SPSP Acute Adult Collaborative

Identifying and learning from cardiac arrests: an improvement resource

August 2022
Identifying and learning from cardiac arrests: an Introduction

Welcome to the Identifying and Learning from Cardiac Arrests improvement resource
This resource is designed to support acute hospital teams to use quality improvement methods to improve the processes of identifying and learning from cardiac arrests within their board. As a core indicator of patient safety, robust processes for the identification of cardiac arrests is essential not only to monitoring of the data but also to enable learning from those cardiac arrests. Developing a system for learning can provide evidence to drive improvement in clinical and care processes, and also provide boards with reliable insights into areas of strength in their care of deteriorating patients.

Development of the resource
A cardiac arrest data collection scoping exercise was conducted June – August 2022 with contribution from 11 boards. During the exercise 10 boards individually met with the SPSP Acute Adult team to complete a Walk Through Talk Through of their current process for cardiac arrest data collection. The key components of a reliable and sustainable process were developed from the data.

Contents of the resource
The resource is split into five key sections:
1. Components of a reliable and sustainable process for identifying and learning from cardiac arrests
2. Understanding your system
3. Change ideas
4. Measuring progress
5. Examples and resources
Identifying and learning from cardiac arrests: Components of a reliable and sustainable process

Aim: To identify and learn from all cardiac arrests by September 2023

- % 2222 calls lost to follow up
- % cardiac arrests with MDT review
- Learning from cardiac arrest reviews evidenced

We need to ensure...

- Safe communication within and between teams*
- Leadership to support a culture of safety at all levels*

Which requires...

- Daily access and review of 2222 log
- Reliable post-arrest documentation
- Matching 2222 calls to verify all cardiac arrests
- A system for learning from cardiac arrests
- Psychological safety

*SPSP Essentials of Safe Care
# Identifying and Learning from Cardiac Arrests: Understanding Your System

<table>
<thead>
<tr>
<th>Process</th>
<th>Understanding Your System</th>
<th>Use Quality Management System Practical Prompts for Quality Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily access and review of 2222 log</td>
<td>Speak with people doing the job to understand the process from 2222 call to 2222 log being accessed using tool such as process mapping or Walk Through Talk Through</td>
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<tr>
<td>Post-arrest documentation</td>
<td>Review current documentation alongside other board examples</td>
<td>Identify current sources and content of post-arrest documentation</td>
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<tr>
<td>Verification of cardiac arrest</td>
<td>Measure time it takes to identify which 2222 calls are cardiac arrests</td>
<td>Use Quality Management System Practical Prompts for Quality Control</td>
</tr>
<tr>
<td>Learning from cardiac arrests</td>
<td>Map current processes for sharing learning at team, directorate and board level</td>
<td>Review the last 10 cardiac arrests and identify learning shared</td>
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<tr>
<td>Psychological safety</td>
<td>Use of reliable tool to measure psychological safety</td>
<td>Use Quality Management System Practical Prompts for Relationships and Leadership</td>
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<td>Complete a cause and effect diagram for the post-arrest documentation</td>
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<td>Use Lean principles to identify value added work and where is there waste.</td>
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<td>Consider mapping where cardiac arrests occur including ED and critical care</td>
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<td>Use of NES safety culture cards</td>
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### Identifying and learning from cardiac arrests: Change Ideas

<table>
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<th>Process</th>
<th>Change ideas</th>
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<tbody>
<tr>
<td>Daily access and review of 2222 log</td>
<td>Process for daily access to the 2222 log</td>
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<tr>
<td>Post-arrest documentation</td>
<td>Standardise location and content of post-arrest documentation</td>
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<tr>
<td>Verification of cardiac arrest</td>
<td>Allocate and schedule Resuscitation Dept. time to verify cardiac arrests</td>
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<tr>
<td>Learning from cardiac arrests</td>
<td>Map a standardised process for cardiac arrest reviews</td>
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<tr>
<td>Psychological safety</td>
<td>Opportunities for post-arrest debrief e.g. hot debrief</td>
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Measurement is an essential part of improvement as it helps the team understand if the changes they are making are leading to improvements. The measures below are suggestions of approaches to tracking your progress over time. They are not included in the reporting requirement for the SPSP Acute Adult Collaborative.

<table>
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<tr>
<th>Concept</th>
<th>What/ How to measure</th>
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| 2222 call follow up (% 2222 calls lost to follow up) | Percentage of 2222 calls where the cause of the call could not be verified.  
  • Numerator: number of 2222 calls where the cause of the call could not be verified.  
  • Denominator: number of 2222 calls  
  Percentage compliance: (numerator/denominator)×100 |
| SAERs related to deterioration | Count of SAERs assessed as related to deterioration.  
  The SAER                                                |
| Learning from cardiac arrests | Qualitative data showing how learning from cardiac arrests has been actioned at team / directorate / organisational levels. |

Other measures in the SPSP Deteriorating Patient measurement framework, which may be helpful in tracking progress:

- Cardiac arrest reviews
- Critical care admission rate
- Mean time from NEWS2 trigger or clinical concern to admission to critical care
- HSMR

You may wish to develop other measures to inform your learning from cardiac arrests.
Examples and Resources

The following resources have been made available by kind permission from NHS boards. These are hosted in the files section of the Deteriorating Patient Network MS Teams site.

- **Cardiac Arrest Audit Forms**
- **Datix Fields**
- **Hot Debrief form**
- **Cardiac Arrest Review Forms**
- **Process map from cardiac arrest to reviewing and sharing learning**
- **Routes for sharing learning from cardiac arrests in your board**

If you have a resource you would like to share please send it to: **his.acutecare@nhs.scot**
Feedback

We’d love to hear what you think of the resource. Please get in touch and let us know:

• How you have used the resource in your work
• How we might improve the resource

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