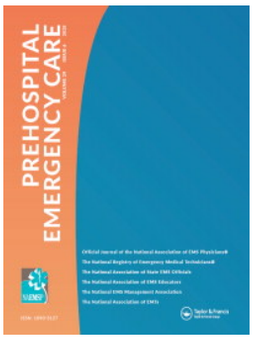

Taylor & Francis
Taylor & Francis Group

Prehospital Emergency Care

ISSN: 1090-3127 (Print) 1545-0066 (Online) Journal homepage: www.tandfonline.com/journals/ipec20

Mobile integrated health care and community paramedicine: A position statement and resource document of NAEMSP

Alexander J. Ulintz, Laurel C. O'Connor, Todd Heffern, Joel Rowe, Jeffrey E. Rollman, Gary Wingrove, Matt Zavadsky, Mike R. Wilcox & Scott A. Goldberg

To cite this article: Alexander J. Ulintz, Laurel C. O'Connor, Todd Heffern, Joel Rowe, Jeffrey E. Rollman, Gary Wingrove, Matt Zavadsky, Mike R. Wilcox & Scott A. Goldberg (01 Aug 2025): Mobile integrated health care and community paramedicine: A position statement and resource document of NAEMSP, Prehospital Emergency Care, DOI: 10.1080/10903127.2025.2541899

To link to this article: https://doi.org/10.1080/10903127.2025.2541899

Mobile integrated health care and community paramedicine: A position statement and resource document of NAEMSP

Alexander J. Ulintz[1,*], Laurel C. O'Connor[2], Todd Heffern[3], Joel Rowe[4], Jeffrey E. Rollman[5], Gary Wingrove[6], Matt Zavadsky[7], Mike R. Wilcox[8], Scott A. Goldberg[9]

[1]The Ohio State University College of Medicine, Department of Emergency Medicine

[2]University of Massachusetts Chan Medical School, Department of Emergency Medicine

[3]The University of Tennessee Medical Center, Department of Emergency Medicine

[4]University of Florida, Department of Emergency Medicine

[5]University of Texas Health Science Center at San Antonio, Department of Emergency Health Sciences

[6]The Paramedic Foundation

[7]PWW Advisory Group

[8]The Paramedic Network

[9]Brigham and Women's Hospital, Department of Emergency Medicine

***Corresponding Author:** Alexander J. Ulintz, Department of Emergency Medicine, College of Medicine, The Ohio State University Wexner Medical Center, 750 Prior Hall, 410 W 10th Ave, Columbus, Ohio, 43210, alexander.ulintz@osumc.edu

ABSTRACT

Emergency medical services (EMS) are integral to public health and safety and provide health care to both individuals and communities. Community paramedicine (CP) and mobile integrated health care (MIH) programs are expanded models of EMS that provide needs-based, patient-centered care in the community. Successful implementation requires a community health needs assessment, engaged EMS medical directors, multidisciplinary collaboration, and sustainable reimbursement that recognizes prehospital care delivery beyond traditional payment for transport.

NAEMSP RECOMMENDS

- Engaged and knowledgeable EMS physician medical directors, preferably with EMS board certification, must guide CP and MIH programs.
- CP and MIH programs should be tailored to meet local community needs based on a community health needs assessment and designed to bridge local gaps in access or care without duplication of services. The role of EMS clinicians should be clearly defined by the physician medical director and reflect the boundaries of collaborative practice.
- Physician medical directors may seek additional guidance on CP and MIH practice from state regulatory bodies, though practice regulations and standards should not stifle innovation and be established upon available data and outcome measures. Any state training or certification regulations should be dependent upon the expanded services provided and made with input from physician EMS medical directors.

- Clinician training programs intending to be comprehensive in approach should use standardized curricula. In programs with a limited expanded scope of practice, modularized training specific to the targeted disease processes may be appropriate. In both cases, CP and MIH clinicians should undergo regular competency evaluation supported by the physician medical director.
- State and federal agencies should establish reimbursement systems under Medicare and Medicaid, and EMS agencies should work with private payors to ensure reimbursement for the provision of community paramedicine and mobile integrated health care, decoupled from reimbursement for transportation.
- Data collection and analysis using standardized tools, methods, and reporting structures are essential for the evaluation and growth of CP and MIH programs. CP and MIH research should develop a standard taxonomy for describing programs, identify common data definitions and outcomes measures, collaboratively aggregate data, and advocate for development of data reporting standards.

Keywords: *Community Paramedicine, Mobile Integrated Health Care, Emergency Medical Services*

INTRODUCTION

The conceptual foundations of mobile integrated health care (MIH) and community paramedicine (CP) are not new; the first examples of what may now be described as MIH-CP developed in the early 1990s in frontier and rural communities leveraging emergency medical services (EMS) to address unmet health needs (1, 2). National dialogue then turned to address the broader roles of EMS in public and population health, with the idea of EMS as "community-based health management…fully integrated with the overall health care system" (3-6). A 2001 perspective piece described "EMS-based community health services or *community paramedicine*" and a 2008 paper described community paramedicine as an expanded EMS model of care "based on local need…provided by [emergency medical technicians] and Paramedics integrated into the local or regional health care system and overseen by emergency and primary care physicians…enables the presence of EMS personnel for emergency response in low call volume areas by providing routine use of their clinical skills and additional financial support from these non-EMS activities" (7, 8).

The following decade saw increasing descriptions of both the EMS clinicians performing these services (e.g., "advanced practice paramedics", "extended role paramedic" and "community health paramedic") and the types of services offered (e.g., "primary health care model", "substitutional model", "community coordination model") (9-11). National organizations developed vision statements for community paramedicine and the Health Resources and Services Administration operationally defined community paramedics as "emergency medical technicians and Paramedics operating in expanded roles…to connect underutilized resources to

underserved populations" (12-15). An international consensus definition emerged in 2023, defining a community paramedic as one who "*provides person-centered care in a diverse range of settings that address the needs of the community…may include provision of primary health care, health promotion, disease management, clinical assessment and needs based interventions…should be integrated with interdisciplinary health care teams which aim to improve patient outcomes through education, advocacy, and health system navigation*" (16) While there remains no consensus definition of MIH, specifically, the term is predominantly used in the United States (U.S.) to describe the interaction of EMS within a broader health and/or public health system, of which community paramedicine is one common service line (17, 18).

Since the adoption of "Principles for Community Paramedicine Programs" by the National Association of EMS Physicians (NAEMSP) and the National Rural Health Association in 2012 (19), MIH-CP has continued to expand, with over 200 additional peer-reviewed manuscripts and numerous reports in addition to evolving workforce, regulation, and reimbursement landscapes. Our goal is to provide contextualized resources supporting the revised 2025 NAEMSP Position Statement on Mobile Integrated Healthcare and Community Paramedicine.

METHODS

To support the development of this resource document, we conducted a structured rapid review of the MIH-CP literature in February 2025. This methodology offers a rigorous and efficient approach to evidence synthesis, based upon the principles of a systematic review, but

in a condensed format enabling timely decision-making, and is similar to methods used in other NAEMSP resource documents (20, 21). We searched PubMed for articles published between January 2013 and December 2024 using the keywords “community paramedic” OR “community paramedicine” OR “community health paramedic” OR “mobile integrated health” OR “mobile integrated health care” OR “mobile integrated healthcare” OR “extended care paramedic” OR “MIH-CP” in the title/abstract. Non-English publications were excluded. The strategy identified 216 articles available for screening. Titles and abstracts were reviewed for relevance to this position statement by two independent reviewers (AJU, LCO), with adjudication by a third reviewer (SAG) in the case of a tie. The structured rapid review resulted in 161 articles for consideration by authors to inform this position statement and resource document (Supplemental File Table 1). Additional publications, such as those of historical or contextual importance, were identified by the authors through bibliography searches.

DISCUSSION

EMS Physician Medical Direction

Engaged and knowledgeable EMS physician medical directors, preferably with EMS board certification, must guide CP and MIH programs.

Medical directors, preferably with EMS board certification, must be engaged in all aspects of MIH-CP program development and delivery, including ongoing training, continuous quality improvement, and quality assurance (22-24). Board-certified EMS medical directors are highly qualified to engage other specialists and stakeholders to assist with program and protocol development (25). While EMS physicians are well positioned to engage with specialists and

stakeholders to develop care pathways, EMS physicians are best positioned to be advocates and drivers of innovation for MIH-CP by championing the recognition and implementation of this evolving model of care delivery within the framework of healthcare. The American College of Emergency Physicians policy statement on medical direction of MIH-CP programs recommends clinical oversight and supervision by an EMS medical director, specialized education for the MIH-CP clinicians to ensure patient needs are addressed, systems of ongoing assessment to evaluate effectiveness, procedures in place to comply with emergency medical treatment and active labor act (EMTALA) regulations, and a strong quality assurance/quality improvement system (26). Additional literature from the American College of Emergency Physicians notes that EMS medical director malpractice insurance may not cover MIH-CP activities and urged consideration of this during program planning and implementation (27).

Medical oversight of MIH-CP is essential. The degree of physician involvement will vary based on program services provided and may include protocol-driven care under standing orders, , delegated practice under the authority of EMS physician medical director (in select states, such as Texas), real-time physician oversight via telemedicine, and even direct patient care from the physician medical director in certain programs (28, 29). While the specialty or subspecialty training of physicians providing direct oversight may vary (30, 31), all should be appropriately trained and familiar with EMS and MIH-CP protocols and should have a reporting structure that includes the MIH-CP service medical director.

Clinical Services and Care Models

CP and MIH programs should be tailored to meet local community needs based on a community health needs assessment and designed to bridge local gaps in access or care without duplication of services.

While there remains a lack of consensus on the exact roles of EMS clinicians in MIH-CP programs (32), clarity of scope and boundaries within any particular MIH-CP program should be informed by a community health needs assessment (33). The community health needs assessment ("gap assessment") is a standardized method for identifying service gaps, ensures non-duplication of existing resources, reinforces MIH-CP role in bridging gaps rather than competing with existing services, promotes interprofessional collaboration, and allows for standardized language with which to engage stakeholders (34).

The role of EMS clinicians should be clearly defined by the physician medical director and reflect the boundaries of collaborative practice.

In current practice, EMS clinician roles within MIH-CP vary greatly and specific roles and duties appear to vary by the model of care they are working under (35). Although there is no universally accepted categorization of MIH-CP programs, individual programs are usually function/context-specific or location-specific, yet these categories are not necessarily mutually exclusive (Table 1).

Generally speaking, the role of an MIH-CP clinician differs from other paramedicine services in *r*esponse to emergencies, *e*ngaging with communities, *s*ituated practice, *p*rimary health care, *i*ntegration, *g*overnance, *h*igher education, and *t*reatment/*t*ransport options ("RESPIGHT") (36). Specific medical services provided (e.g., history & physical examination, blood pressure measurement, Foley catheter maintenance) are summarized in recent national surveys of MIH-CP programs (37-39) and systematic review (40).

Regulation, Accreditation, and Certification

Physician medical directors may seek additional guidance on CP and MIH practice from state regulatory bodies, though practice regulations and standards should not stifle innovation and be established upon available data and outcome measures. Any state training or certification regulations should be dependent upon the expanded services provided and made with input from physician EMS medical directors.

Community paramedics have traditionally functioned in expanded roles (i.e., credentialed by a medical director to practice a certified competency in a specific setting) rather than expanded scope (i.e., regulated by state statutes regarding boundaries of permissible skills and activities based on licensure, certification and training); prior arguments made by the National Highway and Traffic Safety Administration, American College of Emergency Physicians, and the National Consensus Conference on Community Paramedicine suggest that community paramedics operate under the existing EMS scope of practice model (27, 41, 42). Community Paramedic certification (CP-C) via the International Board of Specialty Certifications is available (43). The

Commission on Accreditation of Medical Transport Systems (CAMTS) published the first edition of accreditation standards for MIH programs in 2022 (44), with a second edition forthcoming.

A comprehensive 2018 evaluation of state regulations of community paramedicine programs demonstrated heterogeneity, which largely reflects the heterogeneity in the current landscape of MIH-CP practice. A National Association of State EMS Officials report from that same year found "enabling legislation" in 16 states, but only one state had additional language defining community paramedicine and enabling Medicaid payment for this model of care (45). State-based compendiums provide more granular detail of this state-to-state variation and may be a guiding resource for nascent programs (46-51). More broadly, calls continue to be made to avoid prematurely setting broad standards and rules that could harm the field in its infancy (52, 53) and engaged EMS medical directors play an important role in advocating for the development of appropriate regulations at the local, state, and national level.

EMS Clinician Education and Training

Clinician training programs intending to be comprehensive in approach should use standardized curricula. In programs with a limited expanded scope of practice, modularized training specific to the targeted disease processes may be appropriate. In both cases, CP and MIH clinicians should undergo regular competency evaluation supported by the physician medical director.

Recent reports identify extensive education and training variation, due in part to the spectrum of clinical roles and duties they may perform, as well as state-by-state variation in potential

roles and duties (46, 54, 55). Community paramedicine education curricula are publicly available through multiple organizations and have been instituted internationally (56-60).

Vision statements for MIH-CP called for specialized education of EMS clinicians, though the exact content of this education has not been specified (12, 13). While disease-specific programs may focus on disease-specific education (61), the previous NAEMSP position statement on MIH-CP suggested considering more holistic education for general community paramedic clinicians who may encounter a breadth of conditions (17, 62). However, given ongoing heterogeneity in the field, and because education should match emerging (and not-yet-emerged) roles and duties, the National EMS Advisory Council recommends ongoing consensus development in this area (63). Some agencies are using other clinicians (e.g., advanced practice clinicians) in scenarios where EMS education or training is not yet optimized (64, 65).

Training for MIH-CP roles is also poorly described (66, 67). A recent survey of nationally certified EMS clinicians performing in MIH roles found that clinicians most often received less than 50 hours of training (54). Further, while some states have regulated community paramedic training (46), most do not, with variable approaches to the regulation of training and certification for MIH-CP. Some programs choose to train paramedics for the job role whereas other programs prefer to pair paramedics with a specialist in another discipline; for example, community paramedics responding to behavioral health calls in Modesto, California receive 140 hours of specialized training to work independently for behavioral health 9-1-1 calls while community paramedics in Atlanta, Georgia work with a mental health social worker to accomplish a similar

task (68). Other programs choose to provide additional training in the form of community health worker certification (69). International experts have report early consensus on standardized domains for in-home assessment by community paramedics (70), though the applicability to US MIH-CP programs remains unclear.

Funding & Reimbursement

State and federal agencies should establish reimbursement systems under Medicare and Medicaid, and EMS agencies should work with private payors to ensure reimbursement for the provision of community paramedicine and mobile integrated health care, decoupled from reimbursement for transportation.

Perhaps the most pressing unanswered questions for MIH-CP is how this model of care can be sustainably funded. As funding and reimbursement landscapes continue to change, the growth and sustainability of MIH-CP will be heavily influenced by national standardization of payment models, allowing EMS clinicians and agencies to provide the right level of care, to the right patient, at the right time, in the right place, with the right transport disposition. Many MIH-CP programs continue to report lack of sustainable funding as a significant barrier to effectively expanding programs (71, 72). Despite mounting evidence of cost neutrality or cost savings MIH-CP models to the healthcare system (73-83), MIH-CP programs also represent increased cost to the EMS system, including training, operations, and staffing (84).

Payment for EMS services is often tied to EMS transportation; however, calls to align payment with the value of the care provided by EMS clinicians, rather than the transportation decision

only, are ongoing (25, 73, 85-87). The Emergency Triage, Treat, and Transport (ET3) model provided a framework for a fee-for-service model of EMS reimbursement, decoupled from transportation to an emergency department (88). The ET3 model allowed for patient transport to an alternative destination and reimbursement for treatment in place with a qualified health care partner either on-scene or via telehealth (88). The stated goals of this model were to reduce expenditures, increase system efficiency, and provide quality person-centered care using an appropriate level of service based on the person's actual healthcare needs (88). The model was intended to run for five years, but ended two years early on December 31, 2023 (88, 89). A total of 2,379 beneficiaries received care under ET3 with 35% of the 185 participating agencies billing for interventions (90). Eight programs provided more than 100 interventions over the study period with the majority of these (92%) treatment in place (90). Multiple challenges were identified by the participants including: EMS personnel disengagement, difficulty in obtaining agreements with alternative destination partners, patient understanding of the program, and technology issues (90). Low participation rates prevented adequate statistical evaluation of outcomes, though the final report noted a trend towards fewer ED visits and cost savings (90).

Pending federal legislation includes the Emergency Medical Services Reimbursement for On-Scene and Support Act, the Improving Access to Emergency Medical Services Act of 2024, and longer-term extension of several rules related to telemedicine via the American Relief Act of 2025.

Outside of a centralized reimbursement process through federal legislation, the MIH-CP model may also be funded via direct financial collaboration with health systems, accountable care organizations, and managed care organizations. Examples include providing value-based care (e.g., treatment in place or alternate destination transport) and cost-avoidance (e.g., 30-day readmission reduction) (91). The growing literature base also highlights the possibility of reimbursement for services from state Medicaid or commercial payers, though the type of clinician (Paramedic vs non-Paramedic EMS clinician) and reimbursable services vary greatly (92, 93).

Outcomes and Data Collection

Data collection and analysis using standardized tools, methods, and reporting structures are essential for the evaluation and growth of CP and MIH programs.

Research on MIH-CP remains vitally important to safe and effective EMS practice (94). Both the quantity and quality of MIH-CP research has increased over the past decade, with a trend away from retrospective program descriptions and towards prospective interventional and implementation trials with health outcomes (95-103). However, given significant heterogeneity in both clinical practice and outcomes reporting, it remains difficult to aggregate data and/or compare programs (104-110). Outcomes measures and reporting varies greatly among programs (111). The MIH-CP Outcome Measures Workbook provides a variety of recommended agency-level outcomes; even greater heterogeneity exists among larger outcomes, such as state-based reports (112, 113).

CP and MIH research should develop a standard taxonomy for describing programs, identify common data definitions and outcomes measures, collaboratively aggregate data, and advocate for development of data reporting standards.

Despite the increasing visibility of MIH-CP programs over the past decade, it remains difficult to identify and classify all active programs in the U.S. Current unanswered questions include: the prevalence and types of MIH-CP programs across the country, EMS clinician roles within these programs, the education and training received for those roles, best practices for collaborating in multidisciplinary out-of-hospital teams that reduce fragmentation of care, and methods for outcomes data collection among multiple agencies. Current unanswered questions include available data sources and interoperability, patient-centered outcomes (including both qualitative experiences and disease-specific outcomes), longitudinal patient outcomes, patient safety, EMS clinician-centered outcomes (including workforce development and retention), MIH-CP program implementation, health system outcomes, as well as a larger framework and agenda for MIH-CP research, which was last updated in 2012 (114, 115).

CONSIDERATIONS FOR IMPLEMENTATION

Engaged and knowledgeable physician medical direction is essential to MIH-CP program implementation. A critical first step in program implementation is a health system gap analysis. When completing this gap analysis, it is important to engage the local public health system including not only hospitals and clinics but public health entities and community organizations. Once completed, the physician medical director along with program leadership should use this gap analysis to guide program design, ensuring clinician training appropriate to the scope of the

program, and maintaining clinical quality. Standardized curricula exist to support MIH-CP clinician training, (113, 126-128) although no specific curricula or certification has yet been widely adopted by the MIH-CP community. Ultimately a training program tailored to the specific needs of the community, and meeting regulatory standards, should be developed in collaboration with the program medical director.

Program design should also include plans to maintain flexibility to adapt roles as community needs evolve, and efforts should be made to avoid duplication of existing or planned services. This may include regular and open communication with other community services and collaboration across similarly focused programs. Successful integration of MIH-CP programs within the larger public health system requires early stakeholder engagement, often with stakeholders unfamiliar with EMS and MIH-CP. While MIH-CP programs must operate within existing regulatory framework, programs and medical directors must advocate for regulations and standards that do not stifle innovation. Frequent discussions with stakeholders and demonstration of measurable outcomes are helpful approaches. This breadth of responsibility – program design, stakeholder engagement, training, clinical oversight, system integration, quality assurance and quality improvement – is best met through the engagement of an EMS physician medical director with MIH-CP experience.

Sustainable funding strategies are essential for long-term program viability. Unfortunately, a standardized payment model for MIH-CP services remains elusive Until such a payment model is

implemented, programs should pursue diversified revenue streams, including partnerships with health systems, private payors, and grant opportunities. Developing a comprehensive, data-driven business case, decoupled from transport-based reimbursement, allows stakeholders to understand the value proposition of improved outcomes and potential cost savings. An early emphasis on data collection, aligned with community priorities and broader health system goals, is essential to demonstrate the value of the service and to ensure program accountability and growth. An engaged medical director can be a valuable asset in advocacy at the local, state, and national level for regulatory guidance and financial sustainability.

LIMITATIONS

This resource document has three key limitations. First, the structured rapid review methodology was a pragmatic choice for the time-sensitive nature of this position statement; however, a comprehensive literature review was not performed and potentially missed pertinent literature. We attempted to minimize this limitation by using broad search terms and multiple reviewers. Second, the inclusion of grey literature and consensus recommendations was necessary for some aspects of this resource document where academic literature is sparse of nonexistent. Third, the pace of change in MIH-CP is rapid and some references or resources, particularly those citing pending legislation, may change after publication.

CONCLUSIONS

The MIH-CP model represents an ongoing paradigm shift in EMS, moving beyond emergency response and transportation to meet broader community healthcare needs. This revised position statement and resource document outline key examples of successful programs, including engaged EMS physician medical direction, education and training, sustainable reimbursement, and data-driven evaluation. Future efforts should address important gaps, including standardized nomenclature, outcomes measurement, rigorous data collection, and sustainable reimbursement models with supporting policy.

ACKNOLWEDGEMENTS: We gratefully acknowledge the guidance and contributions of the NAEMSP Standards and Practices Committee and the NAEMSP Board of Directors.

FUNDING SOURCES: No funding was received for the development of this manuscript.

DECLARATION OF INTEREST STATEMENT: The authors report no financial conflicts of interest. Non-financial conflicts of interest include co-author affiliations with: The Paramedic Foundation (GW), The Paramedic Network (MRW), PWW Advisory Group (MZ), International Roundtable on Community Paramedicine (GW, MRW), International Board of Specialty Certification (MRW).

DECLARATION OF GENERATIVE AI IN SCIENTIFIC WRITING: The authors did not use a generative artificial intelligence (AI) tool or service to assist with preparation or editing of this work. The author(s) take full responsibility for the content of this publication.

DATA SHARING STATEMENT: Not applicable.

AUTHORSHIP STATEMENT: AJU and SAG conceived and designed the resource document. AJU designed data collection. AJU, SAG and LCO performed the rapid literature review; the remaining authors performed reference list and grey literature review. All authors contributed significantly to contextualizing the data. AJU drafted the manuscript, and all authors contributed substantially to its revision; all authors provided final approval of the version to be published. AJU and SAG take responsibility for the paper as a whole.

EXTERNAL REVIEW: This document was created solely by NAEMSP and was not subject to review by external parties.

UPDATING PROCEDURE: Pursuant to NAEMSP Standards & Clinical Practices Committee procedures and practices, this position statement and resource document will be reviewed and updated five years after its publication. Applicable NAEMSP review and revision practices that are current as of the time of the review will be followed. At a minimum the review process should include a search and synthesis of any new and relevant evidence that is published since the printing of this document.

REFERENCES

1. Shoup S. Red River Project. Expanded scope program for New Mexico medics. JEMS. 1995;20(12):43-7. PubMed PMID: 10152662.
2. Hauswald M, Raynovich W, Brainard AH. Expanded emergency medical services: the failure of an experimental community health program. Prehosp Emerg Care. 2005;9(2):250-3. doi: 10.1080/10903120590924942. PubMed PMID: 16036856.
3. Hsiao AK, Hedges JR. Role of the emergency medical services system in regionwide health monitoring and referral. Ann Emerg Med. 1993;22(11):1696-702. doi: 10.1016/s0196-0644(05)81308-3. PubMed PMID: 8214859.
4. Garrison HG, Foltin GL, Becker LR, Chew JL, Johnson M, Madsen GM, Miller DR, Ozmar BH. The role of emergency medical services in primary injury prevention. Consensus workshop. Arlington, Virginia, August 25-26, 1995. Ann Emerg Med. 1997;30(1):84-91. doi: 10.1016/s0196-0644(97)70116-1. PubMed PMID: 9209232.
5. Mann NC, Hedges JR. The role of prehospital care providers in the advancement of public health. Prehosp Emerg Care. 2002;6(2 Suppl):S63-7. doi: 10.3109/10903120209102685. PubMed PMID: 11962587.
6. National Highway Traffic Safety Administration. Emergency Medical Services Agenda for the Future. Washington, DC: U.S. Department of Transportation, 1996.
7. Rowley T. Solving the Paramedic Paradox. Rural Health News. 2001;8(3).
8. Wingrove G, Laine S. Community Paramedic: A New Expanded EMS Model. Washington, DC: National Association of Emergency Medical Services Educators; 2008. 32-7 p.
9. Blacker N, Pearson L, Walker T, editors. Redesigning paramedic models of care to meet rural and remote community needs. 10th National Rural Health Conference; 2009 Jun; Hobart, Australia: National Rural Health Alliance.
10. Bissell RA, Seaman KG, Bass RR, Racht E, Gilbert C, Weltge AF, Doctor M, Moriarity S, Eslinger D, Doherty R. Change the scope of practice of paramedics? An EMS/public health policy perspective. Prehosp Emerg Care. 1999;3(2):140-9. doi: 10.1080/10903129908958923. PubMed PMID: 10225648.
11. Rasku T, Kaunonen M, Thyer E, Paavilainen E, Joronen K. The core components of Community Paramedicine - integrated care in primary care setting: a scoping review. Scand J Caring Sci. 2019;33(3):508-21. Epub 20190208. doi: 10.1111/scs.12659. PubMed PMID: 30735260.
12. American College of Emergency Physicians. Vision Statement on Mobile Integrated Healthcare (MIH) & Community Paramedicine (CP). Irving, TX: American College of Emergency Physicians, 2014.
13. National Association of Emergency Medical Technicians. Updated Vision Statement of Mobile Integrated Healthcare (MIH) & Community Paramedicine (CP). Clinton, MS: National Association of Emergency Medical Technicians, 2015.
14. Health Resources and Services Administration. Community Paramedicine Evaluation Tool. Bethesda, MD: US Department of Health and Human Services, 2011.
15. EMS Agenda 2050 Technical Expert Panel. EMS Agenda 2050: A People-Centered Vision for the Future of Emergency Medical Services. DOT HS 812 664. Washington, DC: National Highway Traffic Safety Administration, US Department of Transportation, 2019 DOT HS 812 664.
16. Shannon B BS, O'Meara P, Foster N, Martin A, Cook M, Stewart K, Miles A. The definition of a community paramedic: An international consensus. Paramedicine. 2023;20(1):4-22.
17. Choi BY, Blumberg C, Williams K. Mobile Integrated Health Care and Community Paramedicine: An Emerging Emergency Medical Services Concept. Ann Emerg Med. 2016;67(3):361-6. Epub 20150711. doi: 10.1016/j.annemergmed.2015.06.005. PubMed PMID: 26169927.

18. Wanner GK, Burch KR. EMS Community Paramedicine and Mobile Integrated Health. StatPearls. Treasure Island (FL): StatPearls Publishing; 2024.
19. White R, Wingrove G. Principles for Community Paramedicine Programs. National Rural Health Association, 2012.
20. Khangura S, Konnyu K, Cushman R, Grimshaw J, Moher D. Evidence summaries: the evolution of a rapid review approach. Syst Rev. 2012;1:10. Epub 20120210. doi: 10.1186/2046-4053-1-10. PubMed PMID: 22587960; PubMed Central PMCID: PMC3351736.
21. Breyre AM, Wang DH, Brooten JK, Colwell CB, Hanson KC, Taigman M, Lyng JW. EMS Care of Adult Hospice Patients- a Position Statement and Resource Document of NAEMSP and AAHPM. Prehosp Emerg Care. 2023;27(5):560-5. Epub 20230413. doi: 10.1080/10903127.2023.2193978. PubMed PMID: 36961936.
22. Leduc S, Wells G, Thiruganasambandamoorthy V, Cantor Z, Kelly P, Rietschlin M, Vaillancourt C. The hospital care and outcomes of long-term care patients treated by paramedics during an emergency call: exploring the potential impact of 'treat-and-refer' pathways and community paramedicine. CJEM. 2023. Epub 20230915. doi: 10.1007/s43678-023-00590-3. PubMed PMID: 37715067.
23. Mackey KE, Qiu C. Can Mobile Integrated Health Care Paramedics Safely Conduct Medical Clearance of Behavioral Health Patients in a Pilot Project? A Report of the First 1000 Consecutive Encounters. Prehosp Emerg Care. 2018:1-10. Epub 20180823. doi: 10.1080/10903127.2018.1482390. PubMed PMID: 30118361.
24. Iezzoni LI, Kothari D, Camargo CA, Jr., Wint AJ, Cluett WS, 3rd, Tripodis Y, Palmisano J. Making Triage Decisions for the Acute Community Care Program: Paramedics Caring for Urgent Health Problems in Patients' Homes. Am J Med Qual. 2019;34(4):331-8. Epub 20180919. doi: 10.1177/1062860618800582. PubMed PMID: 30229680.
25. O'Connor L, Behar S, Refuerzo J, Mele X, Rowe J, Ulintz A, Faro JM, Soni A, Lindenauer PK. Incorporating Systems-Level Stakeholder Perspectives into the Design of Mobile Integrated Health Programs. Prehosp Emerg Care. 2025:1-10. Epub 20250113. doi: 10.1080/10903127.2024.2443485. PubMed PMID: 39688949.
26. American College of Emergency Physicians. Medical Direction of Mobile Integrated Health Care and Community Paramedicine Programs. Policy statement. Ann Emerg Med. 2015;66(6):692-3. doi: 10.1016/j.annemergmed.2015.08.020. PubMed PMID: 26590753.
27. American College of Emergency Physicians. Mobile Integrated Healthcare/Community Paramedicine (MIH/CP) Primer: Information Paper. American College of Emergency Physicians, 2016.
28. Langabeer JR, 2nd, Gonzalez M, Alqusairi D, Champagne-Langabeer T, Jackson A, Mikhail J, Persse D. Telehealth-Enabled Emergency Medical Services Program Reduces Ambulance Transport to Urban Emergency Departments. West J Emerg Med. 2016;17(6):713-20. Epub 20160906. doi: 10.5811/westjem.2016.8.30660. PubMed PMID: 27833678; PubMed Central PMCID: PMC5102597.
29. Glober N, Hamilton J, Montelauro N, Ulintz A, Arkins T, Supples M, Liao M, O'Donnell D, Faris G. Safety of an Alternative Care Protocol for EMS Non-Transport in the COVID-19 Pandemic. Prehosp Emerg Care. 2023;27(3):315-20. Epub 20220622. doi: 10.1080/10903127.2022.2086652. PubMed PMID: 35666266.
30. Ulintz AJ, Podolsky SR, Lapin B, Wyllie RR. Addition of community paramedics to a physician home-visit program: A prospective cohort study. J Am Geriatr Soc. 2023. Epub 20231006. doi: 10.1111/jgs.18625. PubMed PMID: 37800363.
31. Fitzsimon J, Patel K, Peixoto C, Belanger C. Family physicians' experiences with an innovative, community-based, hybrid model of in- person and virtual care: a mixed-methods study. BMC Health Serv Res. 2023;23(1):573. Epub 20230603. doi: 10.1186/s12913-023-09599-x. PubMed PMID: 37270531; PubMed Central PMCID: PMC10238231.

32. Spelten E, Thomas B, van Vuuren J, Hardman R, Burns D, O'Meara P, Reynolds L. Implementing community paramedicine: A known player in a new role. A narrative review. Australas Emerg Care. 2023. Epub 20230809. doi: 10.1016/j.auec.2023.07.003. PubMed PMID: 37567857.
33. Ravaghi H, Guisset AL, Elfeky S, Nasir N, Khani S, Ahmadnezhad E, Abdi Z. A scoping review of community health needs and assets assessment: concepts, rationale, tools and uses. BMC Health Serv Res. 2023;23(1):44. Epub 20230117. doi: 10.1186/s12913-022-08983-3. PubMed PMID: 36650529; PubMed Central PMCID: PMC9847055.
34. National Association of State EMS Officials CP-MIH Committee. Community Health Needs Assessments: Resources for Community Paramedicine & Mobile Integrated Healthcare. 2018.
35. Gage CB, Powell JR, Cooke CB, Kamholz JC, van den Bergh S, Kurth JD, Panchal A. Not Just 9-1-1: The Expanded Work Environment of United States Emergency Medical Service Clinicians. Cureus. 2024;16(10):e72779. Epub 20241031. doi: 10.7759/cureus.72779. PubMed PMID: 39618647; PubMed Central PMCID: PMC11608087.
36. O'Meara P, Stirling C, Ruest M, Martin A. Community paramedicine model of care: an observational, ethnographic case study. BMC Health Serv Res. 2016;16:39. Epub 20160202. doi: 10.1186/s12913-016-1282-0. PubMed PMID: 26842850; PubMed Central PMCID: PMC4739332.
37. Mobile integrated healthcare and community paramedicine (MIH-CP): a national survey. EMS World. 2015;Supp:5-16. PubMed PMID: 26043599.
38. National Association of Emergency Medical Technicians. Mobile Integrated Healthcare and Community Paramedicine (MIH-CP): 2nd National Survey. Clinton, MS: National Association of Emergency Medical Technicians, 2018.
39. Okoh CM, Moczygemba LR, Thurman W, Brown C, Hanson C, Baffoe JO. An examination of the emerging field of community paramedicine: a national cross-sectional survey of community paramedics. BMC Health Serv Res. 2023;23(1):516. Epub 20230523. doi: 10.1186/s12913-023-09537-x. PubMed PMID: 37221608; PubMed Central PMCID: PMC10204027.
40. Gregg A, Tutek J, Leatherwood MD, Crawford W, Friend R, Crowther M, McKinney R. Systematic Review of Community Paramedicine and EMS Mobile Integrated Health Care Interventions in the United States. Popul Health Manag. 2019;22(3):213-22. Epub 20190103. doi: 10.1089/pop.2018.0114. PubMed PMID: 30614761.
41. Patterson DG, Skillman SM. National Consensus Conference on Community Paramedicine: Summary of an Expert Meeting. Seattle, WA: WWAMI Rural Health Research Center, University of Washington, 2013.
42. Glenn M, Zoph O, Weidenaar K, Barraza L, Greco W, Jenkins K, Paode P, Fisher J. State Regulation of Community Paramedicine Programs: A National Analysis. Prehosp Emerg Care. 2018;22(2):244-51. Epub 20171012. doi: 10.1080/10903127.2017.1371260. PubMed PMID: 29023167.
43. Clark JR, Pierce GW. Paramedic Board Certification: The International Board of Specialty Certification Turns 20. Air Med J. 2020;39(5):334-9. Epub 20200821. doi: 10.1016/j.amj.2020.07.006. PubMed PMID: 33012468.
44. Commission on Accreditation of Medical Transport S. First Edition Accreditation Standards for Mobile Integrated Healthcare Programs. Sandy Springs, SC: Commission on Accreditation of Medical Transport Systems, 2022 979-8-9861971-3-5.
45. National Association of State EMS Officials CP-MIH Committee. State by state community paramedicine-mobile integrated helathcare (CP-MIH) status board 2018 [updated 3/1/2018; cited 2022 10/20]. v1.3:[Available from: https://nasemso.org/wp-content/uploads/CP_State_Status_Board_CURRENT.pdf.
46. George K, Syed S. Community Paramedics. National Conference of State Legislatures. 2024.
47. State Board of Emergency Medical; Fire; and Transportation Services. Ohio Compendium of Resources on Mobile Integrated Healthcare (Community Paramedicine). Columbus, OH: 2016.

48. Florida Health. Florida Mobile Integrated Healthcare Community Paramedicine Program Guidebook. Tallahassee, FL: Florida Department of Health, 2019.
49. California Emergency Medical Services Authority. Community Paramedicine Toolkit Version 2.0. Sacramento, CA: California Emergency Medical Services Authority, 2022.
50. Minnesota Department of Health. Community Paramedic Toolkit: Review of Existing Community Paramedic Toolkits. St. Paul, MN: Minnesota Department of Health., 2015.
51. Mathis S, Merrell M. Blueprint for Community Paramedicine Programs Especially for EMS Agencies: Version 1 The Abbeville Experience. Columbia, SC: South Carolina Office of Rural Health, 2014.
52. Kirkwood S. Argument Against Setting Standards & Rules for Community Paramedic Programs. JEMS. 2012.
53. The National EMS Advisory Council. Final Advisory on Community Paramedicne. 2014.
54. Ulintz AJ, Gage CB, Powell JR, Wang HE, Panchal AR. Mobile Integrated Health Care Roles of US EMS Clinicians: A Descriptive Cross-Sectional Study. Prehosp Emerg Care. 2023:1-7. Epub 20230517. doi: 10.1080/10903127.2023.2210219. PubMed PMID: 37141533.
55. O'Meara P, Ruest M, Stirling C. Community paramedicine: Higher education as an enabling factor. Australasian Journal of Paramedicine. 2014;11(2).
56. Larmon B. State of California Community Paramedic CORE Education Program. UCLA Center for Prehospital Care, 2015.
57. Community Health Paramedicine. Pollak A, editor. Burlington, MA: Jones & Bartlett Publishing; 2018.
58. Paramedic Health Solutions I. Community Paramedicine: Global Curriculum & Career Pathway. 2018.
59. NAEMT. Community Paramedicine Series 2022. Available from: https://www.naemt.org/education/CP.
60. Raynovich W, Weber, M., Wilcox, M., Wingrove, G., Robinson-Montera, A., Long S. A survey of community paramedicine course offerings and planned offerings. International Paramedic Practice. 2014;4(1). doi: https://doi.org/10.12968/ippr.2014.4.1.19.
61. Kasper AL, Myers LA, Carlson PN, Johnson RF, Schultz JL, Meyer D, Liedl CP, Juntunen MB, McCoy RG. Diabetes Management for Community Paramedics: Development and Implementation of a Novel Curriculum. Diabetes Spectr. 2022;35(3):367-76. Epub 20220309. doi: 10.2337/ds21-0095. PubMed PMID: 36082010; PubMed Central PMCID: PMC9396728.
62. Scharf BM, Bissell RA, Trevitt JL, Jenkins JL. Diagnosis Prevalence and Comorbidity in a Population of Mobile Integrated Community Health Care Patients. Prehosp Disaster Med. 2019;34(1):46-55. Epub 20181227. doi: 10.1017/S1049023X18001140. PubMed PMID: 30587265.
63. Shannon B, Eaton G, Lanos C, Leyenaar M, Nolan M, Bowles KA, Williams B, O'Meara P, Wingrove G, Heffern JD, et al. The development of community paramedicine; a restricted review. Health Soc Care Community. 2022. Epub 20220905. doi: 10.1111/hsc.13985. PubMed PMID: 36065522.
64. Sanko S, Kashani S, Ito T, Guggenheim A, Fei S, Eckstein M. Advanced Practice Providers in the Field: Implementation of the Los Angeles Fire Department Advanced Provider Response Unit. Prehosp Emerg Care. 2020;24(5):693-703. Epub 20191211. doi: 10.1080/10903127.2019.1666199. PubMed PMID: 31621447.
65. Somers S, Brown J, Fitzpatrick S, Landi C, Gingold DB, Marcozzi D. Innovative Use of Emergency Medicine Providers in an Urban Setting to Reduce Overutilization of 9-1-1. J Emerg Med. 2020;59(6):836-42. Epub 20200904. doi: 10.1016/j.jemermed.2020.07.003. PubMed PMID: 32893068.
66. Chan J, Griffith LE, Costa AP, Leyenaar MS, Agarwal G. Community paramedicine: A systematic review of program descriptions and training. CJEM. 2019;21(6):749-61. doi: 10.1017/cem.2019.14. PubMed PMID: 30885280.

67. van Vuuren J, Thomas B, Agarwal G, MacDermott S, Kinsman L, O'Meara P, Spelten E. Reshaping healthcare delivery for elderly patients: the role of community paramedicine; a systematic review. BMC Health Serv Res. 2021;21(1):29. Epub 20210106. doi: 10.1186/s12913-020-06037-0. PubMed PMID: 33407406; PubMed Central PMCID: PMC7789625.
68. Colman M, Mackey K. Novel Paramedic Programs Respond to Behavioral Health-related Calls. ED Manag. 2017;29(2):13-8. PubMed PMID: 29787659.
69. Zavadsky M. Is CHW Certification the Magic Bullet for Community Paramedics? EMS World. 2017.
70. Leyenaar MS, Strum RP, Batt AM, Sinha S, Nolan M, Agarwal G, Tavares W, Costa AP. Examining consensus for a standardised patient assessment in community paramedicine home visits: a RAND/UCLA-modified Delphi Study. Bmj Open. 2019;9(10). doi: ARTN e031956

10.1136/bmjopen-2019-031956. PubMed PMID: WOS:000512882200251.
71. Morganti KG, Alpert A, Margolis G, Wasserman J, Kellermann AL. The state of innovative emergency medical service programs in the United States. Prehosp Emerg Care. 2014;18(1):76-85. Epub 20131010. doi: 10.3109/10903127.2013.831508. PubMed PMID: 24112051.
72. O'Connor L, Behar S, Refuerzo J, Mele X, Sundling E, Johnson SA, Faro JM, Lindenauer PK, Mattocks KM. Factors Impacting the Implementation of Mobile Integrated Health Programs for the Acute Care of Older Adults. Prehosp Emerg Care. 2024:1-9. Epub 20240328. doi: 10.1080/10903127.2024.2333034. PubMed PMID: 38498782.
73. Alpert A, Morganti KG, Margolis GS, Wasserman J, Kellermann AL. Giving EMS flexibility in transporting low-acuity patients could generate substantial Medicare savings. Health Aff (Millwood). 2013;32(12):2142-8. doi: 10.1377/hlthaff.2013.0741. PubMed PMID: 24301398.
74. Bradley KW, Esposito D, Romm IK, Laughnane J, Ajayi T, Davis R, Kuruna T. The Business Case for Community Paramedicine: Lessons from Commonwealth Care Alliance's Pilot Program. Center for Health Care Strategies, Inc., 2016.
75. Tadros AS, Castillo EM, Chan TC, Jensen AM, Patel E, Watts K, Dunford JV. Effects of an emergency medical services-based resource access program on frequent users of health services. Prehosp Emerg Care. 2012;16(4):541-7. Epub 20120619. doi: 10.3109/10903127.2012.689927. PubMed PMID: 22712694.
76. Xie F, Yan J, Agarwal G, Ferron R. Economic Analysis of Mobile Integrated Health Care Delivered by Emergency Medical Services Paramedic Teams. JAMA Netw Open. 2021;4(2):e210055. Epub 20210201. doi: 10.1001/jamanetworkopen.2021.0055. PubMed PMID: 33625510; PubMed Central PMCID: PMC7905495.
77. Roeper B, Mocko J, O'Connor LM, Zhou J, Castillo D, Beck EH. Mobile Integrated Healthcare Intervention and Impact Analysis with a Medicare Advantage Population. Popul Health Manag. 2018;21(5):349-56. Epub 20171214. doi: 10.1089/pop.2017.0130. PubMed PMID: 29240530; PubMed Central PMCID: PMC6161318.
78. Gingold DB, Liang Y, Stryckman B, Marcozzi D. The effect of a mobile integrated health program on health care cost and utilization. Health Serv Res. 2021;56(6):1146-55. Epub 20210816. doi: 10.1111/1475-6773.13773. PubMed PMID: 34402056; PubMed Central PMCID: PMC8586470.
79. Iezzoni LI, Wint AJ, Cluett WS, 3rd, Ajayi T, Goudreau M, Blanchfield BB, Palmisano J, Tripodis Y. Early experiences with the Acute Community Care Program in eastern Massachusetts. Am J Manag Care. 2018;24(9):e270-e7. Epub 20180901. PubMed PMID: 30222922.
80. Agarwal G, Pirrie M, Angeles R, Marzanek F, Thabane L, O'Reilly D. Cost-effectiveness analysis of a community paramedicine programme for low-income seniors living in subsidised housing: the community paramedicine at clinic programme (CP@clinic). BMJ Open. 2020;10(10):e037386. Epub

20201027. doi: 10.1136/bmjopen-2020-037386. PubMed PMID: 33109643; PubMed Central PMCID: PMC7592288.
81. Gingold DB, Stryckman B, Liang Y, Harris E, McCarren WL, Marcozzi D. Analysis of an Alternative Model of Definitive Care For Low-Acuity Emergency Calls: A Natural Experiment. J Emerg Med. 2022;62(1):38-50. Epub 20210917. doi: 10.1016/j.jemermed.2021.07.063. PubMed PMID: 34538675.
82. Elden OE, Uleberg O, Lysne M, Haugdahl HS. Community paramedicine: cost-benefit analysis and safety evaluation in paramedical emergency services in rural areas - a scoping review. BMJ Open. 2022;12(6):e057752. Epub 20220609. doi: 10.1136/bmjopen-2021-057752. PubMed PMID: 35680256; PubMed Central PMCID: PMC9185415.
83. Castillo DJ MJ, Mocko J, Beck EH. Mobile Integrated Healthcare: Preliminary Experience and Impact Analysis with a Medicare Advantage Population. Journal of Health Economics and Outcomes Research. 2016;4(2):172-87. doi: 10.36469/9819.
84. Wilkinson-Stokes M, Tew M, Yap CYL, Crellin D, Gerdtz M. The Economic Impact of Community Paramedics Within Emergency Medical Services: A Systematic Review. Applied Health Economics and Health Policy. 2024;22:665-84. doi: 10.1007/s40258-024-00902-3.
85. Munjal KG, Margolis GS, Kellermann AL. Realignment of EMS Reimbursement Policy: New Hope for Patient-Centered Out-of-Hospital Care. JAMA. 2019;322(4):303-4. doi: 10.1001/jama.2019.7488. PubMed PMID: 31225862.
86. Ulintz AJ, Quatman CE. Beyond flashing lights and sirens: Community paramedicine as health safety nets for older adults. Journal of the American Geriatrics Society. 2024. doi: 10.1111/jgs.19087.
87. Oskvarek JJ, Blutinger EJ, Pilgrim R, Joshi AU, Lin MP, Mazer-Amirshahi M, Miller G, Smiley A, Becker CW, Pines JM, et al. Beyond the Four Walls: The American College of Emergency Physicians 2022 New Practice Models Task Force Report. Ann Emerg Med. 2023. Epub 20230929. doi: 10.1016/j.annemergmed.2023.08.488. PubMed PMID: 37777937.
88. Boehler A. Medicaid Opportunities in the Emergency Triage, Treat, and Transport (ET3) Model. Department of Health and Human Services, Centers for Medicare & Medicaid Services, 2019.
89. Blutinger E, Ulintz A, Chason K, Gavin N. Learning From The Failure Of A CMS Emergency Medical Services Model. Health Affairs Forefront. 2025.
90. Services CfMaM. Emergency Triage, Treat, and Transport (ET3) Model: Final Evaluation Report. Centers for Medicare & Medicaid Services, 2025.
91. Rahim F, Jain B, Patel T, Jain U, Jain P, Palakodeti S. Community Paramedicine: An Innovative Model for Value-Based Care Delivery. J Public Health Manag Pract. 2022. Epub 20221202. doi: 10.1097/PHH.0000000000001683. PubMed PMID: 36580427.
92. Coffman J. Left Behind in California: Comparing Community Paramedicine Policies Across States. California Health Care Foundation, 2019.
93. Huang YH, Ma L, Sabljak LA, Puhala ZA. Development of sustainable community paramedicine programmes: a case study in Pennsylvania. Emerg Med J. 2018;35(6):372-8. Epub 20180417. doi: 10.1136/emermed-2017-207211. PubMed PMID: 29666145.
94. Bigham B, Welsford M. Applying hospital evidence to paramedicine: issues of indirectness, validity and knowledge translation. CJEM. 2015;17(3):281-5. doi: 10.1017/cem.2015.65. PubMed PMID: 26034914.
95. Agarwal G, Angeles R, Pirrie M, McLeod B, Marzanek F, Parascandalo J, Thabane L. Evaluation of a community paramedicine health promotion and lifestyle risk assessment program for older adults who live in social housing: a cluster randomized trial. CMAJ. 2018;190(21):E638-E47. doi: 10.1503/cmaj.170740. PubMed PMID: 29807936; PubMed Central PMCID: PMC5973885.
96. Johnson D, Druschel J, Wattai B, Mann J. Factors Associated With Successful Enrollment in a Community Paramedicine Program for Heart Failure. Cureus. 2023;15(2):e34811. Epub 20230209. doi: 10.7759/cureus.34811. PubMed PMID: 36915830; PubMed Central PMCID: PMC10008085.

97. Fulton AT, Vognar L, Stuck AR, McBride C, Scott R, Crowley C. Integra at Home: A flexible continuum of in-home medical care for older adults with complex needs. J Am Geriatr Soc. 2023. Epub 20231102. doi: 10.1111/jgs.18639. PubMed PMID: 37916679.
98. Ridgeway JL, Gerdes EOW, Dodge A, Liedl CP, Juntunen MB, Sundt WJS, Glasgow A, Lampman MA, Fink AL, Severson SB, et al. Community paramedic hospital reduction and mitigation program: study protocol for a randomized pragmatic clinical trial. Trials. 2023;24(1):122. Epub 20230220. doi: 10.1186/s13063-022-07034-w. PubMed PMID: 36805692; PubMed Central PMCID: PMC9940335.
99. Plishka M, Angeles R, Pirrie M, Marzanek F, Agarwal G. Challenges in recruiting frequent users of ambulance services for a community paramedic home visit program. BMC Health Serv Res. 2023;23(1):1091. Epub 20231012. doi: 10.1186/s12913-023-10075-9. PubMed PMID: 37821905; PubMed Central PMCID: PMC10568826.
100. Mi R, Hollander MM, Jones CMC, DuGoff EH, Caprio TV, Cushman JT, Kind AJH, Lohmeier M, Shah MN. A randomized controlled trial testing the effectiveness of a paramedic-delivered care transitions intervention to reduce emergency department revisits. BMC Geriatr. 2018;18(1):104. Epub 20180503. doi: 10.1186/s12877-018-0792-5. PubMed PMID: 29724172; PubMed Central PMCID: PMC5934842.
101. Arendts G, Sim M, Johnston S, Brightwell R. ParaMED Home: a protocol for a randomised controlled trial of paramedic assessment and referral to access medical care at home. BMC Emerg Med. 2011;11:7. Epub 20110608. doi: 10.1186/1471-227X-11-7. PubMed PMID: 21649935; PubMed Central PMCID: PMC3126720.
102. Agarwal G, McDonough B, Angeles R, Pirrie M, Marzanek F, McLeod B, Dolovich L. Rationale and methods of a multicentre randomised controlled trial of the effectiveness of a Community Health Assessment Programme with Emergency Medical Services (CHAP-EMS) implemented on residents aged 55 years and older in subsidised seniors' housing buildings in Ontario, Canada. BMJ Open. 2015;5(6):e008110. Epub 20150611. doi: 10.1136/bmjopen-2015-008110. PubMed PMID: 26068514; PubMed Central PMCID: PMC4466604.
103. Masterson Creber RM, Daniels B, Munjal K, Reading Turchioe M, Shafran Topaz L, Goytia C, Diaz I, Goyal P, Weiner M, Yu J, et al. Using Mobile Integrated Health and telehealth to support transitions of care among patients with heart failure (MIGHTy-Heart): protocol for a pragmatic randomised controlled trial. BMJ Open. 2022;12(3):e054956. Epub 20220310. doi: 10.1136/bmjopen-2021-054956. PubMed PMID: 35273051; PubMed Central PMCID: PMC8915277.
104. Pang PS, Litzau M, Liao M, Herron J, Weinstein E, Weaver C, Daniel D, Miramonti C. Limited data to support improved outcomes after community paramedicine intervention: A systematic review. Am J Emerg Med. 2019;37(5):960-4. Epub 20190305. doi: 10.1016/j.ajem.2019.02.036. PubMed PMID: 30857911.
105. Iezzoni LI, Dorner SC, Ajayi T. Community Paramedicine--Addressing Questions as Programs Expand. N Engl J Med. 2016;374(12):1107-9. doi: 10.1056/NEJMp1516100. PubMed PMID: 27007957.
106. Patterson DG, Coulthard C, Garberson LA, Wingrove G, Larson EH. What Is the Potential of Community Paramedicine to Fill Rural Health Care Gaps? J Health Care Poor Underserved. 2016;27(4A):144-58. doi: 10.1353/hpu.2016.0192. PubMed PMID: 27818420.
107. Leyenaar MS, McLeod B, Penhearow S, Strum R, Brydges M, Mercier E, Brousseau AA, Besserer F, Agarwal G, Tavares W, et al. What do community paramedics assess? An environmental scan and content analysis of patient assessment in community paramedicine. CJEM. 2019;21(6):766-75. doi: 10.1017/cem.2019.379. PubMed PMID: 31366416.
108. Leduc S, Wells G, Thiruganasambandamoorthy V, Kelly P, Vaillancourt C. Alternative care models for paramedic patients from long-term care centers: a national survey of Canadian paramedic services. CJEM. 2023. Epub 20230310. doi: 10.1007/s43678-023-00471-9. PubMed PMID: 36897539.

109. Thurman WA, Moczygemba LR, Tormey K, Hudzik A, Welton-Arndt L, Okoh C. A scoping review of community paramedicine: evidence and implications for interprofessional practice. J Interprof Care. 2021;35(2):229-39. Epub 20200401. doi: 10.1080/13561820.2020.1732312. PubMed PMID: 32233898.
110. Lurie T, Adibhatla S, Betz G, Palmer J, Raffman A, Andhavarapu S, Harris A, Tran QK, Gingold DB. Mobile integrated health-community paramedicine programs' effect on emergency department visits: An exploratory meta-analysis. American Journal of Emergency Medicine. 2022. doi: https://doi.org/10.1016/j.ajem.2022.12.041.
111. Adibhatla S, Lurie T, Betz G, Palmer J, Raffman A, Andhavarapu S, Harris A, Tran QK, Gingold DB. A Systematic Review of Methodologies and Outcome Measures of Mobile Integrated Health - Community Paramedicine Programs. Prehosp Emerg Care. 2022:1-21. Epub 20221019. doi: 10.1080/10903127.2022.2138654. PubMed PMID: 36260780.
112. Vartanian K, Jones K, McMenamin K, Sanchez K. Community Paramedics Health Share of Oregon Evaluation Report. Center for Outcomes Research and Educaiton, Providence Health & Services, 2018.
113. Pearson KB SG. Community Paramedicine Pilot Programs: Lessons from Maine. Journal of the Health and Human Services Administration. 2017;40(2):141-85.
114. Patterson DG, Skillman SM. Concensus Conference on Community Paramedicine: Summary of an Expert Meeting. University of Washington School of Medicine, 2012.
115. Patterson DG SS. National Concensus Conference on Community Paramedicine: Summary of an Expert Meeting. Seattle, WA: WWAMI Rural Health Research Center, University of Washington; 2013.
116. Rock PJ, Quesinberry D, Singleton MD, Slavova S. Emergency Medical Services and Syndromic Surveillance: A Comparison With Traditional Surveillance and Effects on Timeliness. Public Health Reports®. 2021;136(1_suppl):72S-9S. doi: 10.1177/00333549211018673.
117. Hawkins ER, Brice JH, Overby BA. Welcome to the world: findings from an emergency medical services pediatric injury prevention program. Pediatr Emerg Care. 2007;23(11):790-5. doi: 10.1097/PEC.0b013e318159ffd9. PubMed PMID: 18007209.
118. Lunn TM, Bolster JL, Batt AM. Community Paramedicine Supporting Community Needs: A Scoping Review. Health Soc Care Community. 2024;2024:Article 4079061. doi: 10.1155/2024/4079061.
119. Leyenaar MS, McLeod B, Jones A, Brousseau AA, Mercier E, Strum RP, Nolan M, Sinha SK, Agarwal G, Tavares W, et al. Paramedics assessing patients with complex comorbidities in community settings: results from the CARPE study. CJEM. 2021;23(6):828-36. Epub 20210817. doi: 10.1007/s43678-021-00153-4. PubMed PMID: 34403118; PubMed Central PMCID: PMC8575756.
120. Constantine ST, Callaway D, Driscoll JN, Murphy S. Implementation of Drive-Through Testing for COVID-19 With Community Paramedics. Disaster Med Public Health Prep. 2021:1-7. Epub 20210216. doi: 10.1017/dmp.2021.46. PubMed PMID: 33588962; PubMed Central PMCID: PMC8111182.
121. Jarman AF, Ford JS, Maynard MJ, Simmons ZL, Mackey KE, Mumma BE, Rose JS. Prehospital Testing and Surveillance for SARS-CoV-2: A Special Report from the Sacramento (California USA) Mobile Integrated Health Unit. Prehospital and Disaster Medicine. 2022;37(2):265-8. doi: 10.1017/s1049023x22000292.
122. Kasting ML, Laily A, Smith SJ, Sembian S, Head KJ, Usidame B, Zimet GD, Schwab-Reese LM. Exploring the feasibility and acceptability of community paramedicine programs in achieving vaccination equity: a qualitative study. BMC Health Services Research. 2024;24(1). doi: 10.1186/s12913-024-11422-0.
123. Schwab-Reese LM, Renner LM, King H, Miller RP, Forman D, Krumenacker JS, DeMaria AL. "They're very passionate about making sure that women stay healthy": a qualitative examination of women's experiences participating in a community paramedicine program. BMC Health Serv Res. 2021;21(1):1167. Epub 20211028. doi: 10.1186/s12913-021-07192-8. PubMed PMID: 34706727; PubMed Central PMCID: PMC8550812.

124. Quatman-Yates CC, Wisner D, Weade M, Gabriel M, Wiseman JM, Sheridan E, Garvin JH, Bridges JFP, Santry HP, Panchal AR, et al. Assessment of Fall-Related Emergency Medical Service Calls and Transports after a Community-Level Fall-Prevention Initiative. Prehosp Emerg Care. 2022;26(3):410-21. Epub 20210527. doi: 10.1080/10903127.2021.1922556. PubMed PMID: 33909512; PubMed Central PMCID: PMC8626520.
125. Agarwal G, Angeles R, Pirrie M, Marzanek F, McLeod B, Parascandalo J, Dolovich L. Effectiveness of a community paramedic-led health assessment and education initiative in a seniors' residence building: the Community Health Assessment Program through Emergency Medical Services (CHAP-EMS). BMC Emerg Med. 2017;17(1):8. Epub 20170309. doi: 10.1186/s12873-017-0119-4. PubMed PMID: 28274221; PubMed Central PMCID: PMC5343405.
126. Parsons C, Escobar C, Jasani A, Zhao D, Gliatto P, Blutinger E, Ornstein KA. Community paramedicine in dementia care. J Am Geriatr Soc. 2024. Epub 20240314. doi: 10.1111/jgs.18872. PubMed PMID: 38485282.
127. Juntunen MB, Liedl CP, Carlson PN, Myers LA, Stickler ZR, Ryan Schultz JA, Meilander AK, Behnken E, Lampman MA, Rogerson MC, et al. Diabetes Rescue, Engagement and Management (D-REM): rationale and design of a pragmatic clinical trial of a community paramedicine programme to improve diabetes care. BMJ Open. 2022;12(4):e057224. doi: 10.1136/bmjopen-2021-057224.
128. Trevino MH, White L, Meischke H, Eisenberg MS. A new SPHERE for EMS. EMS Mag. 2008;37(10):118-20. PubMed PMID: 18959349.
129. Calvert B, Bayakly R, Newsome T. Stroke Prevention and Management in Rural Georgia: Evaluating the Effectiveness of a Community Paramedicine Program. J Public Health Manag Pract. 2024;30:S32-S8. Epub 20240612. doi: 10.1097/PHH.0000000000001951. PubMed PMID: 38870358.
130. Washist, Smith, Kientopf. Community paramedicine program and outcomes of referred coronary artery bypass grafting patients. Rural and Remote Health. 2024. doi: 10.22605/rrh8977.
131. Barefoot EH, Cyr JM, Brice JH, Bachman MW, Williams JG, Cabanas JG, Herbert KM. Opportunities for Emergency Medical Services Intervention to Prevent Opioid Overdose Mortality. Prehosp Emerg Care. 2021;25(2):182-90. Epub 20200402. doi: 10.1080/10903127.2020.1740363. PubMed PMID: 32176548; PubMed Central PMCID: PMC7529698.
132. Naimi S, Stryckman B, Liang Y, Seidl K, Harris E, Landi C, Thomas J, Marcozzi D, Gingold DB. Evaluating Social Determinants of Health in a Mobile Integrated Healthcare-Community Paramedicine Program. J Community Health. 2022. Epub 20221021. doi: 10.1007/s10900-022-01148-7. PubMed PMID: 36269531.
133. Gormley MA, Moschella P, Cordero-Romero S, Wampler WR, Allison M, Kitzmiller K, Estes L, Heo M, Litwin AH, Roth P. No Patient Left Behind: A Novel Paradigm to Fulfill Hepatitis C Virus Treatment for Rural Patients. Open Forum Infect Dis. 2024;11(5):ofae206. Epub 20240426. doi: 10.1093/ofid/ofae206. PubMed PMID: 38737428; PubMed Central PMCID: PMC11088356.
134. Champagne-Langabeer T, Bakos-Block C, Yatsco A, Langabeer JR. Emergency medical services targeting opioid user disorder: An exploration of current out-of-hospital post-overdose interventions. J Am Coll Emerg Physicians Open. 2020;1(6):1230-9. Epub 20200807. doi: 10.1002/emp2.12208. PubMed PMID: 33392528; PubMed Central PMCID: PMC7771755.
135. Beldena C, Kopaka A, Coulesa C, Friesena T, Hallb J, Shuklaa S. Building bridges to outpatient treatment services for post-overdose care via paramedic buprenorphine field initiation. J Subst Use Addict Treat. 2024:209364. Epub 20240414. doi: 10.1016/j.josat.2024.209364. PubMed PMID: 38626851.
136. Myers LA, Carlson PN, Krantz PW, Johnson HL, Will MD, Bjork TM, Dirkes M, Bowe JE, Gunderson KA, Russi CS. Development and Implementation of a Community Paramedicine Program in Rural United States. West J Emerg Med. 2020;21(5):1227-33. Epub 20200824. doi: 10.5811/westjem.2020.7.44571. PubMed PMID: 32970579; PubMed Central PMCID: PMC7514407.

137. Severson S, Fink A, McCoy R, Liedl C, Bieber P, Juntunen M, Chen H, Lin G. Community Paramedic Home Care Program for Acute Decompensated Heart Failure: A Pilot Study. Circ Cardiovasc Qual Outcomes. 2023:e009142. Epub 20230720. doi: 10.1161/CIRCOUTCOMES.122.009142. PubMed PMID: 37470393.
138. Feldman BA, Rivera OE, Greb CJ, Jacoby JL, Nesfeder J, Secheresiu P, Shah M, Sundlof DW. "House Calls" by Mobile Integrated Health Paramedics for Patients with Heart Failure: A Feasibility Study. Prehosp Emerg Care. 2021:1-9. Epub 20210928. doi: 10.1080/10903127.2021.1977439. PubMed PMID: 34505798.
139. Burnett A, Wewerka S, Miller P, Majerus A, Clark J, Crippes L, Radant T. Community Paramedicine Intervention Reduces Hospital Readmission and Emergency Department Utilization for Patients with Cardiopulmonary Conditions. West J Emerg Med. 2023;24(4):786-92. Epub 20230710. doi: 10.5811/westjem.57862. PubMed PMID: 37527389; PubMed Central PMCID: PMC10393450.
140. Bourdages S, Olaf M, Schoenwetter D, Berger A. Mobile Integrated Health and Hospital Utilization for Congestive Heart Failure in a Rural Setting. Prehospital Emergency Care. 2024;28(1):186-91. doi: 10.1080/10903127.2023.2217259.
141. Pennel CL, Tamayo L, Wells R, Sunbury T. Emergency Medical Service-based Care Coordination for Three Rural Communities. J Health Care Poor Underserved. 2016;27(4A):159-80. doi: 10.1353/hpu.2016.0178. PubMed PMID: 27818421.
142. Cordero Romero SM, Gormley MA, Siddle J, Wampler WR, Roth P, Moschella P. Using Community Paramedicine to Treat Hepatitis C Virus in Upstate South Carolina. South Med J. 2023;116(3):321-5. doi: 10.14423/SMJ.0000000000001521. PubMed PMID: 36863056; PubMed Central PMCID: PMC9973429.
143. Coffman J, LJ B. Update of Evaluation of California's Community Paramedicine Pilot Program. San Fransisco, CA: Healthforce Center and Philip R. Lee Institute for Health Policy Studies at UC San Francisco, 2021.
144. Schaefer RA, Rea TD, Plorde M, Peiguss K, Goldberg P, Murray JA. An emergency medical services program of alternate destination of patient care. Prehosp Emerg Care. 2002;6(3):309-14. doi: 10.1080/10903120290938355. PubMed PMID: 12109574.
145. Creed JO, Cyr JM, Owino H, Box SE, Ives-Rublee M, Sheitman BB, Steiner BD, Williams JG, Bachman MW, Cabanas JG, et al. Acute Crisis Care for Patients with Mental Health Crises: Initial Assessment of an Innovative Prehospital Alternative Destination Program in North Carolina. Prehosp Emerg Care. 2018;22(5):555-64. Epub 20180207. doi: 10.1080/10903127.2018.1428840. PubMed PMID: 29412043.
146. Gainey CE, Brown HA, Gerard WC. Utilization of Mobile Integrated Health Providers During a Flood Disaster in South Carolina (USA). Prehosp Disaster Med. 2018;33(4):432-5. Epub 20180717. doi: 10.1017/S1049023X18000572. PubMed PMID: 30012235.
147. Goldstein J, Lajeunesse D, Abawajy K, Luan A, Hancock K, Carter A, Greene JA, McVey J, Lee JS. Paramedic supportive discharge programmes to improve health system efficiency and patient outcomes: a scoping review protocol. BMJ Open. 2023;13(2):e066645. Epub 20230216. doi: 10.1136/bmjopen-2022-066645. PubMed PMID: 36797012; PubMed Central PMCID: PMC9936280.
148. Shah MN, Hollander MM, Jones CM, Caprio TV, Conwell Y, Cushman JT, DuGoff EH, Kind AJH, Lohmeier M, Mi R, et al. Improving the ED-to-Home Transition: The Community Paramedic-Delivered Care Transitions Intervention-Preliminary Findings. J Am Geriatr Soc. 2018;66(11):2213-20. Epub 20180810. doi: 10.1111/jgs.15475. PubMed PMID: 30094809; PubMed Central PMCID: PMC6235696.
149. Siddle J, Pang PS, Weaver C, Weinstein E, O'Donnell D, Arkins TP, Miramonti C, team MC. Mobile integrated health to reduce post-discharge acute care visits: A pilot study. Am J Emerg Med. 2018;36(5):843-5. Epub 20171229. doi: 10.1016/j.ajem.2017.12.064. PubMed PMID: 29317154.
150. Sokan O, Stryckman B, Liang Y, Osotimehin S, Gingold DB, Blakeslee WW, Moore MJ, Banas CA, Landi CT, Rodriguez M. Impact of a mobile integrated healthcare and community paramedicine program

on improving medication adherence in patients with heart failure and chronic obstructive pulmonary disease after hospital discharge: A pilot study. Explor Res Clin Soc Pharm. 2022;8:100201. Epub 20221113. doi: 10.1016/j.rcsop.2022.100201. PubMed PMID: 36457714; PubMed Central PMCID: PMC9707008.
151. Munjal KG, Yeturu SK, Chapin HH, Tan N, Gregoriou D, Garcia D, Grudzen C, Hwang U, Morano B, Neher H, et al. Feasibility of the Transport PLUS intervention to improve the transitions of care for patients transported home by ambulance: a non-randomized pilot study. Pilot and Feasibility Studies. 2022;8(1):169. doi: 10.1186/s40814-022-01138-5.
152. O'Connor L, Sison S, Eisenstock K, Ito K, McGee S, Mele X, Del Poza I, Hall M, Smiley A, Inzerillo J, et al. Paramedic-Assisted Community Evaluation After Discharge: The PACED Intervention. J Am Med Dir Assoc. 2024;25(10):105165. Epub 20240716. doi: 10.1016/j.jamda.2024.105165. PubMed PMID: 39030939; PubMed Central PMCID: PMC11486595.
153. Costa Jacobsohn G, Maru AP, Green RK, Gifford AN, Lukasik MD, Bandara T, Caprio TV, Cochran AL, Cushman JT, Jones CMC, et al. Multimethod Process Evaluation of a Community Paramedic Delivered Care Transitions Intervention for Older Emergency Department Patients. Prehospital Emergency Care. 2023;27(7):841-50. doi: 10.1080/10903127.2022.2094514.
154. Gardett I, Scott G, Clawson J, Miller K, Richmond N, Sasson C, Zavadsky M, Rector M, Wilcox A, Olola C. 911 Emergency Communication Nurse Triage Reduces EMS Patient Costs and Directs Patients to High-Satisfaction Alternative Point of Care. Annals of Emergency Dispatch & Response. 2015;3(1):8-13.
155. Blanchard IE, Kozicky R, Dalgarno D, Simms J, Goulder S, Williamson TS, Biesbroek S, Page L, Leaman K, Snozyk S, et al. Community paramedic point of care testing: validity and usability of two commercially available devices. BMC Emergency Medicine. 2019;19(1). doi: 10.1186/s12873-019-0243-4.
156. O'Connor L, Reznek M, Hall M, Inzerillo J, Broach JP, Boudreaux E. A mobile integrated health program for the management of undifferentiated acute complaints in older adults is safe and feasible. Academic Emergency Medicine. 2023;30(11):1110-6. doi: 10.1111/acem.14791.
157. Juhrmann ML, Grindrod AE, Gage CH. Emergency medical services: the next linking asset for public health approaches to palliative care? Palliat Care Soc Pract. 2023;17:26323524231163195. Epub 20230413. doi: 10.1177/26323524231163195. PubMed PMID: 37063113; PubMed Central PMCID: PMC10102939.
158. Verma AA, Klich J, Thurston A, Scantlebury J, Kiss A, Seddon G, Sinha SK. Paramedic-Initiated Home Care Referrals and Use of Home Care and Emergency Medical Services. Prehosp Emerg Care. 2018;22(3):379-84. Epub 20171115. doi: 10.1080/10903127.2017.1387627. PubMed PMID: 29140748.
159. Kue R, Ramstrom E, Weisberg S, Restuccia M. Evaluation of an emergency medical services-based social services referral program for elderly patients. Prehosp Emerg Care. 2009;13(3):273-9. doi: 10.1080/10903120802706179. PubMed PMID: 19499461.
160. Nejtek VA, Aryal S, Talari D, Wang H, O'Neill L. A pilot mobile integrated healthcare program for frequent utilizers of emergency department services. Am J Emerg Med. 2017;35(11):1702-5. Epub 20170427. doi: 10.1016/j.ajem.2017.04.061. PubMed PMID: 28495031.
161. Boland LL, Jin D, Hedger KP, Lick CJ, Duren JL, Stevens AC. Evaluation of an EMS-Based Community Paramedic Pilot Program to Reduce Frequency of 9-1-1 Calls among High Utilizers. Prehosp Emerg Care. 2022:1-8. Epub 20220627. doi: 10.1080/10903127.2022.2086653. PubMed PMID: 35666265.
162. Tangherlini N, Villar J, Brown J, Rodriguez RM, Yeh C, Friedman BT, Wada P. The HOME Team: Evaluating the Effect of an EMS-based Outreach Team to Decrease the Frequency of 911 Use Among High Utilizers of EMS. Prehosp Disaster Med. 2016;31(6):603-7. Epub 20160919. doi: 10.1017/S1049023X16000790. PubMed PMID: 27640612.
163. Agarwal G, Angeles R, Pirrie M, McLeod B, Marzanek F, Parascandalo J, Thabane L. Reducing 9-1-1 Emergency Medical Service Calls By Implementing A Community Paramedicine Program For Vulnerable

Older Adults In Public Housing In Canada: A Multi-Site Cluster Randomized Controlled Trial. Prehosp Emerg Care. 2019;23(5):718-29. Epub 20190204. doi: 10.1080/10903127.2019.1566421. PubMed PMID: 30624150.
164. Agarwal G, Angeles R, Brar J, Pirrie M, Marzanek F, McLeod B, Thabane L. Effectiveness of the community paramedicine at home (CP@home) program for frequent users of emergency medical services in Ontario: a randomized controlled trial. BMC Health Serv Res. 2024;24(1):1462. Epub 20241125. doi: 10.1186/s12913-024-11952-7. PubMed PMID: 39587610; PubMed Central PMCID: PMC11590269.
165. Agarwal G, Pirrie M, Angeles R, Marzanek F, Paterson JM, Nguyen F, Thabane L. Community Paramedicine Program in Social Housing and Health Service Utilization. JAMA Network Open. 2024;7(10):e2441288. doi: 10.1001/jamanetworkopen.2024.41288.
166. Currier J, Wallace N, Bigler K, O'Connor M, Farris P, Shannon J. Community paramedicine in Central Oregon: A promising model to reduce non-urgent emergency department utilization among medically complex Medicaid beneficiaries. J Am Coll Emerg Physicians Open. 2023;4(3):e12988. doi: 10.1002/emp2.12988.
167. Tyano E, Ferrer E, Mayberry SD, Eldridge RC, Evans D, Simpson RL. Grady Health System's Mobile Integrated Health Program: A Statistical Analysis of Low-Acuity 911 Calls. JEMS Exclus. 2021;2021. Epub 20210420. PubMed PMID: 34471915; PubMed Central PMCID: PMC8406265.
168. Abrashkin KA, McBride AC, Slaboda JC, Kurliand M, Abel-Bey A, Turkistani A, Finuf K, Pekmazaris R. Emergency Medical Technician-Facilitated Telehealth Visits: A New Model to Expand Home-Based Primary Care for Homebound Seniors. Telehealth and Medicine Today. 2020.
169. Daniels B, McGinnis C, Topaz LS, Greenwald P, Turchioe MR, Creber RMM, Sharma R. Bridging the digital health divide—patient experiences with mobile integrated health and facilitated telehealth by community-level indicators of health disparity. Journal of the American Medical Informatics Association. 2024;31(4):875-83. doi: 10.1093/jamia/ocae007.
170. Thirumalai M, Zengul AG, Evans E. Challenges and Lessons Learned From a Telehealth Community Paramedicine Program for the Prevention of Hypoglycemia: Pre-Post Pilot Feasibility Study. JMIR Diabetes. 2021;6(3):e26941. doi: 10.2196/26941.
171. Abrashkin KA, Washko JD, Li T, Berkowitz J, Poku A, Zhang J, Smith KL, Rhodes KV. Video or Telephone? A Natural Experiment on the Added Value of Video Communication in Community Paramedic Responses. Annals of Emergency Medicine. 2021;77(1):103-9. doi: 10.1016/j.annemergmed.2020.04.026.
172. Dias H, Brar J, Pirrie M, Angeles R, Marzanek F, Agarwal G. COVID-19 and social care screening for older adults in social housing: a CP@clinic adaptation. BMC Geriatrics. 2024;24(1). doi: 10.1186/s12877-024-05549-2.
173. Jiang LG, McGinnis C, Benton E, Nawa E, Stern M, Xi W, Sharma R, Daniels B. Using tele-paramedicine to conduct in-home fall risk reduction after emergency department discharge: Preliminary data. Journal of the American Geriatrics Society. 2024. doi: 10.1111/jgs.19080.
174. O'Connor L, Behar S, Tarrant S, Stamegna P, Pretz C, Shirshac J, Scornavacca T, Wilkie T, Fisher K, Tigas E, et al. Healthy at Home for COPD: An Integrated Digital Monitoring, Treatment, and Pulmonary Rehabilitation Intervention. Res Sq. 2024. Epub 20241115. doi: 10.21203/rs.3.rs-5084150/v1. PubMed PMID: 39606445; PubMed Central PMCID: PMC11601823.
175. Jafri FN, Johnson K, Elsener M, Latchmansingh M, Sege J, Plotke M, Jing T, Arif A, Ganz-Lord F. A Quality Improvement-based Approach to Implementing a Remote Monitoring-Based Bundle in Transitional Care Patients for Heart Failure. Jt Comm J Qual Patient Saf. 2024;50(11):775-83. Epub 20240726. doi: 10.1016/j.jcjq.2024.07.004. PubMed PMID: 39277482.

176. Kanagala SG, Gupta V, Kumawat S, Anamika F, McGillen B, Jain R. Hospital at home: emergence of a high-value model of care delivery. Egypt J Intern Med. 2023;35(1):21. Epub 20230317. doi: 10.1186/s43162-023-00206-3. PubMed PMID: 36969500; PubMed Central PMCID: PMC10023005.
177. Hayden EM, Nentwich LM, Jung OS, Zheng H, White BA. Patient Perceptions of Emergency Department Observation Care at Home. Telemed J E Health. 2024;30(7):1874-9. Epub 20240410. doi: 10.1089/tmj.2023.0705. PubMed PMID: 38597956.
178. Munene A, Alaazi D, Mathew J, McLane P, Cummings G, Holroyd-Leduc J. Impact of community paramedic interventions on transfers from long term care to emergency departments: results of a systematic review. CJEM. 2022;24(1):101-2. Epub 20211014. doi: 10.1007/s43678-021-00214-8. PubMed PMID: 34648170.
179. Jensen JL, Travers AH, Marshall EG, Cain E, Leadlay S, Carter AJ. Insights into the implementation and operation of a novel paramedic long-term care program. Prehosp Emerg Care. 2014;18(1):86-91. Epub 20131011. doi: 10.3109/10903127.2013.831506. PubMed PMID: 24116961.
180. Jensen JL, Travers AH, Bardua DJ, Dobson T, Cox B, McVey J, Cain E, Merchant R, Carter AJ. Transport outcomes and dispatch determinants in a paramedic long-term care program: a pilot study. CJEM. 2013;15(4):206-13. doi: 10.2310/8000.2012.120965. PubMed PMID: 23777992.
181. Chellappa DK, DeCherrie LV, Escobar C, Gregoriou D, Munjal KG. Supporting the on-call primary care physician with community paramedicine. Intern Med J. 2018;48(10):1261-4. doi: 10.1111/imj.14049. PubMed PMID: 30288895.
182. Breyre A, Taigman M, Salvucci A, Sporer K. Effect of a Mobile Integrated Hospice Healthcare Program on Emergency Medical Services Transport to the Emergency Department. Prehosp Emerg Care. 2022;26(3):364-9. Epub 20210330. doi: 10.1080/10903127.2021.1900474. PubMed PMID: 33689535.
183. Taplin JG, Barnabe CM, Blanchard IE, Doig CJ, Crowshoe L, Clement FM. Health service utilization by people experiencing homelessness and engaging with community paramedics: a pre-post study. CJEM. 2022. Epub 20221017. doi: 10.1007/s43678-022-00387-w. PubMed PMID: 36251151.
184. Abrashkin KA, Washko J, Zhang J, Poku A, Kim H, Smith KL. Providing Acute Care at Home: Community Paramedics Enhance an Advanced Illness Management Program-Preliminary Data. J Am Geriatr Soc. 2016;64(12):2572-6. Epub 20160830. doi: 10.1111/jgs.14484. PubMed PMID: 27575363.

Table 1: Example MIH-CP models of care and EMS clinician roles and duties, separated by function/context-specific and location-specific services.

Model of Care	Description of EMS Clinician Roles, Duties
Function- or Context-Specific: Services that are provided by MIH-CP clinicians to fulfill a specific function or deliver care in a context identified as a service gap.	
Public Health	• Programs related to disease surveillance (116), primary/secondary prevention (117), and/or connecting to community resources (118) • Access populations that cannot or will not access services otherwise (119) • Viral testing & vaccinations (120-122)
Preventive Care, Risk Reduction	• Home safety evaluations for new parents & programs to improve access to prenatal and postpartum care and wrap-around services for people with high-risk pregnancies (123) • EMS clinicians focusing on in-home assessment and/or identification of fall risk, dementia, delirium, polypharmacy (124-126) • EMS clinicians providing education and care for individuals following hypo/hyperglycemia-related presentations (61, 127) • High blood pressure screening/treatment (128) • Post-stroke and post-coronary artery bypass graft care in rural counties (tertiary prevention) (129, 130) • Post-overdose harm reduction (tertiary prevention) (131) • Social determinants of health screening (132)
Chronic Disease Management	• EMS clinicians following up on positive emergency department-based hepatitis screenings and coordinating follow up & treatment (133) • Post-overdose response including screening, brief intervention, starting medications for opioid use disorder (134, 135) • EMS-led community health promotion program for at-risk older adults (136) • Congestive heart failure chronic disease management & readmission avoidance (137-140) • Coordinating complex care among teams of clinicians and community agencies (119, 141) • Ensuring patient have access to and are properly taking treatments for diseases of public health importance (e.g., tuberculosis, hepatitis C) (142, 143)
Alternative Destination Transport	• Expands options for transportation to include non-emergent health ambulatory care settings, including sobering centers or mental health facilities (23, 144, 145)
Disaster Response	• Assisting with lost medications and system navigation following a local flood disaster (146)

Care Transitions	• Focuses specifically on the transition from emergency department or hospital to home (147-153)
System Navigation	• Redirection of 9-1-1 calls to appropriate levels of care (154), including use of point-of-care testing (155, 156) • Identifying and navigating appropriate patients to specialty care (157) or social services (158, 159) • Reducing frequent and/or unnecessary 9-1-1 EMS calls and/or ambulance use (160-167)
Telemedicine & Digital Monitoring	• EMS clinicians with telemedicine may help determine appropriate transportation modality, appropriate treatment (i.e., enable treatment-in-place), or facilitate access to multidisciplinary services in broadband deserts, disaster or isolated settings (28, 133, 168-173) • Digital monitoring symptoms with on-demand MIH-CP services (174) and leveraging EMS clinicians to assist with remote monitoring setup (175)
Location-Specific: Services that are provided by MIH-CP clinicians to deliver care to a specific location that is identified as a service gap.	
Hospital at Home	• Partial or complete avoidance of brick-and-mortar hospitalization through a home-based inpatient level of care, allowing for increased relative hospital capacity (176); may also include observation status at home (177)
Long-Term Care Facility	• EMS partnership with long-term care facilities to increase services offered to reduce unnecessary transport to the emergency department (178-180)
Within Primary or Specialty Care	• Embedding EMS clinicians within primary care practices to improve access to care and reduce wait times for urgent evaluations during off-hours (181) • Partnerships with palliative care services and hospice agencies to reduce hospice revocation, avoid EMS transport, and improve timely access to off-hours care (182)
Homeless Shelter or Street Medicine	• Multidisciplinary care, including EMS clinicians, to address health and social needs among individuals experiencing housing insecurity (183)
Treat In Place	• Allows for in-home treatment of older adults without the requirement of transportation (184) • Alternative protocols for treatment-in-place during the COVID-19 pandemic (29)

Table 1 footnotes: MIH-CP: mobile integrated health care - community paramedicine; EMS:

emergency medical services