To Whom It May Concern:

Thank you for the opportunity to contribute to the Australian Safety and Quality Goals for Health Care project.

There are approximately 16,000 paramedics in Australia. These health care professionals respond to three million calls for emergency medical assistance each year, making them a significant component of the Australian health care system. In addition, all Australians count on paramedics to be available not only for every crash, fall, snakebite and heart attack, but also for events such as New Years Eve celebrations and disasters such as cyclones. Paramedics provide services in virtually every community in Australia; they work in every city, every town and every mining camp. They care for people from culturally and linguistically diverse backgrounds, older people, infants and people who have both physical and mental health conditions.

The country depends on paramedics to be fit and healthy yet recent research indicates that they suffer from an extraordinarily high occupational injury and fatality rate. We depend on them to be expert clinicians, caring for patients without making mistakes, yet we know little about patient care mistakes that may take place in the out of hospital environment. And, we expect paramedics to help protect society, but we need to better understand the risks that ambulance services may pose to the community in terms of pedestrians struck, collisions and “wake-effect” incidents. For example, in one study of fatal ambulance crashes, eight of the 25 victims were identified as EMS personnel; 17 of the fatalities were patients, family members and community members.

Paramedics are, rightly so, highly respected professionals. But the dearth of research leaves open the possibility that there is a great need for improvement in this sector of the health care system. One of the reasons for the dearth of research is that ambulance services have been reluctant to participate in systems research. Another significant reason is the paucity of funding that has been available for ambulance services research.
Therefore, in response to question 2 on page 29, I recommend that emergency medical services be added as a topic area. The proposed issue meets the criteria used to select the proposed Australian Safety and Quality Goals for Health Care in the following ways:

- There are few data on the burden of disease, cost to the system and number of adverse events. But there are some indications of the potential scope of the problem. For example,
  - in the U.S., the transportation related fatality rate for paramedics is approximately five times higher than the national average - the transportation related fatality rate for paramedics in Australia is three times higher than the U.S. rate;
  - The rate of non-fatal injury with lost work days for U.S. paramedics is seven times higher than the national average;
  - In Australia, “Ambulance officers and paramedics” were reported to have the sixth highest rate of occupational injuries and the sixth highest rate of “new mental stress claims for men”;
  - Female paramedics have a disproportionately high risk of injury;
  - Twenty percent of transportation related injury cases among paramedics result in 31 or more lost work days;
  - In the U.S., the employers’ healthcare cost for paramedic occupational injuries is approximately $60,000 per 100 full time workers per year (these costs do not include the cost for replacement workers, early termination, etc.);
  - Nine percent of paramedics in one U.S. study reported making a medication error within the past 12 month – if the rate is the same in Australia that may be over 1,400 medication errors per year;
  - In Australia, 10% of paramedics reported to be “dangerously sleepy”;
  - The U.S. government is making improved EMS safety and improved EMS patient safety, a high priority.

- We do know for sure that there are high levels of preventable harm related to paramedic injury and fatality
- There is a growing body of work that could be built on to make improvements
- It seems likely that these potential goals would be amenable to national action at multiple levels of the health system
- Given sufficient funding there is great likelihood that improvements would be achieved in a three to five year timeframe
- Reducing risks to paramedics and reducing the risks for the three million patients they treat every year is clearly linked to other national priorities
- Clear measures already exist (e.g. paramedic fatality rate, injury rate, medication error rate) that could be used to monitor progress
- Addressing these issues can certainly improve the safety of care (by reducing medication errors and reducing injuries to patients and community members).

These are specific measures that could be used to assess progress towards achievement of the Goals:

- Reduction of occupational injuries and fatalities among paramedics
- Reduction of medical errors by paramedics
- Reduction of risks to society from ambulance services
- Implementation of a system to have ambulance service data submitted to a national body
Ambulance Safety and Quality

- Implementation of a system to have ambulance data made available to researchers
- Increased funding for on-going ambulance services research.

Achievement of these goals will directly:
- “improve the safety and quality of health care
- achieve better outcomes for patients
- provide a more effective and efficient health system.”

The barrier that exists in achieving these goals is largely a lack of funds. A sufficiently allocated, dedicated funding source could eliminate the barrier.

Your support for this proposal could improve the care for three million patients a year, decrease the risk of injury and death for 16,000 paramedics and, reduce the burden to society for injuries and deaths related to ambulance operations.

Thank you for your consideration.

Sincerely,

[Signature]

Dr. Brian Maguire
Professor

References


14 Maguire BJ, Smith S. Injuries and Fatalities among Emergency Medical Technicians and Paramedics in the U.S. Accepted by *Prehospital and Disaster Medicine.* 2010


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