

Introduction to SNOMED CT-AU

About this Quick Reference Guide

This Quick Reference Guide (QRG) summarises the key concepts, tables and reference information from the Introduction to SNOMED CT-AU course. Use it to refresh key concepts during knowledge checks and case studies, or as an ongoing reference while working with SNOMED CT-AU.

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Topic: Why Clinical Terminology Matters

Key Terms

Three terms appear throughout the course. They may sound familiar from everyday use, but in healthcare they have specific meanings.

Term	Definition
Concept	A single unit of clinical meaning (an idea) such as a medicine, a condition or a procedure. Each concept has a unique, permanent code and one or more terms that describe it, allowing people and systems to represent and share the same meaning consistently.
Terminology	A structured collection of standardised concepts, each identified by a code, along with their descriptions (terms) and the relationships that connect them. This ensures clinical meaning is shared consistently, even when different descriptions are used.
Interoperability	Interoperability is the ability of a system or product to transfer meaning of information within and between systems or products without special effort on the part of the user. Interoperability is made possible by the implementation of standards.
Standards	Standards enable healthcare providers and digital health systems to share and use health information in a secure, consistent and meaningful way. • Support consistent health information exchange • Enable interoperability between systems • Improve patient safety and quality of care

The Problem with Words Alone

Words in healthcare can be ambiguous. When a clinician documents “headache”, another healthcare professional may record it differently – a tension headache, a migraine, or a symptom of something more serious. The word alone does not carry enough meaning to support safe, consistent care. This is not a matter of clinical skill; it is a fundamental limitation of natural language, because different clinicians, systems and organisations may all use different words to describe the same clinical concept.

One Concept, Many Words

Each clinical concept has a single, consistent code. Common words for that concept are linked to the code in advance, so when a clinician records care, the system stores the underlying code, not just the word shown on the screen.

For example, the same symptom recorded in different systems still resolves to one shared concept:

Setting	Term displayed	What is recorded
GP clinic	Headache	Concept identifier 25064002
Remote health service	A different word for the same concept	The same identifier (25064002)

This works not because the two systems agreed on a word, but because both words are linked to the same concept in a shared standard.

Why It Matters

Clinical terminology is the foundation of safe, connected health information. This matters for three reasons.

Reason	What it means
Patient safety	Consistent terminology means a patient's clinical history can be accurately understood across different care settings, by different healthcare professionals, in different systems and in different organisations.
Interoperability	When systems use the same codes, information can be exchanged and understood across organisations and platforms. A code sent from a GP system means the same thing when it arrives at a hospital.
Data quality	Consistent coding supports reliable reporting, population health analytics and research. The same concept is recorded the same way, every time, everywhere.

Key message: Clinical terminology supports patient safety and interoperability through one principle – consistent meaning. Many words. One meaning. One code.

Topic: What is SNOMED CT-AU

SNOMED CT-AU is Australia's largest and most comprehensive national clinical terminology and the Australian extension of the international SNOMED CT standard. It contains the SNOMED CT core content along with Australian-developed content, including the Australian Medicines Terminology (AMT). It is a product of the National Clinical Terminology Service (NCTS).

Aspect	SNOMED CT (international)	SNOMED CT-AU (Australian edition)
What it is	The international clinical terminology standard	Australia's national clinical terminology and the Australian extension of SNOMED CT
Active concepts	Over 500,000 active concepts	Over 700,000 active concepts (including AMT)
Coverage	Diagnoses, procedures, anatomy, clinical findings and more; maintained in multiple languages	Core international content plus Australian-developed content
Reach	Used in more than 80 countries	Maintained for the Australian health system by the NCTS

SNOMED CT is a clinical terminology, not a classification. It describes clinical meaning in a way that supports care delivery, clinical decision support and data exchange. This differs from classifications, which are designed to group conditions into broader categories for purposes like hospital funding or national health statistics.

What Makes It Australian

SNOMED CT-AU includes Australian terms and content that support the way healthcare is delivered and recorded in Australia:

- Concepts regarding Aboriginal and Torres Strait Islander health matters
- Australian medicines via the Australian Medicines Terminology (AMT), which is part of SNOMED CT-AU
- Australian-specific spelling (e.g. “z” to “s”), clinical terms and concepts to support local clinical usage and procedures in the Australian health system
- Alignment with other Australian digital health standards

The National Clinical Terminology Service (NCTS) acts as Australia's National Release Centre (NRC) for SNOMED International. The NCTS is managed by the Australian Digital Health Agency and operated by CSIRO's Australian e-Health Research Centre (AEHRC).

Key message: AMT uses the Australian name paracetamol for the medicine known internationally as acetaminophen – the kind of local naming convention that makes SNOMED CT-AU Australian.

Common Misconceptions

Misconception	Reality
“SNOMED CT is just a list of codes”	SNOMED CT-AU is not simply a flat list of codes. It is a structured terminology where every concept has a unique identifier, one or more human-readable descriptions and defined relationships to other concepts.
“AMT and SNOMED CT-AU are separate standards”	AMT (Australian Medicines Terminology) is part of SNOMED CT-AU, not a separate standard. It provides the standard vocabulary for Australian medicines within the broader SNOMED CT-AU framework.
“SNOMED CT-AU is only for technical teams”	While SNOMED CT-AU is implemented in clinical systems by technical specialists, its impact reaches every part of the health system. Clinicians interact with it every time they document a diagnosis or select a term.

Topic: How SNOMED CT-AU is Structured

SNOMED CT-AU is built from three core components that work together to represent clinical knowledge.

Component	What it is
Concepts	A single unit of clinical meaning, such as a medicine, a condition or a procedure.
Descriptions	The familiar, human-readable names for each concept.
Relationships	The connections that define meaning and hierarchy between concepts.

Concepts: The Building Blocks

In SNOMED CT-AU, every clinical idea is a concept. Each concept has a unique numeric identifier called a SNOMED CT Identifier (SCTID). The SCTID:

- Never changes, even if the concept's name is updated
- Is never reused, even if the concept is retired
- Is the same across all systems that use SNOMED CT-AU

Descriptions: The Human-Readable Names

A description is the human-readable name for a concept. Every concept has multiple descriptions: a standard label (also called the preferred term, or PT) used in clinical systems, plus synonyms that different clinicians might use. All synonyms point to the same concept and the same SCTID.

Example – Concept 25064002:

Description type	Term
Standard label or Preferred Term (PT)	Headache
Synonym	Cephalalgia
Synonym	Pain in head
Synonym	Head pain

All of these belong to the same concept 25064002. A clinician using any of these terms is recording the same clinical meaning.

Relationships: Meaning and Hierarchy

Relationships define how concepts connect to each other and give SNOMED CT-AU its structure. The most common is the “is a” relationship, which creates the hierarchy. For example: Migraine is a vascular headache, which is a headache disorder.

SNOMED CT-AU is polyhierarchical – a concept can have more than one parent, belonging to multiple categories at the same time. For example, Allergic headache (SCTID 145611000119107) has two “is a” parents: it is both a type of headache and an allergic condition, so a query for either will find it.

Key message: This is what makes SNOMED CT-AU more powerful than a flat list or single-level classification – relationships capture clinical meaning, not just categories.

Topic: Where SNOMED CT-AU is Used

When a clinician selects a diagnosis, procedure or finding in a clinical system, they choose from a familiar list of terms, not codes. The SNOMED CT-AU identifier is recorded automatically in the background. Clinicians do not need to know or memorise codes; SNOMED CT-AU works invisibly to ensure that whatever term a clinician selects, the same underlying clinical meaning is recorded consistently across systems.

Where SNOMED CT-AU Appears

SNOMED CT-AU appears across three broad areas of the Australian health system.

Area	How SNOMED CT-AU is used
Clinical information systems	SNOMED CT-AU is embedded in clinical information systems, including electronic medical records (EMR), pathology systems and prescribing tools, to enable consistent clinical documentation at the point of care.
Digital health records	Used in the clinical systems that contribute information to My Health Record and other digital health records, so clinical information can be consistently understood across different systems and organisations. A record created in one system can be interpreted correctly by another, regardless of which terms were used at the point of entry.
Data exchange and analytics	Enables consistent meaning when data is exchanged between organisations, supporting population health reporting and analytics. Because the same concept is always recorded with the same code, data from different sources can be aggregated and compared reliably.

During the COVID-19 pandemic, SNOMED CT-AU provided a standardised way to consistently record COVID-19 codes in Australian clinical systems. This supported consistent sharing, aggregation and analysis of information from different care settings.

SNOMED CT-AU in Practice

A patient journey shows how the same coded diagnosis follows a patient between care settings.

Setting	What happens
GP clinic, Brisbane	Maria, a 58-year-old patient with Type 2 diabetes, is managed by her GP. When the GP documents the diagnosis, the SNOMED CT-AU code is recorded automatically in the background.
Hospital, Sydney	When Maria presents with complications, the treating team accesses her My Health Record. Her shared health summary contains the same coded diagnosis.

Key message: Because SNOMED CT-AU provides a consistent, unambiguous identifier, the clinical information means the same thing to every clinician and system that reads it – no phone calls to confirm the diagnosis and no risk of information being lost or misread between settings.

Quick Reference Topic Summary

Key takeaways from each topic of the course.

Topic	Key takeaway
Why clinical terminology matters	Clinical terminology links familiar clinical terms to a single, consistent code, so the same concept is recorded the same way wherever care is documented. This consistent identification supports patient safety, interoperability and reliable data.
What is SNOMED CT-AU	SNOMED CT-AU is Australia's largest and most comprehensive national clinical terminology and the Australian extension of SNOMED CT, containing core international content plus Australian-developed content including AMT. It is a clinical terminology, not a classification and AMT is part of it, not a separate standard.
How SNOMED CT-AU is structured	Built from concepts (permanent unique identifiers), descriptions (standard label and synonyms) and relationships ("is a" links forming a polyhierarchy), so a concept can belong to more than one category – far more than a flat list of codes.
Where SNOMED CT-AU is used	Works in the background of everyday clinical systems, recording a consistent code automatically when a term is selected, so the same concept is identified consistently across clinical information systems, digital health records and data exchange and analytics.