

Moving knowledge into practice

Paramedics apply knowledge in their practice every day; it can be explicit in the form of treatment guidelines, or implicit through clinical experience. However, the systems and processes of how knowledge is moved from creation to application are not widely appreciated in the paramedic profession. Knowledge is constantly created, adapted, and transformed as we learn and better understand the natural world. The two most common sources of knowledge in healthcare are research studies and clinical experience. Bridging the 'gap' between knowledge and practice is however not a straightforward process, as merely attaining knowledge is not a predictor for its use or application in clinical practice. A key component of modern healthcare is to provide the best clinical care to patients based on the most up-to-date and sound evidence, known as 'evidence-based practice'. It then becomes prudent to understand how paramedics interact with the knowledge that emanates from research studies and clinical experience, and how those interactions affect their clinical practice. The most common constructs used to describe the systems and processes of moving knowledge into practice are 'knowledge translation' and 'implementation science'. Knowledge translation relates to the processes of synthesis, exchange, and application. Synthesis allows for evidence to be combined, evaluated, and transformed for a common purpose, like the development of resuscitation or clinical practice guidelines. Exchange focuses on the sharing of evidence by those who produce it and those who use it, mostly through direct interactions or disseminated in literature and educational publications. Application describes how knowledge is put into practice and forms the basis of implementation science. Implementation can thus be seen as the actions required to adapt clinical systems and practice to reflect a change in knowledge. Although there is a large focus on research knowledge, the contribution of clinical experience to the knowledge base is often overlooked within the paramedic profession. Experience naturally has an influence on clinical practice—both positive and negative—clinicians should therefore be cognisant of how clinical experiences shape their decision-making and practice. Clinicians sharing knowledge that is supported by evidence is potentially the biggest driver of change and improvement in practice. As the paramedic profession grows, more research is being done, and clinical experience is building within the prehospital context—so does the knowledge base expand at an exponential rate. Translating that knowledge and being able to implement it in daily clinical practice is key to the positive development and expansion of the profession. Regulators, educational institutions, ambulance services, and individual clinicians all have a responsibility to engage in the systems and processes that promote the movement of knowledge into practice. Only then can evidence-based practice flourish and allow paramedics to provide the latest and best care to patients.

Dr Enrico Dippenaar is editorial board member of International Paramedic Practice