Health and Disability Sector Incident Management Project

GUIDE TO USING THE SEVERITY ASSESSMENT CODE (SAC)

Purpose

The purpose of this document is to outline for District Health Board users, the most effective way of using the Severity Assessment Code for defining, reporting and acting upon health care incidents.

Immediate action

There is a variety of actions that may need to be taken immediately following health care incident. These actions may include:

- providing immediate care and comfort to individuals involved in the event (patient, staff or visitors);
- making the environment safe to prevent immediate reoccurrence of the event;
- removing equipment or supplies that malfunctioned;
- establishing a chain of evidence;
- notifying police and/or security.

The Severity Assessment Code

The Severity Assessment Code (SAC) is the method used by any person who has identified an incident, to determine the appropriate action to take on that incident.

The score is ascertained by rating the consequence of the incident and its likelihood of occurrence. The SAC allocates a numerical rating to every incident to ensure that appropriate management occurs. While there is undoubtedly and necessarily a level of subjectivity/judgement involved in this classification it provides a more uniform yardstick, from a systems perspective, by which to prioritise or guide actions. It is recommended that the SAC is determined at least twice, by different people to ensure greater reliability of the score.

The utility of the SAC is at the start of the process so that limited resources, particularly time, are applied where they have the greatest opportunity to improve the level of safety from a systems perspective. It should be noted that the SAC score is also of value for incidents that did not actually result in an actual adverse event such as close calls. This is a valuable feature since close calls generally occur far more frequently than actual adverse events and provide an opportunity to improve the system without having had to experience an actual poor consequence.
SAC steps

The SAC score is applied to all incidents whether they are of a corporate or a clinical nature. The SAC matrix is the method by which the SAC score is derived. The steps are:

- Using Step 1: determine the actual consequence of the incident;
- Using Step 2: determine the likelihood of recurrence of this incident. This analysis will require knowledge of the facility or health service in which the incident occurred;
- Using Step 3: allocate a SAC score to the incident;
- Using Step 4: determine the appropriate action to be taken.

Each incident is assessed for the actual consequence and the potential consequence. The potential consequence is the worst case scenario for the incident being assessed.

Who does the SAC score

Any person who has identified an incident can allocate a SAC score. It is recommended that the person who first notifies the incident gives that incident a rating and based and the next person to whom the incident is reported also re-scores the incident.

It is further recommended that if an incident is given a SAC of 1 the CEO of the organisation should be notified of the incident and the score further verified.

Consequence

Consequence is divided into five categories – serious, major, moderate, minor and minimal.

In order to ensure the most consistent process and results in assigning SAC scores across facilities and individuals doing the scoring, it is important that the definitions provided are the criteria that are used in the determination of the consequence category. In some instances, past experience might lead the scorer to arrive at a consequence level that is not consistent with the definitions that are used here.

Further, when assessing the consequence of the event from a potential/risk perspective, one must consider the most likely “worst case” outcome from a systems standpoint. For example, if you entered a patient’s room before they were able to complete a lethal suicide attempt, the consequence of the event would be classified as serious from a potential/risk perspective even though the suicide was prevented.

Likelihood

Likelihood is also divided into five categories – certain, almost certain, likely, unlikely, highly unlikely.

These categories are the most subjective. However, when used in concert with the level of consequence, they have been shown to result in consistent SAC scores by virtue of the construction of the SAC matrix table. Here it is important that the assessment of the likelihood is made from the perspective of the facility in which the incident occurred. In this way actions taken will be guided and consistent with the circumstances present in the facility directly involved with the incident.
Warning!

It must be remembered that the SAC score is just a tool that allows a more consistent prioritisation of the actions that are required, following any incident or near miss / close call. The SAC provides criteria for determining the minimum action that is required but in no way is there an intention to prevent a clinician or manager from assigning a higher level of priority if that is felt to be appropriate. There is no substitute for good professional judgement.

The following hypothetical examples will provide the basis upon which people using the SAC will be able to successfully determine scores for a wide variety of cases.
**SAC Score example Case 1**

Whilst providing routine care nursing staff where showering a patient in the shower room on the ward. The patient was seated in a chair being washed when he slid off the chair and hit his face, hip and shoulder. The doctor examined the patient at 7:55 am and x-rays were ordered. No fractures were noted. The patient returned to the ward where neurological checks were initiated according to policy and reported as normal.

**Actual Consequence Determination**

The first step in assigning the AC score is determining the consequence of the event. We can see from the report that no injury was reported after evaluation by x-ray and clinical evaluation on the ward. There was however additional investigations required, therefore, the actual consequence would be rated as minor.

**Likelihood Determination**

The likelihood determination is made according to the evaluator’s assessment and is based on their own experience of their facility. It should be noted that the SAC Matrix that is used has been constructed in such a way that it minimises the impact of this subjectivity. It must be remembered that the entire purpose of the SAC score process is to provide a framework within which to prioritise future actions and that a higher rating can be assigned if the facility feels that there are particular circumstances that warrant more in depth follow-up.

Based on the experience of the evaluator, the likelihood of a patient of this type having a fall and hitting his/her head is likely, conservatively some may say possible. Wanting to be conservative, the likely assessment would be selected.

Using the SAC matrix one need only locate the consequence rating and then follow down the column until reaching the row containing the likelihood score.

**POTENTIAL**

The potential consequence looks at the worst-case scenario if the same incident occurred again. Therefore, when one considers the potential for injury, the evaluator could reasonably assess it as potentially serious. This is true because past experience with such a fall had demonstrated such an event could have resulted in a fatal injury.

- Actual Consequence – MINOR
  - Actual Likelihood – LIKELY
  - SAC Score – ACTUAL = 3

- Potential Consequence – SERIOUS
  - Potential Likelihood – LIKELY
  - SAC Score – POTENTIAL = 1
**SAC score example Case 2**

A patient in the ICU developed cardiac arrhythmias but the monitor failed to trigger the alarm. The arrhythmia was observed by two nurses. As the patient was determined to be NFR, he was not resuscitated.

**Consequence Determination**

The first step in assigning the SAC score is determining the consequence of the event. We can see from the report that the actual outcome of this event was the death of the patient. This would definitely be thought to be serious consequence if no other factors were considered.

As the patient was classified as NFR and the nurses who were caring for the patient witnessed the cardiac arrhythmias, the patient’s death was not the result of the failure of the alarm to alert the nurses to the cardiac abnormalities. Instead, there was an appropriate decision made not to resuscitate based on the NFR order. This then would mean that the actual outcome would be considered to be a result of the natural course of the patient’s disease. As such, the consequence based on the actual outcome would be minimal and the case would not receive any further consideration if we were to stop here.

However, such an action does not take into account the potential/risk assessment. It was purely serendipitous that the patient had a NFR order. Had this not been the case the death would not have been placed in the natural course of the disease category. It was probably also serendipitous that the cardiac arrhythmias were witnessed. This would mean that had this happened in a patient that did not have a NFR order a serious adverse event may have occurred. For these reasons the potential consequence for this event would be determined to be serious.

**Likelihood Determination**

The likelihood determination should be made based on the situation and the evaluator’s own experience at their facility. This, in most cases, will be the most subjective portion of the SAC score determination.

The likelihood determination would rely on the experience of the evaluator. For the purposes of this illustration we will assume that the likelihood is thought to be unlikely.

<table>
<thead>
<tr>
<th>Actual Consequence –</th>
<th>MINIMUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Likelihood –</td>
<td>UNLIKELY</td>
</tr>
<tr>
<td>SAC Score –</td>
<td>ACTUAL = 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Consequence –</th>
<th>SERIOUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Likelihood –</td>
<td>UNLIKELY</td>
</tr>
<tr>
<td>SAC Score –</td>
<td>POTENTIAL = 1</td>
</tr>
</tbody>
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SAC score example Case 3

A patient was admitted to hospital following a massive stroke. Whilst routine pressure care was being provided, a nurse noted a tourniquet had been left on the patient’s arm. The tourniquet was removed immediately; the hand was noted to be deep purple. On subsequent examination the patient’s arm and hand returned to normal appearance – it was warm and dry with good capillary return.

Consequence Determination

The first step in assigning the SAC score is determining the consequence of the event. We can see from the report that the actual outcome of this event was minor.

However, when one considers the potential for injury, the evaluator could reasonably assess the consequence as potentially moderate. Had the volunteer not discovered the tourniquet on this patient, who was unable to remove it themselves or call for assistance, the result could have been neurovascular compromise that may have required additional care with possible temporary reduction of function. One could also argue that the tourniquet, had it been applied tightly enough, could have resulted in the loss of the limb in certain patients. This determination would have to be made by the evaluator. For the purposes of this case, it was felt that a tourniquet applied for the purpose of phlebotomy would, by definition, have to be a venous tourniquet and not an arterial tourniquet otherwise it would not serve its intended function. Therefore, it was felt that the major consequence classification would be inappropriate in this case.

Likelihood Determination

The likelihood that a phlebotomist would inadvertently leave a tourniquet on a patient was thought to be frequent, that is likely to occur several times in a year or more.

- Actual Consequence – MINOR
- Actual Likelihood – LIKELY
- SAC Score – ACTUAL = 3

- Potential Consequence – MODERATE
- Potential Likelihood – LIKELY
- SAC Score – POTENTIAL = 2