2013

Anywhere Private Hospital AROC Outcome Targets Report (Inpatient - Pathway 3), January 2012 - December 2012

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Publication Details

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Anywhere Private Hospital AROC Outcome Targets Report (Inpatient - Pathway 3), January 2012 - December 2012

Abstract
This is the second AROC Outcome Targets Report which graphically compares your facility’s data to the AROC Benchmark (as set by AROC members). For each impairment that has had outcome targets established we provide background information on the development of the impairment specific target and graphically present the results for all facilities with sufficient data on this impairment.

Keywords
targets, 3, pathway, inpatient, report, outcome, aroc, hospital, private, january, anywhere, 2012, december

Publication Details

This report is available at Research Online: http://ro.uow.edu.au/ahsri/293
AROC Outcome Targets Report
Inpatient – Pathway 3
Anywhere Hospital
July 2012 – June 2013

Australasian Faculty of Rehabilitation Medicine

University of Wollongong
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AROC impairment specific benchmarking process

Since 2005 AROC has hosted benchmarking workshops, each of which has focused on one specific impairment. The ultimate objective of the workshop is the development of outcome targets specific to the impairment in question. A representative group of providers of rehabilitation for that impairment are invited to attend the workshop, covering both Australian public and private sectors in as many states and territories as possible, and New Zealand.

As part of the workshop invitees are provided with some detail regarding best practice outcomes relevant to the impairment under study (from an expert speaker and review of literature), and substantive analysis of AROC data relating to that impairment. During the workshop de-identified facility outcome data is presented and compared. Workshop participants are invited to discuss the issues (resource availability/processes etc) that affect the outcomes they achieve, and then to suggest relevant draft outcome targets.

Post workshop the draft targets, if created, are subjected to a sector wide review and feedback process prior to being finalised. Once finalised AROC publishes them on their website and includes the targets in their 6 monthly benchmarking process.

The process of benchmarking enables rehabilitation facilities to compare their functional outcomes against others in their field, and in this instance with targets. This healthy comparison between facilities allows for continuous reflection, evaluation and improvement of rehabilitation provided. Targets are developed by rehabilitation clinicians for rehabilitation clinicians, informed by clinical guidelines and current best practice. They are endorsed by the industry and enable benchmarking between facilities.

NOTE: the goal of benchmark workshops is to develop quality targets and these should not be linked to funding.
Introducing the Outcome Targets Report

This is the second AROC Outcome Targets Report which graphically compares your facility’s data to the AROC Benchmark (as set by AROC members). For each impairment that has had outcome targets established we provide background information on the development of the impairment specific target and graphically present the results for all facilities with sufficient data on this impairment.

To date, outcome targets have been set for four impairments: fractured neck of femur, stroke, brain dysfunction and reconditioning. For each impairment targets are set by AN-SNAP class.

The Outcome Targets Report is structured as a series of chapters, one per impairment. Each chapter begins with a background to the development of the impairment specific outcome target. Following this are the targets themselves, with each individual target followed by de-identified facility level graphs, one graph per AN-SNAP class per target. The red dotted horizontal line on the graph is the benchmark for that particular target. Each bar on each graph represents a facility, your facility is the coloured bar. If your bar is green your facility has achieved target; if your bar is orange your facility is within 5% of target; if your bar is red your facility has not achieved the target.

Some facilities only have a small number of episodes for a given impairment. Your facility will only receive the chapters for which you have a minimum of 20 completed episodes within the impairment (minimum of 15 episodes for brain dysfunction). Further, a minimum of 5 episodes within the AN-SNAP class of an impairment is required for your facility to appear on the graph for that target of that impairment.

NOTE: This report should be considered in conjunction with relevant Impairment Specific Reports and the Benchmark Core Report for your facility.
Data used in this report

- Data included in this report are episodes ending during the financial year 2013 (1 July 2012 to 30 June 2013 inclusive)

- Data in this report was collected using both version 3 (V3) and version 4 (V4) AROC data sets. All data collected using the V3 data set has been mapped to the V4 data set. This report is based on the V4 data set - Pathway 3 (inpatient direct care)

- All data are presented by AN-SNAP class (Appendix 3) within the impairment group (Appendix 2) the targets are set for

- Appendix 1 (glossary) contains definitions of concepts referred to in this report. An understanding of these will help with interpretation of the data

- Unit of counting is by episode, not by patient
How to interpret your graphs

1. Impairment the graph is about
2. Target the graph is about
3. AN-SNAP class the graph is about
4. Target details for this AN-SNAP class for this impairment
5. Target value shown on graph
6. Line indicating target level
7. One bar per facility
8. Your facility will be highlighted if you had at least 5 episodes for this AN-SNAP class within this impairment:
   a) green indicates the target was achieved at your facility
   b) orange indicates your facility is within 5% of achieving the target
   c) red indicates your facility did not achieve the target
   d) if your facility achieved 0% for this target no bar will appear
9. Summary of how many facilities achieved target and the average across all facilities
Fractured neck of femur
Background to target development

The first AROC Benchmarking Workshop run was on fractured neck of femur (#NOF) in April 2005. A follow-up workshop took place in October 2007 and the targets for outcomes of treatment of fractured neck of femur were developed at that workshop and were published in June 2008. AROC later held another follow-up #NOF Benchmarking Workshop in November 2010. The targets for outcomes of treatment of fractured neck of femur were reviewed and adjusted at this workshop and the revised targets published in March 2011.

The #NOF outcome targets developed address four key aspects of rehabilitation:

- Target 1 - Time since surgery to rehabilitation
- Target 2 - Length of inpatient hospital stay
- Target 3 - Functional gain achieved (as measured by FIM change)
- Target 4 - Discharge to accommodation, which allowed for same or greater independence
Episodes used to determine targets

Data was analysed in relation to the outcome targets at two time points, end of calendar year 2006 and financial year 2009/2010.

Data used to determine the targets comprised all episodes with AROC impairment codes:

- 8.111 (fracture of hip, unilateral)
- 8.112 (fracture of hip, bilateral)

Levels of functioning are categorised by V3 AN-SNAP classes:

- 3-227 Orthopaedic Conditions, Fractures, Motor 58-91
- 3-228 Orthopaedic Conditions, Fractures, Motor 48-57
- 3-229 Orthopaedic Conditions, Fractures, Motor 14-47, Cognitive 19-35
- 3-230 Orthopaedic Conditions, Fractures, Motor 14-47, Cognitive 5-18

Changes to AROC analysis between original target development in 2008 and revision in 2011:

- Removal of 90 days rule (episodes with a LOS greater than 90 days are no longer excluded from the dataset)
- Analysis is now based on “completed” episodes of care (refer to Appendix 1 for definition)
Summary of fractured neck of femur

Snapshot of target outcomes at your facility:

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>Episodes</th>
<th>Target status</th>
</tr>
</thead>
<tbody>
<tr>
<td>3227</td>
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<td>1 2 3 4</td>
</tr>
<tr>
<td>3228</td>
<td>0</td>
<td>1 2 3 4</td>
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<tr>
<td>3229</td>
<td>0</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>3230</td>
<td>0</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>All episodes</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

- [✓] Achieved target
- [✗] Did not achieve target
- [Ո] Within 5% of target
- [□] Not reported (0-4 episodes)

NOTE: 117 of 244 (48.0%) facilities reporting #NOF had fewer than 20 episodes.
Target 1: Time since surgery to rehabilitation

2011 time since surgery to rehabilitation outcome targets

Proportion of #NOF episodes to be admitted for rehabilitation within 7 days post surgery:

- AN-SNAP class 3-227 80%
- AN-SNAP class 3-228 80%
- AN-SNAP class 3-229 70%
- AN-SNAP class 3-230 60%

Data excluded from this analysis: nil

NOTE: At the time this target was developed, neither Australia or New Zealand had strong data upon which to develop a target, therefore the target was based on international literature and guidelines that rehabilitation should be started early to promote mobility and function (refer to the Scottish Intercollegiate Guidelines Network [http://www.sign.ac.uk/guidelines/fulltext/56/section9.html]). As a result this target was initially developed as “80% of all #NOF episodes will be admitted for rehabilitation within 7 days post surgery”.

At the time of creation of these targets AROC did not receive data from its members regarding date of surgery. As in interim measure, AROC used “date of onset” as a proxy to complete analysis. During target development participants advised that there is about a 3 day time lag between date of onset (date of relevant acute admission) and date of surgery, which needs to be considered when reporting performance against the current target.

Date of surgery is now being collected routinely in the version 4 AROC dataset, which commenced in July 2012. This target will be reviewed when sufficient V4 data exists.
#NOF Target 1: Time Since Surgery to Rehabilitation — AN-SNAP class 3-227 Target = 80% within 7 days post surgery

(24/130 facilities made target; average was 57.3%)
#NOF Target 1: Time Since Surgery to Rehabilitation — AN-SNAP class 3-228 Target = 80% within 7 days post surgery

(26/115 facilities made target; average was 57.3%)
#NOF Target 1: Time Since Surgery to Rehabilitation — AN-SNAP class 3-229 Target = 70% within 7 days post surgery

(41/120 facilities made target; average was 55.7%)
NOF Target 1: Time Since Surgery to Rehabilitation — AN-SNAP class 3-230 Target = 60% within 7 days post surgery

Proportion of episodes admitted for rehabilitation within 7 days post surgery

(27/49 facilities made target; average was 59.1%)
Target 2: Length of stay

2011 length of stay outcome targets

Half all #NOF episodes to achieve a length of stay of:

- AN-SNAP class 3-227 14 days or less
- AN-SNAP class 3-228 18 days or less
- AN-SNAP class 3-229 23 days or less
- AN-SNAP class 3-230 21 days or less

Data excluded from this analysis:

- Invalid LOS (error in dates giving negative or > 500 days LOS)
- Incomplete episodes (refer to Appendix 1 for definition)

NOTE: Original outcome targets published in 2008 were set at slight stretch (40th percentile of actual 2006 data). In other words 40% of all episodes were already achieving this length of stay, whilst 60% were not.

Upon review of 2006 data for completed episodes only, it was decided to adjust the targets in-line with the statistical changes. The targets remain at the 40th percentile of 2006 data. However they now reflect completed episodes only (in-line with AROC reporting).
#NOF Target 2: Length of Stay — AN-SNAP class 3-227 Target = 14 days or less

(80/144 facilities made target; average was 49.9%)
#NOF Target 2: Length of Stay — AN-SNAP class 3-228 Target = 18 days or less

(67/128 facilities made target; average was 48.7%)
#NOF Target 2: Length of Stay — AN-SNAP class 3-229 Target = 23 days or less

(59/127 facilities made target; average was 45.2%)
#NOF Target 2: Length of Stay — AN-SNAP class 3-230 Target = 21 days or less

(23/53 facilities made target; average was 45.6%)
Target 3: FIM change

2011 functional gain outcome targets

Half all #NOF episodes to achieve a FIM change score of:

- AN-SNAP class 3-227 17 points or more
- AN-SNAP class 3-228 25 points or more
- AN-SNAP class 3-229 31 points or more
- AN-SNAP class 3-230 23 points or more

Data excluded from this analysis:

- Invalid FIM score (1 or more items not answered or null)
- Incomplete episodes (refer to Appendix 1 for definition)

NOTE: Original outcome targets published in 2008 were set at slight stretch (60th percentile of actual 2006 data). In other words 40% of all episodes were already achieving this length of stay, whilst 60% were not. Upon review of 2006 data for completed episodes only, it was decided to adjust the targets in-line with the statistical changes. The targets remain at the 60th percentile of 2006 data. However they now reflect completed episodes only (in-line with AROC reporting).
#NOF Target 3: FIM Change — AN-SNAP class 3-227 Target = 17 points or more

(48/144 facilities made target; average was 40.9%)
# NOF Target 3: FIM Change — AN-SNAP class 3-229 Target = 31 points or more

(63/127 facilities made target; average was 44.8%)
#NOF Target 3: FIM Change — AN-SNAP class 3-230 Target = 23 points or more

(19/53 facilities made target; average was 40.9%)
Target 4: Discharge destination

2011 discharge destination outcome targets

Proportion of completed #NOF episodes to be discharged to pre-impairment form of accommodation or one which allows for greater independence:

- AN-SNAP class 3-227 90%
- AN-SNAP class 3-228 80%
- AN-SNAP class 3-229 75%
- AN-SNAP class 3-230 70%

Data excluded from this analysis:

- Incomplete episodes (refer to Appendix 1 for definition)

NOTE: Original outcome targets published in 2008 were set just above 2006 proportion. It was agreed to adjust the 2011 targets to be just above the 2009/2010 proportion for completed episodes as this data was more accurate and reliable than 2006 data.
#NOF Target 4: Discharge Destination — AN-SNAP class 3-227 Target = 90% achieve same or greater independence

(65/144 facilities made target; average was 80.4%)
#NOF Target 4: Discharge Destination — AN-SNAP class 3-228 Target = 80% achieve same or greater independence

(62/128 facilities made target; average was 74.0%)
#NOF Target 4: Discharge Destination — AN-SNAP class 3-230 Target = 70% achieve same or greater independence

(17/53 facilities made target; average was 53.8%)
Stroke
Background to target development

The first AROC stroke benchmarking workshop took place in February 2008 and the targets for outcomes of treatment of stroke developed at that workshop were published in June 2008. AROC later held a follow-up stroke benchmarking workshop in May 2011. The objective of the follow-up workshop was to evaluate the achievements of stroke outcome targets over the past 3 years and review the targets as deemed necessary. The reviewed targets for outcomes of treatment of stroke as adjusted at this workshop were published in August 2011.

The Stroke outcome targets developed address four key aspects of rehabilitation:

• Target 1 - Time since onset to rehabilitation
• Target 2 - Length of inpatient hospital stay
• Target 3 - Functional gain achieved (as measured by FIM change)
• Target 4 - Discharge to accommodation which allowed for same or greater independence
Episodes used to determine targets

Data was analysed at two time points, financial years 2006/2007 and 2009/2010. For the 2011 workshop the 2006/2007 data was re-analysed to include ‘completed episodes’ only, enabling direct comparison to the 2009/2010 data.

Data used to determine the stroke targets comprised all episodes with AROC impairment codes:

- 1.11 - Haemorrhagic, left body involvement
- 1.12 - Haemorrhagic, right body involvement
- 1.13 - Haemorrhagic, bilateral body involvement
- 1.14 - Haemorrhagic, no Paresis and
- 1.19 - Haemorrhagic, other stroke

- 1.21 - Ischaemic, left body involvement
- 1.22 - Ischaemic, right body involvement
- 1.23 - Ischaemic, bilateral body involvement
- 1.24 - Ischaemic, no Paresis and
- 1.29 - Ischaemic, other stroke

Levels of functioning are categorised by V3 AN-SNAP classes:

- 3-204 Stroke, Motor 63-91, Cognitive 20-35
- 3-205 Stroke, Motor 63-91, Cognitive 5-19
- 3-206 Stroke, Motor 47-62, Cognitive 16-35
- 3-207 Stroke, Motor 47-62, Cognitive 5-15
- 3-208 Stroke, Motor 14-46, Age>=75
- 3-209 Stroke, Motor 14-46, Age <=74
Summary of stroke

Distribution of completed episodes across facilities treating stroke

NOTE: 93 of 227 (41.0%) facilities reporting stroke had fewer than 20 episodes.

Snapshot of target outcomes at your facility:

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>Episodes</th>
<th>Target status</th>
</tr>
</thead>
<tbody>
<tr>
<td>3204</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3205</td>
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<td></td>
</tr>
<tr>
<td>3206</td>
<td>0</td>
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<tr>
<td>3209</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>All episodes</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

✓ Achieved target
⊗ Within 5% of target
✗ Did not achieve target
— Not reported (0-4 episodes)
Target 1: Time between onset and rehabilitation

### 2011 time between onset and rehabilitation outcome targets

Half (50%) of all stroke episodes to be admitted for rehabilitation post onset within:

- AN-SNAP class 3-204 9 days
- AN-SNAP class 3-205 9 days
- AN-SNAP class 3-206 10 days
- AN-SNAP class 3-207 14 days
- AN-SNAP class 3-208 13 days
- AN-SNAP class 3-209 16 days

75% of stroke episodes to be admitted for rehabilitation post onset within:

- AN-SNAP class 3-204 19 days
- AN-SNAP class 3-205 19 days
- AN-SNAP class 3-206 19 days
- AN-SNAP class 3-207 19 days
- AN-SNAP class 3-208 19 days
- AN-SNAP class 3-209 19 days

Data **excluded** from this analysis: nil
Target 1: Time between onset and rehabilitation continued

NOTE: Development of the 2008 target was guided by best practice and clinical judgment. A dual target was set based on the 25th and 75th percentile of current data at that time.

The targets were set as identical for each AN-SNAP class; a target of 7 days between onset and rehabilitation for 50% of episodes and 19 days for 75% of episodes.

The 2011 follow-up workshop participants agreed that the data gave confirmation that the targets set in 2008 were ‘aspirational’. Very few facilities had been able to meet the targets.

The 2011 workshop adjusted the 50% targets to reflect the data current at that time. However they retained the 75% target.

In setting the 50% targets it was found the mean number of days varied across AN-SNAP classes. As a result, the 50% targets were adjusted to reflect a target by AN-SNAP class.
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-204 Target = 50% within 9 days

(75/130 facilities made target; average was 52.6%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-204 Target = 75% within 19 days

(77/130 facilities made target; average was 73.3%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-205 Target = 50% within 9 days

(5/17 facilities made target; average was 37.1%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-205 Target = 75% within 19 days

Proportion of episodes admitted for rehabilitation within 19 days

75%

(10/17 facilities made target; average was 72.0%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-206 Target = 50% within 10 days

(70/120 facilities made target; average was 51.2%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-206 Target = 75% within 19 days

(59/120 facilities made target; average was 69.6%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-207 Target = 50% within 14 days

(4/6 facilities made target; average was 68.8%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-207 Target = 75% within 19 days

(4/6 facilities made target; average was 75.4%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-208 Target = 50% within 13 days

(65/103 facilities made target; average was 55.8%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-208 Target = 75% within 19 days

(48/103 facilities made target; average was 68.8%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-209 Target = 50% within 16 days

(51/84 facilities made target; average was 54.1%)
Stroke Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-209 Target = 75% within 19 days

(23/84 facilities made target; average was 57.9%)
Target 2: Length of stay

2011 length of stay outcome targets

Half all stroke episodes to achieve a length of stay of:

- AN-SNAP class 3-204 14 days or less
- AN-SNAP class 3-205 21 days or less
- AN-SNAP class 3-206 20 days or less
- AN-SNAP class 3-207 26 days or less
- AN-SNAP class 3-208 29 days or less
- AN-SNAP class 3-209 38 days or less

Data excluded from this analysis:
- Invalid LOS (error in dates giving negative or > 500 days LOS)
- Incomplete episodes (refer to Appendix 1 for definition)

NOTE: Targets were set at the median of 2009/2010 data. The median was chosen as statistically speaking it allows for a long tail. This means that a subset of patients can have a significantly longer length of stay, which is often required clinically, without risk of negatively impacting on the length of stay report for that unit.
Stroke Target 2: Length of Stay — AN-SNAP class 3-204 Target = 14 days or less

Proportion of completed episodes to achieve a length of stay of ≤14 days

50%

(100/143 facilities made target; average was 58.8%)
Stroke Target 2: Length of Stay — AN-SNAP class 3-205 Target = 21 days or less

(15/19 facilities made target; average was 55.9%)
Stroke Target 2: Length of Stay — AN-SNAP class 3-206 Target = 20 days or less

(69/131 facilities made target; average was 48.3%)
Stroke Target 2: Length of Stay — AN-SNAP class 3-207 Target = 26 days or less

(3/6 facilities made target; average was 51.2%)
Stroke Target 2: Length of Stay — AN-SNAP class 3-208 Target = 29 days or less

(41/113 facilities made target; average was 42.2%)
Stroke Target 2: Length of Stay — AN-SNAP class 3-209 Target = 38 days or less

(31/91 facilities made target; average was 43.0%)
Target 3: FIM change

2011 functional gain outcome targets

Half all stroke episodes to achieve a FIM change score of:

- AN-SNAP class 3-204 14 points or more
- AN-SNAP class 3-205 18 points or more
- AN-SNAP class 3-206 25 points or more
- AN-SNAP class 3-207 29 points or more
- AN-SNAP class 3-208 28 points or more
- AN-SNAP class 3-209 39 points or more

Data excluded from this analysis:

- Invalid FIM score (1 or more items not answered or null)
- Incomplete episodes (refer to Appendix 1 for definition)

NOTE: It was agreed at the 2008 workshop that the target around functional gain would be a slight stretch target set by AN-SNAP class at the 60th percentile of 2008 data. In other words, 40% of all stroke episodes would be already achieving this level of FIM change, whilst the other 60% are not.

At the follow-up workshop in 2011 targets were adjusted to the median of the 2009/2010 data. Where the 2009/2010 data indicated a target lower than that previously set the 2008 target was retained.
Stroke Target 3: FIM Change — AN-SNAP class 3-204 Target = 14 points or more

(56/143 facilities made target; average was 43.5%)
Stroke Target 3: FIM Change — AN-SNAP class 3-205 Target = 18 points or more

(15/19 facilities made target; average was 52.3%)
Stroke Target 3: FIM Change — AN-SNAP class 3-206 Target = 25 points or more

Proportion of completed episodes to achieve a FIM change of >=25 points

(67/131 facilities made target; average was 49.0%)
Stroke Target 3: FIM Change — AN-SNAP class 3-207 Target = 29 points or more

(2/6 facilities made target; average was 50.9%)
Stroke Target 3: FIM Change — AN-SNAP class 3-208 Target = 28 points or more

(54/113 facilities made target; average was 47.0%)
Stroke Target 3: FIM Change — AN-SNAP class 3-209 Target = 39 points or more

Proportion of completed episodes to achieve a FIM change of 39+ points

50%

(41/90 facilities made target; average was 50.3%)
Target 4: Discharge destination

2011 discharge destination outcome targets

Proportion of completed stroke episodes to be discharged to pre-impairment form of accommodation or one which allows for greater independence:

- AN-SNAP class 3-204 82%
- AN-SNAP class 3-205 77%
- AN-SNAP class 3-206 80%
- AN-SNAP class 3-207 75%
- AN-SNAP class 3-208 61%
- AN-SNAP class 3-209 78%

Data excluded from this analysis:

- Incomplete episodes (refer to Appendix 1 for definition)

NOTE: Results of data analysis at the original workshop showed large differences between the public and private sectors. Participants from public hospitals voiced realistic concerns that it would be difficult for the public sector to raise their discharge proportions to meet that of the private sector. For these reasons the target was set at the current public proportion by AN-SNAP class.

In the 2011 follow-up workshop analysis using 2009/2010 data showed that all AN-SNAP class targets were being met. As a result targets for all classes were increased.
Stroke Target 4: Discharge Destination — AN-SNAP class 3-204 Target = 82% achieve same or greater independence

(72/143 facilities made target; average was 79.4%)
Stroke Target 4: Discharge Destination — AN-SNAP class 3-205 Target = 77% achieve same or greater independence

(7/19 facilities made target; average was 64.9%)
Stroke Target 4: Discharge Destination — AN-SNAP class 3-206 Target = 80% achieve same or greater independence

(62/131 facilities made target; average was 74.0%)
Stroke Target 4: Discharge Destination — AN-SNAP class 3-207 Target = 75% achieve same or greater independence

(1/6 facilities made target; average was 49.1%)
Stroke Target 4: Discharge Destination — AN-SNAP class 3-208 Target = 61% achieve same or greater independence

(30/113 facilities made target; average was 47.2%)
Stroke Target 4: Discharge Destination — AN-SNAP class 3-209 Target = 78% achieve same or greater independence

(23/91 facilities made target; average was 54.9%)
Brain dysfunction
Background to target development

The first AROC brain injury benchmarking workshop took place in September 2008. Targets developed at this workshop for outcomes of treatment of brain injury were published in July 2009.

Brain injury targets were set by trauma categories, that is, traumatic brain injury (TBI) and non-traumatic brain injury (NTBI). At the workshop TBI were considered an homogenous group so targets were set for open and closed injury combined. Subarachnoid haemorrhage, anoxic brain damage and other non-traumatic brain dysfunctions were not considered an homogenous group and it was agreed at the workshop that targets needed to be developed at an impairment level for NTBI. At present, subarachnoid haemorrhage is the only impairment with sufficient data to develop robust targets.

For each trauma category brain injury outcome targets developed address four key aspects of rehabilitation:

• Target 1 - Time since onset to rehabilitation
• Target 2 - Length of inpatient hospital stay
• Target 3 - Functional gain achieved (as measured by FIM change)
• Target 4 - Discharge to accommodation, which allowed for same or greater independence
Episodes used to determine targets

Data was analysed using calendar year 2007 whole episodes.

Data used to determine the TBI targets comprised all episodes with AROC impairment codes:
- 2.21 (open injury)
- 2.22 (closed injury)

Data used to determine the NTBI target for subarachnoid haemorrhage (SAH) comprised all episodes with an AROC impairment code:
- 2.11 (subarachnoid haemorrhage)

Levels of functioning are categorised by V3 AN-SNAP classes:
- 3-210 - Brain Dysfunction, motor 56-91, cognitive 32-35
- 3-211 - Brain Dysfunction, motor 56-91, cognitive 24-31
- 3-212 - Brain Dysfunction, motor 56-91, cognitive 20-23
- 3-213 - Brain Dysfunction, motor 56-91, cognitive 5-19
- 3-214 - Brain Dysfunction, motor 24-55
- 3-215 - Brain Dysfunction, motor 14-23
Summary of traumatic brain injury (TBI)

Distribution of completed episodes across facilities treating traumatic brain injury

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>Episodes</th>
<th>Target status</th>
</tr>
</thead>
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<tr>
<td>3215*</td>
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</tr>
</tbody>
</table>

*No figures provided for this AN-SNAP class due to insufficient episodes

Target status:
- ✓ Achieved target
- ✗ Within 5% of target
- ✗ Did not achieve target
- ⌂ Not reported (0-4 episodes)

(Note: 138 of 153 (90.2%) facilities reporting traumatic brain injury had fewer than 15 episodes.)
**Target 1: Time between onset and rehabilitation**

### 2009 time between onset and rehabilitation outcome targets

**Traumatic Brain Injury:**
- 25% of TBI episodes to start rehabilitation within 7 days of injury
- 50% of TBI episodes to start rehabilitation within 17 days of injury

Data *excluded* from this analysis: nil

**NOTE:** Best practice, clinical judgment and the current data guided the development of these targets. Targets were set at a slightly higher level than the current data and independent of AN-SNAP classes.