



Using off-duty emergency physicians for paramedic consultation: a step forward with even greater potential

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The workload on emergency department (ED) physicians has reached unprecedented levels. Escalating patient volumes, increasingly complex cases, excessive documentation requirements, persistent hospital bed gridlock, and high staff turnover are pushing ED physicians to their limits. Paramedic services are facing similar pressures. Guo and colleagues offer an intriguing solution that could alleviate some of this workload: a centralized system for paramedic medical consultations managed by off-duty ED physicians with expertise in prehospital and transport medicine, instead of on-duty ED physicians [1]. Their research indicated that shifting the consultation workload out of the ED yielded promising benefits, suggesting that the Online Medical Consultation tool may shorten average phone call durations and minimize physician interruptions.

The benefits of a centralized paramedic consultation

As highlighted in Guo's study, paramedics often make consultation calls in high-stress situations, such as cardiac arrests or encounters with combative patients. These calls rarely occur in calm, controlled environments; more likely,

they take place inside homes with distressed family members nearby or in the back of a moving ambulance driving with lights and sirens. Under such conditions, long or frequently interrupted consultation calls can disrupt focus and impair communication, potentially leading to worse patient outcomes. By engaging off-duty physicians dedicated to handling these calls, Guo's study showed a promising reduction in call length, resulting in likely more focused and safer consultative and communication practices between paramedics and physicians.

For ED physicians, this approach is practical and logical. On-duty physicians are no longer required to step away from critical tasks to answer prehospital phone calls, enabling them to focus entirely on medical care within the ED. Meanwhile, off-duty physicians handling these consultations could dedicate their full attention to the calls, without the distractions of the ED. Another advantage highlighted by Guo's study is the transition from paper-based documentation to electronic charting systems, enabling trend analysis that could inform updates to paramedic medical protocols.

Specialized expertise for prehospital medicine

A key strength of this model is that it funnels consultations to physicians who have specialized training in prehospital and transport medicine. This change could reduce situations where ED physicians unfamiliar with paramedic protocols inadvertently recommend medications that paramedics do not carry or suggest procedures beyond their scope of practice. Streamlining this communication strengthens the paramedic-physician relationship and enhances trust and efficiency during crucial consultation calls, such as those involving termination of resuscitation, narcotic dose adjustments, or performing synchronized cardioversion.

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A timely innovation for paramedic systems and opportunities for expansion

This study comes at a pivotal moment for paramedic services, specifically in Ontario, where this research was conducted. The province's paramedic landscape is already evolving with innovative care models aimed at reducing ED transports to alleviate ED pressures, such as programs where paramedics can treat and discharge or treat and refer patients [2, 3]. With ~60% of paramedic transports involving non-emergency cases (CTAS 3 to 5), there is a growing interest in developing alternative care pathways for some lower acuity patients who call 911 [4]. While current models primarily focus on patient groups with a very low risk of adverse events (e.g., palliative care, corrected hypoglycemia for known diabetics), expansion into new cohorts is likely—and would benefit from an integrated consultation model with off-duty ED physicians for support and decision making.

Community paramedicine (CP) offers another intriguing application for this model. In CP programs, specially trained paramedics care for patients who require medical attention but do not need immediate ED care, operating within a variety of care models. Integrating a centralized consultation system could support these paramedics with real-time guidance during times of clinical uncertainty, enhancing their ability to further prevent future ED visits. Off-duty ED physicians well-versed in CP's expanded practice scope, equipment and care models could offer more thorough and focused support compared to busy on-duty physicians who may lack the time or capacity to engage in detailed consultations.

However, there is still work to be done. One key challenge is the relatively small pool of emergency physicians with adequate training in prehospital and transport medicine who could contribute to this model. Moreover, ED resident learners have notably minimal exposure to prehospital medicine and its emergencies. Enhancing opportunities for physician learners to get involved in prehospital training will be critical to cultivating more prehospital certified physicians and fostering a deeper understanding of paramedic operations. Additionally, the true impact of this intervention may be underappreciated due to the sample size. Expanding the

analysis to include larger cohorts, incorporating qualitative insights from paramedic and ED colleagues, and examining data beyond the COVID-19 timeframe will provide further guidance on whether broader centralized medical consultation services should be adopted more widely across Ontario.

Looking ahead

While the current system of on-duty ED physicians handling paramedic consultations may be sufficient, it is wise to anticipate future needs. Guo and colleagues have offered a compelling framework worth further exploration. If this model can reduce ED physician workload, enhance communication with paramedics and expand to support a broader range of care models focused on low-to-urgent medical acuities, then embracing it could lead to a more resilient, efficient, and forward-thinking prehospital care ecosystem—ultimately benefiting patients, paramedics and physicians alike.

Declarations

Conflict of interest The authors declare that they have no conflict of interest.

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