T75.4 *Effects of electric current*

October 2025

To better understand the quality of coded data in episodes of care involving exposure to electric currents, the Statistical Services Branch-Coding Consistency Special Interest Group (SSB-CCSIG) has undertaken a review of episodes of care within the Queensland Hospital Admitted Patient Data Collection (QHAPDC).

As a result, here are some things to consider when coding episodes of care involving effects of and exposure to electric current.

What is the principal diagnosis?

The code assigned (principal or additional diagnosis) will depend on the scenario. Be guided by Australian Coding Standard (ACS) 0001 *Principal diagnosis* and ACS 0002 *Additional diagnosis* when abstracting information from the clinical documentation. For patients admitted for the treatment of conditions relating to an electric current, it is common for index pathways such as "Electrocution" and "Shock – electric" to lead to T75.4 *Effects of electric current*. However, the principal diagnosis may not always be an effect of the electric current.

The principal diagnosis for these types of episodes can also be burn injury codes in the range T20-T31 *Burns*, other injury codes in the range S00-S99 and other diagnoses such as atrial fibrillation. Please refer to Example 2 for details.

The assignment of codes in the range Z04.- *Examination and observation for other reasons* should also be considered where patients are admitted following an event where no injuries occurred but the patient is admitted for observation.

Are there additional diagnoses also associated with the exposure to electric current?

It is also essential to consider whether there are relevant additional diagnoses that meet the requirements of ACS 0002 *Additional diagnoses*. As mentioned earlier, the principal diagnosis can be a range of conditions, but there may also be additional diagnoses associated with the same event.

The review of T75.4 data identified one patient who was admitted for the treatment of multiple conditions relating to the electric current. These included a burn injury associated with the electric current, electric shock and atrial fibrillation. As a result, a code in the range T20-T31 *Burns,* T75.4 *Effects of electric current* and atrial fibrillation were assigned to capture the multiple conditions associated with the electric current. Please refer to Example 2 for details.

Although the T75 *Effects of other external causes* range has an Excludes note for *burns (electric) (T20–T31)*, the *Conventions Used in the ICD-10-AM Tabular List* notes if an Excludes note results in a code for one of the clinical concepts not being assigned, to assign codes for both the problem and the underlying cause following the guidelines in ACS 0001 or ACS 0002.

Which associated external cause codes could be assigned?

When following one clear index pathway “Exposure (to) – electric”, it was not surprising that in the review most episodes were associated with external cause codes in the range W85-W87 *Exposure to electric current*.

It is important to note that external cause codes are not always associated with the usually expected S and T injury codes. They can also be assigned with other conditions, or when a person is admitted for a specific purpose that is neither an injury or disease.

As per ACS 2001 *External cause code use and sequencing* external cause codes ‘conditions classified outside Chapter 19 that have an external cause where it adds specificity’. For example, diagnoses such as atrial fibrillation and examination and observation codes can also be associated with these external cause codes.

What about the sequencing of external cause codes?

Be mindful where there are multiple conditions associated with the electric current, and the sequencing of these conditions and their associated external cause codes. If both the principal and additional diagnoses relate to the same event, the principal diagnosis code is to be assigned with the external cause codes, followed by the related additional diagnoses, and repeated external cause codes again. Please refer to Example 1 and Example 2 for details.

Example 1:

A patient is admitted for shock and loss of consciousness (less than 30 minutes) after being electrocuted whilst performing household maintenance in the kitchen at home. The patient is also treated for chest pain as the underlying injury associated with the electric current (see National Coding Advice TN210).

PD	T75.4	Effects of electric current
EX	W86	Exposure to other specified electric current
EX	Y92.04	Place of occurrence, kitchen
EX	U73.1	Activity, while engaged in other types of work
OD	S06.02	Loss of consciousness of brief duration [less than 30 minutes]
OD	S29.9	Unspecified injury of thorax
EX	W86	Exposure to other specified electric current
EX	Y92.04	Place of occurrence, kitchen
EX	U73.1	Activity, while engaged in other types of work

One helpful resource to refer to when reviewing the sequence of external cause codes is Section 9.5 *External cause sequencing* of the QHAPDC Manual.

Does the condition onset flag (COF) matter?

The assignment of condition onset flag (COF) can be significant when considering data related to the impact of exposure to electrical current.

The data review identified the majority of episodes involving exposure to electric currents with COF 1 *Condition present on admission to the episode of care*. However, there was one episode where the COF values were 2 *Condition arose during the episode of care*.

This indicates the electrical exposure occurred whilst the patient was an inpatient. Being aware of this COF assignment allows for the investigation and monitoring of these types of events, which in turn can help facilities identify patient safety risks, work towards minimising patient and staff harm, and to provide high quality patient care.

Is a clinical query required?

If the clinical documentation within the episode of care is unclear or inadequate for complete and accurate coding, seek clarifying information from the clinician before assigning a code. For guidelines and examples to assist in developing appropriate queries to clinicians, refer to ACS 0010 *Clinical documentation and general abstraction guidelines*.

Validations

The following validations are associated with T75.4 *Effects of electric current*:

H847 - Code | | cannot have a Condition onset flag of 9 Condition onset unknown/uncertain on admission to the episode of care. Please review and amend.

This validation states code T75.4 must have a COF value of either:

1 - Condition present on admission to the episode of care
2 - Condition arose during the episode of care.

H564 - Code | | must be followed by a code in the range |.

This validation states that T75.4 *Effects of electric current* requires external cause codes.

Electrocution and burns

It is important to note that electrocution and electric burn are coded differently.

The code for T75.4 *Effects of electric current* does not include electric burn.

For electrocution, electric current, electricity, effects (concussion) (fatal) (nonfatal) (shock) code: T75.4 *Effects of electric current*. Please refer to Example 3 for details.

For an electric burn, refer to Burn in the Alphabetical index.

Also note the external cause codes for electrocution and burns are different. An electric burn will require a site code, a code for the body surface area (BSA) involved as well as external cause codes. Please refer to Example 2 for details.

Example 2:

Patient admitted to hospital with a full thickness electrical burn to the inner aspect of the right forearm (2% BSA) and partial thickness of the left hand (6% BSA). Patient was also treated for electric shock and atrial fibrillation as a result of the accident at work.

PD	T22.31	Full thickness burn of shoulder and upper limb, except wrist and hand, forearm and elbow
EX	W87	Exposure to unspecified electric current
EX	Y92.9	Unspecified place of occurrence
EX	U73.09	While working for income, unspecified
OD	T23.2	Partial thickness [blisters, epidermal loss] burn of wrist and hand

OD	T31.00	Burns involving less than 10% of body surface, 0-9 per cent or unspecified full thickness burns
OD	T75.4	Effects of electric current
OD	I48.9	Atrial fibrillation and atrial flutter, unspecified
EX	W87	Exposure to unspecified electric current
EX	Y92.9	Unspecified place of occurrence
EX	U73.09	While working for income, unspecified

Example 3:

Patient admitted to hospital with electrocution caused by touching a power socket at home.

PD	T75.4	Effects of electric current
EX	W86	Exposure to other specified electric current
EX	Y92.09	Place of occurrence, other and unspecified place in a home
EX	U73.9	Unspecified activity

Document History

Version	Date	Status	Key changes made	Author/s
1.0	October 2020	Approved	Version 1.0 published	Data Quality Team
2.0	May 2024	Approved	Data amendment, additional content, examples updated, formatting.	Data Quality Team
3.0	October 2025	Approved	Australian Coding Standard (ACS) Thirteenth Edition updates, content amendment.	Data Quality Team