

Inquest into the death of Kesler Lee James

Kesler Lee James was aged five years when he died on 25 February 2012 at the Mt Isa Base Hospital.

The coroner found Kesler's clinical needs exceeded the capability of the treating team in Mt Isa and the retrieval team initially tasked to transfer Kesler to Townsville Hospital.

Coroner Kevin Priestly delivered his findings of inquest on 3 June 2016.

The departments named in this response will provide implementation updates until the recommendation is delivered. Further information relating the implementation of recommendations can be obtained from the responsible minister named in the response.

Recommendation 1a

Each district health service take steps to ensure that every child admitted to a hospital has clinical observations charted and scores completed using Children's Early Warning Tool (CEWT)

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

The Patient Safety and Quality Improvement Service will meet with Queensland Health clinicians to plan an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

The Children's Early Warning Tool (CEWT) is a suite of tools designed to assist bedside clinicians (usually junior medical and nursing clinicians) in detecting critically abnormal physiology or progressive deterioration, and compel escalation of care where appropriate.

Children admitted to Queensland Health hospitals have their clinical observations charted and scores completed using CEWT.

Recommendation 1b

Each district health service periodically audit all hospitals to assess the extent of compliance with the required use of the CEWT, identifying any shortcomings and take appropriate remedial action to ensure full compliance.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

The Patient Safety and Quality Improvement Service will meet with Queensland Health clinicians to plan an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

The Children's Early Warning Tool (CEWT) is a suite of tools designed to assist bedside clinicians (usually junior medical and nursing clinicians) in detecting critically abnormal physiology or progressive deterioration, and compel escalation of care where appropriate.

The Queensland bedside audit is undertaken annually in all hospital and health services. The use and compliance of the CEWT was initially included in the October 2013 audit and measures documentation compliance on the CEWT.

The majority of hospital and health services conduct additional documentation and clinical tools audits throughout the year and table the results at safety and quality or governance meetings. Hospital and health services have reported they are taking appropriate remedial action to ensure compliance.

Queensland Health hospitals can additionally utilise an electronic audit tool via the online data collection system, Measurement Analysis and Reporting System (MARS), to audit completion of CEWT. To further enhance the current auditing process, a tool is being developed in MARS, that will additionally include questions relating to other sections of CEWT e.g. modifications, interventions and other observations.

Recommendation 1c

Each district health service review the role of the CEWT and publish guidelines or pathways appropriate to each hospital, addressing:

- i. pre-determined triggers for escalation
- ii. the nature of the escalation, preferable a stratified approach (MET call, consultant review etc.)
- iii. early notification to Retrieval Services Queensland (RSQ) of the possible need for retrieval
- iv. paediatric Intensivist consultation.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

The Patient Safety and Quality Improvement Service will meet with Queensland Health clinicians to plan an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

The Children's Early Warning Tool (CEWT) is a suite of tools designed to assist bedside clinicians (usually junior medical and nursing clinicians) in detecting critically abnormal physiology or progressive deterioration, and compel escalation of care where appropriate.

Clinicians follow existing triggers and escalation pathways on the statewide CEWT which includes a stratified approach to escalation. This is further supported by documented procedures for code blue and medical emergencies which are referenced in the CEWT procedure.

Individual hospital and health services have specific written procedures in place for their rural facilities which require immediate consultation with the paediatric service for a CEWT score persisting at >4 or deterioration in CEWT score of 2 points or more, or immediate consultation with the Retrieval Services Queensland clinical coordinator for critically unwell, deteriorating children or significant trauma.

Potential paediatric transfers or retrievals are discussed with the Children's Advice and Transport Coordination Hub, which includes consultation with a paediatric intensivist at Lady Cilento Children's Hospital or with Retrieval Services Queensland, depending on the nature of the child's condition.

Recommendation 1d

Each district health service incorporate into professional development programs for medical and nursing staff at hospitals, education in cognitive errors and limitations, in the context of the role of the Children's Early Warning Tool (CEWT) as a debiasing tool.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

The Patient Safety and Quality Improvement Service will meet with Queensland Health clinicians to plan an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

The Children's Early Warning Tool (CEWT) is a suite of tools designed to assist bedside clinicians (usually junior medical and nursing clinicians) in detecting critically abnormal physiology or progressive deterioration, and compel escalation of care where appropriate.

Hospital and health services provide regular education to new and existing staff as part of their professional development programs for medical and nursing staff, regarding the reasoning for and compliance with CEWT usage.

Children's Health Queensland Hospital and Health Services has a multidisciplinary online core and advanced skills course on the recognition and management of the deteriorating paediatric patient in partnership with simulation training on resuscitation in kids and includes a CEWT case study. The online education is being reviewed to further include cognitive biases.

The Minister for Health and Minister for Ambulance Services updated:

The Children's Health Queensland Hospital and Health Service continues to review its online education tools to include cognitive biases. The revised courses will be made available to Queensland Health clinicians when the review is completed.

On 9 April 2018 the Minister for Health and Minister for Ambulance Services responded:

Children's Health Queensland Hospital and Health Service reviewed the simulation training on resuscitation for kids (SToRK) program to develop video case presentations that incorporate cognitive error and limitations. The presentations will be placed on an online learning platform for access by all medical and nursing staff involved with the care of paediatric patients. This includes the use of the CEWT. The program will be launched by Children's Health Queensland in 2018.

On 1 November 2018 the Minister for Health and Minister for Ambulance Services responded:

In February 2018, Children’s Health Queensland Hospital and Health Service developed and published an online learning program, which is accessible to all Queensland Health staff who care for children.

This program includes education in cognitive errors and its application with the early recognition and management of sick children utilising the CEWT.

Recommendation 1e

Each district health service ensure the CEWT charts accompany children when transferring between facilities.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

The Patient Safety and Quality Improvement Service will meet with Queensland Health clinicians to plan an approach to effectively implement the coroner’s recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

The Children’s Early Warning Tool (CEWT) is a suite of tools designed to assist bedside clinicians (usually junior medical and nursing clinicians) in detecting critically abnormal physiology or progressive deterioration, and compel escalation of care where appropriate.

CEWT charts accompany children when transferring between facilities, excluding hospitals with integrated electronic medical record sites. Hospitals utilising integrated electronic medical records have immediate access to all documentation.

Inter-hospital transfer guidelines require commencement of a CEWT chart prior to transfer to ensure baseline measures are recorded for future comparison.

Recommendation 1f

Each district health service ensure children re-presenting in a short timeframe with the same diagnosis have their observations plotted on the same CEWT chart.

Response and action: the recommendation was not implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

The Patient Safety and Quality Improvement Service will meet with Queensland Health clinicians to plan an approach to effectively implement the coroner’s recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

The Children’s Early Warning Tool (CEWT) is a suite of tools designed to assist bedside clinicians (usually junior medical and nursing clinicians) in detecting critically abnormal physiology or progressive deterioration, and compel escalation of care where appropriate.

In consultation with clinicians, it was identified that the previous chart cannot be directly reused once the prior episode of care has been closed. The integrated electronic medical record also closes an episode of care once a child is discharged.

Instead, a letter will be sent to the directors of paediatrics requesting hospital and health services review their systems to ensure clinicians compare observations from previous admissions when available to inform care. Progress on the recommendation will be reviewed at a following directors of paediatrics forum.

Recommendation 1g

Each district health service ensure that administrative arrangements be in place to facilitate the electronic scanning and transmission of the CEWT charts on a 24/7 basis.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

The Patient Safety and Quality Improvement Service will meet with Queensland Health clinicians to plan an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

The Children's Early Warning Tool (CEWT) is a suite of tools designed to assist bedside clinicians (usually junior medical and nursing clinicians) in detecting critically abnormal physiology or progressive deterioration, and compel escalation of care where appropriate.

Hospital and health services have administrative arrangements in place to facilitate the electronic scanning and transmission of CEWT charts on a 24/7 basis.

Recommendation 2

Each district health service to ensure every child admitted to a hospital who is critically unwell and may require retrieval to a higher level care facility is discussed with a paediatric intensivist in conference with Retrieval Services Queensland (RSQ), and the treating doctor as soon as possible, to develop a consensus clinical management plan. The plan should, amongst other things, take into consideration an assessment of the risk of deterioration during the retrieval period and contingency plans for the capability to respond.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

The Patient Safety and Quality Improvement Service is planning an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

Hospital and health services report that processes are in place when a critically unwell child is admitted to a hospital and may require retrieval to a higher level care facility. As part of the process, a clinical management plan is developed with a paediatric intensivist in consultation with Retrieval

Services Queensland and the treating doctor on an individual case management basis. The current processes take into consideration an assessment of the risk of deterioration during the retrieval period and contingency plans, including the capability to respond.

Retrieval Services Queensland and the Patient Safety Quality Improvement Service are making improvements to the current processes. A standardised statewide critical care management plan is being developed which will expand the current clinical management plan, to include the children targeted in recommendation 5 (i.e. children with acute cardiac conditions).

The critical care plan will support improved effectiveness of clinical care for a critically unwell child as part of the retrieval process and management strategy.

The Minister for Health and Minister for Ambulance Services updated:

A draft statewide critical care management plan was developed for critically unwell children who may require retrieval to a higher care facility. The management plan, developed in consultation with the intensivist and Retrieval Services Queensland, will ensure that a paediatric intensivist is involved in discussions at an early stage, providing strategies for care including an acute resuscitation plan, monitoring plan and early escalation for retrieval services. The document will act as a prompt to action any deterioration in the patient and escalate care. The management plan will be distributed to the referring facility and the accepting tertiary facility.

Retrieval Services Queensland is implementing a new digital system and will assess the appropriateness of including the template into their system as part of their retrieval process and management strategy.

The draft management plan requires further development and endorsement prior to distribution to Hospital and Health Services with instructions on how to use the document.

On 9 April 2018 the Minister for Health and Minister for Ambulance Services responded:

The statewide critical care management plan for critically unwell children was endorsed and incorporated into the Retrieval Services Queensland web-based information system (Brolga). It requires a paediatric intensivist is involved in discussions at an early stage. The plan documents the discussion with the paediatric intensivist and the treating doctor/s and includes an assessment of the risk of deterioration before and during the retrieval period including a contingency plan for the capability to respond. The plan is documented in Brolga as per recommendation 6 (below).

Recommendation 3

The Townsville Hospital be additionally resourced (time, training and equipment) to enable paediatric intensivists and paediatric intensive care nurses to participate in the retrieval of critically unwell children, if that level of care is considered necessary. The current participation is not resourced and if that continues, may impact on the availability of that capability.

Response and action: implementation of the recommendation is in progress.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

The Townsville Hospital is considering the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

The Townsville Hospital is negotiating the funding required to enable paediatric intensivists and paediatric intensive care nurses to participate in the retrieval of critically unwell children, if that level of care is considered necessary.

The Minister for Health and Minister for Ambulance Services updated:

The Department of Health initiated a review of paediatric and neonatal retrieval services in Queensland to inform the development and implementation of a state wide neonatal and paediatric medical co-ordination and retrieval service, supported by an operational and governance framework. The objectives of the review include:

- assist relevant hospital and health services in the provision of paediatric and neonatal retrieval services
- review current funding arrangements for paediatric and neonatal retrieval services and identify possible efficiencies across funded hospital and health services
- ensure optimal integration within and governance oversight by Retrieval Services Queensland.

A working group is being convened to undertake the review. Senior paediatric medical and nursing staff from the Townsville Hospital and Health Service represent the organisation on the working group and to provide expert advice to inform the outcomes of the review.

Paediatric intensivists do, on occasion, participate in retrievals of critically unwell children, however, this is a collegial response to a request for assistance by retrieval services and is unfunded. There is currently no budget for paediatric intensive care nurses to be trained or released to participate in these retrievals and therefore no opportunity for them to participate in these retrievals.

Pending the outcome of the statewide review, a funding commitment would enable both paediatric intensivists and paediatric intensive care nurses to participate in the retrieval of critically unwell children, if that level of care is considered necessary.

The Townsville Hospital and Health Service is waiting on the outcome of the review of paediatric and neonatal retrieval services in Queensland initiated by Department of Health. The outcome of this review will determine whether local hospital and health services participation is physical (present during the retrieval) or strategic (involved in the planning but not present during the retrieval) and the capacity to train and release paediatric intensive care nurses to participate in these retrievals.

On 9 April 2018 the Minister for Health and Minister for Ambulance Services responded:

The Department of Health's review of paediatric and neonatal retrieval services resulted in funding to implement additional services based in Townsville. Funding will enable both paediatric intensivists (senior medical officers and or registrars) and paediatric intensive care nurses to participate in the retrieval of critically unwell children, in cases where that level of care is considered necessary. The service will be available 24 hours a day, 7 days a week. Planning for the introduction of these services into Townsville is now well advanced.

A recruitment strategy is in development and recruitment for suitably qualified staff planned to commence in 2018.

On 1 November 2018 the Minister for Health and Minister for Ambulance Services responded:

Townsville Hospital received funding to implement the Townsville Paediatric Retrieval Service (TPRS). An implementation plan, consistent with the *Governance and Operational Framework, Statewide Paediatric and Neonatal Retrieval Services* was developed to operationalise the service. As identified in the framework, Retrieval Services Queensland (RSQ) operates as the system manager, and coordinator, for the delivery of statewide retrieval services (see recommendation 4). TPRS operates as a provider within this system for critically ill paediatric patients requiring retrieval in the North Queensland region. The model of care, equipment and personnel required to deliver the service are detailed in the implementation plan.

A process to ensure there is an appropriately skilled workforce to safely cover the TPRS roster will be developed. This will be done in a staggered 16-week process, working with similar facilities in South East Queensland, to develop the highly skilled workforce that is required to deliver the service. The service is planned to commence in November 2018.

Recommendation 4

The northern hub within Retrieval Services Queensland (RSQ) be expanded to provide 24/7 co-ordination of retrieval services. While in theory it is possible with current information technology to co-ordinate retrievals from Brisbane, the 'joined up thinking', personal relationships and local knowledge (amongst other elements of a resilient health care model) are missing with the potential to impact negatively on the quality of service.

Response and action: implementation of the recommendation is in progress.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

Retrieval Services Queensland is considering the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

The Aeromedical Retrieval and Disaster Management Branch are liaising with the Townsville Hospital and Health Service to discuss opportunities and potential solutions.

The Minister for Health and Minister for Ambulance Services updated:

Queensland Health commenced a project to develop and fund a more integrated paediatric and neonatal retrieval service for Queensland. A guiding principle is to provide a statewide service with a more equitable coordination and retrieval service for all Queensland communities. The paediatric model will include a dedicated paediatric medical coordinator 24/7 and processes to support the state. The project is well advanced with funding and models to be confirmed.

On 9 April 2018 the Minister for Health and Minister for Ambulance Services responded:

The project referred to in the previous update of paediatric and neonatal services is in the final stages. The governance and operational framework for paediatric and neonatal services and the service agreement for paediatric and neonatal retrieval services will be finalised in 2018. The key and mandatory component of the framework is the provision of 24/7 dedicated statewide paediatric medical coordination and retrieval teams, including a paediatric retrieval team from Townsville. An additional \$6 million was provided to the following paediatric and neonatal services responsible for retrievals: the Children's Health Queensland Hospital and Health Service, the Townsville Hospital

and Health Service (Paediatric ICU and Neonatal ICU), and NeoRESQ (Metro North Hospital and Health Service).

The service will be implemented upon finalisation and sign-off of the service agreement by Children's Health Queensland and Townsville Hospital and Health Services.

On 1 November 2018 the Minister for Health and Minister for Ambulance Services responded:

The Governance and operational framework, statewide paediatric and neonatal retrieval services, 5 March 2018 was completed and agreed to by the participating hospital and health services.

The Children's Health Queensland Retrieval Service and The Townsville Paediatric Retrieval Service, along with their respective hospital and health services executives are currently engaged in each providing an implementation plan to ensure the requirements of the governance and operational framework are met. This is a requirement of ongoing funding as outlined in the previous update.

The framework and supporting implementation plan specifically includes the provision of a collaborative 24 hour statewide paediatric medical coordination capability and a dedicated Townsville Paediatric Retrieval Service retrieval capability for North Queensland. The Aeromedical and Disaster Management Branch through Retrieval Services Queensland is assisting the Children's Health Queensland Retrieval Service and the Townsville Paediatric Retrieval Service to develop and implement their plans.

Finalisation and endorsement of the implementation plan by the two hospital and health services and the Department of Health in late 2018.

Recommendation 5

Queensland Health initiate the development of a statewide, evidence based clinical pathway for the management of children with acute cardiac conditions to ensure a stratified risk approach to timely access to the best available care within Queensland wherever the child resides.

Response and action: the recommendation is agreed to in part and is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

Queensland Health is planning an approach to implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

Queensland Health agrees in part to this recommendation. Cardiac conditions in children are rare and difficult to diagnose. A statewide critical care management plan will provide a practical substitute to the proposed clinical pathway. Clinicians have advised that this critical care management plan will provide improved management effectiveness to all acutely unwell children including those with acute cardiac conditions wherever they live in Queensland.

Retrieval Services Queensland and the Patient Safety Quality Improvement Service are making improvements to the current processes. A statewide critical care management plan is being developed which will improve the current clinical management plans, and include the children targeted in recommendation 5 (i.e. children with acute cardiac conditions).

The Minister for Health and Minister for Ambulance Services updated:

The draft individualised clinical management planning document (discussed in recommendation 2) will provide improved management strategies to all acutely unwell children including those with cardiac conditions. The document will ensure critically unwell children, with a suspected or known cardiac condition are escalated early in consultation with paediatric cardiac specialists to the most appropriate tertiary centre for care.

The draft management plan requires further development before it can be distributed to hospital and health services.

On 9 April 2018 the Minister for Health and Minister for Ambulance Services responded:

The statewide critical care management plan (discussed in recommendation 2) was endorsed and incorporated into the Retrieval Services Queensland web-based information system (Brolga). It will ensure that children with known cardiac conditions are escalated to a paediatric cardiac specialist and then transferred to the most appropriate tertiary centre for care.

Recommendation 6a

Queensland Health initiate, in collaboration with Retrieval Services Queensland (RSQ) and other stakeholders in retrieval services (e.g. Royal Flying Doctor Service, EMQ and Careflight), a consensus model of care for clinical management of acute patients requiring retrieval. The model should detail, amongst other things, requirements for early notification to RSQ.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

Queensland Health in collaboration with other stakeholders in retrieval services will meet to agree on an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

Early warning tools identifying risk of patient clinical deterioration for rural sites currently include a threshold for contacting Retrieval Services Queensland for involvement and consultation by appropriate specialist care and transfer. Retrieval Services Queensland has made the use of these tools mandatory, as part of the triage and ongoing monitoring process.

Recommendation 6b

Queensland Health initiate, in collaboration with Retrieval Services Queensland (RSQ) and other stakeholders in retrieval services (e.g. Royal Flying Doctor Service, EMQ and Careflight), a consensus model of care for clinical management of acute patients requiring retrieval. The model should detail, amongst other things, participants' access to the medical records, preferably on a shared platform.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

Queensland Health in collaboration with other stakeholders in retrieval services will meet to agree on an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

In September 2016, Retrieval Services Queensland gained approval to access the integrated electronic Medical Record (ieMR) solution. This does not include external stakeholders such as Royal Flying Doctor Service and LifeFlight.

The ieMR project will allow Retrieval Services Queensland to access the digital records in the four pilot Queensland Health facilities and will expand as ieMR is implemented to other Queensland Health facilities. Retrieval Services Queensland is identifying personnel, access and education for staff in the use of ieMR.

The Minister for Health and Minister for Ambulance Services updated:

Retrieval Services Queensland now has read-only access to the integrated electronic Medical Record (ieMR) service. This allows Retrieval Services Queensland access to the digital records in the four pilot Queensland Health facilities currently operating ieMR. Retrieval Services Queensland will gain access to the records of the remaining Queensland Health facilities as they commence using ieMR. This access is not currently available to external stakeholders such as Royal Flying Doctor Service and LifeFlight Retrieval Medicine.

Queensland Health is working towards Retrieval Services Queensland having 'write' access to ieMR, to allow further integrations of information. This is a more complicated activity requiring detailed planning, agreements and training. An implementation date will be discussed during the next stage of development.

On 9 April 2018 the Minister for Health and Minister for Ambulance Services responded:

In October 2017, Retrieval Services Queensland commenced using Broilga, a web-based information system for all aeromedical transfers. This programme provides instantaneous sharing of information within Retrieval Services Queensland and electronic communication of complete and current records to external service providers. Protocols and guidelines were established relating to the dissemination of this information between Retrieval Services Queensland and the external service providers.

Retrieval Services Queensland continues to have access to the Queensland Health integrated electronic Medical Record (ieMR) service, and gained access to a further two Queensland Health facilities who commenced using ieMR during July to December 2017. As the ieMR roll-out continues into other Queensland Health facilities, Retrieval Services Queensland will gain access to those records.

Recommendation 6c

Queensland Health initiate, in collaboration with Retrieval Services Queensland (RSQ) and other stakeholders in retrieval services (e.g. Royal Flying Doctor Service, EMQ and Careflight), a consensus model of care for clinical management of acute patients requiring retrieval. The model should detail, amongst other things, a shared communication platform facilitating contemporaneous communication with each team and team member.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

Queensland Health in collaboration with other stakeholders in retrieval services will meet to agree on an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

Retrieval Services Queensland is procuring an information system which will include clinical and logistical components of the communication and coordination process. The information system is currently for Retrieval Services Queensland coordination purposes and does not include other external parties such as Royal Flying Doctor Service and LifeFlight. As the project progresses, the aim is to enable other participants to have access to the information system appropriate to their involvement in the system. Until the information system is functional these participants can be provided with notes from the system.

In addition, Retrieval Services Queensland is enhancing the use of existing technology (video and telephone conferencing) with multiple parties to facilitate contemporaneous communication with each team and team member.

The Minister for Health and Minister for Ambulance Services updated:

Retrieval Services Queensland medical coordinators have access to remote videoconference on their personal devices. The Children's Health Queensland Retrieval Services and The Townsville Hospital paediatric intensivists have been educated on how to use the technology. Paediatric coordinators have access to telehealth (videoconference) facilities at the Lady Cilento Children's Hospital and The Townsville Hospital.

Retrieval Services Queensland continues to develop and implement an information system which includes clinical and logistical components of the communication and coordination process. Retrieval Services Queensland named the new system 'Brolga'. It will replace the paper-based system and will provide our service providers with real-time updates on current cases. The patient safety aspect of this significant change within Retrieval Services Queensland cannot be understated as it will impact on all components of the service, from point of retrieval through to expeditious review of cases. Retrieval Services Queensland is entering the user acceptance stage of the development of the system. Introduction of the new system is dependent on a number of factors including user acceptance, training and meeting communication technology requirements.

The next stage will include, allowing system access by stakeholders including contracted providers such as LifeFlight, Royal Flying Doctor Service and their retrieval teams.

On 9 April 2018 the Minister for Health and Minister for Ambulance Services responded:

Retrieval Services Queensland implemented a critical care video conferencing system which has the capacity to include relevant critical care and other specialists in video and teleconference to discuss acute patients requiring retrieval.

Additionally, Queensland Health implemented Brolga, which assists with communication and coordination of retrievals, provides real time updates on current retrieval cases and allows clinical notes to be shared electronically. Clinical data can be transferred from Brolga to external stakeholders (for example Royal Flying Doctor Service, Emergency Management Queensland and Carefight).

Recommendation 6d

Queensland Health initiate, in collaboration with Retrieval Services Queensland (RSQ) and other stakeholders in retrieval services (e.g. Royal Flying Doctor Service, EMQ and Careflight), a consensus model of care for clinical management of acute patients requiring retrieval. The model should detail, amongst other things, the co-ordinator RSQ, referring team, retrieval team, receiving team to jointly confer at the first available opportunity and agree a consensus clinical care plan for the retrieval.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

Queensland Health in collaboration with other stakeholders in retrieval services will meet to agree on an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

Retrieval Services Queensland is procuring an information system which will include clinical and logistical components of the communication and coordination process. The use of existing technology (video and telephone conferencing) is being used which enables multiple participants such as the Retrieval Services Queensland coordinator, referring team, retrieval team and receiving team to jointly conference (by teleconference or videoconference) at the first available opportunity and agree on a consensus clinical care plan for the retrieval.

The Minister for Health and Minister for Ambulance Services updated:

The current Retrieval Services Queensland practice is to ensure all appropriate participants confer at the first available opportunity. The introduction of the new information system 'Brolga' will further enhance this capacity on a shared communication platform as discussed in the response to recommendation 6c.

Brolga will provide a platform for real-time communication to the coordinator and retrieval team. The patient's vital signs will automatically be collected from the adult deterioration detection system and the children's early warning tool and tallied. Observations outside the normal range will trigger an alert to Retrieval Services Queensland to relay to the receiving clinical teams. In conjunction with the extensive clinical experience of Retrieval Services Queensland medical and nursing, this will ensure receiving teams are aware of a critically ill patient.

Brolga includes the capacity to include all relevant clinicians and stakeholders in a retrieval situation. A summary of the communication and consensus model of care can then be printed or sent directly to the relevant stakeholders.

Queensland Health will continue to develop the implementation strategy with consideration of information technology.

The next stage will include, allowing access to the system by contracted providers such as LifeFlight, Royal Flying Doctor Service and their retrieval teams.

On 9 April 2018 the Minister for Health and Minister for Ambulance Services responded:

The introduction of Brolga in October 2017 and video-conferencing supports early consultation involving Retrieval Services Queensland, the referring team, retrieving team and receiving team to

develop agreed critical care plans (as discussed in recommendation 2) for patients requiring retrieval. This is supported by protocols, guidelines and procedures.

Recommendation 6e

Queensland Health initiate, in collaboration with Retrieval Services Queensland (RSQ) and other stakeholders in retrieval services (e.g. Royal Flying Doctor Service, EMQ and Careflight), a consensus model of care for clinical management of acute patients requiring retrieval. The model should detail, amongst other things, access to further specialist/consultant advice.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

Queensland Health in collaboration with other stakeholders in retrieval services will meet to agree on an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

Retrieval Services Queensland developed and introduced a triage tool as a new process to access specialist advice for appropriate cases through the use of teleconferencing. The collaborative triage tool is used by the services involved in the aeromedical transfer of paediatric patients. Procedures are in place for paediatric referrals which include involvement of a regional paediatrician and paediatric intensivist in patient management planning, dependent on patient status.

Recommendation 6f

Queensland Health initiate, in collaboration with Retrieval Services Queensland (RSQ) and other stakeholders in retrieval services (e.g. Royal Flying Doctor Service, EMQ and Careflight), a consensus model of care for clinical management of acute patients requiring retrieval. The model should detail, amongst other things, respective roles and responsibilities of each team during the retrieval.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

Queensland Health in collaboration with other stakeholders in retrieval services will meet to agree on an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

A clear delineation of the roles and responsibilities of each team during retrieval is in place and effectively details the roles within each service throughout the coordination and retrieval process. This process is reinforced through the quality and governance system.

Recommendation 6g

Queensland Health initiate, in collaboration with Retrieval Services Queensland (RSQ) and other stakeholders in retrieval services (e.g. Royal Flying Doctor Service, EMQ and Careflight), a

consensus model of care for clinical management of acute patients requiring retrieval. The model should detail, amongst other things, the contents of the consensus clinical care plan including:

- i. an understanding of each teams capability
- ii. a detailed risk assessment about possible deterioration over the likely duration of retrieval (to definitive care) and contingency plans about what capability will be deployed by who and when (triggers)
- iii. monitoring and reporting to all teams on progress with implementation of the care plan.

Response and action: the recommendation is implemented.

Responsible agency: Queensland Health.

On 12 September 2016 the Minister for Health and Minister for Ambulance Services responded:

Queensland Health in collaboration with other stakeholders in retrieval services will meet to agree on an approach to effectively implement the coroner's recommendation.

On 25 January 2018 the Minister for Health and Minister for Ambulance Services responded:

Retrieval Services Queensland, Royal Flying Doctors Service and Lifelight (formerly Careflight) meet monthly to discuss clinical and system issues. The consensus model of care for clinical management of acute patients is considered and discussed at these meetings. Retrieval Services Queensland has numerous standard operating procedures, clinical guidelines, and procedures in place that address the individual parts of recommendation 6. The standard operating procedures are being reviewed by the senior nursing and medical group and is near completion. Once finalised they will be published on the Retrieval Services Queensland website.

The Minister for Health and Minister for Ambulance Services updated:

The Retrieval Services Queensland senior nursing and medical staff are in the final stages of reviewing standard operating procedures. The standard operating procedures include—but are limited to—team capability, risk assessment and contingency plans and the roles and responsibilities of stakeholders in a retrieval situation.

Responsibility for completion and approval of the consensus model is ongoing given that the paediatric specialists responsible for providing the advice are not under the governance of Retrieval Services Queensland.

Retrieval Services Queensland has the capacity to include the consensus model in their new information system (called 'Brolga') in the second enhancement of the system, however the process involved will need resolution.

All calls, communication and advice received by and teleconferenced by Retrieval Services Queensland are documented. This includes clinical care plans and advice regarding monitoring and response to deterioration.

The next stage will be the approval and publishing of the standard operating procedures. The Patient Safety and Quality Improvement Service, Children's Health Queensland Retrieval Services and The Townsville Hospital will develop a process to ensure a documented clinical care plan has clearly established responsibilities.

On 9 April 2018 the Minister for Health and Minister for Ambulance Services responded:

This recommendation was implemented when Brolga was introduced in October 2017. Brolga enables more efficient documentation and communication. Brolga incorporates standard operating procedures, including risk assessment and contingency plans, and the roles and responsibilities of stakeholders in retrieval situations.