



Best Practice Guideline

for the recording, transfer and
access of allergy information
in electronic health records





About the National Allergy Council

The [National Allergy Council](#) is a partnership between the [Australasian Society of Clinical Immunology and Allergy \(ASCIA\)](#) and [Allergy & Anaphylaxis Australia \(A&AA\)](#). The National Allergy Council aims to reduce the impact of allergies on the Australian community and healthcare system through the delivery of a wide range of evidence-based public health initiatives, educational resources and training programs.

Disclaimer

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Version control and reviews

This guideline will be reviewed at least biennially through consultation with key stakeholders and updates will be made where required. Each iteration will be updated with a new version number and date. All versions will be retained for the purpose of recordkeeping.

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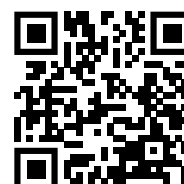


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Acronyms

ACSQHC	Australian Commission on Safety and Quality in Health Care
ADHA	Australian Digital Health Agency
AI	Artificial Intelligence
ASCIA	Australasian Society of Clinical Immunology and Allergy
CR	Clinical recommendation
EHR	Electronic health record
FHIR®	Fast Healthcare Interoperability Resources
GP	General practitioner
HPI-I	Healthcare Provider Identifier - Individual
HPI-O	Healthcare Provider Identifier - Organisation
OR	Organisational recommendation
SNOMED CT®	Systemised Nomenclature of Medicine Clinical Terms
TR	Technical recommendation



Definitions

Adverse reaction	Harmful or negative effect of a drug, not including therapeutic failure, overdose or expected effect of medication. ¹
Alert	The flagging of a patient's critical issue/condition to the clinician before the initiation of treatment. ² Alerts in relation to allergies are permanent avoidance statements that can only be changed or removed by appropriately trained healthcare professionals.
Allergic reaction	Immune-mediated adverse reaction. ³
Allergy/ Allergic	A chronic condition where there is an abnormal immune-mediated reaction to a substance that is ordinarily harmless. ⁴
Allergies	A list of substances to which a person is allergic. This document relates to the following allergies: • drug (medication) • food • insect (anaphylaxis only) • tick • exercise with/without food • latex • radiological contrast agents • idiopathic.
Anaphylaxis	A serious allergic reaction that is rapid in onset and might cause death. Commonly but not always Immunoglobulin E (IgE) mediated. ¹
Beta-lactam antibiotics	Antibiotics that contain a chemical structure called a beta-lactam ring: • Penicillin derivatives (penams) • Cephalosporins (cephems) • Monobactams • Carbapenems • Carbacephems.¹
Challenge test	Medically supervised test in which the allergen (usually food or drug) is taken/administered while the patient is being monitored for adverse effects at each stage. Considered to be the most reliable test for allergy assessment. ¹

Definitions

Clinician	A practitioner who delivers direct patient care, including diagnosis, treatment and preventive health advice. Also referred to as healthcare professional in this document. ⁵
Confirmed allergic	Allergy is considered certain or highly likely. The most reliable test is a challenge test. However, in certain situations where this may not be clinically safe or appropriate to perform, confirmation may be based on: • Reliable history or observed reaction, and/or • Positive blood test (e.g. specific IgE, basophil activation) or skin test in the presence of a consistent history.¹
Confirmed not allergic	Allergy to food or drug is ruled out by expert assessment. ⁶
Criticality	Assessment of the likely level of clinical risk associated with a reaction to a specific substance. ⁷
Delabeled/delabeling	An allergy diagnosis has been removed from the patient medical record, after assessment. ¹
Discoverability	Achieved by having information available, highly visible and accessible by public and private specialists, hospital doctors, GPs, individuals and their parents/carers. ⁸
Excipient	Substances within a drug that do not play an active role in therapy, but support the production of an effective drug. ⁹
Healthcare professional	A practitioner who delivers direct patient care, including diagnosis, treatment and preventive health advice. Also referred to as a clinician in this document. ⁵
Healthcare Provider Identifier	A unique number that enables patient records to be matched with the healthcare provider. HPI-I is a number assigned to individual healthcare providers. HPI-O is a number assigned to healthcare organisations.¹⁰
Idiopathic	When a trigger cannot be identified after evaluation, and after probable conditions have been ruled out. ¹¹
Idiosyncratic	Adverse reactions that occur through an unknown mechanism. ¹²

Definitions

IgE-mediated reaction	Manifestation caused by IgE antibodies, leading to degranulation of mast cells. Includes the sudden onset of one or more of the following; urticaria, angioedema, rhinitis, stridor, bronchospasm, anaphylaxis and anaphylactic shock. ¹³
Interoperability	The ability to seamlessly transfer information between systems within and across organisations. ¹⁴
Intolerance	An undesirable effect that may occur at low or usual doses, pharmacological or idiosyncratic mechanism. Reproducible non-immunological adverse reaction. ¹⁵
Intolerances	List of substances (drug or food) to which a person is intolerant.
Intolerant	Susceptible to a pharmacological/non-immunological adverse reaction to a drug, or non-immunological reaction to food. ¹⁵
Maculopapular rash	A generalised rash characterised by a combination of macules (flat, discoloured lesions) and papules (raised bumps). ¹
My Health Record	A national online record of patient health information that can be accessed and updated by the patient or specific members of the patient's healthcare team. ¹⁶
Picklist	Links entered allergy information to a populated list of probable allergies. It provides healthcare professionals with a more concise search that saves time, removes duplicates and minimises confusion. ¹⁷
Resolved	When clinical reassessment indicates that the individual is no longer allergic to the identified substance. ¹⁸
Serious adverse reaction	Reaction that: • is fatal or life-threatening • results in hospitalisation, permanent disability or disruption • requires urgent medical or surgical intervention.¹⁹
Serum specific IgE	Immune antibody of the IgE class directed against a specific substance (allergen) that can be measured in the blood serum. ²²
Severe allergy	Food allergy likely to result in anaphylaxis; ²⁰ drug allergy likely to result in anaphylaxis or severe cutaneous adverse reaction. ²¹

Definitions

Severe cutaneous adverse reaction (SCAR)	A group of potentially life-threatening drug reactions affecting the skin and often mucosal surfaces as well. Systemic involvement and complications can be severe. SCARs include: • Stevens-Johnson syndrome/toxic epidermal necrolysis (SJS/TEN) • Drug reaction with eosinophilia and systemic symptoms (DRESS) • Acute generalised exanthematous pustulosis (AGEP) • Generalised bullous fixed drug eruptions (GBFDE).¹
Skin test	Allergy tests used to identify allergens responsible for triggering allergic reactions, whereby a small amount of allergen (as in skin prick test) or larger defined amount of allergen (as in intradermal test) are introduced into the skin, to elicit a localised allergic response.¹
Stevens-Johnson syndrome (SJS)	Severe mucocutaneous reaction most commonly caused by medications characterised by extensive necrosis and detachment of the epidermis. Mucous membranes are affected in over 90% of patients, usually at 2 or more distinct sites (ocular, oral and genital).¹
Structured data	Information or data that has a code assigned, enabling transfer of data within and between systems.²³
Suspected allergy	Reaction that is yet to be medically confirmed as allergy.⁶
Tryptase	Enzyme that is abundant in mast cells and may be released into the blood when mast cells are activated by antigens binding to surface IgE. Tryptase release can occur in infections, autoimmune conditions and immune-mediated systemic reactions such as anaphylaxis.¹
Unstructured data	Information entered as free text and has no code assigned.²⁴
Urticaria	Typically, itchy raised spots or patches of skin that may be red, pink or pale in colour and may disappear and reappear elsewhere. The spots usually resolve completely within 24 hours, but they may be recurrent. Sometimes, but not always, due to an allergic reaction.¹

About this guideline

Purpose of this guideline

Due to the clinical risks associated with poor allergy record management, urgent reform is needed to prevent errors and appropriately manage patients with an allergy.²⁵ The development of standards and guidelines can help to achieve this.²⁶

The *Best Practice Guideline for the accurate recording, access and transfer of allergy information in electronic health records* defines the responsibilities of healthcare professionals, healthcare organisations and technical teams in managing patient allergy information. They have been developed to assist users of electronic health records (EHRs) to carry out their obligations to support clinical decision making that will ensure the best patient outcomes and reduce healthcare costs.

This guideline can be used as a training and education resource, to inform quality improvement initiatives and to support implementation of new systems and processes within healthcare organisations.

How was this guideline developed?

Three separate literature searches were carried out in January 2024, November 2024 and January 2026. The searches retrieved national and international guidelines and standards, peer-reviewed journal articles and government reports between 2009 and 2026. Search terms on PubMed included “allergy”, “documentation”, “digital” and “electronic health record”. Government websites including the Australian Digital Health Agency (ADHA), the Australian Commission on Safety and Quality in Health Care (ACSQHC) and the Australian Government Department of Health, Disability and Ageing were accessed to acquire relevant publications. Literature that was deemed relevant and of high-quality, informed the development of this guideline.

This guideline has been developed by the National Allergy Council in consultation with healthcare professionals (including end users), policy makers and technical experts. Engagement methods have included:

- National Allergy Council Digital Communication of Allergy Working Group meetings
- National Allergy Council Advisory Committee meetings
- In-person meetings with key stakeholders
- Sparked® community events
- Email communication with key stakeholders

About this guideline

Applicable healthcare settings

This guideline is applicable across all healthcare settings where allergy information is recorded, accessed, transferred or used for clinical decision-making. This includes, but is not limited to, general practice, hospitals, pharmacies, specialist services, community health services, residential aged care, emergency care, diagnostic services, allied health services and national digital health systems such as My Health Record.

Who is this guideline for?

This guideline is intended for all healthcare professionals, technical teams and organisations involved in recording, accessing, transferring or managing allergy information within EHRs. This includes medical practitioners, pharmacists, nurses, allied health professionals, aboriginal health workers, healthcare administrators, policy makers, digital health teams, software vendors and health information technology developers.

Using this guideline

This guideline should be used to support the accurate recording, access, transfer and management of allergy information within and between EHRs. The clinical, technical and organisational recommendations can inform healthcare practice, system design, staff training, quality improvement initiatives, policy development and implementation of interoperable digital health systems and processes across healthcare organisations.

Governing programs and legislation

This guideline is built upon the following federal programs, initiatives and legislation. It is important that healthcare providers comply with these as a minimum. There may be additional requirements within each jurisdiction.

1. Australian Government Department of Health, Disability and Ageing

- **Digital Health Blueprint and Action Plan 2023–2033**

The Australian Government's digital health vision between the years 2023 and 2033.²⁷

- **National Digital Health Strategy**

The delivery of data and technology across the healthcare sector, managed by the ADHA. This includes the rollout of My Health Record.²⁸

About this guideline

- **National Allied Health Digital Uplift Plan**

A five-year national plan supporting allied health professionals' digital engagement and integration within multidisciplinary healthcare teams.²⁹

- **National Healthcare Interoperability Plan 2023–2028**

Australia's national strategy for secure and seamless sharing of health information across systems to improve interoperability, connected care and safety.³⁰

- **National Clinical Terminology Service**

Australia's national service providing standardised clinical terminology systems supporting consistent, interoperable and accurate digital health documentation and information exchange.³¹

- **Fast Healthcare Interoperability Resources (FHIR)**

A healthcare data exchange standard enabling interoperable and secure sharing of clinical information between digital health systems and applications.³²

- **My Health Record**

An online record of patient health information that can be accessed and updated by the patient and specific members of the patient's healthcare team.²⁸ It contains key patient health information that features the following:

Shared health summary

An outline of a patient's health status at a point in time that has been created by the patient's nominated healthcare provider. It includes medical conditions, immunisations, medicines, allergies and adverse reactions.^{33, 34}

Event summary

A detailed description of a significant event that is relevant to ongoing patient care. It may contain medicines, allergies and adverse reactions, interventions, diagnoses and immunisations.^{33, 34}

Pathology and diagnostic imaging reports

Results of diagnostic imaging examinations and pathology tests.^{16, 33}

Medicines information view

A record of the patient's most recent prescription, dispensed medication and allergies and adverse reactions.^{16, 33}

About this guideline

Immunisation view

A summary of the patient's immunisation history including disease, date, vaccine details, source and dose.^{16, 33}

Discharge summary

An outline of the patient's hospital admission and required follow-up treatment. It includes the reason for admission, diagnoses and medication changes.^{16, 33, 34}

Specialist letter

Correspondence from the treating specialist to the referring general practitioner (GP), detailing the patient's treatment plan and required follow-up.^{16, 33}

Personal health summary

A consumer-entered section containing information about allergies, adverse reactions and current medications.¹⁶

2. Legislation

The following pieces of legislation underpin this guideline. There may be additional state and territory requirements.

- [National Health Act 1953](#)³⁵
- [My Health Records Act 2012](#)³⁶
- [Australian Immunisation Register Act 2015](#)³⁷
- [Healthcare Identifiers Act 2010](#)³⁸
- [Therapeutic Goods Act 1989](#)³⁹
- [Therapeutic Goods \(Charges\) Act 1989](#)⁴⁰
- [Privacy Act 1988](#)⁴¹
- [Electronic Transactions Act 1999](#)⁴²
- [Archives Act 1983](#)⁴³

About this guideline

3. Australian Commission on Safety and Quality in Healthcare

- **National Safety and Quality Health Service Standards**

The ACSQHC have developed the *National Safety and Quality Health Service Standards Second edition*⁴⁴ that details the expectations that consumers have on a health service organisation. This guideline supports the following actions:

Standard 1: Clinical Governance Standard – Healthcare records

- [Action 1.16](#) states

“The health service organisation has healthcare records systems that:

- Make the healthcare record available to clinicians at the point of care
- Support the workforce to maintain accurate and complete healthcare records
- Comply with security and privacy regulations
- Support systematic audit of clinical information
- Integrate multiple information systems, where they are used.”⁴⁴

- [Action 1.17](#) states

“The health service organisation works towards implementing systems that can provide clinical information into the My Health Record system that:

- Are designed to optimise the safety and quality of health care for patients
- Use national patient and provider identifiers
- Use standard national terminologies.”⁴⁴

- [Action 1.18](#) states

“The health service organisation providing clinical information into the My Health Record system has processes that:

- Describe access to the system by the workforce, to comply with legislative requirements
- Maintain the accuracy and completeness of the clinical information the organisation uploads into the system.”⁴⁴

About this guideline

Standard 6: Communicating for Safety Standard – Documentation of information

- [Action 6.09](#) states

“Clinicians and multidisciplinary teams use clinical communication processes to effectively communicate critical information, alerts and risks, in a timely way, when they emerge or change to:

- Clinicians who can make decisions about care
- Patients, carers and families, in accordance with the wishes of the patient.”⁴⁴

- [Action 6.10](#) states

“The health service organisation ensures that there are communication processes for patients, carers and families to directly communicate critical information and risks about care to clinicians.”⁴⁴

- [Action 6.11](#) states

“The health service organisation has processes to contemporaneously document information in the healthcare record, including:

- Critical information, alerts and risks
- Reassessment processes and outcomes
- Changes to the care plan.”⁴⁴

- **Acute Anaphylaxis Clinical Care Standard**

Australia’s national standard outlining best-practice recognition, treatment, documentation, communication and follow-up care for patients experiencing anaphylaxis.⁴⁵

4. Australian Health Practitioner Regulation Agency

- **Good Medical Practice**

[Medical records 10.5.1](#) states that doctors should maintain clear, accurate, current and accessible clinical records that document relevant patient history, assessment findings, investigations, diagnoses, treatments, medications, referrals and information provided to patients in a way that supports communication and continuity of care between healthcare professionals.⁴⁶

Background

Food and drug allergies are becoming increasingly prevalent worldwide, increasing the risk of morbidity and mortality from allergic reactions, including anaphylaxis and severe delayed medication reactions.⁴⁷ Reliable allergy information within patient health records is therefore essential to support safe clinical decision-making, prevent allergen re-exposure and enable appropriate allergy management by healthcare professionals.^{48, 49}

The ADHA is leading the digitisation of healthcare through initiatives such as the National Digital Health Strategy²⁸, the Digital Health Blueprint and Action Plan 2023–2033²⁷ and the National Healthcare Interoperability Plan.³⁰ Paper records are progressively being replaced by EHRs, improving the accessibility and discoverability of clinical information. When allergy information is complete, accurate and accessible, EHRs can improve continuity of care and reduce documentation related errors.^{28, 50–54}

Despite these benefits, allergy documentation within EHRs is often inconsistent, incomplete or inaccurate.^{49, 55} Missing or poorly documented allergies may result in patient re-exposure to allergens and potentially severe reactions.^{51, 56} Conversely, inaccurate allergy labels can lead to unnecessary avoidance of first-line therapies, particularly antibiotics, contributing to increased healthcare costs, longer hospital stays, antimicrobial resistance and poorer patient outcomes.⁵⁶ Inaccurate documentation of radiocontrast media allergies may also delay important diagnostic procedures.⁵⁶

Allergy information in EHRs may be recorded using structured coded fields or unstructured free text.⁵⁷ Structured documentation supports interoperability, enables information sharing between systems and activates clinical decision support tools such as allergy alerts.^{24, 56} Alerts are critical for medication safety because they can prevent prescription or administration of known allergens.^{24, 56} Structured entries also support medication surveillance, quality improvement and research initiatives.⁵⁸ Overreliance on free-text documentation limits interoperability, reduces visibility of important allergy information and may prevent allergy alerts from functioning effectively.^{59, 60}

Research has shown that current allergy information in EHRs is lacking and insufficient to support clinical decision making.^{49, 55} For example, the study by Manious et al.⁶¹ identified inconsistencies in the recording of peanut allergies in EHRs across various settings, and therefore differences in how the allergy was managed. A study by Phadke et al.⁴⁷ showed the majority of allergy safety events were caused by inaccurate or incomplete EHR documentation.

Transitions of care are particularly high-risk periods for medication discrepancies and allergy-related errors.⁶² The World Health Organization has identified medication safety during transitions of care as a global patient safety priority.⁶² Incomplete or outdated allergy lists can contribute to inappropriate alerts or missed warnings, increasing the risk of patient harm.⁵⁵ Alert fatigue is also a significant concern, with clinicians frequently overriding low-value or inaccurate alerts, potentially reducing responsiveness to critical warnings.^{55, 56}

Background

Many allergy safety incidents are linked to inaccurate documentation, poor communication, inadequate training, interoperability failures and suboptimal EHR design.⁴⁷ Additional challenges include inconsistent terminology, incomplete allergen databases, reliance on free text, poor usability and limited ability to distinguish allergies from adverse reactions or patient preferences.^{24, 57} Food allergy documentation presents further complexity, particularly within hospital food service systems where communication gaps between catering and clinical teams may result in incorrect meal provision and increased patient risk.^{56, 63} Errors in this process has caused at least one known fatality in Australia.⁶⁴ Poor transfer of dietary information also exists between community dietitian EHRs and other health service EHRs at points-of-care transition.^{65, 66}

The complexity of allergy documentation is compounded by the large number of digital systems used across healthcare settings.⁵¹ Patients often have information recorded across multiple systems, including general practice, hospitals, pharmacies, specialists and national systems such as My Health Record.⁵¹ These systems may use different terminology, formats and coding standards, resulting in duplication, conflicting information and reduced accessibility of clinically important data.⁵¹ Interoperability challenges are particularly concerning in emergency situations where timely access to accurate allergy information is essential.^{34, 67}

National reforms aim to improve connectivity and information sharing across the healthcare system. Initiatives such as My Health Record modernisation, Sharing by Default legislation, Health Connect Australia and the National Healthcare Identifiers Roadmap seek to strengthen interoperability and enable secure exchange of clinical information between providers and systems.^{29, 68, 69} Increasing adoption of Healthcare Provider Identifiers (Healthcare Provider Identifier – Individual [HPI-Is] and Healthcare Provider Identifier – Organisation [HPI-Os]), interoperable clinical information systems and electronic prescribing capabilities supports safer and more connected care.^{29, 68}

Healthcare professionals therefore have a responsibility to obtain, verify and document allergy information accurately and with sufficient detail to support informed clinical decision-making.⁴⁷ Reliable allergy documentation must be accessible to all members of the healthcare team and maintained throughout the patient journey.⁴⁹ Improving allergy documentation requires national standardisation, structured coding systems, improved interoperability, clinician training, effective alert functionality and strong governance processes.^{47, 57, 70}

Emerging technologies such as artificial intelligence (AI) may help improve digital workflows and reduce documentation burden through automated transcription and EHR integration.⁷¹ However, challenges related to data standardisation, privacy, regulation and user trust remain significant.^{71, 72} AI currently functions as a complementary tool rather than a replacement for clinical judgement or patient-centred communication.⁷¹

Benefits and outcomes

Implementing this guideline can provide healthcare professionals, healthcare organisations and patients with the following benefits:

Benefits to healthcare professionals

- ✓ Improves clinical decision-making by providing accurate and complete allergy information.
- ✓ Reduces administrative burden and duplicate documentation, allowing more time for patient care.
- ✓ Enables allergy delabeling programs and improves accuracy of patient allergy records.
- ✓ Improves food allergy management by supporting communication between clinical and hospital food service teams.

Benefits to healthcare organisations

- ✓ Improves interoperability and transfer of allergy information between healthcare systems and providers.
- ✓ Enhances safety in settings where there are people with cognitive impairment or communication barriers.
- ✓ Supports antimicrobial stewardship by reducing unnecessary use of second-line antibiotics, antibiotic resistance, hospitalisations and healthcare costs.
- ✓ Supports reporting, auditing, research and quality improvement through access to structured allergy data.
- ✓ Contributes to a more efficient and connected healthcare system with reduced hospital admissions and healthcare costs.

Benefits to patients

- ✓ Reduces medical errors, adverse reactions and risk of patient harm.
- ✓ Improves medication safety through allergy alerts and other clinical decision support tools.
- ✓ Enhances prescribing accuracy, including safer use of beta-lactam antibiotics after allergy assessment or delabeling.
- ✓ Reduces delays in imaging and avoids unnecessary premedication or withholding of contrast agents through accurate documentation.
- ✓ Supports safer care during emergencies when patients cannot communicate their allergies.
- ✓ Supports continuity of care and healthcare access for people living in rural and remote areas.^{28, 34, 52-54, 56, 73-8}

Barriers and facilitators to implementation

There are a number of barriers and facilitators to implementing this guideline in health service organisations. It is important that these are considered and addressed on an ongoing basis.

Barriers

Poor technical infrastructure (particularly in rural and remote areas)⁸⁴

System complexity, including poor system design or multiple clinical systems^{77, 78, 84}

Time consuming⁸⁵

Fear/perception of increased workload⁷¹

Negative attitudes towards EHRs and lack of awareness of benefits^{84, 89}

Lack of education, training and confidence in using digital health systems^{89, 91}

Lack of training or understanding of drug and food allergy documentation⁹²

Lack of funding⁸⁹

Poor interoperability and data compatibility⁸²

Inconsistent terminology⁸²

Unclear responsibility⁹⁵

Privacy concerns⁹⁶

Lack of clear national standards⁹⁷

Patients unable to provide an accurate allergy history⁸²

Patient reluctance (updating information to My Health Record)⁹⁶

Insufficient collaboration with end-users⁹¹

Barriers and facilitators to implementation

Facilitators

Reliable IT systems⁵⁴

Integrated technology⁸⁴

Easy to use and intuitive navigation^{84, 86-88}

Ease of access⁸⁴

Standardised terminology⁹⁰

Adequate healthcare professional education, training and resources^{84, 88}

Positive healthcare professional attitudes towards EHRs^{84, 87, 88}

Policies, guidelines and national standards that support uptake^{56, 86, 93, 94}

Government regulations that mandate recording, access and interoperability⁹⁴

Multi-disciplinary collaboration from the development phase^{88, 91}

Solid leadership and local champions⁸⁸

Patient trust⁹⁶

Support tools such as speech recognition and automated transcription⁷¹

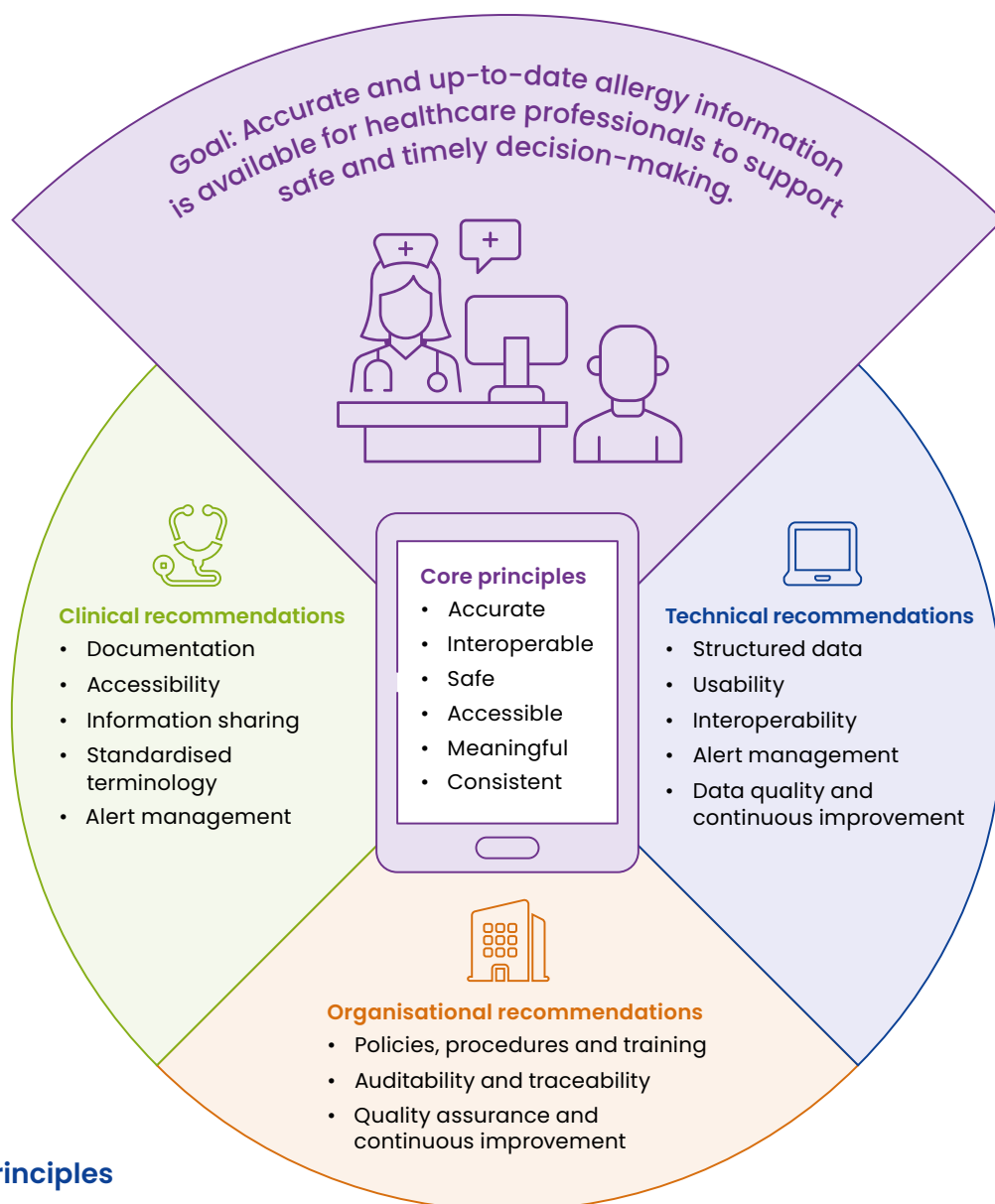
Adequate patient education⁹⁶

Adequate patient tools to facilitate updating information⁶⁷

Adequate support structures facilitating collaboration⁹¹

Best practice framework for allergy information in EHRs

This framework summarises the core principles and recommendations that underpin best practice for recording, transferring and accessing allergy information in EHRs. It brings together clinical, technical and organisational recommendations to support the core principles.



Core principles

Allergy information should be:

- **Accurate:** be recorded correctly and based on evidence-based diagnosis.
- **Interoperable:** be seamlessly shared and understood across healthcare settings.
- **Safe:** support good clinical care and minimise the risk of patient harm.
- **Accessible:** be available to the right health professional, at the right time and right place.
- **Meaningful:** contain sufficient and relevant detail to support clinical decision-making.
- **Consistent:** be recorded and presented in a standardised way across healthcare settings.

Summary of recommendations

Clinical recommendations (CR)

Clinical documentation and management

CR1 *Documentation of suspected allergic reactions*

Where a patient experiences an adverse event suspected to be an allergic reaction, details of the event must be documented in the EHR as soon as practicable.⁹⁸

CR2 *Updating confirmed allergies*

Where a suspected allergy has been clinically confirmed by an appropriately qualified healthcare professional, the patient's EHR must be updated promptly.^{6, 99, 100}

CR3 *Removing a suspected allergy*

Where a previously suspected allergy has been excluded following clinical assessment or challenge testing, the EHR must be updated promptly.^{6, 99, 100}

CR4 *Recording "No known allergy" status*

Where no allergy is known, the EHR should clearly record:

- "No known allergy" or
- "Nil known allergy".^{101, 102}

CR5 *Documentation of delabeled and resolved allergies*

Delabeled or resolved allergies must be documented within the EHR.^{6, 99, 100}

CR6 *Separation of allergy and other diagnosis information*

Conditions that belong within the diagnosis or problem list must not be recorded within the allergy list.⁹⁹

CR7 *Use of structured data*

Critical allergy information should be recorded using structured fields wherever possible.^{70, 73, 74}

CR8 *Completeness and quality of allergy documentation*

Allergy documentation should be complete and written in a way that avoids vagueness about the patient or what occurred. It should only contain information that is relevant to patient care and provide sufficient information that enables other healthcare providers to continue that care.^{33, 34}

Summary of recommendations

Accessibility and information sharing

CR9 *Appropriate access to allergy information*

Only healthcare professionals involved in the patient's care should access the patient's EHR.¹⁰³

CR10 *Timely access to allergy information*

Accurate and current allergy information must be accessible to all members of the patient's healthcare team.^{49, 51, 52}

Standardised terminology

CR11 *Use of standardised terminology*

Healthcare organisations and software systems must use nationally recognised standardised terminology for allergy documentation.^{104, 105}

CR12 *Use of specific allergen names*

Specific names (as opposed to class) of the food, drug, chemical or other agent should be entered when documenting the suspected or confirmed trigger.^{99, 106}

Alert management

CR13 *Clinically appropriate allergy alerts*

Records should accurately detail features of the reaction to ensure that only necessary alerts are fired (e.g. for IgE-mediated reactions such as drug-induced urticaria or severe reactions such as Stevens-Johnson Syndrome).¹⁰⁷

CR14 *Alert content*

Allergy alerts should be accompanied with the following information:

- reason for alert
- substantiation of the alert
- how the alert should be managed.⁵⁹

CR15 *Alert overrides*

If an allergy alert is overridden, reasons for overriding the alert as well as the outcome after exposure must be recorded and must be authorised by an appropriate healthcare professional such as a pharmacologist, allergy specialist or second consultant.^{59, 108}

Summary of recommendations

Technical recommendations (TR)

Structured documentation and data capture

TR1 ***Clear and consistent allergy records***

Allergy information should be recorded in a structured, standardised and prioritised format that enables healthcare professionals to promptly identify and act on critical information.¹⁰²

TR2 ***Coded fields***

Structured coded fields should be made available for the entry of critical allergy information rather than free text wherever possible.^{58, 99}

TR3 ***Terminology and coded system support***

EHR systems should recognise and support standardised allergy terminology and coding systems.¹⁰⁹

TR4 ***Retention of allergy information***

Resolved, removed or delabeled allergies may be removed from active summaries and alerts but must remain available within the patient's permanent health record.¹⁰²

System configuration and usability

TR5 ***System design for usability***

EHR systems must be designed to safely support allergy documentation, maintenance and clinical decision support.¹¹⁰

TR6 ***Point-of-care allergy access***

Drug allergy information should be available at all points of care where medication-related decisions occur.¹⁰¹

Interoperability and information exchange

TR7 ***Interoperability***

EHRs must support real-time interoperability and seamless exchange of structured allergy information across care settings.¹¹¹

Summary of recommendations

Alert management

TR8 *Alert prioritisation*

Allergy alert systems should prioritise clinically significant allergies and minimise unnecessary alerts.⁵⁹

TR9 *Order prevention alerts*

When the alert directs strict avoidance of the culprit allergen, the EHR should block the ordering of the substance that contains the allergen (e.g. an alert that interrupts and avoids the action from occurring).⁵⁹

TR10 *Management of delabeled allergy alerts*

Alerts for allergies that have been delabeled after challenge testing need to be deactivated, although the corresponding documentation needs to be retained. The activation of an alert if an attempt is made to re-add a delabeled allergy should be standard practice.^{59, 112}

TR11 *Allergy review*

Systems should support scheduled review and reassessment of historical or unverified allergy labels.^{75, 77, 111, 113}

TR12 *Updated allergy alerts*

Alerts need to be regularly updated in line with medical discovery maintaining digital optimisation. Updated cross-reactivity data should be provided to EHR vendors to ensure accurate alert logic.⁵⁹

Communication and transitions of care

TR13 *Information sharing*

Digital systems should support secure, structured and timely communication of allergy information across transitions of care.^{62, 114, 115}

Data quality, maintenance and continuous improvement

TR14 *Ongoing review*

Regular allergy reconciliation and data quality review processes should be undertaken to maintain accurate and current allergy records.^{75, 77, 111, 113}

Summary of recommendations

Organisational recommendations (OR)

Policies and procedures

OR1 *Recording of allergy information*

All healthcare professionals involved in a patient's care must be able to record, update and access allergy and adverse reaction information within the patient's EHR.^{116, 117}

OR2 *Governance and policy alignment*

Healthcare organisations must ensure that legislation and national standards and guidelines inform all policies and procedures related to digital communication and allergy documentation.^{16, 67, 118}

OR3 *National identifiers and interoperability*

Healthcare organisations must adopt and use national healthcare identifiers to enable safe and connected allergy care.¹¹¹

OR4 *Policy development and clinical documentation standards*

Organisations must establish clear and standardised policies for allergy documentation and system use.^{16, 45}

OR5 *Cybersecurity, privacy and ethical data use*

Robust cybersecurity protection policies and procedures must be in place and enforced to protect patient allergy data.^{33, 103} Security and access training should be undertaken before accessing EHRs for the documentation of allergy information.³⁴ This is a requirement for the use of My Health Record.³⁴

Infrastructure

OR6 *System infrastructure and sustainability*

Organisations must ensure infrastructure supports interoperability of patient allergy information.^{67, 119–121}

Summary of recommendations

Training and competency

OR7 *Workforce capability, training and digital readiness*

Healthcare professionals that record and access allergy information on EHRs should receive training to build knowledge and skills.^{119, 122-124}

Auditability and traceability

OR8 *Auditing, traceability and quality assurance*

Organisations must ensure systems that manage allergy information are auditable and continuously improved.^{120, 123}

Quality assurance and continuous improvement

OR9 *Continuous improvement and system optimisation*

Healthcare organisations should have a quality assurance process in place that monitors organisational engagement with the EHR, and strive for continuous improvement.²⁹



Recommendations





Clinical recommendations

This section is designed for clinicians (including medical practitioners, nurses, pharmacists and allied health professionals) responsible for maintaining accurate patient allergy information. It sets out clinical recommendations for how suspected, confirmed and resolved allergies should be documented, updated and managed within EHR systems. The recommendations aim to ensure patient safety and continuity of care by ensuring allergy records are complete, structured, consistently updated and can be accessed in a timely manner across healthcare settings to support safe clinical decision-making.

Clinical documentation and management

CR1 – Documentation of suspected allergic reactions

Where a patient experiences an adverse event suspected to be an allergic reaction, details of the event must be documented in the EHR as soon as practicable.⁹⁸

When a patient experiences an adverse event suspected to be an allergic reaction (either patient self-reported or while under care), the information should be entered into the allergy section of the patient's EHR to alert future healthcare providers to potential risks. Recording the event supports patient safety, helps prevent repeat exposure to suspected triggers, improves clinical decision-making and ensures continuity of care while the reaction is further investigated or confirmed.^{45, 98, 99}

Incident giving rise to the allergy record should be documented with the:

- term "suspected"⁹⁹
- severity of the reaction (mild, moderate, severe*)^{73, 99}
- date exposed to suspected trigger⁹⁹
- date of reaction onset¹⁰⁰
- time between initial exposure and onset of symptoms (reaction onset time)⁹⁹
- duration of reaction/s^{106, 116}
- manifestation^{99, 116}

**Severity recording should be reserved for healthcare professionals that have adequate knowledge to grade allergy severity. For allergies, severity should be based on symptoms e.g. maculopapular rash is low, urticaria is medium and anaphylaxis is high.⁹⁹ "Severe" should equal risk of being dangerous or life threatening, not just unpleasant rash or vomiting.*

- suspected trigger:
 - food
 - drug
 - radiological contrast agent
 - insect (anaphylaxis only)
 - tick
 - exercise with/without food
 - latex
 - idiopathic
 - other¹⁰⁰
- dosage of suspected trigger if drug (including number of doses and number of days on the drug prior to reaction onset)¹⁰⁰
- route of administration^{7, 116}
- formulation of suspected trigger^{99, 116}
- practitioner name¹⁰⁰
- patient must avoid statement¹⁰⁰
- clinical management description¹⁰⁰
- date of last known severe reactions (anaphylaxis; if applicable).

Suspected allergies should appear in the allergy summary, so that the suspected trigger can be avoided while the patient undergoes investigation.¹⁰⁰

It is important that the information is also uploaded to the patient's My Health Record so it is accessible across different healthcare settings and providers, as well as by the patient.^{16, 125, 126}

CR2 - Updating confirmed allergies

Where a suspected allergy has been clinically confirmed by an appropriately qualified healthcare professional, the patient's EHR must be updated promptly.^{6, 99, 100}

Once suspected allergies are **confirmed**, allergy information on EHRs should be updated with the:

- term "confirmed allergic"^{6, 99, 100}
- date confirmed allergic⁴⁶
- risk criticality (low or high)¹²⁷
- method of diagnosis (including assessment details and results)
 - clinical evaluation/history
 - supervised challenge

- skin test (skin prick, intradermal or patch)
- serum specific IgE
- tryptase
- other (genomic/ invitro, HLA typing, etc.)⁹⁹
- practitioner role (e.g. allergy specialist, nurse practitioner) that completed the assessment¹⁰⁰
- name of healthcare professional that completed the assessment¹⁰⁰

The following should also be recorded:

- whether an adrenaline device was prescribed (Yes/No)⁴⁶
- if an ASCIA Action Plan was provided (Yes/No).⁶

It is advisable that the ASCIA Action Plan is uploaded to the patient's EHR.

Following assessment and confirmation, the following information should also be reviewed and updated in the allergy section of the EHR where relevant:

- severity of the reaction (mild, moderate, severe*)^{73, 99}
- date exposed to trigger⁹⁹
- date of reaction onset¹⁰⁰
- timing of reaction/s^{106, 122}
- symptoms/description of reaction^{116, 122}
- trigger:
 - food
 - drug
 - radiological contrast agent
 - insect (anaphylaxis only)
 - tick
 - exercise with/without food
 - latex
 - idiopathic
 - other^{100, 116}
- dosage of trigger if drug (including number of doses and number of days on the drug prior to reaction onset)¹⁰⁰
- route of administration^{7, 116}
- formulation of suspected trigger^{99, 116}
- patient must avoid statement¹⁰⁰
- date of last anaphylaxis.

**Severity recording should be reserved for healthcare professionals that have adequate knowledge to grade allergy severity. For allergies, severity should be based on symptoms e.g. maculopapular rash is low, urticaria is medium and anaphylaxis is high.⁹⁹ "Severe" should equal risk of being dangerous or life threatening, not just unpleasant rash or vomiting.*

It is important that the specific trigger is recorded accurately in the allergy summary once confirmed. For example, if the patient reacted to amoxicillin and it was determined through assessment that they are allergic to all aminopenicillins and aminocephalosporins, “amoxocillin” should appear in the allergy and adverse reaction history, and aminopenicillins and aminocephalosporins should appear in the allergy and adverse reaction risk summary.⁹⁹ This is relevant information as the patient still can tolerate other penicillins and cephalosporins.

Confirmed allergies should be recorded in My Health Record because it ensures the information is available across different healthcare providers and settings, not just within a single clinic or hospital system. This improves patient safety by helping prevent re-exposure to known allergens, supports safer prescribing and treatment decisions and reduces the risk of serious adverse reactions.^{125, 126, 128} In My Health Record, confirmed allergies are recorded in the “Allergies and Adverse Reactions” section, where they can be viewed by authorised healthcare professionals involved in the patient’s care.¹²⁹

CR3 – Removing a suspected allergy

Where a previously suspected allergy has been excluded following clinical assessment or challenge testing, the EHR must be updated promptly.^{6, 99, 100}

Removing substances that patients have been confirmed as not allergic to is important because it prevents unnecessary avoidance of safe medications or foods. It reduces unnecessary avoidance of first-line antibiotics, avoids alert fatigue for clinicians and ensures the patient’s record is accurate, current and clinically reliable for safe decision-making.⁵⁶

The following details should still appear in the event history:

- term “confirmed not allergic”
- date the patient was confirmed not allergic⁴⁶
- method of confirmation (including assessment details and results):
 - clinical evaluation/history
 - supervised challenge
 - skin test (skin prick, intradermal or patch)
 - serum specific IgE
 - tryptase
 - other (genomic/in vitro, HLA typing, etc.)⁹⁹
- practitioner role (e.g. allergy specialist, general practitioner) that completed the assessment¹⁰⁰
- name of healthcare professional that completed the assessment.¹⁰⁰

It is important that the healthcare professional completing the assessment updates this information in My Health Record because the system is shared across many healthcare settings. If a suspected allergy is later proven not allergic, failing to update it on My Health Record can lead to unnecessary avoidance of key food groups or first-line antibiotics and delayed treatment across different providers.^{56, 126}

CR4 – Recording “No known allergy” status

Where no allergy is known, the EHR should clearly record:

- “No known allergy” or
- “Nil known allergy”.^{101, 102}

“No known allergy” or “Nil known allergy” confirms no known history of allergy at a specific point in time. “Unknown” indicates possible allergy history with missing details about the trigger.^{99, 101, 102}

It is important not to confuse these terms as it risks unnecessary avoidance of food or drugs (medications), or it can lead to unsafe exposure of potential triggers.¹⁰²

CR5 – Documentation of delabeled and resolved allergies

Delabeled or resolved allergies must be documented within the EHR.^{6, 99, 100}

If a patient is confirmed no longer allergic to a substance following assessment by an appropriately trained healthcare professional, their allergy status needs to be updated on all relevant systems (including My Health Record) and documentation with “confirmed not allergic”.^{6, 99, 100}

Delabeling should be followed by appropriate documentation and communication with the patient and their care team within and between health services to prevent reacquisition of the allergy label.^{6, 99, 100}

The following details should be included:

- drug/food/substance that the patient has been delabeled to^{6, 99, 100}
- method of confirmation which may include:
 - clinical evaluation/history
 - skin test
 - serum specific IgE
 - supervised challenge
 - tryptase¹³⁰

- dates of assessments⁴⁶
- name of healthcare professional who completed the assessment.¹⁰⁰

Healthcare professionals should recognise that inaccurate allergy labels can contribute to increased healthcare costs, unnecessary avoidance of the food or drugs (medications) and poorer patient outcomes. Accurate antibiotic records in an EHR support antimicrobial stewardship by helping healthcare professionals choose the most appropriate antibiotic. This reduces inappropriate antibiotic use, improves patient safety and limits the development of antimicrobial resistance.⁵⁶

CR6 – Separation of allergy and other diagnosis information

Conditions that belong within the diagnosis or problem list must not be recorded within the allergy list.^{73, 99}

This applies to allergies that do not trigger alerts or inform safe prescribing.⁷³ An example of this is allergic rhinitis due to environmental allergens such as pollens, moulds or animal dander.^{73, 99} Exposure to these allergens do not cause anaphylaxis (except if injected by an allergy specialist intentionally as part of immunotherapy).⁷³

Removal of these allergens can improve the accessibility and usability of the allergy module by increasing the visibility of more relevant, high-risk allergens.⁷³

Specific details still need recording in the problem list, including confirmation and treatment.⁹⁹

EHRs should clearly distinguish between:

- allergy
- intolerance
- adverse drug reaction
- side effect
- diagnosis
- patient preference.⁹⁹

These represent different clinical concepts with different risks and management requirements. Accurate classification improves patient safety, supports appropriate prescribing and clinical decision-making, reduces unnecessary alerts and treatment restrictions and ensures reliable documentation, communication and clinical decision support.⁹⁹

CR7 – Use of structured data

Critical allergy information should be recorded using structured fields wherever possible.^{70, 73, 74}

Structured documentation should include, as a minimum:

- substance name
- manifestation
- severity
- criticality
- timing
- verification status.^{7, 99, 127}

Free text may be used to:

- describe clinical management
- give further detail on assessments
- provide additional contextual or historical information
- document nuances not supported by structured terminology.^{48, 79, 99, 100, 105}

Critical safety information must not rely solely on free-text entries.^{60, 99, 100}

CR8 – Completeness and quality of allergy documentation

Allergy documentation should be complete and written in a way that avoids vagueness about the patient or what occurred. It should only contain information that is relevant to patient care and provide sufficient information that enables other healthcare providers to continue that care.^{33, 34}

Clinical documents containing allergy information should:

- be complete, accurate and clinically meaningful
- avoid vague or ambiguous terminology
- contain only relevant clinical information
- support continuity of care across healthcare settings.^{33, 34, 70}

Documentation should provide sufficient detail to:

- inform future clinical decision-making
- support safe prescribing
- facilitate multidisciplinary communication.^{33, 34, 109}

Accessibility and information sharing

CR9 – Appropriate access to allergy information

Only healthcare professionals involved in the patient's care should access the patient's EHR.¹⁰³

EHR access must:

- occur only for clinical purposes
- comply with relevant privacy legislation and organisational policy
- not be used for punitive purposes.¹⁰³

CR10 – Timely access to allergy information

Accurate and current allergy information must be accessible to all members of the patient's healthcare team.^{49, 51, 52}

This includes:

- medical practitioners
- nurses
- pharmacists
- allied health professionals (including dietitians)
- aged care providers
- food service staff where relevant.^{49, 51, 52}

Timely access to allergy information is essential to:

- reduce medication errors
- prevent adverse reactions
- reduce the risk of allergic reaction from being served a food that the patient is allergic to
- support continuity of care
- improve patient outcomes.^{49, 51, 52, 70, 131}

Standardised terminology

CR11 – Use of standardised terminology

Healthcare organisations and software systems must use nationally recognised standardised terminology for allergy documentation.^{104, 105}

Standardised terminology facilitates the accurate reporting, transfer and access to allergy information. SNOMED CT is a comprehensive healthcare terminology set and is being integrated with interoperability standards to achieve the seamless transfer of health information globally.⁹⁰ The National Clinical Terminology Service encourages all healthcare organisations and software vendors to use SNOMED CT as it is designed for point of care recording of clinical information and interoperability.¹³² Nationally standardised terms need to link to local EHR systems.^{104, 105}

Standardised terminology should:

- support interoperability
- improve consistency of documentation
- facilitate transfer of information between systems
- enhance clinical decision support functionality.^{70, 90}

Nationally recognised coding systems such as SNOMED CT should be adopted wherever feasible.^{90, 132}

Terminology sets and picklists should:

- be regularly reviewed and updated
- reflect current clinical practice
- support local relevance while maintaining national consistency.^{24, 57, 108}

CR12 – Use of specific allergen names

Specific names (as opposed to class) of the food, drug, chemical or other agent should be entered when documenting the suspected or confirmed trigger.^{99, 106, 122}

For example:

- Enter “ampicillin” (not “penicillin”) if the patient is allergic to ampicillin.^{99, 106}
- Enter “sulfamethoxazole” (not “sulfa”) if the patient is allergic to sulfamethoxazole.^{99, 106}
- Enter “ibuprofen” (not “Advil”) if the patient is allergic to ibuprofen.^{99, 106}
- Enter “cashew” not “nuts” or “tree nuts” if the patient is allergic to cashew.

Both the generic and proprietary names of suspected drug/s should be recorded, as well as the formulation and strength.^{99, 106}

An exception to using the generic name is if there is a known reaction to a specific formulation of that agent that suggests an excipient reaction. If there is a known excipient allergy however, that excipient should be recorded separately.⁹⁹

Alert management

CR13 – Clinically appropriate allergy alerts

Records should accurately detail features of the reaction to ensure that only necessary alerts are fired (e.g. for IgE-mediated reactions such as drug-induced urticaria or severe reactions such as Stevens–Johnson Syndrome).¹⁰⁷

Alert systems should prioritise:

- severe reactions such as Stevens–Johnson Syndrome
- IgE-mediated reactions such as anaphylaxis and drug-induced urticaria
- severe delayed hypersensitivity reactions
- high-risk cross-reactivity.¹⁰⁷

Systems should support alerts relating to:

- drugs (medications)
- foods
- radiological contrast agents
- latex
- other clinically significant allergens e.g. insects.⁹⁹

Unnecessary alerts should be minimised to reduce alert fatigue.^{55, 56}

CR14 – Alert content

Allergy alerts should be accompanied with the following information:

- **reason for alert**
- **substantiation of the alert**
- **how the alert should be managed.**⁵⁹

Providing this information is important because allergy alerts alone are often insufficient to support safe clinical decision making. Detailed information enables healthcare professionals to assess the clinical relevance, severity and reliability of the alert and determine the most appropriate course of action.⁵⁹

CR15 – Alert overrides

If an allergy alert is overridden, reasons for overriding the alert as well as the outcome after exposure must be recorded and must be authorised by an appropriate healthcare professional such as a pharmacologist, allergy specialist or second consultant.^{59, 133}

Providing reasoning and authorisation of allergy alert overrides patient safety, accountability and continuity of care. It supports auditing and traceability activities, reduces inappropriate alerts and alert fatigue, and improves the accuracy of allergy documentation, including identification of incorrect or low-risk allergy labels.^{59, 133, 134}

Practical implications for healthcare professionals

The recommendations listed above make allergy documentation a continuous clinical safety process rather than a static note in the EHR. Healthcare professionals must promptly record, update, confirm, remove or delabel allergies and ensure allergy information is accurate, structured, accessible and can be shared across care teams, so that patients can receive the right care in a timely manner.

Allergy records must distinguish confirmed allergies, suspected reactions, intolerances, side-effects and resolved allergies, while preserving historical records. Allergy alerts should be clinically appropriate, based on reaction severity and type, and include the reason for the alert, supporting evidence and management guidance. Any alert overrides must be documented, justified and authorised by qualified clinicians. These recommendations aim to reduce medication errors, inaccurate allergy labels and patient harm, while improving patient care across the patients' entire healthcare team.



Technical recommendations

This section is intended for information technology teams in health services, EHR vendors and digital health implementers. These recommendations ensure systems are accessible, are set up in a way that enable interoperability, are easy for healthcare professionals to use, support allergy alerts and ensure availability of accurate allergy information at the point of care. This supports safe clinical decision-making and effective communication at point of care and transition between healthcare settings.

Structured documentation and data capture

TR1 – Clear and consistent allergy records

Allergy information should be recorded in a structured, standardised and prioritised format that enables healthcare professionals to promptly identify and act on critical information.¹⁰²

EHRs should use nationally consistent layouts, structured fields and standardised terminology to support clinical decision making, continuity of care and interoperability across healthcare settings. Information should be presented clearly, concisely and in a prioritised order to reduce mental load for healthcare professionals and improve usability in time-critical situations.^{102, 114, 123}

It includes:

- minimising unnecessary content to avoid losing critical information
- distinguishing current allergy status from past diagnoses and events
- describing substances in a clear and unambiguous way
- ordering lists appropriately
- providing easy access to justification where relevant.¹⁰²

Standardised data reduces ambiguity, improves data quality and enables consistent interpretation across systems and organisations.^{114, 123}

TR2 – Coded fields

Structured coded fields should be made available for the entry of critical allergy information rather than free text wherever possible.^{58, 99}

Structured coded fields enable clinical decision support and allergy alert functionality, interoperability and transfer of information between systems.⁷⁰

Allergy data should be seamlessly transferred to clinical documentation such as:

- discharge summaries
- GP referral letters
- prescriptions
- radiology reports (for allergies to radiological contrast agents).^{100,135}

A quick picklist should be made available for common allergies and severe reactions (rather than a full list in alphabetical order).^{56, 99, 106} Reaction picklists should be populated with most likely reactions upon entering of the allergen.²⁴

If critical allergy information cannot be structured or will not generate an alert, a warning needs to be put in place on the record that an alert will not be triggered. This needs to be placed at the point of decision-making, e.g. a drug allergy next to the medication label.¹⁰²

Unstructured, free text (or “comments”) can be used to provide additional information where required but will not trigger an alert.¹³⁶

TR3 – Terminology and coded system support

EHR systems should recognise and support standardised allergy terminology and coding systems.¹⁰⁹

Systems should:

- support nationally agreed terminology standards such as SNOMED CT and Australian Medicines Terminology^{90, 137}
- enable selection of allergens and reactions from standardised coded datasets⁵⁷
- provide predictive picklists and spellchecking functionality¹³⁸
- warn users when terminology is not recognised while still permitting supplementary free-text entry when clinically necessary.¹⁰⁹

Structured terminology supports interoperability, data quality, alert accuracy and seamless exchange of allergy information between healthcare systems.¹⁰⁹

TR4 – Retention of allergy information

Resolved, removed or delabeled allergies may be removed from active summaries and alerts but must remain available within the patient's permanent health record.¹⁰²

Keeping all allergy information in the EHRs preserves an accurate clinical history and audit trail while preventing unnecessary active alerts. Historical allergy information may still be relevant for future care, investigations or safety reviews, and retaining it supports continuity of care, clinical accountability and informed decision-making. Historical records should:

- remain auditable
- support future clinical review
- not continue to trigger inappropriate alerts once delabeled.^{48, 95}

Healthcare professionals should provide justification as to why the allergy or adverse reaction risk is being removed.¹⁰⁹ The record should include who removed the allergy or adverse reaction risk and when it was removed.⁴⁶

System configuration and usability

TR5 – System design for usability

EHR systems must be designed to safely support allergy documentation, maintenance and clinical decision support.¹¹⁰

Usability is critical to clinician adoption and safe clinical practice, particularly in emergency, acute care and rural and remote settings where rapid access to allergy information is essential.^{28, 34, 84}

Systems should minimise cognitive load for healthcare professionals and support efficient retrieval of clinically relevant information during time-sensitive decision making.⁶³

Systems should enable:

- entry and updating of allergy information
- retention of historical allergy records
- generation of alerts from structured entries
- documentation of allergy verification and delabeling
- inclusion of allergy test results, challenge outcomes and cross-reactivity risks.¹¹⁰

Viewing platforms should:

- present priority allergy and adverse reaction information prominently
- support intuitive filtering, searching and sorting
- display documents in reverse chronological order
- distinguish local records from shared records such as My Health Record
- support consistent table layouts, labels and terminology
- prominently display patient identifiers and record update dates.^{63, 114}

System configuration should minimise usability barriers and workflow disruption. Interfaces should support:

- intuitive navigation
- consistent layouts
- efficient data entry
- minimal logins and clicks
- clear instructions and visual hierarchy.^{54, 63, 114}

System design should involve end users including medical practitioners, pharmacists, nurses, allied health professionals and patients to ensure alignment with real clinical workflows.

Poorly designed systems can increase healthcare professional burden and contribute to incomplete or inaccurate allergy documentation.⁹¹

TR6 – Point-of-care allergy access

Drug allergy information should be available at all points of care where medication-related decisions occur.¹⁰¹

Allergy and adverse reaction information should be visible and actionable during:

- prescribing a drug
- dispensing a drug
- administering a drug
- updating and/or viewing a medication chart
- discharging or transferring a patient.¹⁰¹

Critical allergy information should also be accessible to multidisciplinary teams including pharmacists, dietitians, food service teams, residential aged care providers, allied health professionals and emergency care clinicians where relevant to patient safety.^{56, 63}

Interoperability and information exchange

TR7 – Interoperability

EHRs must support real-time interoperability and seamless exchange of structured allergy information across care settings.¹¹¹

Interoperability is essential to reduce:

- duplicated or conflicting allergy records
- missing information during transitions of care
- delays in treatment and diagnosis
- medication and food-related adverse events.^{51, 56, 119}

EHRs should:

- support national interoperability standards including FHIR and SNOMED CT
- enable structured data exchange rather than static PDF transfer
- support secure real-time transfer of allergy information
- integrate across hospitals, primary care, specialist services, community health, aged care and My Health Record.^{111, 114, 115, 120}

Shared interoperable records improve multidisciplinary collaboration, continuity of care and patient safety, particularly during emergency presentations, hospital discharge and aged care transitions.¹¹⁵

Alert management

TR8 – Alert prioritisation

Allergy alert systems should prioritise clinically significant allergies and minimise unnecessary alerts.⁵⁹

Only allergies associated with clinically significant risk should generate interruptive alerts. Systems should distinguish:

- true allergies from side effects and intolerances
- severe reactions from low-risk reactions
- verified allergies from unconfirmed patient-reported allergies.^{59, 70, 123}

Alert systems should present:

- allergen name
- reaction type and severity
- recommended management actions.¹²²

Targeted and clinically relevant alerts reduce alert fatigue and improve clinician responsiveness to high-risk warnings.¹³⁹

TR9 – Order prevention alerts

When the alert directs strict avoidance of the culprit allergen, the EHR should block the ordering of the substance that contains the allergen (e.g. an alert that interrupts and avoids the action from occurring).⁵⁹

Where exposure to an allergen may result in severe harm, such as anaphylaxis or severe delayed hypersensitivity reactions, systems should prevent ordering or administration unless appropriate override processes are completed.⁵⁹

TR10 – Management of delabeled allergy alerts

Alerts for allergies that have been delabeled after challenge testing need to be deactivated, although the corresponding documentation needs to be retained. The activation of an alert if an attempt is made to re-add a delabeled allergy should be standard practice.^{59, 112}

Systems should:

- retain historical documentation of prior allergy labels and challenge outcomes
- remove active alerts once an allergy has been delabeled
- ensure delabeled allergies are not inadvertently reactivated.^{59, 112}

This supports patient safety, antimicrobial stewardship and accurate prescribing.^{28, 70, 78, 112}

TR11 – Allergy review

Systems should support scheduled review and reassessment of historical or unverified allergy labels.^{75, 77, 111, 113}

Clinical decision support tools (such as alerts) should prompt reassessment of suspected or historical allergies at clinically appropriate intervals, particularly for commonly mislabelled allergies such as penicillin allergies.^{70, 122}

Regular review supports:

- allergy delabeling programs
- reduction of unnecessary broad-spectrum antibiotic use
- improved prescribing practices
- reduced healthcare costs and hospitalisations.^{70, 77}

TR12 – Updated allergy alerts

Alerts need to be regularly updated in line with medical discovery maintaining digital optimisation.⁵⁹ Updated cross-reactivity data should be provided to EHR vendors to ensure accurate alert logic.⁵⁹

EHR vendors and healthcare organisations should maintain current:

- cross-reactivity datasets
- allergy terminology standards
- clinical decision support rules
- medication safety guidance.^{59, 63, 122}

Continuous optimisation is required to ensure alert accuracy, minimise inappropriate alerts and maintain alignment with evolving clinical evidence.^{59, 70}

Communication and transitions of care

TR13 – Information sharing

Digital systems should support secure, structured and timely communication of allergy information across transitions of care.^{62, 114, 115}

Systems should support:

- secure clinician-to-clinician messaging
- structured electronic referrals and consultations
- timely discharge communication
- multidisciplinary collaboration
- continuity of allergy documentation across care settings.^{114, 119}

Discharge planning and allergy reconciliation should begin early and involve relevant clinicians, patients and primary care providers.¹¹⁴

Communication pathways should also support transfer of food allergy information to dietetic and food service systems to reduce inpatient food-related adverse events.⁵⁶

Data quality, maintenance and continuous improvement

TR14 – Ongoing review

Regular allergy reconciliation and data quality review processes should be undertaken to maintain accurate and current allergy records.^{75, 77, 111, 113}

Healthcare organisations should implement processes to:

- remove duplicate or inaccurate allergy entries
- update outdated information
- reconcile conflicting records
- reduce unnecessary alerts
- prevent medical record contamination.^{63, 75, 77, 111, 113}

Data quality activities should include:

- routine audit and review
- clinician feedback mechanisms
- user-centred system evaluation
- ongoing optimisation of allergen databases and structured record fields.^{97, 115, 123}

Continuous improvement processes should involve both clinicians and consumers to improve trust, usability, safety and adoption of EHRs.¹²¹

Practical implications for clinicians and developers of EHR systems

These recommendations significantly change how allergy information is captured, used and maintained in everyday clinical work. Clinicians need to enter allergy data using structured, coded fields at the point of care rather than typing free-text notes, which means more standardised workflows and more mandatory fields.

EHR systems will need to support national terminology sets and interoperability, meaning healthcare organisations should invest in the infrastructure that allows allergy records to transfer information and remain consistent across settings. Without this, discrepancies could lead to unsafe prescribing.

Clinical decision support would become more sophisticated, with alerts prioritised based on clinical severity. High-risk drug allergies could trigger “hard stops” that physically prevent ordering, while lower-risk alerts are reduced to avoid alert fatigue. This requires careful system configuration and ongoing clinical governance.



Organisational recommendations

This section is designed for healthcare organisations, digital health leaders, clinical governance teams and policymakers responsible for implementing and overseeing EHR systems. It sets out the organisational recommendations for the safe recording, governance and management of allergy information within EHR systems. The recommendations emphasise whole-of-organisation responsibilities, including policies, national interoperability standards, workforce training, infrastructure and continuous quality improvement to ensure accurate, secure and consistent allergy information across healthcare settings.

Policies and procedures

OR1 – Recording of allergy information

All healthcare professionals involved in a patient's care must be able to record, update and access allergy and adverse reaction information within the patient's EHR.^{116, 117}

All healthcare professionals should have access to allergy information in EHRs because any clinician involved in patient care may need to be made aware of important allergies. Shared access improves communication, keeps records accurate and current, reduces treatment errors, and supports safer and more coordinated care across all healthcare settings.^{116, 119}

The following points should be considered:

- Only healthcare professionals that have extensive knowledge of the patient and sufficient training on allergies and allergy terminology should have the ability to remove, add or change an allergy status.^{47, 116}
- Allergy labels should only be changed after discussion with the patient, including agreement of the change and an understanding of the implications on their clinical management.¹¹⁶

All healthcare professionals should also have the ability to easily upload allergy information on the patient's My Health Record because clinic or hospital EHRs are often separate systems that cannot always share information with each other. My Health Record provides a central, accessible record that different healthcare providers can view, which ensures allergy information is available during emergencies, referrals, after-hours care, or when patients attend different healthcare services.^{16, 125, 128}

OR2 – Governance and policy alignment

Healthcare organisations must ensure that legislation and national standards and guidelines inform all policies and procedures related to digital communication and allergy documentation.^{16, 28, 118}

Policies should support accurate allergy recording, communication and interoperability across care settings, and maintain alignment with evolving national standards for documenting food and drug allergies.⁷⁰

Policies and procedures should be aligned with national frameworks, including the National Model Clinical Governance Framework and National Digital Health Strategy, to ensure system-wide consistency and safety.^{67, 140} Clinical information systems should be compatible with My Health Record requirements and evolving national standards.²⁹

Policies and procedures should:

- be routinely reviewed and updated where required³³
- be disseminated to all staff, including when they have been reviewed and updated³³
- link to supporting toolkits, checklists and resources such as documents published by the ACSQHC.^{33, 77}

There should be clear accountability structures for safety, risk escalation and governance outcomes across all organisational levels.¹⁴⁰ Roles such as Organisation Maintenance Officers and Responsible Officers should be established in line with the *My Health Records Act 2012*.⁹¹ These roles:

- oversee the implementation of My Health Record, including compliance with procedures and policies³³
- are responsible for the upkeep of policies and procedures³³
- are responsible for the upkeep of other EHRs.³³

OR3 – National identifiers and interoperability

Healthcare organisations must adopt and use national healthcare identifiers to enable safe and connected allergy care.¹¹¹

It is important that healthcare professionals and healthcare organisations are aware of the *Healthcare Identifiers Act 2010* when obtaining a Healthcare Provider Identifier.¹¹¹

National healthcare identifiers ensure that the right information is matched to the right patient, clinician and organisation across different systems and care settings. They reduce the risk of misidentification, duplication and fragmented records, which can lead to medication errors, missed allergies or incomplete clinical history. They also enable interoperability between healthcare systems, supporting safe information sharing, continuity of care and more efficient clinical workflows across the health system.^{10, 141}

Widespread use of Individual Healthcare Identifiers (IHIs), HPI-Is and HPI-Os should be implemented to support interoperability and continuity of care.^{68, 142} Clinicians and organisations should remain identifiable within national systems, including My Health Record, to enable secure access and documentation.¹⁴²

OR4 – Policy development and clinical documentation standards

Organisations must establish clear and standardised policies for allergy documentation and system use.^{16, 45}

Policies should be developed that define how allergy information is recorded and maintained.^{70, 123} Policies should support accurate, structured and interoperable allergy documentation using standard terminology.^{68, 70} These can include:

- when to record
- what to record
- where to record it
- recording format
- roles and responsibilities around recording allergy information
- ensuring allergy alert systems are safe and clinically meaningful.^{45, 117, 137}

Clear and standardised policies promote consistent and accurate allergy documentation across healthcare settings. They reduce variation in practice, improve communication between clinicians and systems and support safer prescribing and clinical decision-making.^{45, 56, 93, 117}

OR5 – Cybersecurity, privacy and ethical data use

Robust cybersecurity protection policies and procedures must be in place and enforced to protect patient allergy data.^{103, 33} Security and access training should be undertaken before accessing EHRs for the documentation of allergy information. This is a requirement for the use of My Health Record.³⁴

An access and security policy should outline:

- procedures around how EHRs should be accessed
- staff training prior to accessing EHRs
- organisational security measures (e.g. two-factor authentication, screensavers and administrative privileges).³³

Policies and procedures must comply with national privacy, security and data governance requirements.¹¹⁹

Because allergy data informs prescribing and clinical decision-making, secure access ensures that only appropriately trained healthcare professionals can view or update records, reducing the risk of unauthorised changes, errors or misuse of patient information.

Infrastructure

OR6 – System infrastructure and sustainability

Organisations must ensure infrastructure supports interoperability of patient allergy information.^{67, 119–121}

Healthcare organisations should invest in robust, future-proof digital infrastructure that supports reliable hardware, software, connectivity and interoperability for safe allergy information sharing across care settings. Systems should be scalable and adaptable to evolving national requirements to ensure long-term sustainability and accurate, timely access to allergy information. This is particularly important in rural and remote healthcare settings where limited resources, connectivity challenges and fragmented systems can affect continuity of care, access to allergy-related specialist services and timely clinical decision-making. Addressing financial, technical and infrastructure barriers supports more equitable access to safe and effective allergy documentation and care.^{67, 120}

Training and competency

OR7 – Workforce capability, training and digital readiness

Healthcare professionals that record and access allergy information on EHRs should receive training to build knowledge and skills.^{119, 122–124}

This should include:

- the importance of recording the information⁹⁴
- the difference between an allergy, adverse reaction and intolerance^{94, 143}
- the different types of allergic reactions⁷⁷
- how to document allergy and adverse reaction information in the EHR¹⁰⁴
- allergy terminology, which should include definitions and types of allergies, encouraging the use of structured entries over unstructured, free text⁹⁹
- legal obligations of the organisation³⁴
- legal obligations of the healthcare professionals using the system³⁴
- penalties when obligations have been breached.³⁴

Training should be short and effective. It should be undertaken by staff that are new to the system and annual refreshers should be undertaken by trained staff as part of ongoing learning.⁹⁹ Training programs should be based on this Best Practice Guideline, and should also include ASCIA drug allergy training. Interdisciplinary collaboration and shared learning across professions should be promoted.⁹¹

The [Standards Academy](#) hosted by the ADHA provides education and training on digital health through their website. Courses cover FHIR and SNOMED CT, and related material that supports interoperability, clinical terminology, standards adoption and data quality.¹⁴⁴

A training register should be maintained by the healthcare organisation.³⁴

Auditability and traceability

OR8 – Auditing, traceability and quality assurance

Organisations must ensure systems that manage allergy information are auditable and continuously improved.^{120, 123}

All access, changes and updates to allergy records should be traceable, time-stamped and authored. Regular audits of allergy documentation quality and accuracy should be undertaken.¹²³

Healthcare organisations should have mechanisms in place for learning from incidents and feeding insights back into system design.¹²³

Quality assurance and continuous improvement

OR9 – Continuous improvement and system optimisation

Healthcare organisations should have a quality assurance process in place that monitors organisational engagement with the EHR, and strive for continuous improvement.²⁹

The organisation should:

- keep all clinical software up to date to ensure allergy documentation and alert systems remain current and effective
- record and review allergy-related incidents and near misses, including missed allergies or incorrect allergy labels
- identify and address potential safety risks related to allergy documentation and alerting systems

- review clinical workflows to improve how allergy information is recorded, updated and accessed
- provide ongoing staff training to support accurate allergy documentation and interpretation
- align practices with the ACSQHC, particularly those related to medication safety and clinical information systems.^{33, 44}

An oversight team of subject matter experts should:

- continually monitor allergy alerts and evaluate their effectiveness
- monitor rates and reasons for override
- implement quality improvement measures, encouraging feedback from users of the EHR.⁶³

Quality assurance processes ensure that allergy information in EHRs remains accurate, clinically meaningful and reliably used in decision-making. Ongoing monitoring helps identify documentation gaps, workflow issues, training needs and system risks, ultimately improving patient safety, reducing allergy-related errors and strengthening the overall quality of digital health systems.^{97, 140, 145}

Practical implications for healthcare organisations

Recording of allergies in EHRs is a whole-of-organisation responsibility, not just a clinical documentation or technical task. Healthcare services need to align policies and procedures with national digital health standards, meaning existing workflows for allergy recording, prescribing and communication may need redesign to ensure compliance. Organisations must adopt national patient identifiers and interoperability standards, so patient records can be reliably matched across hospitals, GP clinics, pharmacies and other healthcare settings.

Workforce implications are significant, as all healthcare professionals and other relevant staff would need training in allergy documentation, system use and terminology. Strong cybersecurity and privacy controls will also require mandatory staff training before EHR access. Organisations must implement continuous auditing and quality improvement processes, meaning regular review of allergy data, system performance and healthcare professional engagement.

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