National Digital Health Strategy Survey - Consultation

1. Background

The next digital health strategy will start in 2022 and covers a five-year time frame. The feedback provided through this survey will be used to develop the draft strategy and implementation plan for governments, healthcare providers, consumers, innovators and the technology industry.

1.1 About the survey

A full copy of the survey can be found in the attached PDF. This consultation will provide structure from existing ACEM submissions on digital health strategy.

2. What barriers do ACEM members face?

The Australasian College for Emergency Medicine (ACEM) welcomes the opportunity to provide its submission to the Australian Digital Health Agency's (the Agency) consultation on the National Digital Health Strategy (the Strategy). ACEM has been actively involved in previous consultation initiatives undertaken by the Agency to develop a digital health framework.

ACEM is a not-for-profit organisation responsible for the training and ongoing education of emergency physicians, and for the advancement of professional standards in emergency medicine, in Australia and New Zealand. As the peak professional organisation for emergency medicine, ACEM has a vital interest in ensuring the highest standards of emergency medical care are maintained for all patients.

ACEM believes that everyone has the right to timely, safe and quality emergency care and is committed to advocating for improved service planning and development across hospital, community health services, community and Aboriginal Community Controlled Organisations across Australia and New Zealand. Australian emergency departments (EDs) are experiencing increasing pressure due to growing demand, increasingly complex patients, and limited resources, including resources related to digital health.

The College has a long-standing interest in the flow of patients through the hospital system, and particularly with acute health issues where patients are seen in ED, as this contributes to hospital ED overcrowding, long ED wait times, ambulance ramping and adverse patient outcomes. Access block is the single most serious issue facing EDs and the major contributor to ED overcrowding.

Access block refers to the situation where patients who have been seen, assessed, initially treated and then need admission to a hospital bed are delayed from leaving the ED for more than eight hours because of a lack of inpatient bed capacity. This includes patients who were planned for an admission but were discharged from the ED without reaching an inpatient bed, or transferred to another hospital for admission, or who died in the ED. Previous research has found that access block is associated with increased risk of complications, medical errors, and death, with greater costs to the healthcare system overall.

Digital health initiatives have the potential to improve the flow of patients when meticulously designed and implemented, however they can also, conversely, complicate and slow patient care if implemented poorly.

3. What barriers to incorporating digital health into day-to-day activities do ACEM members face?

EDs provide a compelling window into the strengths and weaknesses of the healthcare system overall. The occurrence of access block and overcrowding is far too common across EDs in Australia, and indicative of problems across the wider health system. Access block and ED overcrowding caused by bottlenecks in other parts of the healthcare system have implications for patient safety and the efficient use of health resources.

Whilst the drivers for access block are complex, there is an inextricable link to inadequacies in the current digital health system. The resulting challenges ACEM members face in their day-to-day activities include managing the flow of patients out of the ED and onto the next destination of the patient's journey, managing inter-hospital transfers (IHTs), receiving accurate clinical handovers and access to essential patient information. These are all essential to inform planning, minimise delays, and ensure continuity of care for patients at every stage of their hospital journey.

Across Australia, most ACEM members would regard their bed management system as difficult to navigate and clunky. Piecemeal IT systems make it hard to gain the whole benefits of these systems. There is a growing inequality of investment in IT systems across the healthcare and related sectors, a piecemeal and sometimes siloed approach and interoperability issues therefore remain unresolved. Significant investment goes into bespoke solutions that do not offer widespread benefits to the system. The systems for IHTs vary from jurisdiction to jurisdiction and are most often available only for critical care patients. These shortcomings in IT systems have created conditions where decision-making processes for transferring patients into, out of, and between hospitals are compromised, the accuracy of clinical handover information can be compromised, and we see the resulting delays to treatment, and inefficient use of hospital resources.

The ability for EDs to utilise enhanced digital health systems offers the potential to improve the continuity and quality of patient care as well as improving efficiency of health care delivery. ACEM considers that without sufficient uptake and maintenance of digital health by government, hospitals, patients, and healthcare professionals alike, the effectiveness of the digital health system is diminished for all who wish to use it.

The challenges posed by digital health also require acknowledgement. These challenges include difficulties associated with its complex user interface, as well as difficulties with enrolment into the system. There is also difficultly in designing a system that meets all professional and patient needs. Patients of every age and demographic group present at the ED, exhibiting a spectrum of undifferentiated physical and behavioural conditions. Consequently, the breadth and volume of information required by emergency clinicians is a challenge to cognitive retention, particularly given the time critical nature of many interventions performed in the ED. Without access to appropriate digital health resources, optimal patient care can be affected. Patient care in the ED is enhanced by removing the barriers facing emergency staff to accessing online clinical information. These barriers include undiscriminating firewalls, poor internet/Wi-Fi coverage/speed, ED design and space issues, and lack of necessary hardware. Improved digital access to pathology and radiology investigations performed in the community by private providers would reduce unnecessary duplication.

4. Looking five years ahead, what would you like digital health to achieve in Australia? What changes need to be made to digital health need to be made to achieve these benefits

ACEM recommends that:
- Digital health systems be appropriately integrated into existing hospital information technology systems
- Real-time reporting be implemented to link ED to other critical care areas
- Practical digital health training is prioritised for new systems and/or users

- Hospitals and jurisdictions improve integration to enable improved continuum of care across regions, stats and territories
- Digital health interfaces are designed to reduce workload and improve useability
- Appropriate infrastructure is in place to allow digital health to thrive
- Electronic prescribing systems are improved (and made consistently available in non-metropolitan areas)
- Timely access to Advanced Care Directives

Digital health systems must be appropriately integrated into existing hospital information technology systems to achieve real value for patients and physicians. Achieving this would involve investments in technology to replace existing outdated systems and devices, as well as the ability to upload vital information such as medication history, advance care directives, enduring power of attorney legal documentation and acute resuscitation plans.

The College believes that the appropriate integration of digital health will support clinicians to determine the right treatment, at the right place, at the right time. There is a clear need for clinicians to 'see' these system challenges as they evolve so services can align to deliver safe, equitable, effective, and timely patient-centred care. Key challenges in this context include inpatient bed capacity, ability to share patient load throughout the hospital, specialist availability and availability of other services such as radiology. One way forward in this area is to utilise real-time reporting on the availability of activity and resources within the whole hospital. Providing real-time transparency and linking the ED to other areas of critical care such as intensive care units and ambulance services would be strengthen EDs operationally to manage surge and bottleneck issues. Ensuring the digital health providers understand the difference between information used for patient care and research vs. business proprietary information is also essential to ensure that clinicians have timely access to this information without red tape.

Digital health training is necessary and needs to follow newly implemented systems. Practical online training is preferred such as courses and/or user guides. These programs need to be easily read and accessible for timely use in a busy ED setting. Current training is cumbersome and with medical teams changing often, the training needs to be easy and intuitive. Training is also often provided at the initial step into digital health with clinicians left to figure out changing systems after this. Digital health experts are needed to support clinicians so clinicians can focus on patient care.

There must be a seamless connection between the community and hospital settings. Digital information generated by the primary care provider and paramedics (as well as for example residential aged care facilities) should be incorporated into the patient's hospital encounter to show the continuum of care. This would also allow the primary care provider insight into the hospital admission to provide the continuum of care once the patient has left the hospital.

The College recommends that Government and hospitals improve interfaces to reduce workload and input time for clinicians. Improved usability and reliability of data outputs are essential in optimal patient care. By streamlining interfaces, clinicians can spend less time toggling to different screens to find critical patient information, and importantly, nothing critical is missed. It is also important that the information in digital health provides a single source of truth for the patient. Digital health records need have accurate information from both the patient and their treating team. These systems should also be set up with a patient-centred care focus. The adoption of US-based Electronic Medical Record systems and workflows have meant that most EMR systems are not suited for patient centred care but tailored around legislation designed to meet American workflow (documentation standards).

ED infrastructure must enable convenient and reliable online access with respect to both desktop and mobile devices. Desktop and mobile devices that are aged, or don't have functions such as cameras and microphones limit clinicians' ability to undertake digital health. Bandwidth must be broad enough to support rapid large file download and transfer. Hospitals should provide staff with appropriate associated hardware such as, for example, hand-held devices, cameras, speakers and headphones. Additionally, while hospital intranets require firewalls that are essential for data

security, appropriate internet access must be provided to medical and nursing staff, as well as to those undertaking clinical support activities.

The current electronic prescribing system is not user friendly in the context of the ED. By displaying many screens before a script can be issued, errors can be made due to an overload of irrelevant information. A streamlined electronic prescribing system is essential in moving digital health forward. Digital health providers must work with prescribing clinicians to understand what is important not only in community and primary care prescribing, but in situations such as busy EDs.

Accessibility and transferability of advance care planning documents is a time critical role of digital health to ensure that care is preference-aligned in the ED. Determining whether the person has an Advance Care Directive at assessment needs to be able to be quickly assessed in the ED so an up-to-date digital health record is essential. The transfer of Advance Care Directives or advance care plans between relevant service providers to inform future medical treatment decision-making ensures that the patient receives the care they desire at end of life.

5.   Other feedback

A potential risk to consider involves clinical processes becoming beholden to IT systems rather than the other way around. IT systems inherently come with limitations and when implemented, there can be pressure to change practice to align with the limitations of the system. This is different to a situation where there is implementation of an IT system that is responsive to clinical processes and leads to improved practice.

Digital health systems should be designed to allow easy and efficient access to quality information for system improvement, and improved and more efficient and effective data input interfaces are needed to engage clinicians in their use, provide better data outputs, and improve productivity.

Digital health systems should support and improve health consumers understanding of their condition and treatment, providing them with accurate and evidence-based information. This information should be uniform and accessible across the country.