‘See Me, Hear Me’

Improving the safety of care for Victorian children: White paper series No. 1

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# Foreword

Professor Mike Roberts, CEO, Safer Care Victoria and Chief Quality and Safety Officer Victoria

This white paper comes from a round table where over 100 clinicians, managers, and most importantly of all, consumers came together to share their experiences of health care and form a series of co-designed recommendations to improve emergency care for children. This white paper explores themes from the round table and outlines a series of recommendations that can be readily implemented across our state. The dedicated clinicians, managers, and consumers who came together to co-design these recommendations believe that acting on them will have a substantial impact on the safety of acutely unwell Victorian children and young people.

# Executive summary

The round table discussion identified three main issues that need to be addressed: Timely recognition and action when children are acutely unwell or deteriorating; Ensuring that Parents concerns are heard and acted on; Putting in place a system for the delivery of safe care to children 24/7. There were 17 actions to improve health care delivery for children.

## The priority recommendations to improve the safety of care for children are:

**Recommendation 1.** Mandate the use of and response to Victorian Charts for Tracking Observation and Response charts appropriate for age group by all clinicians wherever children have vital signs recorded.

**Recommendation 2.** Implement the ‘Hear Me’ centralised parent escalation process.

**Recommendation 3**. Implement a system of virtual paediatric emergency consultation, with the appropriate infrastructure including training and quality assurance that has video links to clinicians with paediatric expertise, and to retrieval services.

# Insights from the roundtable

There are over two hundred thousand presentations of acutely unwell children in Victoria each year. Approximately two-thirds of these children attend the non-paediatric specialist Emergency Departments. Most care is delivered to a high quality with clinicians and parents/carers and patients working together to provide excellent outcomes. However, this does not always happen, and the associated harm is an opportunity for us to learn about the system and what processes could be implemented prevent these harms. This round table discussion focussed on this but acknowledged the need to partner with clinicians and consumers not just in learning from these harms, but to learn from episodes of good care to aid in designing resilience into our systems and keeping joy in our work.

Further it was evident that there is strong commitment to improving the care of acutely unwell children across the sector. There are two metropolitan hospitals gaining accreditation for paediatric emergency department training, and development of a paediatric emergency service at a further 2 hospitals. The engagement of emergency department leaders, directors of inpatient paediatric care, and hospital executives shows clinical and organisational engagement in improving the issues identified and discussed.

It is clear within the review of various sentinel events related to unwell children that:

* non-paediatrically trained clinicians appear more likely to suspect sepsis too late and by this time the child is at the point of collapse
* parents often do not feel safe to speak up, and do not feel heard
* there are organisational factors contributing to this, such as lack of experience, knowledge, and appreciation of the clinical risk factors. In 70% of cases, medical clinicians did not have access to senior supervision that could provide the knowledge needed to safely manage the case. Being a junior clinician, and therefore uncomfortable about making decisions (i.e. "calling it"), leads to a delay in diagnosis and management
* communication is central to the issue, but parents do not always feel adequately involved in the clinical review of their own child, and frequently report that they are not listened to.

## Supporting clinician decision making

The early warning system for children, the Victorian Children's Tool for Observation and Response (ViCTOR) charts, are a key to recognising and responding to children at risk of deteriorating. They are used in most paediatric inpatient wards but are not consistently used in the care of acutely unwell children. Most emergency departments (EDs) or Urgent Care Centres (UCC) that see both adults and children are not using them for the period of emergency department care. VICTOR is designed as a paper-based system which graphs observations, with colour coding to identify abnormal observations. Where it has been incorporated into electronic medical records graphical depiction is not always available (removing some of its utility). ViCTOR identifies abnormalities in observations with action required if one or more observations are in the abnormal (coloured) zone. It does not incorporate the calculation of a score (such as the Paediatric Early Warning Score).

Many UCCs are co-located within Residential Aged Care Facilities and to provide good urgent care for children, augmentation of remote support and networking with expert paediatric services must be established.

There was widespread agreement that such a tool for flagging that ‘something is wrong’ with a child, needs to be implemented in emergency departments, urgent care centres (UCC) and across the hospital system (with consideration of how they might be implemented into ambulance services). This is a significant gap in safety for acutely unwell children. However, it should be emphasised that standardised use of VICTOR charts is only part of the escalation pathway; it is necessary but alone is not sufficient to care for acutely unwell children. Using ViCTOR charts will detect deterioration of acutely unwell children, but it must be accompanied by standardised and mandated escalation and management responses to this deterioration.

This needs to be augmented by appropriate paediatric clinical decision-making skills and appropriate use of diagnostic tools to help clinicians to determine what that ‘something’ is and what the appropriate response should be. Pathways that outline a consistent approach to this should be developed. They should include use of inpatient paediatric skills in organisations where they exist, and development of remote support pathways for health services who do not have many paediatric cases presenting to their EDs and have no inpatient resources. Action is required to partner with consumers, and the clinicians and management of health services of all sizes to codesign a system and culture that enables recognition of an unwell child, and appropriate and timely escalation and management interventions. The engagement with consumers and hospital teams is key to ensure interventions and implementation plans are appropriate to local circumstance, and lead to sustainable change.

Additional support is also needed for clinicians in EDs and UCCs managing children with complex medical problems. Such support should assist parents/carers to communicate disease features, risks for and signs of deterioration. CCOPMM has advocated for an alert card that accompanies the child and family to be instigated for children with long term or complex medical illness to address these exact needs. Such a card would contain information such as what can trigger acute deterioration, what features will suggest deterioration, what should be done about this, and the child's main treating clinicians and contact details. Some teams – such as the metabolic team at the RCH – have instigated this system but it is not systematically in place for all at-risk children.

## Escalation of concerns by parents

For the parent and/or primary caregiver of an acutely unwell child, the current systems for escalating care, and having their voice heard, are complex and difficult to understand, and have been described as like “navigating spaghetti”.

To improve this the system must:

* provide ongoing and enhanced education to clinicians managing children about both the importance of empowering and engaging the parents and/or caregivers in clinical decision making, and the way to practically do this in the clinical setting
* have agreed language and terminology that is universally used
* have agreed methods and processes for parent escalation if they do not feel heard, or are worried their child is getting sicker
* have audit, learning and feedback to both clinicians and parents as a standard process.

The aim is for clinicians, regardless of seniority, to become comfortable with involving the parent in the diagnosis including discussing diagnostic uncertainty. This includes asking for and documenting parental concerns; to accept that parents have a higher level of understanding of what 'illness looks like' for their child (especially for children who have chronic illness); to involve parents in all levels of decision making for their child.

Parents and carers of acutely unwell children need assistance to understand the diagnostic pathway and that, with changing symptoms and further information, the diagnosis may change. They also need to be empowered and given opportunity to question and have input into the diagnostic process to ensure all relevant information is obtained and as a counterfoil to clinician diagnostic fixation and confirmation biases. Parents need a simple mechanism to have their concerns heard. Clinical processes should build this into every interaction – such as asking, ‘do you think your child is getting worse?’ We should consider whether this needs to become part of routine observations.

To meet these needs, education and communication tools and strategies for acutely unwell children should be designed jointly with clinicians and consumers to ensure they are accepted and usable by all parties. As the patient stories have shown, there are times that, despite their best efforts, parents are sometimes not heard by clinicians. Having robust, simple, and consistent processes for escalation of concern by parents, which is well communicated, is vital to keep acutely unwell children in our hospitals safe. There are currently several approaches to this in place across Victoria. It was accepted that to be effective this process requires a standardised approach across health services. Such a system would outline mechanisms for escalating concerns within the treating team, more broadly within the health service and then potentially to a system that lies outside the health service. Such systems would need to be accessible and responsive at all times.

Some systems that have worked in Victoria include a ‘Red Flag’ that is a given to all families on attendance that they can present at any time initiating clinical reassessment and discussion; and the ‘Hear Me’ project by SCV, which provided a safety net for patients and carers. It empowered them to voice unresolved concerns and receive timely responses from their health service. It was trialled at 17 pilot sites which were a mix of public and private health services, rural and metro and is under review by SCV.

Interstate there are also working examples. In Queensland Health, when a matter is not resolved locally, parents can call a single number from any health service. The call is immediately directed to a senior executive within the organisation for independent review of the escalated issue. This is articulated within Ryan’s Rule (https://clinicalexcellence.qld.gov.au/priorityareas/safety-andquality/ryans- rule). The Coordinator of Clinical Deterioration in Queensland covers over 170 facilities and receives 6-7 calls a day. There are fewer calls from EDs compared with inpatient settings. These calls often challenge communication around discharge decisions.

Victoria should ensure all health services have a robust, consumer-initiated escalation processes, tailored to local health services’ needs and contexts, reflecting a commonly held set of principles to provide consumers with consistency across services. Consideration of a single contact number for streamlining calls by implementing a centralised model is warranted as:

* all health services are required to have a patient-led escalation model in place, but these are variable across the state and not easily recognised by consumers
* Targeting Zero identified the need to balance local protocol with centralised innovations to maximise effect
* the three-step escalation process (with steps one and two being internal escalation within the health service) allows for the focus of efforts to strengthen consumer partnerships in healthcare within individual services. This is done through promoting the importance of communication and relationships between consumers and their health service in the first two steps of the three-step process. This third and final step (calling the universal “hear me” number) is a final resort, but when used can help identify things that may have been missed and could prevent acute deterioration and save lives in the future
* the Queensland experience shows there will not be an over burden for health services, or the central call line
* staff will have a safe means of escalation - in circumstances where structures and cultural issues within organisations do not facilitate this
* allows robust data collection, monitoring and review by the health service. Outcomes and recommendation can be analysed and reported anonymously to SCV, to allow broader system learning
* the patient/carer is part of the review process
* having one consistent process throughout Victoria allows consumers to be aware of what to do at any health service they attend and provides one consistent model for clinicians around patient-led escalation.

Parents should also be able to get rapid clinical care in the case of acute or severe deterioration (e.g., via a parent initiated MET call). Processes that allow for this and that empower parents to initiate these calls should be in place at all health services. Clinicians in these instances must affirm the parents concern and treat the call for assistance as if it came from an experienced clinician. Parents have reported feeling unheard when the MET team or treating doctors simply modify the MET criteria after such calls are made. Clinicians should be mindful to make a thorough assessment of the child at this time and discuss the outcomes with the parents, including ensuring all parental concerns are adequately addressed. Plans for review post MET should be in place as they would be for staff initiated MET calls.

# A safe systems of care for acutely unwell Victorian children

It is important that the insights shared by consumers and caregivers lead to system improvements. Health services need to embrace the positive influence from acknowledging when care has gone wrong and that there are gaps in the systems and pathways for escalation and care.

We need to put an integrated safe system of health care in place for acutely unwell children across Victoria where the two paediatric tertiary hospitals support metropolitan hospitals which in turn support regional and rural health services. This is possible due to the strong collegiality of paediatric services across Victoria and the recent implementation of a Paediatric CHRIS system making paediatric bed availability data visible across the State. This data needs to be better utilised in ensuring children receive their care as close to home as is appropriate given their clinical care needs.

A capability framework for paediatric care within EDs and UCCs is being developed by the Department of Health and SCV and implementation could be overseen by the Chief Quality and Safety Officer role.

In building a system of clinical support for acutely unwell children we should intentionally build on systems that already exist (such as Paediatric Infant Perinatal Emergency Retrieval (PIPER) or Victorian Virtual Emergency Departments (VVED)), rather than starting from scratch in establishing something similar. The system needs to link broadly with health services across Victoria, and understand the capability and capacity of each service, and link with retrieval services (PIPER) when the need for urgent higher-level care is identified.

Consumer feedback was that talking about the role of consumers – particularly in the escalation of parental concern - is important and valued. However, from their perspective their primary concern is how improvements will be implemented and operationalised across the system. Consumers want to see system wide change and for health services to be resourced to implement and embed these changes. Consumers felt that such resourcing would be balanced by reductions in costs associated with missed, delayed or incorrect diagnoses/treatments.

There was a strong assertion that improvement will not come from merely instructing health services to change, as they are challenged by demand and capacity. Health services will require central support to implement improvements. Across Victoria, a shared understanding of the various levels of care for acutely unwell children needs to be developed. A system that provides access to the level of paediatric skills required whenever an acutely unwell child presents to any health service needs to be designed and implemented.

Clinicians need to work more effectively with parents who have a good understanding of their child. There needs to be better communication between clinicians and parents who need support understanding escalation processes. A key action for hospitals is to make their services easier to understand, including providing resources that accommodate the needs of culturally and linguistically diverse families. These resources will inform parents of advocacy and support services that are available, such as interpreters, disability supports, Indigenous supports. The resources will intentionally acknowledge that parents are the experts in understanding their children.

It needs to be acknowledged that parents can bring their child to any ED or urgent care centre with serious illness or with concerns about non-emergency conditions. The systems in place need to allow all services to address these issues.

There is a need to develop the skills required for care of acutely unwell children in the ED and UCC in all health professionals and not just for paediatric specialists. An urgent requirement is to spread understanding across the system of the signs and symptoms that show children are sick. The challenges that clinicians face in understanding when a child is seriously ill reinforces the need for clinicians to listen to the parents. It is important that the response to these issues is actioned at a health system level, rather than the onus being only on individual health services.

Regional and rural health services have an appetite for learning from a specialist paediatric network which can improve their paediatric capability. Other states have also demonstrated this to be an effective collaboration. In service planning and codesigning networks there is a need to engage the regional voice and design systems with regional clinicians and executives. These services must meet the needs of acutely unwell children accessing regional and rural health services, including rapid links to retrieval services (PIPER).

Virtual ED services are available in some parts of Victoria, providing expertise in acute management of children at risk of deterioration when this is required. Video health services, as distinct from telephone health services have been used in some parts of Victoria and found to be very effective in connecting acutely unwell children to staff with expert paediatric skills. Utilising virtual connection to specialist paediatric services has become increasingly more accessible. This requires agreements between organisations and building capacity into an already built infrastructure to develop a reference point/centre with expertise that supports smaller centres. As part of this expansion, a robust evaluation process needs to form part of further uplift and ongoing operationalisation of these models of care. In the adult population, for example, Alfred and Mildura Hospitals have a relationship with video linked support for critical care that has been developed and tested through the Better Care Victoria innovation fund and the Critical Care Clinical Network. The Virtual Paediatric ED, initiated by The Northern Hospital, has been helpful for families, and the ambulance service. Multiple models of virtual video care have been implemented across the state. There is an opportunity to ensure such a system universally provides high level paediatric expertise, and potentially benefits through achieving synergy with the state-wide paediatric referral centre(s) and retrieval service. It will be necessary to determine responsibility for governance of such a service.

A planned, single entry point system for metropolitan, regional, and rural health services that provides paediatric assistance and assessment (e.g., by video consultation) is now needed. This will require determining a service leader that has a large and expanding paediatric ED and specialist workforce that is highly experienced and well connected with other required specialist services including PIPER.

# Getting over the hurdles

Care for acutely unwell children is affected by workforce shortages, with inability to employ senior decision makers meaning that many departments rely on junior and locum medical staff with variable paediatric experience and lack nursing staff experienced in paediatric care. This, combined with both an increase in demand from respiratory illnesses and delayed care, and increasing difficulty with access to inpatient beds, has put clinicians under pressure to make decisions quickly and to discharge patients rather than admitting them.

Regional or rural centres are more often staffed by locums with only a few years’ experience, and often working with limited supervision. These services must be intentionally and effectively linked with centres with specialist paediatric skills with the required knowledge and resources. This networked oversight and supervision can support non-specialist clinicians to make rapid and accurate treatment decisions for acutely unwell children.

A longer-term strategy for acutely unwell children that should be explored, is for junior doctors in training and post-graduate level trainees in emergency medicine, general practice, anaesthetics, and intensive care to be given more exposure to acute paediatrics in their training, so they feel able to consider themselves 'paediatric clinicians'. Current training requirements are not meeting the system’s needs. The attention to paediatric expertise is lacking in many training programs and reflects a mismatch between what is observed in the paediatric knowledge and skills of trainees beginning speciality training, with the assumptions made by their training college. This is an ongoing point of contention in the field of emergency medicine and paediatric emergency medicine. Nurses in under-graduate training would also benefit from more acute paediatric clinical experience during their preparation for registration. In addition, there is an opportunity to enhance the nursing skills and support with the use of Nurse Practitioners in the varied clinical environments for which children are cared for, including our EDs and UCCs.

Codesigning a safe system of care for acutely unwell children will require substantial reform in medical and nursing education, so that paediatrics is a general skill, not just a specialty. The non-specialist paediatric clinician will require specialist paediatric support in real-time for the more unwell patients. Currently in Victoria, there is a disconnect between the "accepted" level of paediatric knowledge and capability with what the system requires to be safe. A safe system of care requires all clinicians caring for children to have a general set of paediatric skills, rather than accepting the status quo that providing services to children is often outside of their comfort zone, given that children comprise 30% of medical caseloads.

There are ongoing challenges with managing and prioritising paediatric presentations in emergency departments and UCCs. A lack of paediatric specific staffing is a barrier - one ED manager commented “We service 120,000 patients a year, mixed, with no paediatric specialty staffing after hours”. Access to resuscitation resources for deteriorating children can be delayed because of the number of unwell adults and the assumptions that the adults will be more unwell than children (as paediatric presentations have a greater proportion of lower acuity). Mixed emergency departments have less access block for paediatrics than adults. Therefore, EDs with dedicated paediatric areas often find these used to house adults waiting for an inpatient bed, reducing access to timely care for the children. ED staff are less familiar with children and even some senior staff prioritise seeing the adult patient with which they are more comfortable. All these factors reduce the perceived importance of the child and often leave the least experienced clinician to manage them.

Opportunities exist to understand ED paediatric demand and capability and ensure appropriate resources are in place including paediatric staff where needed and quarantined space. In EDs and UCCs with lower paediatric presentations a paediatric specific area that is child friendly and away from adult patients, should be mandated.

The strength of ViCTOR chart is the ability to track and trigger but services caring for acutely unwell children can lack the capacity, specialty, or resources to follow up. In particular, there is often lack of staff to constantly visualise children in the waiting room and they're mixed with adults. The challenges inherent in Victoria’s devolved governance model were expressed; “it is difficult to mandate ViCTOR charts in a non-mandated system”. A process that audits the use and encourages and supports their integration into EDs is required. One helpful resource on assessing the vital signs of children is [Using Pediatric Vital Signs To Recognize Clinical Deterioration As Early As Possible - Tom Wade MD](https://www.tomwademd.net/using-pediatric-vital-signs-to-recognize-clinical-deterioration-as-early-as-possible/)

It was pointed out that over the past 20 years PIPER has built trust across the system. They provide advice, retrieval, and coordination of an appropriate destination for sick children. They currently are not resourced as a support for all paediatric decision making, but the health services trust and know this system that provides expert paediatric critical care advice and transport. When virtual consultation is required, we need to have confidence that the capability of the person being consulted is not in question and they truly represent someone with senior paediatric skills. This could be an extension of PIPER with the focus being on advice and guidance.

An embedded culture is required amongst clinicians that encourages advice seeking and sees seeking support as a natural part of clinical care and learning. This must include a culture that sees parents and caregivers as an integral component to the provision of that care. The system should provide timely advice for clinicians regarding paediatric assessment and management. To support care closer to home, the role of paediatric short stay or assessment units in either the ED or on the paediatric ward should be explored.

As children and families from our Aboriginal communities, and culturally and linguistically diverse backgrounds are over-represented in the events causing harm, services must improve communication and serve these children’s needs in a culturally sensitive way. Interpreter services need to be available from the front door of the ED in a timely manner. They need to be available in acute resuscitation events and when information is urgently required, as much as they are for planned outpatient visits. For a parent, being able to communicate your needs and those of your child is a right, not a desirable outcome, and having meaningful two-way communication is a must if we are serious about safety for these populations. Innovative solutions that provide new options are required.

To ensure safe systems of health care for acutely unwell children are embedded across Victoria, a programme of audit is required across hospitals. This should encompass audit of use of guidelines, VICTOR charts, use of escalation processes and availability and use of communication tools at a minimum.

### The issues and actions required to improve the safety of care for children are:

| Issues | Actions |
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| **Issue 1. Timely recognition and action when children are acutely unwell or deteriorating** | * Designing and providing an ‘alert card’ for parents of children with chronic medical conditions at increased risk of complications or deterioration.
* Wherever parents/carers indicate this is the third time within 7 days theyhave presented to an emergency department, urgent care centre, General Practitioner or called paramedics, ensure that a senior decision maker with paediatric skills reviews the child**.**
* Mandating use of the ViCTOR (Victorian Charts for Tracking Observation and Response) charts appropriate for age group by all clinicians (or ViCTOR parameters if using an electronic medical record), wherever children have vital signs recorded.
* Mandatory escalation of care within indicated timescales where the ViCTOR chart indicates a requirement for this, regardless of the clinical presentation.
* Wherever the ViCTOR chart indicates a high level of acuity within the Medical Emergency Team call range, the child is reviewed by a senior decision maker with paediatric experience (arranged locally, virtually, or remotely) prior to discharge from hospital.
* Regular clinical audit of compliance of the use of the ViCTOR chart as described above, across Victoria
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| **Issue 2. Ensure that Parents concerns are heard and acted on** | * Share the responsibility to detect deterioration in paediatric patient between parents and clinicians. Parents should be provided with clear processes to escalate their concerns, and clinicians should respond to parent-initiated escalation with the same level of concern as clinician-initiated escalation
* Mandate the implementation of a centralised “Hear Me” escalation process for parents/caregivers across all Victorian public hospitals.
* Clinicians should receive training in working with a differential diagnosis list, escalating concerns, and proactively assessing parents’ level of concern for their child as valid clinical knowledge/insight.
* Ensure that cultural and linguistic diversity is better represented in the future Consumer input to codesign of services for acutely unwell children.
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| **Issue 3. Put in place a system for the delivery of safe care to children 24/7** | * Establish a system of virtual consultation for clinicians managing children in the emergency department, with the appropriate infrastructure including training, and quality assurance, which provides video links to clinicians with paediatric expertise, and to retrieval services. This should use the VVED or PIPER infrastructure.
* Create an enhanced network of care for hospitals with paediatric expertise to be partners in care to a defined geographic population through video-health, networked with hospitals where paediatricians are not readily available
* Improved public awareness on the deteriorating child, including a health promotion program which further supports parents/carers to seek urgent assessment and care when their child is acutely unwell.
* Direct parents to the most appropriate service for their child to be assessed
* Ensure the state-wide paediatric guidelines are easily accessible at the point of care by clinicians at every hospital
* Implementation of paediatric clinical practice guidelines will be audited to ensure that clinicians without paediatric expertise are using the high-quality guidance available
* Every ED and UCC that treats children should have dedicated paediatric waiting and treatment areas with dedicated staff with paediatric skills. The requirement for this should be set out within the Emergency & Urgent Care Capability Framework.
* A capability framework for emergency and urgent care will be developed in 2023, including a specific focus on paediatric care. Monitoring of the framework will be consistent with other Capability Frameworks – with SCV input, informed by data from VAHI
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