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Appendices

1. Summary against scope

PricewaterhouseCoopers (PwC) was engaged by the ACT Health Directorate (ACT Health) to undertake a program of internal audit assignments as part of the 2016 Strategic Internal Audit Plan. Included in this plan was the review of Pathology Sample Management. This review was sponsored by Ian Thompson, Deputy Director-General, Canberra Hospital and Health Services.

The overarching objective of this review was to provide assurance to ACT Health that key controls associated with the labelling, management, monitoring and reporting of pathology samples are operating effectively.

The focus of the review was on:

- controls for ensuring samples are associated with the correct patients and that samples are managed, assessed, reported and used within appropriate timeframes; and
- whether controls are in place to ensure pathology results in 'urgent' cases have been actioned by the relevant ward.

The scope of the internal audit included collections from within the Canberra Hospital campus that were tested within the TCH Pathology Department. The scope included all types of samples and considered processes and samples for the 2016 calendar year. The review considered:

- Collection (including positive patient identification, labelling and control) within a sample of units selected;
- Monitoring and tracking of samples to ensure all are tested;
- Reporting within the agreed timeframes;
- Extent of use of the reporting in the sampled units; and
- Understanding the definition of 'urgent' applied by requesting areas.

The focus areas of the review are listed in the table below. Against each area, specific findings have been summarised and, where applicable, linked to relevant sections within the report. This summary should be read in conjunction with the remainder of the report and the background information provided at Appendix A.

Focus area	Summary of key findings	Finding Ref
Specimen collection (including positive patient identification, labelling and control) within a sample of units selected.	Instances of non-compliance with prescribed Specimen Labelling and Patient Identification procedures were identified from observations performed. The review noted that the number of incidents reported has remained consistently high over the years with no declining trends noted from the application of new policies, procedures and/or action plans. Concerns in relation to the functionality of the proposed eOrders system were raised by Pathology, particularly, in relation to capturing witness information where one was used.	4.1 4.3
Monthly and quarterly reporting of incidents.	Current incident reports provide excessive detail and do not highlight major incidents to help prioritise actions to be taken by Clinical Areas. Some updates have been made to recent monthly reports which categorises incidents between Major and Minor Incidents, however, this has not been applied consistently to quarterly reports prepared and reported to date. Application of thresholds for separate reporting to Clinical Areas may lead to major incidents go unnoticed.	4.2

2. Summary of results

The Pathology Division within the Canberra Hospital (TCH) provides specialist diagnostic services to assist clinicians in the diagnosis and treatment of illness and disease. In order to ensure integrity of results provided to clinicians it is imperative that patient samples are managed in accordance with relevant standards and clinical expectations.

An assurance map was recently completed for Pathology processes to provide a snapshot of risks associated with key processes and the assurances it gains over those risks. The outcome of the exercise was to identify assurance activities against the following two key processes as they relate to the "three lines of defence":

- Blood Transfusion Pathway
- Taking and Testing of Blood

A number of actions have been completed by ACT Health to date in order to address the issues identified which includes, but are not limited to:

- Reviews of multiple Wrong Blood In Tube (WBIT) and major mislabelling incidents using Root Cause Analysis methodology identifying non-compliance with Positive Patient Identification (PPID) procedure as a major contributing factor.
- Providing feedback on incident review findings to Clinical Areas.
- Engaging nursing /midwifery executives including CNC/CMC participation in the Blood Specimen Mislabelling Working Group (BSMWG).
- Development of local action plans by several Clinical Areas.
- Engaging high risk areas in investigation and improvement actions.
- Removing generic folders with patient identification labels from all Clinical Areas.
- Interviewing staff to understand Human Factors associated with specimen labelling.
- Developing quality initiative posters.
- Standardising classifications and definitions for incident reporting and data capture.
- Developing and trailing a self-reflection tool for staff involved in WBIT/Major Pathology Mislabelling incidents to critically analyse their own practice.
- Developing WBIT, Major Pathology Mislabelling Staff Performance Pathways (Nursing and Medical) to support the process for management of high risk incidents.
- Engaging the facilitator of Canberra Hospital and Health Services (CHHS) venepuncture course to highlight the risks of non-compliance with PPID within the program.
- A new E-learning package on Pathology Specimen labelling.

Actions that were in progress during the review included:

- Improving data collection consistency in RiskMan by aligning pathology incident reporting classifications for other WBIT/Major mislabelling with current transfusion definitions.
- Reporting all WBIT/ Major Pathology Mislabelling incidents as 'BIG DOT' events on the score card to ensure that each incident is investigated at a local level and in the reflection tool.
- Development of management pathways for Patient Identification errors originating from clerical/administrative processes.
- The Electronic Order Entry project's PPID (eOrders) to further assist in reducing WBIT and Major mislabelling incidents. This is discussed in more detail in Section 4.3.

In addition to the above, several policies and procedures and other informational materials are in place to guide ACT Health staff for correctly identifying patients and labelling Pathology specimens collected (refer to Section 4.1). The Pathology Division has also put in place several policies and procedures to assist them with their diagnostic services and help identify related incidents and reporting them to relative Divisions on a periodic basis. Incident reporting in relation to Pathology specimens are discussed in Section 4.2.

The Pathology Division maintains outstanding day books to monitor requests made. If a request remains outstanding for too long, a complaint is generated in Q-Pulse and gets reported within the Division's score card. Urgent requests are marked as "Urgent" and/or specimens received labelled with an "Urgent" sticker.

The results of these requests may be required due to the clinical urgency of the patient's case, for example determining a diagnosis for the patient's condition as fast as possible by excluding conditions that do not apply to the patient. Urgent tests are flagged by the Data Entry section of Specimen Reception as being urgent in Kestral which highlights the test by colouring them red in Daybooks to alert authorising officers that the request is urgent. Pathology prioritises all requests and specimens marked urgent. Results of urgent requests that are considered critical by Pathology, are phoned immediately when they are available to the requesting doctor or in the event of their unavailability, to a medical officer responsible for the patient or to the ward/unit/area where the request originated.

When Pathology incidents are identified, the Pathology area generally attempts to contact the collector or the Clinical Area to rectify the incident immediately e.g. in the instance of information mismatch between request form and specimen labels. For WBIT, collectors are usually required to perform a blood re-collection. However, WBIT events are only detected if there is a historical blood group/result within the laboratory information system and a mismatch with this historical data is identified by pathology. Where there is no historical data, these errors may go unnoticed.

While action plans has been developed by several Clinical Areas to address their WBIT/Major Pathology Mislabelling incidents, the implementation and outcome of all the actions has not been established. According to the monthly and quarterly incident reports reviewed (refer to Section 4.2), the number of incidents have remained consistently high over the past couple of years. Based on discussions with staff, the review noted that several investigations to date performed by ACT Health have predominately identified non-compliance and performance as the key contributors to these errors. The primary issue being staff not following the correct Patient Identification and Pathology Specimen Labelling Procedure. These issues have been further supported through observations (refer to Section 4.1) of blood collection and specimen labelling activities during this review.

Findings and areas for improvement

The following findings were identified during the review:

- Instances of non-compliance with prescribed Specimen Labelling and Patient Identification procedures was identified from observations performed.
- The number of incidents reported has remained consistently high over the years with no declining trends noted from the application of new policies, procedures and/or action plans.
- Current incident reports provide excessive detail and do not highlight major incidents to help prioritise actions to be taken by Clinical Areas. Some updates have been made to recent monthly reports which categorises incidents between Major and Minor, however, this has not been applied consistently to quarterly reports prepared and reported to date.
- Application of thresholds for separate reporting to Clinical Areas may lead to major incidents go unnoticed.
- Concerns in relation to the functionality of the proposed eOrders system were raised by Pathology, particularly, in relation to capturing witness information where one was used.

Further details in relation to each of the above areas are included within Section 4 of this report. Each finding/issue identified during the review has been assigned a risk rating based on the Risk Rating Framework attached as Appendix B.

3. Management signoff

This report has been reviewed and discussed with the following stakeholders who have had the opportunity to express any comments on the findings and recommendations outlined in this report.

20/11/2016

Ian Thompson
Deputy Director-General, Canberra Hospital and Health Services
ACT Health

Date

14/12/16

Dr Peter Collignon
Executive Director, Pathology

Date

15/12/16

Sarwan Kumar
Director, Internal Audit and Risk Management
ACT Health

Date

19/12/2016

Adrian King
Partner
PwC

Date

4. Detailed findings

4.1. Compliance with policies and procedures

High Risk Rating

Finding

A number of policies and procedures have been implemented to prevent Pathology specimen misidentification incidents. The Standard Operating Procedure (SoP) "Patient Identification: Pathology Specimen Labelling" (Document ID: DGD12-024) was the key procedure in place that defined the correct process that Health Directorate staff must follow when identifying a patient and accurately labelling Pathology specimens collected from that patient.

Observations were performed for a sample of collections at Ward 14B and the Emergency Department to check whether current practices comply with the SoP. A total of 15 observations were performed from which: 4 collections were completed by Pathology staff at Ward 14B; 6 collections were completed by Ward staff at Ward 14B; and 5 collections were completed by staff at the Emergency Department. Instances of non-compliance with the SoP were identified in 9 of the 15 observations, and within these 9 observations, 13 exceptions in total were noted. The table below highlights the key findings from the observations performed:

Type of Finding	Observation #									Total
	3	5	6	7	8	9	10	12	13	9
	Pathology	Ward	Ward	Ward	Ward	Ward	Ward	Emergency	Emergency	
Patient not lucid, unable to respond coherently or cannot communicate using language of collector and a witness is not present	1					1				2
Did not establish patient's identification by asking patient to state full name		1	1	1	1		1		1	6
Collector delegated specimen collection and/or labelling to another person		1								1
Completed Pathology Request form not obtained by collector								1	1	2
Collector did not complete and sign Collector's Declaration on Pathology Request form								1	1	2
Total	1	2	1	1	1	1	1	2	3	**13**

We noted that the SoP was superseded by "Patient Identification: Pathology Specimen Labelling (Doc ID: DGD16-17)" effective from 7 July 2016 which was after the date of the above observations. However, the changes to the new SoP would not have impacted the above results.

Similar incidents were noted within the monthly and quarterly Incident Reports prepared by Pathology (refer to Section 4.2) and the number of incidents have remained consistently high over the past couple of years. These reports are provided to the Executive Directors for each Division at the end of the relevant period to

take necessary actions to help reduce the number of incidents for their area. Based on discussions with Pathology, we noted that very little feedback is received in relation to actions taken to reduce incidents.

Further discussions were held with senior staff from the Emergency Department in relation to the findings above, and we were advised that due to urgency of the cases, all steps from the SoP cannot be complied with by staff during blood collections.

Implication

Incorrect labelling of Pathology specimens has a direct relationship with patient morbidity and mortality. Specimens from one patient incorrectly labelled with the details of another can lead to pathology results from one patient being attributed to another and inappropriate changes to care being provided. While this is a significant risk, in transfusion the risk is more severe, as this error can result in the administration of incompatible blood, leading to life-threatening reactions.

Recommendation

ACT Health should:

- Ensure all ACT Health personnel who collect and label Pathology specimens and all personnel witnessing these activities follow the current procedure in place to minimise incorrect specimen labelling and misidentification of patients.

Management Response

Agree

All ACT Health staff responsible for the collection and labelling of pathology samples must follow the documented procedures as described in SOP DGD16-17. CHHS Strategic Executive meeting and the Medical Executive meeting will discuss the best approach to ensuring compliance by staff with the SOP and how compliance with the SOP will be measured.

Responsible Officer: CHHS Executive Directors/ Executive Sponsor Standard 8

Implementation Date: March 2017

Recommendation

- Ensure senior personnel e.g. Executive Directors and Quality Officers take necessary actions to address the incidents reported to them and provide timely feedback to Pathology to assist them better monitor future incidents.

Management Response

Agree

CSQU Patient Safety team will provide a quarterly report of pathology mislabelling incidents that includes the responsible manager follow up and actions to the Executive Sponsor of Standard 7. Significant issues will be escalated to the relevant CHHS governance committee. .

Responsible Officer: CSQU Executive Director/ Executive Sponsor Standard 7

Implementation Date: March 2017

Recommendation

- Ensure Pathology and Emergency Department agree on a procedure for blood collection and specimen labelling that is both reasonable and acceptable by both Departments to minimise future incidents.

Management Response

Agree

The Emergency Department will review practices and follow the positive patient identification requirements for the collection and labelling of blood samples. Where there are special circumstances and the blood is required to be collected in advance of the clinician review and request, the emergency department and Pathology will revise the procedure and specimen labelling procedure and determine a safe storage system for 'unrequested pathology samples'.

Responsible Officer: ED Critical Care/ ED Pathology

Implementation Date: March 2017

Recommendation

- Closely monitor trends in number of incidents after implementing eOrders (currently being piloted) and if improvements are identified then consider implementing across other Clinical Areas. eOrders is discussed in more detail under Section 4.3.

Management Response

Refer Section 4.3

4.2. Incident reporting

Medium Risk Rating

Finding

Currently, incident data are extracted from three reporting systems:

- RiskMan incidents are extracted by their "outcome" classification by Pathology executives and reported to ACT Health.
- Kestral incidents are reported via the monthly and quarterly reports.
- Q-Pulse incidents relate to external (non-ACT Health) client incidents.

In addition to the above reports, the Pathology area also produces Key Incident Monitoring & Management Systems (KIMMS) reports under the KIMMS program run by the Royal College of Pathologists of Australasia (RCPA). These reports contain periodic incident results in comparison with other participants which are major hospitals around Australia.

From these, the key reports identified for this review are the monthly and quarterly reports which list Pathology related incidents for the whole of ACT Health. Divisional incident reports are prepared quarterly and specific Clinical Area incident reports are prepared where there were over 100 requests made by the Clinical Area and the percentage of incidents was greater than 4%. The review noted that both Major and Minor incidents are counted towards the 4% incident rate, which means that Clinical Areas where major incidents in the last month may not have been reported if the number of requests were below 100 or the percentage was below 4%. Based on discussions, the review noted that these may be picked up when quarterly reports for all Divisions are prepared.

In addition, the review noted that incident reports are sometimes hard to read and only lists the number of incidents against an incident category without any indication of whether the incident is considered high or low risk. However, Pathology recently updated the monthly reports to further categorise incidents as Major or Minor but has not implemented this yet to the quarterly Reports.

Reports in relation to monitoring of samples and reporting within agreed timeframes were requested from Pathology, however, due to limitations of Kestral, these could not be provided in a timely manner.

Implication

If major incidents are not reported, understood and acted on in a timely manner by the Clinical Areas, even if under the threshold, this may lead to continued incidents happening within the area.

Recommendation

ACT Health should:

- Ensure Pathology uses a risk based approach to incident reporting and report all high risk incidents to Clinical Areas and only apply the thresholds to low risk incidents to enable responsible officers take necessary action within their Divisions in a timely manner for any number of major incidents.

Management Response

Agree

The Quality Department of ACT Pathology will review current reporting and apply a risk based approach to the reporting criteria with the documentation updated to reflect the changes agreed upon.

Responsible Officer: ED Pathology

Implementation Date: End of January 2017.

Recommendation

- Categorise incidents into Major and Minor for all reporting to ensure all high risk incidents are reported for immediate action and also consistency in reporting.

Management Response

Agree

The reports will be changed to categorise incidents into Major and Minor to ensure all high risk incidents are reported for immediate action and also the reporting format to break the report into 'Major Incidents' and 'Minor Incidents'

Responsible Officer: ED Pathology

Implementation Date: Implemented

4.3. eOrders

Low Risk Rating

Finding

The current ordering processes for Pathology tests at ACT Health are manual and performed via the use of paper request forms. This can lead to errors when writing requests (as observed in Section 4.1), when making the collection, in pathology reception when entering information into the Laboratory Information System and the Lab when transcribing what has been requested. Overall, there is no ability to audit who made the request, if a request had been made and when the collection occurs until it reaches Pathology reception.

It is anticipated that Electronic Order Entry project (eOrders) for Pathology will provide clinicians the ability to electronically order and collect their pathology requests through the use of a bar code scanner to scan the patients ID wristband (bar code will be unique to wristband) and the collectors ID prior to collection. Specimen container labels will be printed once collection is complete and sent to Pathology. The eOrders project includes the implementation of Positive Patient Identification (PPID) which will facilitate the electronic process for collection of Pathology specimens, ensuring the patients and the collector's identity is confirmed verbally and electronically at the bedside.

eOrders was implemented recently as a pilot in two medical wards, 11A that caters for Aged Care Patients and the Coronary Care Unit (CCU) which is for Acute Cardiac Patients.

Some concerns were raised by the Pathology Division in relation to the use of eOrders, the key one being eOrders' inability to record a witness if one was used during the collection process. Having a witness present and their sign-off on the collection forms is a key requirement of ACT Health's policy for blood collections, particularly, when the patient is not lucid, unable to respond coherently (e.g. unconscious/ confused) or cannot communicate using the language of the collector. Through further discussions, it was noted that a manual work around for this is an override feature available to collectors which lets them collect blood via the manual process.

Implication

In the absence of witnesses, particularly for patients that are not lucid, collectors may continue to make the same mistakes in relation to patient identification and specimen labelling even after implementing eOrders across ACT Health. Having the override feature available to collectors may lead to abuse of policy and staff opting for manual process instead.

Recommendation

ACT Health should:

- Ensure eOrders has the capability to capture witness information in addition to collectors ID prior to blood collections before going live across ACT Health.
- Monitor the results from the pilot program compared to pre-program results and then consider its implementation in other Wards.
- Ensure the override feature is used only in exceptional circumstances and not be available to all collectors e.g. a senior supervisor being able to authorise the override feature when a manual collection is the only option.

Management Response

Agree

Upon receipt of the evaluation report on the eOrders pilot program the executive sponsor should ensure that part of the recommendations for the program to be expanded is:

- Development and inclusion of the ability of the system to collect witness details
- Ensure there is a provision for the development of limiting the access to the override function in the system.

If all criteria have been met and the pilot program returns a positive report on reduced number of patient misidentification incidents then the recommendation to support the expansion of the program should be made to CHHS Strategic Executive.

Responsible Officer: eOrders Executive Sponsor

Implementation Date: Dependant on receipt of the eOrders pilot evaluation and benefits report. (TBC)

Appendices

Appendix A Objectives, scope and approach

Objective

The overarching objective of this review was to provide assurance to ACT Health that key controls associated with the labelling, management, monitoring and reporting of pathology samples are operating effectively.

The focus of the review was on:

- controls for ensuring samples are associated with the correct patients and that samples are managed, assessed, reported and used within appropriate timeframes, and
- whether controls are in place to ensure pathology results in 'urgent' cases have been actioned by the relevant ward.

Scope and Approach

The scope of the internal audit included collections from within the Canberra Hospital campus that were tested within the TCH Pathology Department. The scope included all types of samples and considered processes and samples for the 2016 calendar year. The review considered:

- Collection (including positive patient identification, labelling and control) within a sample of units selected;
- Monitoring and tracking of samples ensuring all are tested;
- Reporting within the agreed timeframes;
- Extent of use of the reporting in the sampled units; and
- Understanding the definition of 'urgent' applied by requesting areas.

The proposed approach to the review involved:

- Holding discussions with key staff and management to obtain an overview of policies and procedures for the management of pathology samples
- Analysis of available data to understand the extent of ordering and classifications
- Reviewing policies and procedures relating to management of pathology samples with consideration of relevant internal and legislative requirements and assessing whether these are appropriate and complete
- Testing compliance with documented policies and procedures for the management of pathology samples within TCH Pathology Department via a sample of Pathology specimens selected in conjunction with ACT Health. As per the scope of work this specifically included processes relating to:
  - Collection (including positive patient identification, labelling and control);
  - Monitoring and tracking of samples ensuring all are tested;
  - Management, assessment reporting and use of samples within the agreed timeframes;
  - Extent of use of the reporting in the sampled units; and
  - Ensuring that samples are allocated to the correct patients.

- Making recommendations based on discussions, systems documentation and the results of the review, in relation to:
  - Internal control weaknesses;
  - Efficiency and effectiveness deficiencies;
  - Exposure to risk;
  - Better practice comparisons; and
  - Legislative requirements.
- Aspects of good practice or areas of innovation found during the review was also reported on.

Disclaimer / limitation

Our Internal Audit work was limited to that described in this report. It was performed in accordance with the International Standards for the Professional Practice of Internal Auditing from the Institute of Internal Auditors, and in accordance with the ACT Government Internal Auditing Service Panel Deed – Contract Number 20929.220, dated 10 June 2013, between PricewaterhouseCoopers and the ACT Health Directorate. It did not constitute an 'audit' or 'review' in accordance with the standards issued by the Auditing and Assurance Standards Board, and accordingly no such assurance under those standards will be provided in this report.

This report and PricewaterhouseCoopers deliverables are intended solely for the ACT Health Directorate's internal use and benefit and may not be relied on by any other party. This report may not be distributed to, discussed with, or otherwise disclosed to any other party without PricewaterhouseCoopers prior written consent. PricewaterhouseCoopers accepts no liability or responsibility to any other party who gains access to this report.

Appendix B ACT Health's Risk Rating Framework

LIKELIHOOD

Descriptor	Probability of Occurrence	Indicative Frequency
Almost certain	Occurs more frequently than 1 in 10 tasks.	Is expected to occur in most circumstances.
Likely	1 in 10 – 100	Will probably occur.
Possible	1 in 100 – 1,000	Might occur at some time in the future.
Unlikely	1 in 1,000 – 10,000	Could occur but doubtful.
Rare	1 in 10,000 – 100,000	May occur but only in exceptional circumstances.

CONSEQUENCE

	Insignificant	Minor	Moderate	Major	Catastrophic
Business Process and Systems	Minor errors in systems or processes requiring corrective action, or minor delay without impact on overall schedule.	Policy procedural rule occasionally not met or services do not fully meet needs.	One or more key accountability requirements not met. Inconvenient but not client welfare threatening.	Strategies not consistent with Government's agenda. Trends show service is degraded.	Critical system failure, bad policy advice or ongoing non-compliance. Business severely affected.
Clinical	No injury No review required No increased level of care	Minor injury requiring: • Review and evaluation • Additional observations • First aid treatment	Temporary loss of function (sensory, motor, physiological or intellectual) unrelated to the natural course of the underlying illness and differing from the expected outcome of patient management.	Permanent loss of function (sensory, motor, physiological or intellectual) unrelated to the natural course of the underlying illness and differing from the expected outcome of patient management. A number of key events or incidents.	Patient death unrelated to the natural course of the underlying illness and differing from the immediate expected outcome of the patient management. All national sentinel events.
Environment (Broadly defined as the surroundings in which ACT Health operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation)	Some minor adverse effects to few species / ecosystem parts that are short term and immediately reversible.	Slight, quickly reversible damage to few species / ecosystem parts, animals forced to change living patterns, full, natural range of plants unable to grow, air quality creates local nuisance, water pollution exceeds background limits for short period.	Temporary, reversible damage, loss of habitat and migration of animal population, plants unable to survive, air quality constitutes potential long term health hazard, potential for damage to aquatic life, pollution requires physical removal, land contamination localised and can be quickly remediated.	Death of individual people / animals, large scale injury, loss of keystone species and habitat destruction, air quality 'safe haven' / evacuation decision, remediation of contaminated soil only possible by long term programme, e.g. off-site toxic release requiring assistance of emergency services.	Death of people / animals in large numbers, destruction of flora species, air quality requires evacuation, permanent and wide spread land contamination, e.g. caused by toxic release on-site; chemical, biological or radiological spillage or release on-site.
Financial	1% of budget or <$5K	2.5% of budget or <$50K.	5% of budget or <$500K.	10% of budget or <$5M.	25% of budget or >$5M.

	Insignificant	Minor	Moderate	Major	Catastrophic
Information	Interruption to records / data access less than ½ day.	Interruption to records / data access ½ to 1day	Significant interruption (but not permanent loss) to data / records access, lasting 1 day to 1 week.	Complete, permanent loss of some ACT Health or Divisional records and / or data, or loss of access greater than 1 week.	Complete, permanent loss of all ACT Health or Divisional records and data.
People (Staff, Patients, Clients, Contractors, OH&S)	Injuries or ailments not requiring medical treatment	Minor injury or First Aid Treatment required	Serious injury causing hospitalisation or multiple medical treatment cases.	Life threatening injury or multiple serious injuries causing hospitalisation.	Death or multiple life threatening injuries.
Property and Services (Business services and continuity)	Minimal or no destruction or damage to property. No loss of service Event that may have resulted in the disruption of services but did not on this occasion.	Destruction or damage to property requiring some unbudgeted expenditure. Closure or disruption of a service for less than 4 hours- managed by alternative routine procedures. Reduced efficiency or disruption of some aspects of an essential service.	Destruction or damage to property requiring minor unbudgeted expenditure. Disruption to one service or department for 4 to 24 hours - managed by alternative routine procedures Cancellation of appointments or admissions for number of patients. Cancellation of surgery or procedure more than twice for one patient.	Destruction or damage to property requiring major unbudgeted expenditure. Major damage to one or more services or departments affecting the whole facility – unable to be managed by alternative routine procedures. Service evacuation causing disruption of greater than 24 hours, e.g. Fire/ flood requiring evacuation of staff and patients/clients (no injury); or Bomb threat procedure activation, potential bomb identified, partial or full evacuation required (+/- injury).	Destruction or damage to property requiring significant unbudgeted expenditure. Loss of an essential service resulting in shut down of a service unit or facility. Disaster plan activation.
Reputation	Internal review.	Scrutiny required by internal committees or internal audit to prevent escalation.	Scrutiny required by external committees or ACT Auditor General's Office or inquest, etc.	Intense public, political and media scrutiny e.g. front page headlines, TV stories, etc.	Assembly inquiry or Commission of inquiry or adverse national media.

RISK MATRIX

			Consequence →				
			Insignificant	Minor	Moderate	Major	Catastrophic
			1	2	3	4	5
Likelihood ↑	5	Almost Certain	Medium (11)	High (16)	High (20)	Extreme (23)	Extreme (25)
	4	Likely	Medium (7)	Medium (12)	High (17)	High (21)	Extreme (24)
	3	Possible	Low (4)	Medium (8)	Medium (13)	High (18)	Extreme (22)
	2	Unlikely	Low (2)	Medium (5)	Medium (9)	High (14)	High (19)
↑	1	Rare	Low (1)	Low (3)	Medium (6)	Medium (10)	High (15)

The following management action is prescribed by ACT Health to address the above categories or risk:

- **Extreme risk** – all possible action is taken at Executive level to avoid and insure against these risks.
- **High risk** – general managers are accountable and responsible personally for ensuring that these risks are managed effectively.
- **Medium risk** – accountability and responsibility for effective management of these risks is delegated to line managers at an appropriate level.
- **Low risk** – these risks are managed in the course of routine procedures, with regular review and reporting through management processes.

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