

# Emergency Care Assessment and Treatment

Protocol development, consultation and review process

July 2023

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## Background

Emergency Care Assessment and Treatment (ECAT) is a statewide, co-designed project that aims to standardise nurse-initiated emergency care, reduce unwarranted clinical variation and improve patient experience and staff satisfaction.

Nurse-initiated protocols and models of care are well established in NSW emergency departments (EDs). Nurse-initiated protocols safely reduce the time a patient waits for treatment and the patient's length of stay in the emergency department, while improving the standard of care. However, protocols, education and governance frameworks vary across NSW. This can lead to variation in patient care and nursing practice, and affect nurses' ability to transfer their skills between hospitals. Duplication of local review and approval processes also occurs on a regular basis, leading to inefficiencies.

In 2018, the Agency for Clinical Innovation (ACI) Emergency Care Institute (ECI) commenced a project to create a statewide approach to nurse-initiated emergency care by adapting and building on existing educational frameworks, guidelines, and ED nurse-initiated protocols, in collaboration with the following partners:

- Clinical Excellence Commission (CEC)
- Health Education and Training Institute (HETI)
- NSW Ministry of Health (MoH) System Purchasing Branch
- NSW Ministry of Health (MoH) Nursing and Midwifery Office (NaMO)
- eHealth NSW
- ACI clinical networks
- Local Health District (LHD) and Speciality Health Network (SHN) executives
- ED clinicians across NSW.

The ECAT program aims to provide an improved experience for patients and increase staff satisfaction through supporting metropolitan and rural hospitals to provide consistent care across NSW. This will be achieved through the provision of standardised ECAT protocols, an education pathway and governance framework.

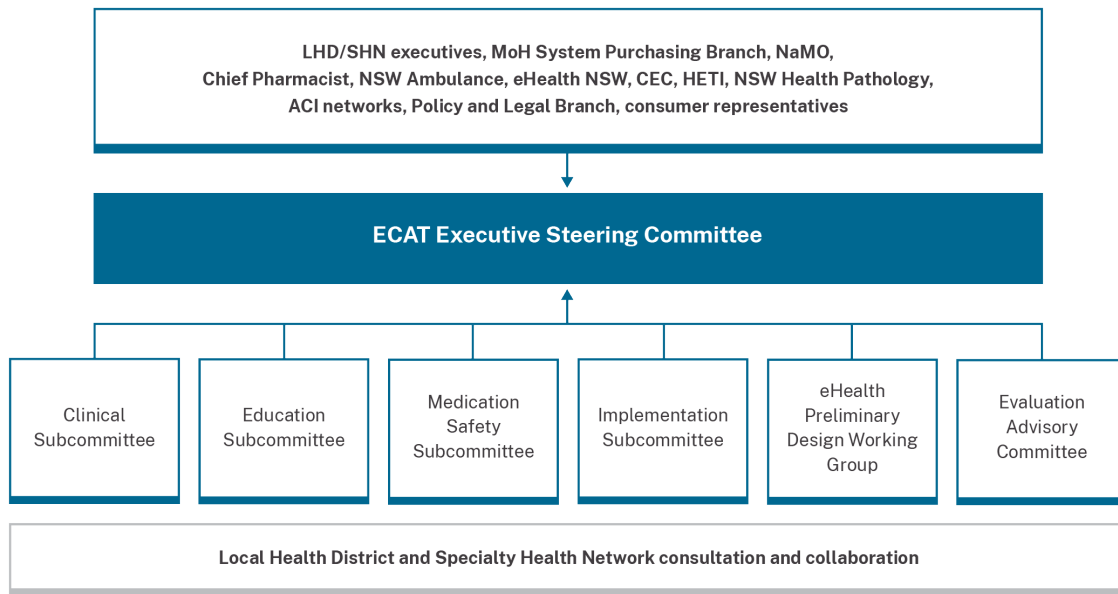
The initiation and planning phase of the ECAT project was governed by the ECAT Executive Steering Committee which included representatives from across the NSW Health system. This governance structure oversaw the ECAT subcommittees, which co-developed the ECAT protocols, revised education pathway and local implementation planning. Each ECAT subcommittee consisted of 20-40 representatives from across NSW LHDs and SHNs including metropolitan, rural and regional, adult and paediatric clinicians. Figure 1 details the governance structure of the initiation and planning phase of the ECAT program.

The ECAT protocols have been systematically developed to guide the initiation of emergency assessment, investigations and treatment. The protocols present best practice clinical guidance

and are based on a thorough evaluation of the evidence from existing local guidelines, published research studies, and expert consensus for the management of patients presenting to the ED.

The aim of this document is to detail the development and consultation process of the 41 adult and 32 paediatric ECAT protocols that have been developed, and the proposed approach for revision following publication.

**Figure 1: Governance structure of the initiation and planning phase of the ECAT program.**



## Development process

The development of the clinical protocols was led by the ECI ECAT program team who oversaw collaboration between the Clinical and Medication Safety subcommittees, ACI Evidence team and the ECAT co-chairs. Figure 2 provides a high-level outline of the development process.

### Foundation

Nurse-initiated protocols and models of care are well established in NSW EDs. Research on their effectiveness provided strong evidence of reducing time-to-analgesia,<sup>1-3</sup> time-to-treatment,<sup>4,5</sup> time-to-radiography<sup>6</sup> and overall length of stay,<sup>7</sup> as well as improved pain relief<sup>2,8</sup> and decreased admission rates.<sup>9-12</sup> The clinical protocols have built upon existing nurse-initiated models, which primarily include:

- NSW Rural Adult Emergency Care Guidelines (RAECGs)<sup>13</sup>
- NSW Rural Paediatric Emergency Care Guidelines (PRECGs)<sup>14</sup>
- Nurse Delegated Emergency Care (NDEC)<sup>15</sup>
- Illawarra Shoalhaven LHD-piloted protocols (ISLHD Pilot)

The ECAT protocols have also built upon existing NSW Health guidelines, standing orders and the Royal Children's Hospital Paediatric Improvement Collaborative Clinical Practice Guidelines (RCH CPG).<sup>16</sup>

### Clinical content

Clinical information was drawn from up-to-date, evidence-based guidelines through rapid literature review of peer-reviewed manuscripts, approved guidelines and grey literature. The clinical content of the protocols was primarily revised and constructed by the ECAT Clinical Subcommittee. Its membership of 30 representatives from across NSW was mostly comprised of senior nursing staff including clinical nurse specialists (CNSs), clinical nurse educators (CNEs) and clinical nurse consultants (CNCs).

The development of the clinical content included:

- initial subcommittee review for all protocols by two or three subcommittee members
- review and consolidation of subcommittee feedback by clinical co-chairs
- additional reviews of the paediatric protocols by the ECAT Paediatric Reference Group.
- revision and editing by an emergency nurse practitioner (NP)
- consultation with medical practitioners and/or subject matter experts (SME) to facilitate alignment with best practice and existing guidance
- resolution of any differing opinion received via feedback with subject matter experts, ECAT co-chairs and ECI Clinical Director (Fellow of the Australasian College for Emergency Medicine – FACEM).

## Medication safety

The protocols have been developed with the intention that they would allow a nurse with appropriate knowledge and skills to administer under protocol. There is an Authority instrument issued by the NSW Health Secretary under the Poisons and Therapeutic Goods Act 1966 and its Regulation, which enables a registered nurse working within NSW Health or an affiliated health organisation to initiate medications in compliance with the ECAT Policy Directive and ECAT protocols. Registered nurses using the ECAT protocols are therefore 'administering under protocol' and medication orders do not require a medical practitioner, nurse practitioner, or other practitioner to sign off.

The medication content within the protocols was reviewed by the ECAT Medication Safety Subcommittee and ongoing reviews have been supported by the CEC Medication Safety Leads. The 37 members of this subcommittee include pharmacists, CEC Medication Safety Leads, nurse unit managers (NUMs) and CNCs. Development of the medication content and checks for medication safety included the following measures:

- an initial subcommittee review of all protocols by two pharmacists and one clinician
- consolidation and review of subcommittee feedback by CEC pharmacist and Medication Safety co-chairs
- CEC pharmacist independently reviewed protocols against current guidelines to ensure medication dosage and indications are consistent within protocols
- where there are existing state guidelines or for more complex protocols, medical practitioners and/or subject matter experts were consulted to ensure alignment with best practice and existing guidance
- all medications included within the protocols were reviewed against the 2022 updated [NSW Health State Formulary](#) by CEC Medication Improvement Leads
- the CEC Antimicrobial Stewardship Expert Advisory Committee Working Group provided support to ensure appropriate dosing and guidance for administration of antibiotics
- the CEC Medication Safety Expert Advisory Committee (MSEAC) was briefed on the initial proposed development and approval plan prior to development (2021). Formal endorsement of the development and consultation process from a medication safety perspective was received in June 2023.

## Reviewing protocols

- At the end of the development process, each protocol was reviewed by a representative group of the ECAT co-chairs, paediatric reference group, emergency NP and the ECAT program team prior to progressing to formal consultation. This review was undertaken in addition to those outlined above in the earlier stages of development.

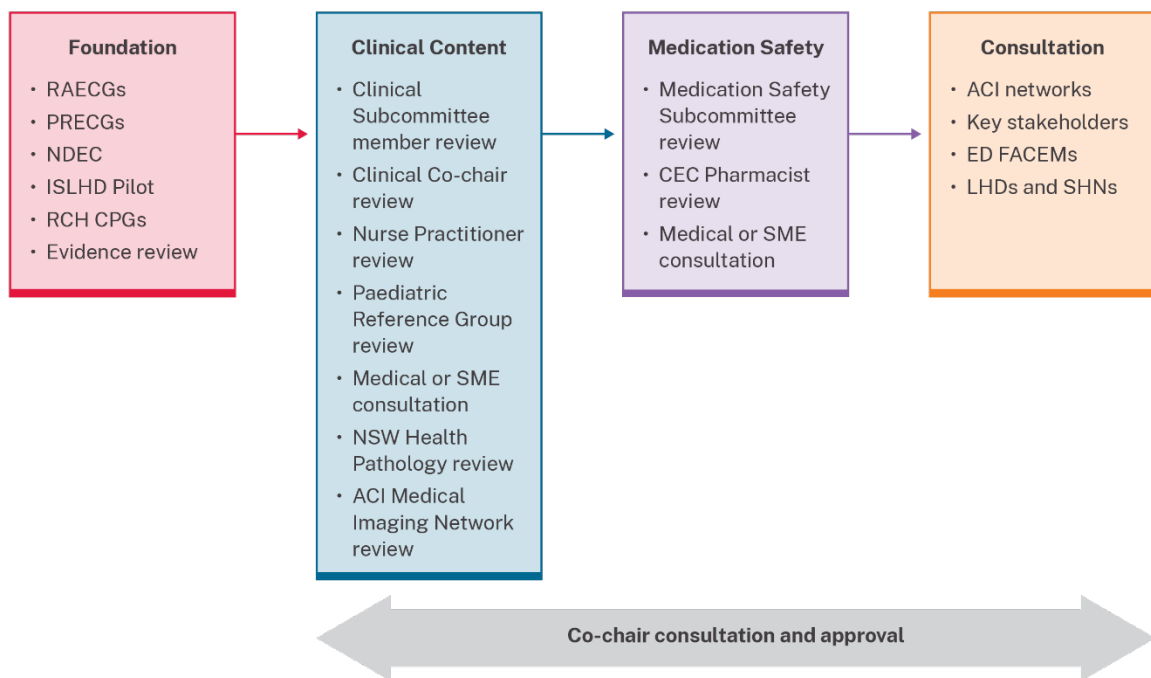
## Pathology

- NSW Health Pathology reviewed the initial order sets included in all ECAT protocols and provided initial feedback coordinated by the NSW Health Chief Pathologist.
- The ECI Clinical Director (FACEM), ECI Manager and emergency NP reviewed feedback from NSW Health Pathology.

## Radiology

- The ACI Medical Imaging Network assisted with the initial revision of the radiology requests included within all ECAT protocols.
- The ECI Clinical Director (FACEM), ECI Manager and emergency NP reviewed the initial order requests.
- A representative group including radiographers, medical physics specialists, medical imaging managers and radiation safety officers reviewed the radiology requests and provided a detailed report regarding the requests, as well as radiological safety and compliance. This feedback will extend to the revision of future nurse-initiated x-ray education packages.

**Figure 2. Development process flow chart**





## Consultation

### Formal consultation

An active and ongoing process of consultation was adopted during development of the ECAT protocols. Formal periods of consultation also occurred and included the following groups:

- ACI clinical networks (December 2022)
- ACI Leadership and Executive Team (December 2022)
- ED FACEMS (~30) including ECI committee representatives (December 2022–February 2023)
- ECAT subcommittee members (December 2022–February 2023)
- Key stakeholders, including NSW Ministry of Health branches, Pillars, NSW Pathology, NSW Ambulance and eHealth NSW (December 2022–February 2023)
- LHDs and SHNs (January 2023–February 2023), with request to distribute through relevant clinical specialty groups including: directors of Nursing and Midwifery, Medical Services, Clinical Governance, Emergency Medicine, Pharmacy, Allied Health, Radiology and Pathology; Emergency Nurse Managers; Chief Information Officers; and Chief Nursing and Midwifery Information Officers
- CEC Medication Safety and Quality Program (February–April 2023)
- CEC Patient Safety Improvement Program (January 2023–April 2023)
- CEC Medication Safety Expert Advisory Committee (February 2023–April 2023)
- Senior paediatric specific review workshops (March 2023–April 2023)

### Consolidation of consultation feedback

Following each round of consultation, feedback was collated and analysed by the ECAT program team with input from subject matter experts. This included seeking detailed expert opinion on any recommended changes that would have an impact on safety and/or quality. All decisions regarding accepting or declining suggested edits were recorded.

### Independent clinical governance committee

An independent committee, representative of the NSW Health system, was established to review the development and consultation approach of the ECAT protocols. Membership included: NSW Chief Paediatrician, NSW Chief Nursing & Midwifery Officer, College of Emergency Nursing Australasia, Australian College for Emergency Medicine, NSW MoH Principle Pharmaceutical Officer, CEC Patient Safety Improvement Programs Principal Lead, and NSW MoH Systems Purchasing Branch Principal Policy Officer. Endorsement for the ECAT protocols development and consultation approach was received in May 2023.

## Proposed protocol review and update process

This section outlines the proposed governance, processes and methods for the future revision, update and maintenance of the ECAT protocols.

### Risks

Inaccurate or outdated clinical protocols may result in processes that do not align with evidence-based best practice, and perpetuate outdated practises and interventions. The review process helps to uphold the currency and accuracy of the protocols.

Clinical guideline programs recommend three to five years, on average, as a reasonable period after which guidelines should be reviewed. This is because one in five guidelines is likely to be outdated after three years.<sup>17</sup>

The protocol review process is designed to mitigate this risk by:

- identifying protocols that contain evidence which may have been invalidated due to new evidence
- identifying protocols that are no longer relevant
- categorising protocols that require full review.

### Frequency of review and update

The currency of the ECAT protocols will be maintained through a review schedule with appropriate pre-approved intervals. Protocols will have a preliminary review one year after publication, then will follow a review cycle of three to five years. Where there is an urgent need, a protocol may undergo an immediate review as below at any point, regardless of these standard cycles.

### Immediate review

An individual protocol may be reviewed prior to a scheduled review if relevant new evidence or information is identified for consideration.

The triggers for an immediate review are:

- recommendations resulting from incident review, working closely with CEC to review Incident Management System (IMS) incident themes and safety concerns
- identification of any safety risk or notification directly submitted to the ECI and determined as requiring investigation by the ACI
- a change in the regulatory status of drugs or clinician scope of practice.
- a change in guidance from a national or state body (e.g., National Clinical Evidence Taskforce, Australasian College of Emergency Medicine, College of Emergency Nursing Australasia) or a directive from NSW Health, the Australian Government Department of Health or the CEC to constitute a change in protocol immediately.

## One-year review

All published and implemented protocols will have a preliminary review one year after publication date. This process will include the following:

- revision of new evidence published that would necessitate a significant change in clinical practice and updating links to resources.
- analysis of feedback received from clinicians through the ACI following implementation evaluation or directly submitted to ECI
- analysis of protocol use across the system and comparison against NSW ED presentation data
- analysis of feedback from ACI evaluation team and CEC on IMS incident themes, safety concerns arising from nurse focus groups and feedback from medical staff survey
- collation and analysis of all information by the ECAT program team, which will be presented to key stakeholders to determine if any immediate changes need to be made –any changes will follow the approval and endorsement process.

## Three-to-five-year review cycle

The three-to-five-year review cycle will involve conducting an evidence review and updating links to clinical resources. This process will be similar to the development process and will follow the principles outlined in the ACI Principles for developing clinical guidance. This process will ensure that the best evidence available at the time of review will inform clinical practice.

## Review approval

Following any review, recommended changes to a protocol/ or protocols will be reviewed by an ECAT Advisory Group. Consultation with key stakeholders will be undertaken by the ECAT Advisory Group and ACI Executive prior to approval.

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