

# **The Bigger Role of Paramedics on Community Well Being**

**Sami Hamoud Alotaibi<sup>1</sup>, Mohammed Khalaf Alsharari<sup>2</sup>, Mohammed Salman Alenzi<sup>3</sup>,  
Abdulkarim Mosfer Aaljamaan<sup>4</sup>, Saud Awwad Alshammari<sup>5</sup>**

<sup>1,2</sup>Emergency Medical Technician, Alkharj Military Hospital

<sup>3</sup>Emergency Medical Services - Specialist, Al Kharj Military Industries Corporation Hospital

<sup>4</sup>Emergency Medical Services, King Fahad Military Medical Complex

<sup>5</sup>Paramedic Technician Prince Sultan Military Medical City

## **ABSTRACT**

As a profession, paramedics are a crucial and adaptable component of community well-being, expanding their role far beyond simple emergency response treatment. Now their work includes preventative care, chronic disease management, mental health care and health education in communities. With the increasing scope of paramedic practice in mind, community paramedicine programs, home care programs, and public health initiatives such as the one discussed in this review paper are also used as examples of the adjustments in practice to meet the needs of local populations. Ultimately, as paramedics reduce visits to the emergency department and further fill gaps in access to care, they help to create a better health system and more patients access to healthier lives. The value derived from the work of paramedics at promoting positive health and health outcomes in the community will be further broadened with continuous education, inter professional collaboration and a supportive policy environment. This study highlights that giving paramedics expanded roles decreases barriers to care and maximizes the impact of these providers in a way that is equitable and ultimately supports improved population health.

**Keywords:** Paramedics, Community Well-being, Community Paramedicine, Preventative Care, Public Health

## **INTRODUCTION**

For decades, paramedics have served as the first responders in emergency medical services (EMS), delivering immediate care during times of crisis. While more traditional forms of paramedic practice exists, these have blossomed into new and emerging types, with the recognition of their wider role in health and wellbeing of the wider community. Paramedics do more than respond to emergencies; their work ranges from preventive care, and chronic disease management, to mental health interventions, and outreach. This change is consistent with global movement towards a holistic and patient-centered approach to population health.

Community paramedic programs — where paramedics provide personal care outside of the hospital — are a new model of care that some have heralded as the key to closing health care service gaps. These programs allow paramedics to visit patients on their own time, follow-up with them, and reach out to those vulnerable populations that may not be able to easily access regular medical care services.

Furthermore, paramedics can help alleviate resource strain on emergency departments by treating those needing urgent care in the community without attending an emergency department, thus benefitting health service resource distribution.

The expanding role of paramedics is driving increased interest in how the diversification in their role improves the well-being of the community within which they serve.

BackgroundParamedics play many roles beyond emergency response with far reaching effects on health care access, patient outcomes, and overall population health. This paper also addresses challenges with implementation, policy considerations to guide implementation, as well as directions for the future to maximize the contributions of paramedics in supporting and creating healthy communities.

## **METHODOLOGY**

Through a systematic literature review methodology, this review paper analyzes the changing scope of paramedics to promote community health and preparedness.

This methodology consists of a scoping review of peer-reviewed journals, government reports, policy documents and grey literature published in the last decade. This will involve adherence to a defined process that focuses on existing knowledge and attempts to avoid bias.

### **1. Data Collection**

Forty-seven records based on the following electronic databases identified relevant literature, such as:

PubMed

Google Scholar

Scopus

A - CINAHL (Cumulative Index to Nursing and Allied Health Literature)

Keywords and Boolean operators were used in the search, such as:

“Community paramedicine”

"Paramedics and long-term condition management"

— “Paramedics and psychological care”

How do paramedics affect health of the population (or the community)?

### **2. Study Eligibility and Exclusion Criteria**

The following criteria were applied in order to remain topical and maintain quality:

Inclusion Criteria:

– Published

– Papers on paramedic role in the community, chronic disease management, public health and prevention

Results Examples of empirical studies, case studies, and systematic reviews that assess community paramedicine program impacts

#### **Exclusion Criteria:**

Works limited to emergency response or trauma care

• Non-English articles.

Opinion pieces or articles not in the peer-reviewed literatures and/or without empirical relevance

### **Data Analysis and Synthesis**

Results: The common themes of the growing functions of paramedics were identified from the selected studies through a critical analysis of previously published work. Data extraction focused on:

The services offered by paramedics apart from emergency services

Paramedic initiated programs; the effects on access and patient outcome

Challenges and barriers and implementing community paramedicine programs

We performed thematic synthesis to group findings into key domains: preventive care; chronic disease management; mental health support; and public health promotion. Such an approach enables a comprehensive view of the role of paramedics in contributing to the health and well-being of the communities in which they work.

### **Quality Assessment**

A quality assessment of the studies selected was performed for rigor and validity taking into consideration the use of standardized tools like the Critical Appraisal Skills Programme (CASP) and PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines.

**Methods:** Studies were assessed for methodology, relevance and reliability so only the best evidence informed conclusions of this review.

## **RESULTS**

A new systematic review has reinforced the status of paramedics as health care providers, expanding their role to positively impact both community health and patient health beyond traditional emergency settings.

The analysis identified four major domains of paramedic involvement: community paramedicine programs, chronic disease management, mental health, and public health.

### **Community Health Education Programs**

Community paramedicine was born from the model of paramedics transitioning to care outside of emergency response. The programs include home visits, health assessments, and follow-up care for patients with chronic conditions or who have just been discharged from the hospital.

#### **Impact:**

Paramedic home care was indicated to reduce rate of unnecessary emergency department (ED) visits by 20% to 30% in three studies.

Increase in Patients Satisfaction and better quality of life especially for older as well as senile populations.

Reduced the rising pressure on the healthcare system by minimizing emergency services burden and cutting down on hospital readmissions.

### **Chronic Disease Management**

Already, there is trial evidence showing paramedics managing chronic illnesses (diabetes, hypertension, and heart failure come to mind) through consistent home visits and follow-ups. This helps patients very well as they provide them with education, routine medication management, and lifestyle counseling.

#### **Impact:**

Conditional on chronic disease, studies demonstrated a 15-25% reduction in hospital admission rates in the patients seen by paramedics.

Improved patient compliance with treatment regimens and better clinical outcomes.

Decreasing health inequities through better access to care for lower-income populations

### **Mental Health Support**

More and more paramedics are getting involved in mental health support by responding to community crises, undertaking initial assessments, and referring patients to relevant mental health services. Mobile Crisis Response Teams (MCRTs) — in which paramedics partner with mental health professionals to address psychiatric emergencies.

#### **Impact:**

Decrease of 40% in police responses and 39% in involuntary hospitalizations where paramedic-led mental health response teams operate Better patient outcomes with timely intervention and continuity of care.

Improved community safety and a reduction in mental health treatment stigma The article discusses public health initiatives and preventive care.

Vaccination drives, health education, and prevention programs are important aspects of healthcare, where paramedics may also play a key role. They have played a key role in pandemic response activities such as COVID-19 vaccination and testing.

#### **Impact:**

Delivered paramedic-led outreach efforts that led to increased vaccination rates by 10-15% in harder hit and underserved communities of Toronto.

Community screening and awareness programs enable risk factor identification and disease progression prevention at early stages of its progress.

The integration of paramedics into population health initiatives further strengthened public health systems Challenges and Barriers From the expanded role of paramedics providing these care, although positive outcomes were observed, some

### **Limitations were identified:**

Regulatory roadblocks: Community paramedicine models are not being adopted on a more widespread scale given the differences in legislation and scope of practice within regions.

Gaps in training and education: Paramedics need to be trained to treat chronic conditions, mental health crises, and preventive care.

Sustainability issues: The long-term sustainability of community paramedicine programs can be hampered by the lack of funding and allocation of resources.

## **DISCUSSION**

The role of paramedics is changing from a traditional emergency response function to one that engages with the community to support their well-being. Driving the change. In recent years, we have witnessed a paradigm shift in emergency medical services towards more systems-oriented approaches to healthcare delivery by expanding the role of paramedics' practice outside of the emergency department or hospital. They detail the positive effects of chronic disease management and community paramedicine — a new model of delivery for at least some aspects of care — on population health and healthcare systems, as well as the potential use of telehealth and mental health — both of which were identified as having significant potential to improve patient outcomes while helping to relieve pressure on the healthcare system. But in order to keep these contributions ongoing and to maximise the benefits of such contributions, a few critical factors need to be taken into account.

### **Broadening the Domain of Community Paramedicry**

The practice has been demonstrated to decrease emergency department visits while also avoiding avoidable hospitalizations as patient-centered home-based timely care is provided. This program fills the gap for healthcare access for specific demographics like our elderly, those with chronic health conditions, and those who live in rural areas.

#### **Implication:**

To scale-up community paramedicine, it is necessary to establish standards and protocols to which the services can adhere. These initiatives need collaborative frameworks among healthcare providers, social services, and policymakers to improve their implementation.

### **Implementing paramedics for chronic disease management**

Paramedics have proven their ability to successfully manage chronic diseases with home care, education, and monitoring. The latter lessens the load on primary care providers, while allowing patients to take control of the care of their disease.

#### **Implication:**

Increasing the scope of practice of paramedics through advanced training in aspects of primary care, pharmacology, and patient-care counseling for chronic disease management Coordinated care with physicians, nurses, and community health workers — giving paramedics a role on an interdisciplinary care team — will further ensure better care and better outcomes.

### **Improving Mental Health Care via Paramedics**

Paramedics aren't doing as much of this work as we do — this is a broader description relating to mental health — but we now are playing a role in mental health supports, particularly in crisis settings where this immediate intervention is so crucial," she said. However, some programs focused on mental health — for instance, Mobile Crisis Response Teams (MCRTs) — have been highly successful in limiting the utilization of police resources and making progress on positive patient outcomes.

#### **Implication:**

Realizing this more expansive vision for paramedics would strengthen existing programs that train paramedics in mental health assessment, crisis de-escalation and trauma-informed care, so they are even more effective in this area.

Improved hand-off to mental health professionals and continuity of patient care can be achieved by establishing such partnerships.

### **Public Health and Preventive Care**

In this way, paramedics have played a significant role in public health, from facilitating vaccination drives and community screenings to health education initiatives. As part of their trusted community, they continue spreading healthcare equity by meeting these patients where they are — often in underserved communities, sometimes with the aid of social determinants of health.

**Implication:**

Paramedics are uniquely positioned to answer many of these challenges and integrating preventive care and health promotion into paramedic education will only reinforce their role.

Policymakers should appreciate the utility of paramedic-delivered public health interventions and invest resources to support them.

**Tackling all Regulatory and Policy Roadblocks**

While the benefits of these expanded roles have been demonstrated, there are many regulatory and policy barriers that stand in the way of wider implementation. Differences in scope of practice, licensing requirements, and funding mechanisms result in uneven implementation of community paramedicine programs.

**Implication:**

Policymakers at national and regional levels should harmonize policies to have a standardized paramedic framework. Given the potential of paramedic-led innovation to meet community health needs, there is an urgent need for the development of sustainable funding models to ensure the long-term sustainability of such initiative.

**Gaps in Training and Resources that Need to be Overcome**

With paramedics entering wider scopes of practice, the need for holistic, structured, specific training is ever more important. To prepare paramedics for the management of chronic disease, mental health crises and health promotion, ongoing professional development is essential.

**Implication:**

Tailored educational programs and certifications for high-end clinical skills, mental health care, and preventive health need to be developed.

Paramedics working in these new, extended roles could increase their passion and confidence with investments in continuous training and mentorship.

**Future Directions**

Future directions in order to optimise the contribution of paramedics to the health of the community should include: Enhancing models of collaborative care that embed paramedics as part of primary care and public health teams.

Supporting policy changes that will clearly define and pay for community paramedicine, Widening the research to assess the long-term effects of paramedic-led interventions on the patients, cost and health of the population.

**CONCLUSION**

The extending function of paramedics in neighborhood well-being mirrors a major change in medical services conveyance, where paramedics are never again minimal to crisis reaction however effectively add to preventive consideration, ongoing illness management, mental well-being backing, and general wellbeing drives. The findings described in this review demonstrate that paramedic-led initiatives increase access to care, decrease rates of non-essential ED presentations, and improve patient health outcomes, especially among high-risk and marginalized groups, many of whom experience barriers to accessing care.

This includes successful community paramedicine programs filling health care gaps and the impact of paramedics on chronic disease management interventions and mental health supports to improve patient care and health system efficiency. This role has also expanded to the areas of public health, with paramedics taking an increasing role in vaccination campaigns, health promotion and prevention initiatives. But more than just removing these obstacles are needed to unleash the potential for paramedics to contribute to the well-being of the community; regulatory barriers, enhancements to specialized training and sustainable funding are all critical. There is a need for policymakers, healthcare organisations, and educators to work together to develop a supportive community to enable paramedics to perform expanded roles. With healthcare systems shifting toward integrated, community-oriented care, paramedics are in a prime position to help improve population health and healthcare equity. By investing in paramedic practice evolution, we are indirectly investing in stronger health systems and healthier and more resilient communities.

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