

INTRAOSSSEOUS DEVICES IN TRAUMA



RESEARCH QUESTION



How do trauma practitioners in Canada, Australia and New Zealand feel about using intraosseous (IO) devices for resuscitation in adult trauma patients, how often do they use these devices in their practice, and what characteristics are associated with choosing to use an IO device in various clinical scenarios?

SIGNIFICANCE



- Clinical use of IO devices for obtaining vascular access has largely been confined to pediatric patients over the last few decades.
- The use of IO devices in the resuscitation of severely injured adult trauma patients has recently become more commonplace.

METHODS



- An electronic survey of all members of national organizations in Canada (TAC, CAEP), Australia & New Zealand (ATS, ANZAST) was administered over a 2-month period in 2014.
- We analysed practitioner roles and specialties, their practice and level of training, clinical experience and comfort level with IO devices in trauma.

RESULTS



1771

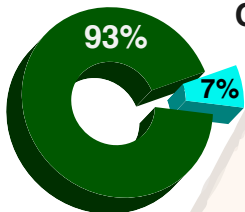
Members Surveyed

24%

Response Rate

375

Physicians Included

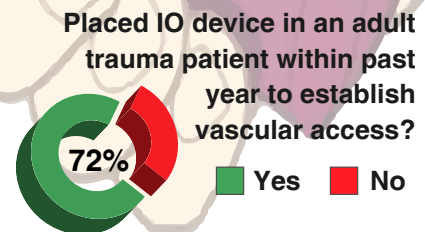


Country of Practice

- Canada
- Australia & New Zealand

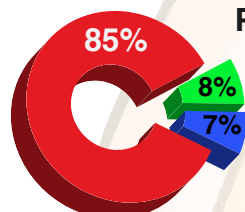
97%
of physicians had access to an IO device

98%
had previous training with an IO device



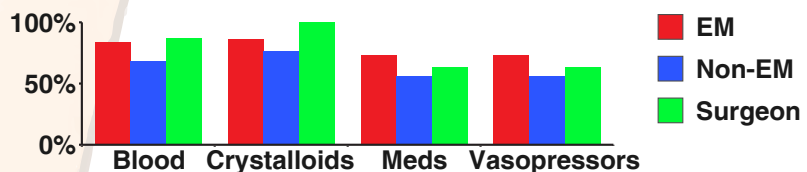
Placed IO device in an adult trauma patient within past year to establish vascular access?

- Yes
- No



Physician Type

- Emerg. Med. (EM)
- Non-EM
- Surgeon



Proportion of physicians who indicated that IO is an acceptable route for administering blood products, crystalloids, medications, or vasopressors

TAKE HOME MESSAGE



- IO devices for the purposes of rapid vascular access are readily available to trauma practitioners in Canada, Australia and New Zealand.
- Surveyed trauma physicians believed that the indications for IO device placement could be expanded beyond current guidelines.

Source: Engels et al. Use of intraosseous devices in trauma: a survey of trauma practitioners in Canada, Australia and New Zealand. Can J Surg (2016).