

Exploring the Field: Towards a Program of Research in Paramedic Education

R. Bowles, C. van Beek, G. Anderson

INTRODUCTION:

This study was conducted as part of an ongoing project to develop a program of research for the Health Sciences Division (HSD) at the Justice Institute of British Columbia. The project identified three to five areas which the HSD will strategically engage in, actively seeking partnerships and funding for. A second goal involved identifying areas of “opportunistic interest” – potential topics or projects that the Division might engage in if external funding or opportunity presented itself. The third objective was to develop topics and projects that faculty and students could use for developing research and scholarly activity as part of their ongoing courses.

METHODS:

The two-stage study employed mixed methods. Stage 1 was a focused review of English language academic databases (e.g. PubMed, Medline, Academic Search Complete) with the goal of identifying the range of existing research literature on and about EMS. The second stage consisted of semi-structured interviews with key stakeholders in Canadian EMS to explore current and future needs for EMS research.

The initial literature search yielded over 2000 articles. Inclusion criteria were English language articles whose primary focus was on EMS (and its related terms) from 1962 to 2012. Articles were excluded that were set in other health care settings or in which EMS personnel was not a central focus of the article. In total, 1618 articles were included in the study. Articles were coded by primary research topic, discipline, setting, and research paradigm. Interviews were transcribed then underwent both critical and thematic analysis. Participants’ descriptions of issues and research needs were thematically analyzed and also categorized against the coding framework used in the literature review. The results were used to identify potential gaps and opportunities for strategic engagement (Table 1; Figure 1).

The stakeholder interviews were also analyzed to explore current conceptions of EMS and paramedic practice. Core terms were extracted from the transcripts, then mapped thematically to look for relationships, similarities, and differences. Thematic analysis was used to explore how descriptions of paramedic practice, the

Opportunities for Paramedic Education Research

Social/Cultural:	Sociological:
Health policy	Culture of paramedicine
Role of paramedics	Change
Conducting paramedic research	Interprofessional practice
Effectiveness of EMS/EMS Education	Communication
Linking theory & practice	Lifespan of a medic
	Education:
	Competency
	Simulation/practicum

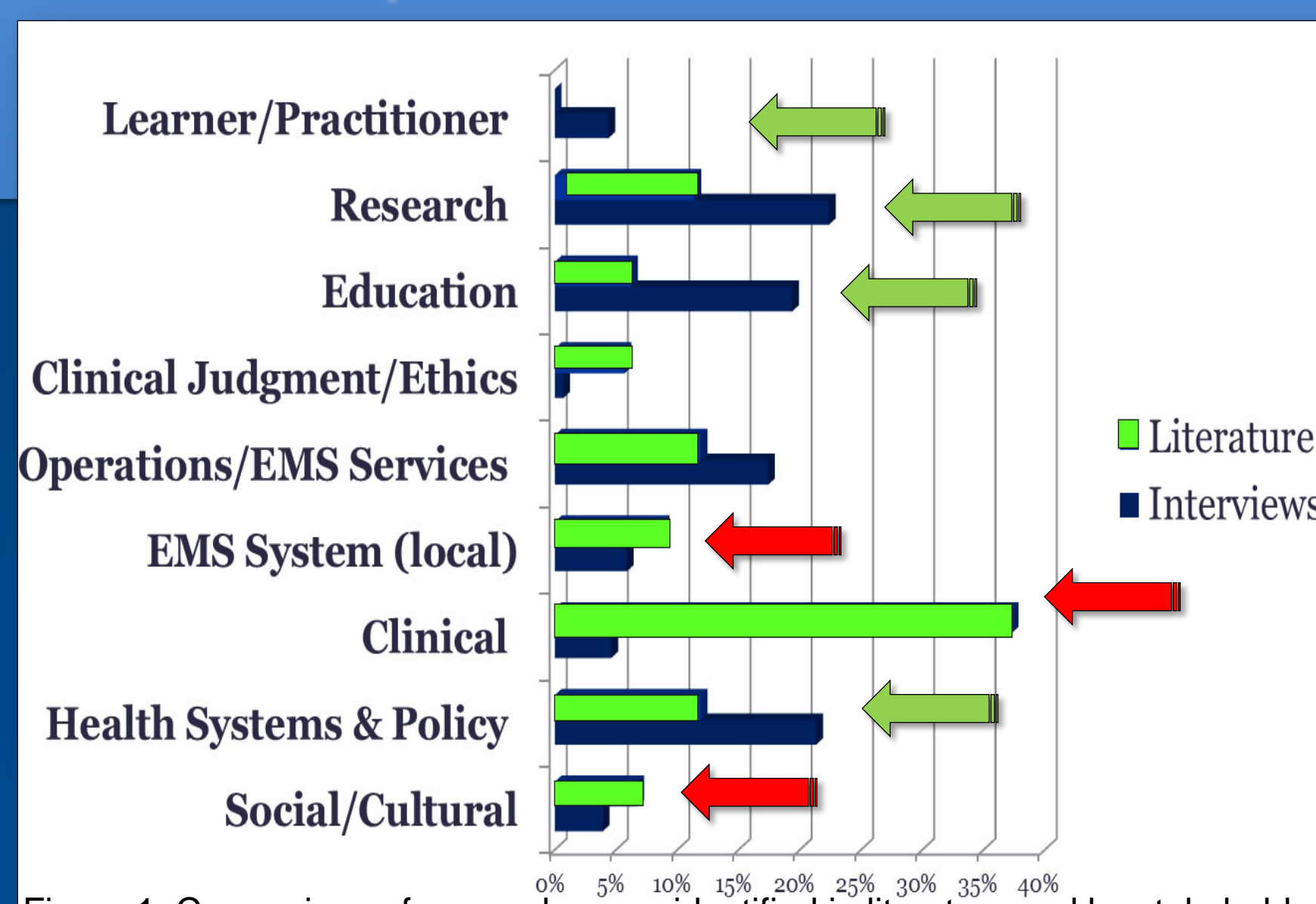


Figure 1: Comparison of research areas identified in literature and by stakeholders

Table 1: Opportunities for Paramedic Education Research..

Describing the field of EMS/Paramedic Practice

- No single “best” term for the field
 - EMS, Paramedicine, Prehospital
- No consensus on the role of EMS
 - ALS, code 3 for an arrest: Safety net for the HC system
- Core themes defining paramedicine:
 - Type of care, Location of care, Transport, Practitioner

Table 2: General findings of stakeholder interviews.

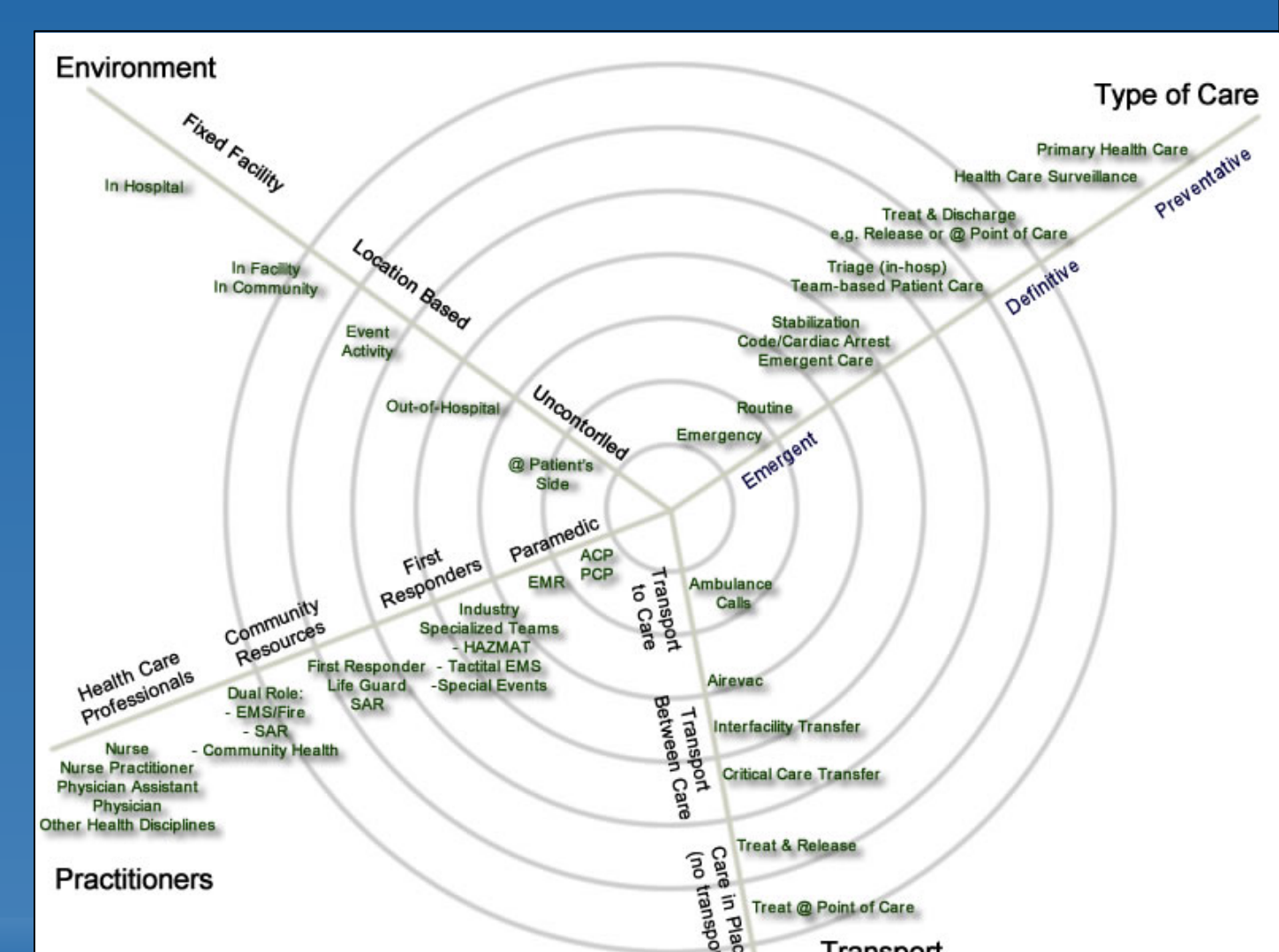


Figure 3: Describing paramedic practice..

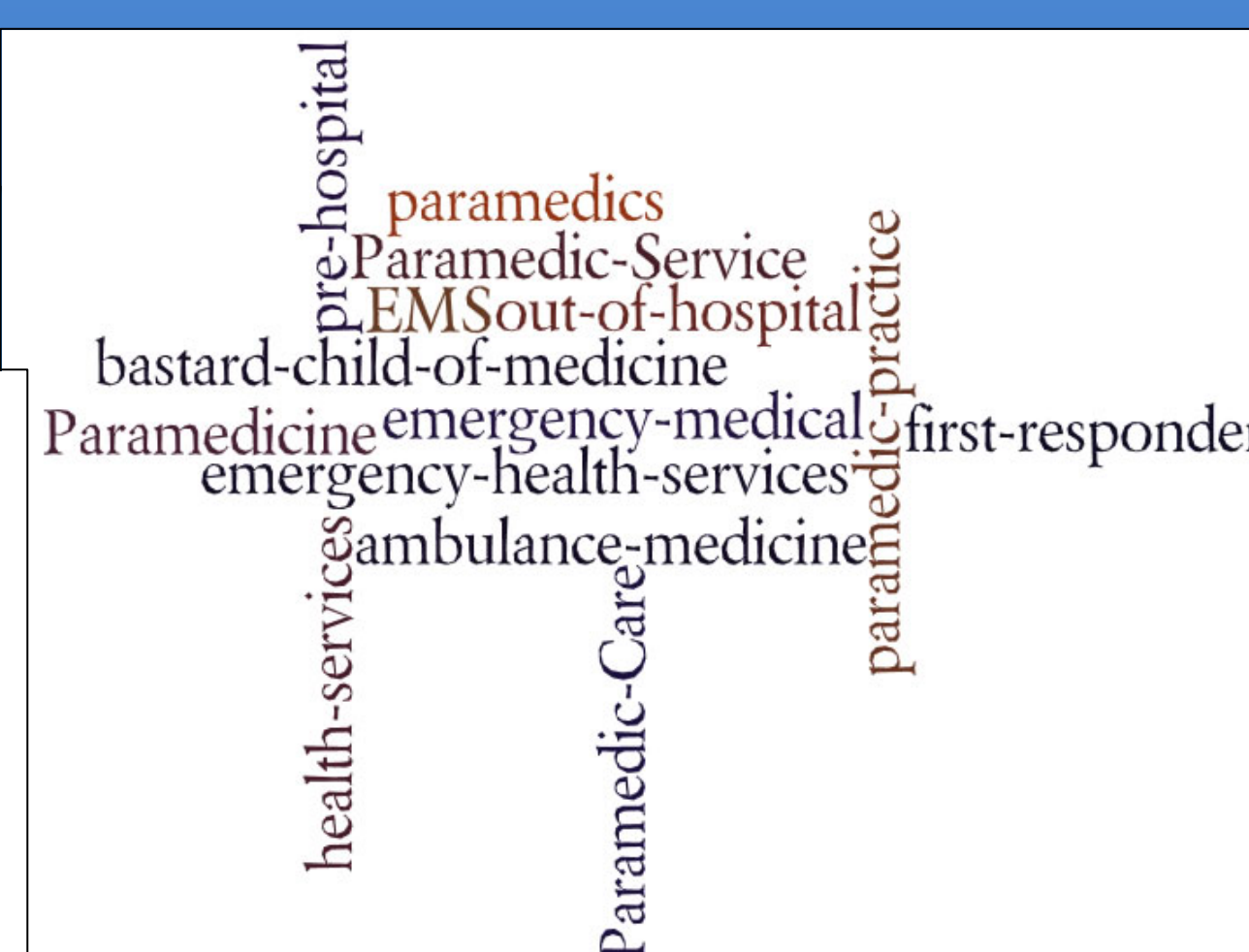


Figure 2: Terms describing EMS and Paramedicine

current and future roles of paramedicine, and its perceived boundaries interact to develop a model for describing contested visions of what constitutes the field of paramedicine.

FINDINGS:

This study uncovered a rich set of issues and areas for research that can contribute to the description, definition, and ongoing development of the paramedic profession.

Figure 1 contrasts research found in the literature with research needs expressed by Canadian EMS stakeholders. The green arrows indicate research areas of greatest opportunity, while red arrows indicate areas where educational research is either already well-represented or where there is less interest from stakeholders.

Stakeholder interviews raised several intriguing themes (Table 2). There was little consensus on the role and boundaries of paramedic practice. At one extreme, EMS was seen as providing emergency care and transport of the critically ill and injured. At the other was an expansive view of paramedicine as the safety net for a stressed health care system. Similarly, participants identified a wide ranging list of terms for EMS or paramedicine (Figure 2). From the interviews, four themes emerged for characterizing the field: type of practitioner, location of practice, nature of care, and transport (Figure 3).

IMPLICATIONS:

Paramedicine, or EMS, is a young field and emerging profession that has yet to definitively establish its boundaries and roles. Stakeholders in EMS education have varying opinions on the core functions of EMS and, thus, how education can best support the field.

Existing literature on EMS focuses on clinical interventions and operational case studies, while stakeholders are most interested in research that will show the effectiveness of EMS at the practitioner and system level. As an educational institution, the JIBC’s Health Science Division has opportunities to participate in research that can help define the field and identify effective educational practices that can lead to change in the culture and practice of paramedicine.