

Paramedicine models: the future for rural and remote Australia

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Introduction

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- † Aims
- † Methods
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- † Bibliography



Background

- Emerging evidence supports the notion that community paramedicine (CP) could form a new model of care that addresses some of the reform needs in the health sector.
- This emerging model of care is a community-focused extension of the traditional emergency response and transportation paramedic model.



Aim

To review relevant paramedic models of service delivery, with an emphasis on emerging models that have the potential to improve the health and well-being of Australian rural and remote populations.



Methods

- A narrative review was undertaken to identify past, present and future paramedic models of relevance to rural and remote Australia.
- Searched CINAHL and Medline. Search terms - ambulance, paramedic and EMS. These were then combined with model* and rural, remote and frontier. Restricted to English language papers from 2000.
- Citation lists were then examined to identify other resources.
- Findings were then synthesised into a narrative review.

Established Models

- **Volunteer/Transport Model**
- **Technological Model**



'Past' Model of Care

† Volunteer/Transport Model

- A community controlled and operated ambulance system that meets the pre-hospital expectations of a local community, resulting in the community feeling safe and secure.

Value Statement

- Community self-reliance and control is highly valued, with it delivering on the expectations of the local community.



Dominant Paramedic Model of Care

† Technological Model

- A professionally staffed and managed ambulance system providing pre-hospital care based on the medical model including advanced technology and technically-skilled staff, resulting in a reduction in mortality and morbidity rates.

Value Statement

- Based on the notion that the specialized health professionals, through their training and experience are best able to determine the needs of the community. Letting communities and other stakeholders have a direct say would distort priorities and result in less than 'best practice' standards.
- Mainly metropolitan-based, flight paramedics, clinical leads
- Successful for specific patient cohorts (eg. cardiac, trauma)
- Experience and post-graduate qualifications required

Evolving Models

- **Extended Care Paramedics**
 - Beginnings in U.K., implemented in parts of Australia and New Zealand
 - Extended care paramedics remaining essentially reactive and assessing and treating patients who have requested an ambulance
- **Community Paramedicine**
 - Widely implemented in parts of U.S. and Canada
 - More strongly aligned with a public health approach that involves a set of interventions both before and after the standard paramedic cycle of care
- ***Both roles share the need for a broader knowledge base, enhanced skills and well-developed clinical decision-making competencies***
- ***Both examples of paramedic practitioner models***

Future (emerging) Paramedic Models of Care

† Practitioner Models

- An integrated pre-hospital system that provides a range of services to prevent injury and illness, respond to emergencies and facilitate recovery, resulting in a healthy community.

Value Statement

- A view that sees pre-hospital care as an integral part of an integrated health care system, with professional staff sharing roles that best utilize their skills and knowledge.



Locating Community Paramedicine

- † Community Paramedicine (CP) is part of the future as we address ageing populations and stressed health systems
 - CP is a focused extension of traditional paramedicine models of care and an example of the paramedic practitioner model
 - it will change the way we deliver services and redefine the roles of paramedics
- † This research builds on work related to Extended Care Practitioners, Mobile Integrated Healthcare and Community Paramedics in the U.K., U.S., Canada , Australia and New Zealand

What does Community Paramedicine offer?



Overview

1. Can fill identified gaps in the healthcare system by expanding the roles of paramedics and other ambulance service staff
2. CP programs are flexible by design to meet the needs and resources of the local community
3. Success is driven by the combined effort of interested in maintaining the health and well-being of community members

Program examples

- Care management and home visits
- Falls and falls prevention
- Medication management and compliance
- Geriatric pathologies (diabetes and COPD)
- Palliative care
- Phlebotomy
- Immunization
- Wound care
- Community referrals
- Assessments

Drivers

- Commitment to improve and maintain the health and well-being of community members
- Integration with local health systems
- Viable treatment and referral options for sub-acute and chronic patients
- Broadening of paramedic education
- Inclusive clinical governance systems

Other Issues

- Need to broaden paramedic scopes of practice beyond emergency care
- Consideration of paramedic prescribing rights (Victoria)
- Review of paramedic education – more emphasis on population health, primary health
- Consideration of the future roles of volunteer ambulance officers



Peer reviewed publications from the project

- **O'Meara, P.** Stirling, C, Ruest, M. Martin, A. 2016 Community paramedicine model of care: an observational ethnographic case study. *BMC – Health Services Research*. 16(39). IF 1.71 DOI 10.1186/s12913-016-1282-0
- Martin, A. **O'Meara, P.** Farmer, J. 2016 Consumer perspectives of a community paramedicine program in rural Ontario. *Australian Journal of Rural Health*. IF 1.343 DOI: 10.1111/ajr.12259
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- **O'Meara, P.** Community Paramedics: a scoping review of their emergence and impact. 2014 *International Journal of Paramedic Practice*. 4(1): 5-12.
- **O'Meara, P.** Ruest, M. Stirling, C. 2014 Community paramedicine: higher education as an enabling factor. *Australasian Journal of Paramedicine*, 11(2).
- **O'Meara, P.** Tourle, V. Stirling, C. Walker, J. Pedler, D. 2012 Extending the Paramedic role in rural Australia: a story of flexibility and innovation. *Rural and Remote Health*. 12(1978) . IF 0.878
- Mulholland, P. **O'Meara, P.** Walker, J. Stirling, C. Tourle, V. 2009 Multidisciplinary Practice in Action: The Rural Paramedic – It's Not Only Lights and Sirens. *Journal of Emergency Primary Health Care*. 7(2): Article 990312.
- Stirling, C. **O'Meara, P.** Pedler, D. Tourle, V. Walker, J. 2007 Expanding the Scope of Practice for Rural Health Practitioners: Community Engagement. *Rural and Remote Health* 7: 839. IF 0.878
- **O'Meara, P.** Walker, J. Stirling, C. Pedler, D. 2007 The rural and regional ambulance paramedic: moving beyond emergency response. *National Rural Health Conference Proceedings*. March 2007.

Questions





Thank you

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