **for not less than 10 years**, unless notified in writing by an attorney before the expiration of the 10-year retention period that there is litigation pending involving the record of a particular client. In such case, follow direction from the Agency's legal counsel.

QUALITY ASSESSMENT/PERFORMANCE IMPROVEMENT (QA/PI) and DATA REPORTING

The MIH Program is data, information, and evidence-informed. Continuous and comprehensive evaluation is essential to measure the effectiveness and quality of all aspects of performance including structural, process, and outcome measures while being highly sensitive to issues of confidentiality.

Quality improvement (QI) data shall be collected and analyzed to compare current to desired states, identify apparent cause analyses of barriers resulting in performance gaps, and create action plans. Assessment occurs in a continuous Plan- Do-Study-Act cycle. Data shall be used to systematically improve care, standardize processes and structures to reduce variation, achieve predictable results, and improve outcomes.

QI monitoring and surveillance audits shall be done internally by each MIH agency on an ongoing basis. An interdisciplinary team will review Program-wide data via monthly screens established by them and the EMS/MIH MD. Performance targets shall be determined by national measures where they exist and local thresholds established by the committee and agreed to by the MIH/EMS MD.

Data collected will include core measures and sentinel events specific to the benchmark being addressed:

- **Structure** metrics: Technology, culture, leadership, and physical capital.
- **Process** metrics: Quantitative measures used to evaluate the efficiency and quality of a specific business process (including knowledge capital (e.g., standard operating procedures) or human capital (e.g., education and training).
- **Outcome** metrics: Specific data collected to assess the extent to which expected outcomes (e.g., changes in behaviors, attitudes, or knowledge) have been achieved.

Questions to be answered by QI:

- Does MIH produce the desired outcomes? (IHI quintuple aims + KPIs)
- Does MIH reduce costs with comparable or better outcomes than traditional approaches to care?
- Does MIH reduce a patient's risk for preventable readmissions?
- Does MIH connect patients to needed care?

Internal accountability

All participants shall conform with best practices aligned to MIH mission, vision, values, goals, and standards. All shall monitor trends, celebrate successes, and understand why measures have/have not been achieved.

External accountability

Data is reported to governmental entities, MIH leaders, and stakeholders as appropriate and required.

What will success look like?

- All stakeholders support the Program.
- MIH stakeholders participate in planning that is tailored to local needs based on the identified scope of the Program. Policies, procedures, and protocols are developed and approved, education and competency measures are completed and documented; clinicians are credentialed; agreements and contracts are negotiated and signed; and specified resources are acquired and readied for use.
- Barriers to innovation and successful implementation are identified and resolved
- The Program plan provides factual, accurate and complete descriptions of required elements in conformity with IDPH rules and accreditation recommendations and is approved by IDPH.
- The plan articulates clear mission, vision, values, and goal statements and are executed flawlessly after Program implementation.
- The Program is implemented and operates within the plan.
- The Program meets or exceeds all goals and QAPI measures and targets after implementation.

Institute for Healthcare Improvement (IHI) Safety resolutions adapted for EMS:

- Learn from what goes right, as well as what goes wrong
- Move from reactive and responsive to proactive and generative
- Invest in quality systems for learning, rather than just individual projects
- Shift from fear, blame and liability toward humility, trust and transparency
- Understand that quality is more than just the avoidance of mistakes and physical harm, but also the pursuit of excellence and optimal outcomes <https://www.ahrq.gov/health-literacy/improve/precautions/tool2b.html>

MIH benchmarks and metrics

Process metrics

- P1: Clients meeting inclusion criteria are enrolled in the program as resources allow
- P2: Communication flows as designed
- P3: First MIH visit occurs within requested date and time
- P4: Home safety risk assessment is completed on first MIH visit if authorized by client/legal decision maker
- P5: Client acuity is accurately rated by MIH clinicians
- P6: Assessment, care, and coaching provided by MIH-CPs conforms to plan and SMOs/procedures.

Outcome metrics

- O1: Clients conform to care plan
- O2: Clients meet target outcomes without preventable complications
- O3: 30-day unscheduled, avoidable hospital readmissions are reduced in target populations to ≤ 2 per year:
Report all Medicare readmission rate; all patient readmission rate and enrolled client readmission rate by target diagnosis by quarter
- O4: Unscheduled non-emergency ED revisits in enrolled clients are reduced to ≤ 5 /year
- O5: Calls to 911 for non-emergency causes by enrolled clients is reduced to ≤ 5 /year.
- O6: Falls are reduced in enrolled clients to ≤ 2 per year

Experience of care and patient satisfaction metrics

- E1: Client satisfaction scores meet/exceed targets set at 75th percentile

Cost of care metrics: (Compare 12 months before Program launch to 12 months after launch)

- C1: MIH Agencies experience ambulance transport savings (ATS) by reducing multiple responses to recidivists
- C2: Program operates within its budgetary plan

Other measures identified by MIH programs as *essential*, collectable and highest priority to their healthcare partners

Quality of Care & Patient Safety Metrics

- Q1: Medication inventory and reconciliation prevents all drug errors
- Q2: Clients are involved in setting individualized goals
- Q3: MIH clinicians conform to MIH policies and protocols
- Q4: Adverse events are prevented/outcomes achieve targets

HRSA recommends the following benchmarks: (national language)

100: Assessment: Regular systematic collection, assembly, analysis, and dissemination of information on the health of the community

- | | |
|---------------|--|
| Benchmark 101 | There is a thorough description of the epidemiology of the medical conditions targeted by the community paramedicine (CP) program in the service area using both population-based data and clinical databases. |
| Benchmark 102 | A resource assessment for the MIH program has been completed and is regularly updated. |
| Benchmark 103 | The MIH program assesses and monitors its value to the constituents in terms of cost-benefit analysis and societal investment. |

200: Policy development: Promoting the use of scientific knowledge in decision making that includes building constituencies, identifying needs and setting priorities, legislative authority and funding to develop plans and policies to address needs, and ensuring the public's health and safety

- | | |
|----------------|---|
| Benchmark 201 | MIH activities are allowable/supportable within regulations, licensure, certification and scope of practice |
| Benchmark 202: | MIH program leaders (sponsoring agency, MIH-CP personnel, and/or other stakeholders) use a process to establish, maintain, and consistently evaluate and improve an MIH program in cooperation with medical, payer, professional, governmental, regulatory and citizen organizations. |

Benchmark 203:	The MIH program has a comprehensive written plan based on community needs. The plan integrates the MIH program with all aspects of community health including, but not limited to: EMS, public health, primary care, hospitals, psychiatric medicine, social service and other key providers. The written CP program plan is developed in collaboration with community partners and stakeholders.
Benchmark 204	Sufficient resources are in place, including those both financial and infrastructure related, support program planning, implementation, and maintenance.
Benchmark 205:	Data is used to evaluate Program performance and to develop public policy. 205.1 The MIH program electronic information system (EIS) is used to assess system performance, to measure system compliance with applicable standards, and to allocate program resources to areas of need or to acquire new resources. 205.2 Continuing education for MIH providers is developed based on review and evaluation of the EIS data. 205.3 MIH leaders, including the multi-disciplinary, multi-agency advisory committee, regularly review Program performance reports and compliance information to monitor MIH program performance and to determine the need for program modifications.
Benchmark 206	The MIH, EMS, public health, community health, and primary care systems are closely linked and working toward a common goal.
300: Assurance: Assurance to constituents that services necessary to achieve agreed-on goals are provided by encouraging actions of others (public or private) requiring action through regulation or providing services directly.	
Benchmark 301	The EIS is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the community paramedicine Program.
Benchmark 302	The financial aspects of the MIH program are integrated into the overall PI system to ensure ongoing “fine-tuning” and cost-effectiveness.
Benchmark 303	The MIH program ensures competent medical oversight.
Benchmark 304	The MIH program is supported by an EMS System that includes communications, medical oversight, and transportation; the MIH program, EMS System and public health and community health agencies are well integrated.
Benchmark 305	The MIH program ensures a competent and safe workforce.
Benchmark 306	The Program acts to protect the public welfare by enforcing various laws, rules, and regulations as they pertain to the MIH Program.

Immunity provisions

- All information contained in or relating to any medical record audit performed by an authorized party and/or by the EMS/MIH MD shall be afforded the same status as information concerning medical studies in Article VIII, Part 21 of the Code of Civil Procedure. Disclosure of such information to IDPH shall not be considered a violation of that Code.
- Hospitals, Agencies, and individuals that perform or participate in medical audits pursuant to the EMS Act shall be immune from civil liability to the same extent as provided in Section 10.2 of the Hospital Licensing Act.

PROGRAM FINANCING

MIH 01.02.01: There must be evidence of financial commitment to the program by the administrative structure and through financial resources that contribute to excellence in patient care and safety.

According to the Centers for Medicaid & Medicare Services, healthcare spending is projected to increase to \$6.2 trillion by 2028. New laws, regulations, technology, and ways of doing business are emerging rapidly to improve outcomes for patients while making care delivery models fiscally sustainable.

A 'triad of value' drives the health care economy: Increased access, increased quality, and decreased cost. The MIH Program must demonstrate its value to a wide range of stakeholders who may fund the program, including hospitals, post-acute care agencies, third-party payers, Medicare, donors, and grantors.

Providing MIH services has direct and indirect costs. Labor, operational and capital supply and equipment, contracted services, and IT technical resources and support are essential expenditures. Compensation for services is currently challenging although federal and state laws are currently pending to help address those issues. In the meantime, creative funding, careful stewardship of resources, and accurate reporting of the Program's Balance Sheet and Profit and Loss Statements are imperative to meeting the financial plan.

Principles such as regional service delivery and alternative payment models improve fiscal efficiency (Hooten, 2017) and we have adopted those principles. One way of decreasing operational cost is to invest in software that centralizes data, streamlines operations, and saves time. The Program did this by contracting with HealthCall as the documentation and care delivery platform.

The MIH Program will monitor financial performance at least on a monthly basis to trend results; make needed adjustments, and determine future growth opportunities.

Financial GOALS: Unite the following to achieve desired program outcomes

- Operational performance improvement to boost quality, improve patient experiences, and maintain safety while decreasing inappropriate use of healthcare resources and preventable admissions/readmission
- Use technology and digitally enabled processes to sharpen efficiencies
- Optimize economies of scale to reduce costs
- Recoup costs via accurate data documentation, coding, and timely invoicing of insurance companies
- Identify, create, and access new and existing revenue streams
- Deliver actionable data from disparate sources to a broad set of stakeholders to guide planning; and evolve analytics from retrospective to predictive

Costs

Unit Costs per visit

- \$ Wages & benefits (\$/hour + Workers Compensation, professional liability insurance) for visit, travel, restocking, and documentation time
- \$ Vehicles (maintenance; gasoline, mileage at \$0.67/mile x miles)
- \$ IT costs: Monthly phone/internet connectivity costs; proportionately divided by call volume
- \$ Equipment restocking costs
- \$ **Total estimated unit costs (?)**

Other costs:

1. Education (initial) student costs (salary/hour X 40/hours X # students)
2. Education (initial) faculty costs
3. Continuing Education: faculty; CPs
4. Quality management; meetings: Staff time, travel
5. On-call stipend?
6. Uniforms
7. Initial capitalization: Vehicles, license, city stickers, insurance, branding; iPad, cell phone
8. Ongoing: Internet and phone service provider
9. Initial stocking/restocking: Required equipment/supplies – See list
10. HealthCall software annual fee (\$15,000 discounted fee year 1 – see Service Agreement)
11. Administrative Support: Wauconda FD call intake center; MIH Coordinators
12. Administrative Support: NWC EMSS MIH Program Director; educators

REVENUE Sources

Funding partners secured by Wauconda FPD - We are grateful for their generous support:

Lake County American Rescue Plan Funds (ARPA):	\$215,106.36
Grainger Foundation:	\$ 24,862.19
Healthcare Foundation of Northern Lake County (HFNLC):	\$ 76,831.20
Lake County Community Foundation (LCCF):	\$ 23,924.56
Jeanne Ang, Advocate Community Health	\$ 15,000.00
<u>Total</u>	<u>\$355,724.31</u>

We continue to negotiate with vendors for preferred pricing on all purchased goods.

Evolving MIH reimbursement landscape

October 2017: Anthem announced that it would begin paying EMS agencies for healthcare common procedure coding system (HCPCS) code A0998: Ambulance response and treatment, without transport. Some states (Arizona, Minnesota, Nevada, New Mexico) are now paying EMS to treat and refer select patients to destinations besides emergency departments. Private insurers are also beginning to pay for such services. Need to advocate for this in Ill.

Anthem will reimburse EMS at 75% of the state average of the allowed payment for all ambulance trips. This basis considers regional variations, such as the geographic practice cost index that Centers for Medicare and Medicaid Services (CMS) uses for the ambulance fee schedule. It costs more to provide EMS service in California vs. Mississippi, and this methodology accounts for those variations.

One of the most innovative payers in the country, Medicaid, has begun compensating MIH programs for their services. The NWC/NLC MIH Program has a signed contract with **Meridian Health Plan of Illinois**, Inc in which the MIH Program agrees to provide Covered Services by credentialed participating providers to Covered Persons enrolled in a Medicaid Product, specifically HealthChoice Illinois, without discrimination in compliance with Regulatory requirements and the program policies and network manual.

In return, the contracted Providers shall submit to Meridian, clean claims for payment for Covered Services rendered to Covered Persons. The compensation for Covered Services (Compensation Amount) will be the appropriate amount under the applicable Compensation Schedule less all applicable Cost-Sharing Amounts in effect on the date of service.

The Billing Codes are defined based on the nature of the visit (new or existing patient); length of the visit in minutes; and complexity of the services rendered.

CMS requirements for transition care billing: Telephonic or e-mail contact within two days of discharge; a review of discharge information and communication with relevant community partners; and face-to-face contact between the patient and their primary care provider within seven days for simple cases and 14 days for complex ones. If all of these are achieved, an organization can bill for transition care.

MIH 01.02.02 Insurance – The community medical service must have and maintain insurance against loss or damage of the kinds customarily insured against and in such types and amounts as are customarily carried under similar circumstances by similar businesses. The insurers must be financially sound and reputable, and they must be qualified to do business in the state(s) in which the service is located.

The types of insurance must include but are not limited to the following:

1. Auto insurance (for ground vehicles owned by the service) – \$1 million (U.S. dollars) and includes accidental death and disability
2. General Liability– \$1 million (U.S. dollars)
3. Worker’s compensation or employer’s liability – per state or equivalent government guidelines
4. Group life insurance or accidental death and disability – whether paid for by the employer or employee. A minimal coverage of one times the annual salary is encouraged.

Insurance for ransomware or internet theft is encouraged.

Insurance coverage maintained: As part of the IGA, each participating MIH Agency maintains insurance certificates as defined above for general liability, auto, medical malpractice, worker's compensation, and availability of group life or AD&D.

COMMUNICATIONS and MARKETING

Program champions solicited ideas and input during the plan development to outline likely market response upon plan implementation and develop the marketing campaign.

MIH 01.03.02: There is a professional and community education program and/or printed information with the target audience to be defined by the community medical service.

1. Clear identification of the sponsoring agency(s) with appropriate contact information
2. Website information and printed materials are accurate and consistent with program documents, practice, and capabilities, including the program's mission and vision statements
3. Evidence of state licensure (or authority having jurisdiction (AHJ)) is provided for each vehicle and care site as appropriate to state or local guidelines
4. State or local license (or AHJ) for each vehicle and care site are accessible to the public
5. Hours of operation, phone number, and access procedure are accessible to the public
6. Capabilities of medical practitioners - including current scope of care, a list of types of patients who are accepted based on personnel training, and configuration and equipment capabilities - are included
7. Coverage area for the service is specified
8. Access requirements to the service are outlined
9. Patients considered appropriate for service are specified

Marketing materials are up to date, consistent with mission and scope, depict actual types of services and service area. **See Appendix G for Brochure and H for a listing of MIH CPs**

A Communications Checklist provides common concerns among stakeholders, and communications strategies to address stakeholder interests.

The Business plan describes how the program impacts or extends the existing agency brands, as well as proposes appropriate promotional strategies for:

- Targeted consumer campaigns
- Physician-directed marketing
- Internal awareness-building efforts
- External awareness-building efforts

Marketing strategy

- **Written media:** Communication messaging was created and distributed on the EMSS website, through e-mails, HealthCall, local media feeds, and via print media to potential patients and community stakeholders.
- All stakeholders shall be kept informed of our progress, barriers, and successes. The dashboard of milestones and achievement will be updated at least monthly for a snapshot of our progress.
- **Verbal reports:** Updates will be provided at relevant System and hospital meetings.

Next steps: Ongoing tasks:

NWC EMSS

- Work with marketing/communications to create press release/messaging
- Operationalize go-live plan

Agencies

- Communicate with all agency & community stakeholders

References:

- Abrashkin, K.A., Poku, A., Ramjit, A. et al. (2024). Community paramedics treat high acuity conditions in the home: a prospective observational study. *BMJ Supportive & Palliative Care*, 14, e683–e690. doi:10.1136/bmjspcare-2018-001746. Accessed online: <https://spcare.bmj.com/content/bmjspcare/14/e1/e683.full.pdf>
- AHA. Future Scan 2023
- Aaron, S.D., Vandemheen, K.L. Whitmore, G.A., et al. (2024). Early diagnosis and treatment of COPD and asthma – a randomized, controlled trial. *NEJM*, DOI: 10.1056/NEJMoa2401389.
- Becknell, J., Simon, L. (2016, December). *Beyond EMS data collection: Envisioning an information-driven future for Emergency Medical Services* (Report No. DOT HS 812 361). Washington, DC: National Highway Traffic Safety Administration.
- Centers for Medicare & Medicaid Services. (2019). Medicare and Medicaid Programs; revisions to requirements for discharge planning for hospitals, critical access hospitals, and home health agencies, and hospital and critical access hospital changes to promote innovation, flexibility, and improvement in patient care final rule. *Federal Register* / Vol. 84, No. 189. 42 FR Parts 482, 484, and 485; [CMS–3317–F and CMS–3295–F]; RIN 0938–AS59.
- CMS. (May 2024). Strategic plan: Health equity. Accessed online: [HealthEquity-FactSheet-052424-508.pdf](#)
- CMS. (May 2024). CMS Diabetes Strategy - Impact Report 2024. Accessed online: [CMS 2024 OMH Diabetes Strategy English V2.pdf](#)
- Commission on Accreditation of Medical Transport Systems (2022). First edition accreditation standards for mobile integrated healthcare programs. ©2022 ISBN: 979-8-9861971-3-5, Accessed online: <https://www.camts.org/wp-content/uploads/2023/02/MIH-Final-Standards-Website-05162022.pdf>
- De Gelder, J., Lucke, J.A., de Groot, B., et al. (2018). Predictors and outcomes of revisits in older adults discharged from the emergency department. *J of the Am Geriatrics Society*. Published on line: 28 February 2018 <https://doi.org/10.1111/jgs.15301>
- Deloitte. (2023). 2023 Human Capital Trends: A Public Sector Perspective. Accessed online: [2023 Human Capital Trends: New Fundamentals in a Boundaryless World \(deloitte.com\)](#)
- Harris, L. J., Graetz, I., Podila, P. S. B., et al. (2016). Characteristics of hospital and emergency care super-utilizers with multiple chronic conditions. *J of Em Med*, 50(4), e203-e214.
- Hooten, D. (2017). Best practices in high value EMS. *EMS World*; accessed on line: <https://www.hmpgloballearningnetwork.com/site/emsworld/article/219383/best-practices-high-value-ems>
- Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>
- IHI Quintuple Aims see: <https://www.ihl.org/resources/publications/quintuple-aim-health-care-improvement-new-imperative-advance-health-equity>
- Itchhaporia, D. (2021). The Evolution of the Quintuple Aim Health Equity, Health Outcomes, and the Economy. *JACC*, 78 (22). Accessed online: [The Evolution of the Quintuple Aim \(nih.gov\)](#)
- Kuzel, A.R., Kuhl, E.A. (2023). EMS Medical Director legal issues and liability. [Updated 2023 Nov 2]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK597344/>
- Minnesota Dept of Health Office of Rural and Primary Care Emerging Professions Program. (2016). Community Paramedic Toolkit. Accessed on line: <http://www.health.state.mn.us/divs/orhpc/workforce/emerging/index.html>
- McLellan, S.E., Mann, M.Y., Scott, J.A., Brown; T.W. (2022). A blueprint for change: Guiding principles for a system of services for children and youth with special health care needs and their families. *Pediatrics*; 149 (Supplement 7): e2021056150C. 10.1542/peds.2021-056150C. Accessed online: [A Blueprint for Change: Guiding Principles for a System of Services for Children and Youth With Special Health Care Needs and Their Families | Pediatrics | American Academy of Pediatrics \(aap.org\)](#)
- National Academies of Sciences, Engineering, and Medicine. (2017). Communicating clearly about medicines: Proceedings of a workshop. Washington, DC: The National Academies Press. doi: <https://doi.org/10.17226/24814>.

NAEMT. (2023). 2023 National Survey on MIH-CP Programs. Accessed online: https://naemt.org/docs/default-source/community-paramedicine/toolkit/mihcp-presentation_may-2023.pdf?sfvrsn=2f01f593_2

National Council on Aging. (2024). Accessed on line: [The National Council on Aging \(NCOA\)](#)

References cont.

NEJM Catalyst Insights Council. (May 2024). Innovations in care delivery. Navigating the clinician shortage crisis. Massachusetts Medical Society. Accessed online: [Navigating the Clinician Shortage Crisis.pdf \(cfassets.net\)](#)

Nundy, S., Cooper, L.A., Mate, K.S. (2022). The quintuple aim for health care improvement: A new imperative to advance health equity. *JAMA*; 327(6):521-522.

Partnership to fight chronic disease. (2024). Accessed on line: [Keeping Education ACTIVE | Partnership to Fight Chronic Disease | Partnership to fight chronic disease](#)

Patient Safety Network. (2019). Medication reconciliation. Agency for Healthcare Research and Quality (AHRQ). Accessed online: <https://psnet.ahrq.gov/primer/medication-reconciliation#:~:text=Medication%20reconciliation%20refers%20to%20the,the%20new%20setting%20of%20care>.

Scaletta, T. (2018). QUEST: Improving patient and provider experiences. Accessed on line: https://www.medscape.com/viewarticle/893987?nlid=121432_785&src=WNL_mdplsfeat_180327_mscpedit_nurs&uac=1774DY&spn=24&implD=1591632&faf=1#vp_2

Shannon, B., Eaton, G., Lanos, C., et al. (2022). The development of community paramedicine; a restricted review. *Health & Social Care in the Community*, 30(6), e3547–e3561. doi: 10.1111/hsc.13985. Accessed online: <https://pubmed.ncbi.nlm.nih.gov/36065522/>

Shannon, B., Baldry, S., O'Meara, P. et al. (2023). The definition of a community paramedic: An international consensus. *Paramedicine*, 20(1), 4-22. doi:10.1177/27536386221148993

Short, M. and Goldstein, S. (2022). EMS documentation. StatPearls [Internet]. Accessed online: <https://www.ncbi.nlm.nih.gov/books/NBK448107/#:~:text=The%20primary%20purpose%20of%20EMS,in%20patient%20care%20will%20understand>.

Skinner, H.G., et al. (2016). The effects of multiple chronic conditions on hospitalization costs and utilization for ambulatory care sensitive conditions in the United States: a nationally representative cross-sectional study. *BMC Health Services Research*, 16(77), 1-8.

The Joint Commission. (2023). National Patient Safety Goals® Effective January 2023 for the Hospital Program. Accessed online: https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2023/npsg_chapter_hap_jan2023.pdf

Varone, C. (2023). Photos from the scene: Understanding fire/EMS department records retention. Accessed on line Feb. 24, 2023 from [Photos from the scene: Understanding fire/EMS department records retention \(ems1.com\)](#)

Zavadsky, M. (August 14, 2017.) How paramedics helped BlueCross BlueShield of New Mexico reduce ED usage, readmissions. *JEMS.com*. Retrieved Nov. 20, 2017, from www.jems.com/articles/pt/2017/08/how-paramedics-helped-bluecross-blueshield-of-new-mexico-reduce-er-usage-readmissions.html

NATIONAL MIH ACCREDITATION STANDARDS

MIH planning is informed by the **Commission on Accreditation of Medical Transport Systems (CAMTS) First Edition Accreditation Standards of Mobile Integrated Healthcare Program**, © 2022 | P.O. Box 130 Sandy Springs, SC 29677 | (864) 287-4177 | www.camts.org | ISBN: 979-8-9861971-3-5.