The AROC Annual Report:

The state of rehabilitation in New Zealand in 2016
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Introduction

This is the fifth comprehensive annual report describing discharge episodes from subacute inpatient rehabilitation programs provided by New Zealand facilities that are members of the Australasian Rehabilitation Outcomes Centre (AROC).

The inaugural report was published in 2013 and described the 2012 data; this fifth instalment describes the 2016 data.

This report is the second to use the version 4 AN-SNAP classification (implemented in Australia in July 2016). For more information about AN-SNAP classification please refer to the AROC website: http://ahsri.uow.edu.au/aroc

This report also includes an extended times series analysis, looking at change in various rehabilitation measures over the most recent five years.

The provision of rehabilitation in New Zealand has been relatively static over the past few years, with 2016 seeing a 1.6% real decrease in inpatient episodes of rehabilitation provided.
Number of episodes by impairment group, 2016
Funding source for rehabilitation in New Zealand, 2016

- MoH: 61.1%
- ACC: 38.1%
- Other: 0.8%
Changes in rehabilitation – compared to last year

The following figures look at changes in rehabilitation between last year and this year:

- The first figure considers the number of episodes within each impairment group and documents real changes in episode volume since last year.
- The second figure presents the key changes in rehabilitation outcome measures between last year and this year. The horizontal axis describes the difference between last year and this year averages, while last year’s actual values are presented on the left side of the graph.
Change in number of episodes by impairment group, 2015 to 2016

- Stroke (1,961)
- Brain (507)
- Neuro (300)
- Spine (236)
- Amputee (187)
- Arthritis (44)
- Pain (285)
- Orthopaedic all (4,544)
  - Ortho-Fractures (3,775)
  - Ortho-Replacements (309)
  - Ortho-Soft tissue injury (335)
- Other ortho (125)
- Cardiac (121)
- Pulmonary (58)
- Other (296)
- MultTrauma (95)
- Reconditioning (3,314)
- All impairments (11,954)

Percentage change in number of episodes
Change in outcome measures, 2015 to 2016

- Age (years) 77.9
- Length of stay (days) 20.8
- FIM admission score 73.6
- FIM discharge score 91.7
- FIM change (adm to disch) 18.2
- FIM efficiency (per week) 6.1
- Disch to community (%) 97.3

2015 (n = 12,158)
2016 (n = 11,974)
The following figures look at changes in rehabilitation over the last 5 years:

- The first figure shows the total number of episodes each year over the past 5 years.
- The second figure outlines the changing proportion of episodes within each impairment group over the past five years as a proportion of all episodes each year.
- The third figure presents the key changes in rehabilitation outcome measures between five years ago and this year. The horizontal axis describes the difference between five years ago and this year averages, while the actual values from five years ago are presented on the left side of the graph.
- The remaining figures provide a graphical representation of the change in various rehabilitation measures over the most recent five years. Each bar (one per year) represents the difference, positive or negative, of that year’s value to the value from five years ago. The value for the bar from five years ago will always be zero.
  - Age at admission
  - Admission to rehabilitation within a week of injury or onset of symptoms
  - Length of stay
  - Proportion of FIM assessments within three days of rehabilitation commencing
  - Admission FIM score as a proportion of the total score possible
  - FIM change as a proportion of the total change possible
  - FIM efficiency
A large number of the New Zealand facilities joined AROC during the 2011-2012 period. This increase in data submitting facilities is responsible for most of the growth in number of episodes during 2011-2013.
Proportion of episodes by impairment group, 2012 to 2016
Change in outcome measures, 2012 to 2016

- **Disch to community (%)**: 95.3
- **FIM efficiency (per week)**: 5.8
- **FIM change (adm to disch)**: 18.7
- **FIM discharge score**: 95.1
- **FIM admission score**: 76.5
- **Length of stay (days)**: 22.5
- **Age (years)**: 75.7

Difference from 2012 data:

- **Lower than 2012 data**
  - **Disch to community (%)**: 95.3
  - **FIM admission score**: 76.5
  - **FIM discharge score**: 95.1
  - **FIM efficiency (per week)**: 5.8
  - **FIM change (adm to disch)**: 18.7
  - **Length of stay (days)**: 22.5
  - **Age (years)**: 75.7

- **Higher than 2012 data**

2012 (n = 7,198)
2016 (n = 11,974)
Average age compared to five years ago

Over the last four years patients have been around 2 years older than patients in 2012.
Admission to rehabilitation within a week of injury or onset of symptoms compared to five years ago

Over the last five years patients have been commencing rehabilitation sooner after their injury /onset of symptoms; in 2016 11% more patients were admitted to rehabilitation within a week of onset compared to in 2012.
Length of stay compared to five years ago

Over the last five years rehabilitation length of stay (LOS) has been declining; in 2016 patients stayed just under 2 days less than they did in 2012.
Timeliness of FIM assessment within 72 hours compared to five years ago

Over the last five years the number of patients assessed for their functional ability within three days of rehabilitation commencing has fluctuated.
Over the last five years the FIM admission score has declined, nearly 3% lower in 2016 compared to in 2012.
Relative functional gain in FIM compared to five years ago

FIM Relative Functional Gain (RFG), or change in FIM score possible from admission to discharge, over the last few years has been 2%-4% lower than it was in 2012, dropping slightly in 2016. In 2016 36% of FIM relative functional gain was achieved.
Over the last three years weekly FIM efficiency (change in FIM score possible from admission to discharge divided by length of stay x7) has increased slightly; in 2016 it was marginally higher than it was in 2011.
Outcomes by impairment

A series of figures and tables are provide for each impairment group; these outline the key descriptive data for this year, changes in episode volumes over the last 5 years, and changes in rehabilitation outcome measures between last year and this year:

• The first figure in each group outlines the number of episodes for each quarter over the past five years, and documents any changes in episode volume over time and/or seasonal trends.
• The second figure displays the proportion of episodes in each AN-SNAP class over the last 5 years.
• The third is a table outlining key data for the respective impairment group by AN-SNAP class.
• The fourth figure provides a summary of the discharge destination of all episodes by AN-SNAP class.
• The fifth figure provides a graphical representation of length of stay (LOS) and improvement in the FIM (Functional Independence Measure) by AN-SNAP class.
• Finally, the sixth figure presents the key changes in rehabilitation outcome measures between last year and this year. The horizontal axis describes the difference between last year and this year averages, while last years actual values are presented on the left side of the graph.
Stroke episodes over time

Number of episodes by quarter - Stroke

- Year - Quarter

Number of episodes

Stroke casemix over time

Proportion of episodes within year

Year
2012
2013
2014
2015
2016

Proportion of episodes within year:

- 4AZ4
- 4AZ3
- 4AA7
- 4AA6
- 4AA5
- 4AA4
- 4AA3
- 4AA2
- 4AA1
Stoke episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4AA1</th>
<th>4AA2</th>
<th>4AA3</th>
<th>4AA4</th>
<th>4AA5</th>
<th>4AA6</th>
<th>4AA7</th>
<th>4AZ3</th>
<th>4AZ4</th>
<th>All Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>360</td>
<td>347</td>
<td>115</td>
<td>217</td>
<td>88</td>
<td>343</td>
<td>128</td>
<td>290</td>
<td>54</td>
<td>1,961</td>
</tr>
<tr>
<td>Proportion of episodes</td>
<td>18.4%</td>
<td>17.7%</td>
<td>5.9%</td>
<td>11.1%</td>
<td>4.5%</td>
<td>17.5%</td>
<td>6.5%</td>
<td>14.8%</td>
<td>2.8%</td>
<td>100.0%</td>
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<tr>
<td>Gender (%)</td>
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</tr>
<tr>
<td>Female</td>
<td>45.6%</td>
<td>52.2%</td>
<td>40.0%</td>
<td>50.7%</td>
<td>45.5%</td>
<td>50.1%</td>
<td>49.2%</td>
<td>53.8%</td>
<td>48.1%</td>
<td>49.5%</td>
</tr>
<tr>
<td>Male</td>
<td>54.4%</td>
<td>47.6%</td>
<td>60.0%</td>
<td>49.3%</td>
<td>54.5%</td>
<td>49.9%</td>
<td>50.8%</td>
<td>46.2%</td>
<td>51.9%</td>
<td>50.5%</td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>28.6%</td>
<td>20.7%</td>
<td>23.5%</td>
<td>0.0%</td>
<td>76.1%</td>
<td>0.0%</td>
<td>80.5%</td>
<td>0.0%</td>
<td>100.0%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Over 65</td>
<td>70.8%</td>
<td>78.7%</td>
<td>76.5%</td>
<td>100.0%</td>
<td>23.9%</td>
<td>100.0%</td>
<td>19.5%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>77.4%</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>70.4 (69.0-71.8)</td>
<td>74.5 (73.0-76.0)</td>
<td>72.8 (70.3-75.2)</td>
<td>82.1 (81.1-83.1)</td>
<td>56.0 (53.9-58.2)</td>
<td>81.2 (80.5-81.9)</td>
<td>57.1 (55.6-58.6)</td>
<td>80.9 (80.0-81.8)</td>
<td>54.6 (52.3-56.9)</td>
<td>74.1 (73.5-74.7)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>101.4 (100.2-102.5)</td>
<td>89.2 (88.0-90.3)</td>
<td>79.2 (77.0-81.4)</td>
<td>65.5 (64.2-66.8)</td>
<td>66.5 (64.6-68.4)</td>
<td>48.1 (47.0-49.2)</td>
<td>46.5 (44.8-48.3)</td>
<td>29.2 (28.2-30.2)</td>
<td>30.4 (28.0-32.7)</td>
<td>67.4 (66.2-68.6)</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>11.9 (11.1-12.8)</td>
<td>15.2 (14.0-16.3)</td>
<td>18.6 (16.6-20.7)</td>
<td>21.9 (20.5-23.4)</td>
<td>25.3 (22.3-28.4)</td>
<td>32.3 (30.0-34.5)</td>
<td>38.5 (34.9-42.2)</td>
<td>41.3 (37.5-45.0)</td>
<td>64.3 (56.2-72.3)</td>
<td>25.4 (24.4-26.3)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>98.9%</td>
<td>98.6%</td>
<td>98.2%</td>
<td>98.6%</td>
<td>95.4%</td>
<td>97.3%</td>
<td>94.5%</td>
<td>96.0%</td>
<td>86.5%</td>
<td>97.3%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>1.1%</td>
<td>1.4%</td>
<td>1.8%</td>
<td>1.4%</td>
<td>4.6%</td>
<td>2.7%</td>
<td>5.5%</td>
<td>4.0%</td>
<td>13.5%</td>
<td>2.7%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>13.5 (12.6-14.5)</td>
<td>17.2 (16.0-18.3)</td>
<td>18.2 (15.8-20.6)</td>
<td>25.6 (23.5-27.8)</td>
<td>33.3 (30.2-36.5)</td>
<td>26.9 (24.8-29.1)</td>
<td>38.9 (35.1-42.8)</td>
<td>20.9 (18.4-23.5)</td>
<td>38.9 (32.0-45.8)</td>
<td>22.5 (21.7-23.3)</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
<td>1.2</td>
<td>1.3</td>
<td>0.8</td>
<td>1.0</td>
<td>0.5</td>
<td>0.6</td>
<td>0.9</td>
</tr>
</tbody>
</table>
Stroke discharge destination by AN-SNAP class

Discharge destination - Stroke

Percentage

AN-SNAP class

Remaining in hospital system
Unknown residence
Other supported residence
Private residence - ?? Support
Private residence - with support
Private residence - no support

4AA1 (n=360)
4AA2 (n=347)
4AA3 (n=115)
4AA4 (n=217)
4AA5 (n=68)
4AA6 (n=343)
4AA7 (n=128)
4AZ3 (n=290)
4AZ4 (n=54)
All Stroke (n=1,961)
Stroke LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Mean LOS

Mean FIM improvement

AN-SNAP class

4AA1 (n=360)
4AA2 (n=347)
4AA3 (n=115)
4AA4 (n=217)
4AA5 (n=88)
4AA6 (n=343)
4AA7 (n=128)
4AZ3 (n=290)
4AZ4 (n=54)
Change in outcome measures in stroke, 2015 to 2016

- Age (years): 74.5
- Length of stay (days): 27.2
- FIM admission score: 66.4
- FIM discharge score: 88.6
- FIM change (adm to disch): 22.2
- FIM efficiency (per week): 5.7
- Disch to community (%): 97.3

Lower than 2015 data

<table>
<thead>
<tr>
<th>Measure</th>
<th>2015 (n = 1,847)</th>
<th>2016 (n = 1,961)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>74.5</td>
<td></td>
</tr>
<tr>
<td>Length of stay (days)</td>
<td>27.2</td>
<td></td>
</tr>
<tr>
<td>FIM admission score</td>
<td>66.4</td>
<td></td>
</tr>
<tr>
<td>FIM discharge score</td>
<td>88.6</td>
<td></td>
</tr>
<tr>
<td>FIM change (adm to disch)</td>
<td>22.2</td>
<td></td>
</tr>
<tr>
<td>FIM efficiency (per week)</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>Disch to community (%)</td>
<td>97.3</td>
<td></td>
</tr>
</tbody>
</table>

Higher than 2015 data
Brain dysfunction episodes over time

Number of episodes by quarter - Brain dysfunction

<table>
<thead>
<tr>
<th>Year - Quarter</th>
<th>Number of episodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-1</td>
<td>40</td>
</tr>
<tr>
<td>2012-2</td>
<td>60</td>
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<tr>
<td>2012-3</td>
<td>80</td>
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<tr>
<td>2012-4</td>
<td>100</td>
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<tr>
<td>2013-1</td>
<td>120</td>
</tr>
<tr>
<td>2013-2</td>
<td>140</td>
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<td>2013-3</td>
<td>160</td>
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<td>2014-2</td>
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<td>2014-3</td>
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<td>2015-2</td>
<td>120</td>
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<td>160</td>
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<td>2016-1</td>
<td>120</td>
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<td>140</td>
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<tr>
<td>2016-3</td>
<td>160</td>
</tr>
<tr>
<td>2016-4</td>
<td>120</td>
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</tbody>
</table>

Specialist: 40, 60, 80, 100, 120, 140, 160, 120, 140, 160, 120, 140, 160, 120, 140, 160
Non Specialist: 0, 20, 40, 60, 80, 100, 120, 140, 160, 120, 140, 160, 120, 140, 160
Total: 40, 80, 120, 160, 200, 240, 280, 240, 280, 320, 280, 320, 360, 280, 320, 360
Brain dysfunction casemix over time – Specialist facilities
Brain dysfunction casemix over time – Non specialist facilities
### Brain dysfunction episodes in 2016 - Specialist facilities

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4AB1</th>
<th>4AB2</th>
<th>4AB3</th>
<th>4AB4</th>
<th>4AB5</th>
<th>4AB6</th>
<th>4AB7</th>
<th>4AZ1</th>
<th>4AZ2</th>
<th>All Brain dysfunction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>78</td>
<td>64</td>
<td>25</td>
<td>41</td>
<td>23</td>
<td>15</td>
<td>15</td>
<td>11</td>
<td>11</td>
<td>283</td>
</tr>
<tr>
<td>Proportion of episodes</td>
<td>27.6%</td>
<td>22.6%</td>
<td>8.8%</td>
<td>14.5%</td>
<td>8.1%</td>
<td>5.3%</td>
<td>5.3%</td>
<td>3.9%</td>
<td>3.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Gender (%)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>23.1%</td>
<td>20.3%</td>
<td>48.0%</td>
<td>31.7%</td>
<td>26.1%</td>
<td>53.3%</td>
<td>20.0%</td>
<td>27.3%</td>
<td>27.3%</td>
<td>27.9%</td>
</tr>
<tr>
<td>Male</td>
<td>76.9%</td>
<td>79.7%</td>
<td>52.0%</td>
<td>68.3%</td>
<td>73.9%</td>
<td>46.7%</td>
<td>80.0%</td>
<td>72.7%</td>
<td>72.7%</td>
<td>72.1%</td>
</tr>
<tr>
<td>Age group (%)</td>
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<td></td>
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</tr>
<tr>
<td>Under 65</td>
<td>89.7%</td>
<td>82.8%</td>
<td>68.0%</td>
<td>78.0%</td>
<td>82.6%</td>
<td>73.3%</td>
<td>93.3%</td>
<td>63.6%</td>
<td>100.0%</td>
<td>82.7%</td>
</tr>
<tr>
<td>Over 65</td>
<td>10.3%</td>
<td>17.2%</td>
<td>32.0%</td>
<td>22.0%</td>
<td>17.4%</td>
<td>26.7%</td>
<td>6.7%</td>
<td>36.4%</td>
<td>0.0%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>44.2 (40.2-48.2)</td>
<td>43.8 (39.2-48.3)</td>
<td>53.4 (45.3-61.5)</td>
<td>49.7 (43.7-55.7)</td>
<td>48.4 (41.0-55.8)</td>
<td>49.3 (37.3-61.3)</td>
<td>41.5 (32.3-50.8)</td>
<td>61.5 (56.2-66.9)</td>
<td>32.8 (26.8-38.9)</td>
<td>46.4 (44.2-48.6)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>111.2 (109.5-113.0)</td>
<td>100.4 (98.3-102.4)</td>
<td>88.3 (85.1-91.4)</td>
<td>78.9 (75.9-81.9)</td>
<td>62.8 (59.3-66.4)</td>
<td>48.3 (45.5-51.1)</td>
<td>34.2 (30.9-37.5)</td>
<td>21.7 (18.4-25.0)</td>
<td>19.1 (18.1-20.1)</td>
<td>84.9 (81.4-88.4)</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>12.4 (10.9-13.9)</td>
<td>22.1 (17.8-26.4)</td>
<td>23.2 (17.8-28.6)</td>
<td>29.6 (23.3-35.9)</td>
<td>59.1 (39.8-78.4)</td>
<td>71.6 (45.5-97.6)</td>
<td>80.5 (56.2-104.8)</td>
<td>90.7 (61.2-120.1)</td>
<td>83.3 (54.6-112.1)</td>
<td>33.3 (29.1-37.5)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
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<tr>
<td>Discharged to community</td>
<td>98.7%</td>
<td>98.4%</td>
<td>100.0%</td>
<td>95.3%</td>
<td>100.0%</td>
<td>87.5%</td>
<td>100.0%</td>
<td>83.3%</td>
<td>83.3%</td>
<td>96.5%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>1.3%</td>
<td>1.6%</td>
<td>0.0%</td>
<td>4.7%</td>
<td>0.0%</td>
<td>12.5%</td>
<td>0.0%</td>
<td>16.7%</td>
<td>16.7%</td>
<td>3.5%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>11.1 (9.4-12.8)</td>
<td>20.1 (17.9-22.4)</td>
<td>30.3 (27.7-32.9)</td>
<td>37.7 (33.5-41.8)</td>
<td>41.5 (32.6-50.4)</td>
<td>56.0 (46.3-65.7)</td>
<td>75.9 (69.6-82.1)</td>
<td>68.4 (49.5-87.4)</td>
<td>70.0 (51.7-88.3)</td>
<td>30.8 (27.9-33.6)</td>
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<td>FIM efficiency (FIM change/LOS)</td>
<td>0.9</td>
<td>0.9</td>
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<td>1.3</td>
<td>0.7</td>
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## Brain dysfunction episodes in 2016 - Non specialist facilities

<table>
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<tr>
<th>AN-SNAP class:</th>
<th>4AB1</th>
<th>4AB2</th>
<th>4AB3</th>
<th>4AB4</th>
<th>4AB5</th>
<th>4AB6</th>
<th>4AB7</th>
<th>4AZ1</th>
<th>4AZ2</th>
<th>All Brain dysfunction</th>
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<tr>
<td>Number of episodes</td>
<td>19</td>
<td>18</td>
<td>36</td>
<td>52</td>
<td>15</td>
<td>31</td>
<td>22</td>
<td>21</td>
<td>7</td>
<td>224</td>
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<tr>
<td>Proportion of episodes</td>
<td>8.5%</td>
<td>8.0%</td>
<td>16.1%</td>
<td>23.2%</td>
<td>6.7%</td>
<td>13.8%</td>
<td>9.8%</td>
<td>9.4%</td>
<td>3.1%</td>
<td>100.0%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>47.4%</td>
<td>66.7%</td>
<td>52.8%</td>
<td>50.0%</td>
<td>60.0%</td>
<td>35.5%</td>
<td>54.5%</td>
<td>61.9%</td>
<td>71.4%</td>
<td>52.7%</td>
</tr>
<tr>
<td>Male</td>
<td>52.6%</td>
<td>33.3%</td>
<td>47.2%</td>
<td>50.0%</td>
<td>40.0%</td>
<td>64.5%</td>
<td>45.5%</td>
<td>38.1%</td>
<td>28.6%</td>
<td>47.3%</td>
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<tr>
<td>Age group (%)</td>
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<td></td>
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</tr>
<tr>
<td>Under 65</td>
<td>42.1%</td>
<td>50.0%</td>
<td>25.0%</td>
<td>23.1%</td>
<td>13.3%</td>
<td>3.2%</td>
<td>18.2%</td>
<td>47.6%</td>
<td>100.0%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Over 65</td>
<td>57.9%</td>
<td>50.0%</td>
<td>75.0%</td>
<td>75.0%</td>
<td>80.0%</td>
<td>93.5%</td>
<td>81.8%</td>
<td>52.4%</td>
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<tr>
<td>Age (Mean+95%CI)</td>
<td>64.6 (56.5-72.8)</td>
<td>64.1 (55.8-72.3)</td>
<td>74.3 (69.1-79.4)</td>
<td>72.1 (67.2-77.0)</td>
<td>74.2 (67.7-80.8)</td>
<td>80.4 (75.9-85.0)</td>
<td>75.2 (70.0-80.5)</td>
<td>69.3 (62.8-75.8)</td>
<td>42.4 (36.3-48.6)</td>
<td>71.4 (69.1-73.6)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>109.2 (105.8-112.6)</td>
<td>97.6 (93.8-101.4)</td>
<td>84.5 (81.2-87.9)</td>
<td>75.5 (72.9-78.2)</td>
<td>60.8 (56.4-65.2)</td>
<td>48.3 (45.4-51.3)</td>
<td>37.1 (33.0-41.3)</td>
<td>21.3 (18.5-24.1)</td>
<td>29.0 (23.4-34.6)</td>
<td>67.4 (63.7-71.1)</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>12.9 (6.7-19.2)</td>
<td>19.2 (13.9-24.5)</td>
<td>17.0 (13.0-21.0)</td>
<td>22.9 (18.3-27.6)</td>
<td>24.9 (21.3-28.5)</td>
<td>20.4 (15.7-25.2)</td>
<td>25.4 (19.3-31.4)</td>
<td>61.6 (21.1-102.0)</td>
<td>57.0 (28.8-85.2)</td>
<td>24.9 (20.6-29.1)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>94.7%</td>
<td>94.7%</td>
<td>100.0%</td>
<td>96.2%</td>
<td>100.0%</td>
<td>93.8%</td>
<td>100.0%</td>
<td>90.5%</td>
<td>75.0%</td>
<td>95.6%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>5.3%</td>
<td>5.3%</td>
<td>0.0%</td>
<td>3.8%</td>
<td>0.0%</td>
<td>6.3%</td>
<td>0.0%</td>
<td>9.5%</td>
<td>25.0%</td>
<td>4.4%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>7.2 (4.4-10.0)</td>
<td>7.8 (4.9-10.8)</td>
<td>19.8 (16.5-23.2)</td>
<td>19.2 (14.9-23.5)</td>
<td>23.7 (15.1-32.4)</td>
<td>28.7 (21.1-36.3)</td>
<td>25.6 (14.1-37.1)</td>
<td>27.6 (19.3-35.8)</td>
<td>42.8 (12.4-73.1)</td>
<td>20.8 (18.3-23.2)</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>0.6</td>
<td>0.4</td>
<td>1.2</td>
<td>0.8</td>
<td>1.0</td>
<td>1.4</td>
<td>1.0</td>
<td>0.4</td>
<td>0.8</td>
<td>0.8</td>
</tr>
</tbody>
</table>
Brain dysfunction discharge destination by AN-SNAP Class – Specialist facilities

Specialist - Discharge destination - Brain dysfunction

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

AN-SNAP class

- 4AB1 (n=78)
- 4AB2 (n=64)
- 4AB3 (n=25)
- 4AB4 (n=41)
- 4AB5 (n=23)
- 4AB6 (n=15)
- 4AB7 (n=15)
- 4AZ1 (n=11)
- 4AZ2 (n=11)
- All Brain dysfunction (n=283)
Brain dysfunction discharge destination by AN-SNAP Class – Non specialist facilities

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>4AB1</td>
<td>19</td>
</tr>
<tr>
<td>4AB2</td>
<td>18</td>
</tr>
<tr>
<td>4AB3</td>
<td>36</td>
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<tr>
<td>4AB4</td>
<td>52</td>
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<td>4AB5</td>
<td>15</td>
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<td>4AB6</td>
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<td>4AZ1</td>
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<tr>
<td>4AZ2</td>
<td>7</td>
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<tr>
<td>All Brain dysfunction</td>
<td>224</td>
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</tbody>
</table>

- **Remaining in hospital system**
- **Unknown residence**
- **Other supported residence**
- **Private residence - ?? Support**
- **Private residence - with support**
- **Private residence - no support**
Brain dysfunction LOS and FIM change by AN-SNAP Class – Specialist facilities

Specialist - LOS and FIM change by AN-SNAP class

Mean LOS
Mean FIM improvement

AN-SNAP class

4AB1 (n=78)
4AB2 (n=64)
4AB3 (n=25)
4AB4 (n=41)
4AB5 (n=23)
4AB6 (n=15)
4AB7 (n=15)
4AZ1 (n=11)
4AZ2 (n=11)
Brain dysfunction LOS and FIM change by AN-SNAP Class – Non specialist facilities

Non specialist - LOS and FIM change by AN-SNAP class

Mean LOS
Mean FIM improvement

AN-SNAP class

4AB1 (n=19) 4AB2 (n=18) 4AB3 (n=36) 4AB4 (n=52) 4AB5 (n=15) 4AB6 (n=31) 4AB7 (n=22) 4AZ1 (n=21) 4AZ2 (n=7)
Change in outcome measures in brain dysfunction, 2015 to 2016 - Specialist facilities

Specialist - Difference from 2015 data - All Brain dysfunction

2015 (n = 244)
2016 (n = 283)

Lower than 2015 data
Higher than 2015 data

Age (years) 46.9
Length of stay (days) 31.2
FIM admission score 84.2
FIM discharge score 113.3
FIM change (adm to disch) 29.1
FIM efficiency (per week) 6.5
Disch to community (%) 96.3

2015
2016

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Change in outcome measures in brain dysfunction, 2015 to 2016 - Non specialist facilities

Non specialist - Difference from 2015 data - All Brain dysfunction

- Age (years) 70.9
- Length of stay (days) 22.7
- FIM admission score 73.2
- FIM discharge score 93.2
- FIM change (adm to disch) 20.0
- FIM efficiency (per week) 6.2
- Disch to community (%) 94.5

2015 (n = 241)
2016 (n = 224)

Lower than 2015 data
Higher than 2015 data
Neurological conditions episodes over time

Number of episodes by quarter - Neurological conditions
Neurological conditions casemix over time
# Neurological conditions episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4AC1</th>
<th>4AC2</th>
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<th>4AZ3</th>
<th>4AZ4</th>
<th>All Neurological conditions</th>
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<tbody>
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<td>Number of episodes</td>
<td>99</td>
<td>84</td>
<td>93</td>
<td>16</td>
<td>7</td>
<td>300</td>
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<td>Proportion of episodes</td>
<td>33.0%</td>
<td>28.0%</td>
<td>31.0%</td>
<td>5.3%</td>
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<td>100.0%</td>
</tr>
<tr>
<td>Gender (%)</td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>58.6%</td>
<td>47.6%</td>
<td>44.1%</td>
<td>25.0%</td>
<td>57.1%</td>
<td>49.3%</td>
</tr>
<tr>
<td>Male</td>
<td>41.4%</td>
<td>52.4%</td>
<td>55.9%</td>
<td>75.0%</td>
<td>42.9%</td>
<td>50.7%</td>
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<td>Age group (%)</td>
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<tr>
<td>Under 65</td>
<td>46.5%</td>
<td>21.4%</td>
<td>37.6%</td>
<td>0.0%</td>
<td>100.0%</td>
<td>35.3%</td>
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<tr>
<td>Over 65</td>
<td>53.5%</td>
<td>77.4%</td>
<td>62.4%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>64.3%</td>
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<tr>
<td>Age (Mean+95%CI)</td>
<td>63.1 (59.4-66.8)</td>
<td>72.5 (69.4-75.5)</td>
<td>66.8 (63.6-70.1)</td>
<td>77.8 (74.0-81.6)</td>
<td>48.0 (35.5-60.5)</td>
<td>67.3 (65.4-69.2)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>100.5 (98.4-102.6)</td>
<td>76.5 (74.2-78.7)</td>
<td>54.7 (52.4-56.9)</td>
<td>29.6 (24.6-34.6)</td>
<td>40.1 (32.5-47.8)</td>
<td>75.0 (72.3-77.8)</td>
</tr>
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<td>LOS (Mean+95%CI)</td>
<td>13.5 (11.5-15.5)</td>
<td>17.9 (15.0-20.8)</td>
<td>27.3 (21.9-32.8)</td>
<td>22.7 (11.6-33.7)</td>
<td>111.4 (37.8-185.1)</td>
<td>21.8 (18.6-25.0)</td>
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<td>Discharge destination (%)</td>
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<tr>
<td>Discharged to community</td>
<td>99.0%</td>
<td>97.6%</td>
<td>96.8%</td>
<td>92.9%</td>
<td>100.0%</td>
<td>97.6%</td>
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<tr>
<td>Remaining in hospital system</td>
<td>1.0%</td>
<td>2.4%</td>
<td>3.2%</td>
<td>7.1%</td>
<td>0.0%</td>
<td>2.4%</td>
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<tr>
<td>FIM change (Mean+95%CI)</td>
<td>9.4 (7.5-11.3)</td>
<td>17.3 (14.7-19.9)</td>
<td>25.3 (21.0-29.6)</td>
<td>21.8 (9.6-33.9)</td>
<td>26.6 (7.2-45.9)</td>
<td>17.5 (15.6-19.4)</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>0.7</td>
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<td>0.9</td>
<td>1.0</td>
<td>0.2</td>
<td>0.8</td>
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</table>
Neurological conditions discharge destination by AN-SNAP class

Discharge destination - Neurological conditions

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>Discharge destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>4AC1 (n=99)</td>
<td>All Neurological conditions (n=300)</td>
</tr>
</tbody>
</table>
| 4AC2 (n=84)   | Remaining in hospital system 90%
| 4AC3 (n=93)   | Unknown residence 10%
| 4AZ3 (n=16)   | Other supported residence 0%
| 4AZ4 (n=7)    | Private residence - ?? Support 5%
|               | Private residence - with support 55%
|               | Private residence - no support 38%
Neurological conditions LOS and FIM change by AN-SNAP class

![Graph showing LOS and FIM change by AN-SNAP class]

- Mean LOS
- Mean FIM improvement

AN-SNAP class:
- 4AC1 (n=99)
- 4AC2 (n=84)
- 4AC3 (n=93)
- 4AZ3 (n=16)
- 4AZ4 (n=7)
Change in outcome measures in neurological conditions, 2015 to 2016

- Age (years): 68.0
- Length of stay (days): 21.7
- FIM admission score: 77.0
- FIM discharge score: 91.5
- FIM change (adm to disch): 14.5
- FIM efficiency (per week): 4.7
- Disch to community (%): 97.5

2015 (n = 278)
2016 (n = 300)

Lower than 2015 data
Higher than 2015 data
Spinal cord dysfunction episodes over time

Number of episodes by quarter - Spinal cord dysfunction

Year - Quarter
Number of episodes - Spinal cord dysfunction
Specialist Non Specialist Total

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Spinal cord dysfunction casemix over time – Specialist facilities

![Graph showing casemix over time for different specialist facilities in years 2012 to 2016.](image)
Spinal cord dysfunction episodes over time – Non specialist facilities
## Spinal cord dysfunction episodes in 2016 - Specialist facilities

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4AD1</th>
<th>4AD2</th>
<th>4AD3</th>
<th>4AD4</th>
<th>4AZ1</th>
<th>4AZ2</th>
<th>All Spinal cord dysfunction</th>
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<tbody>
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<td>Number of episodes</td>
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<td>35</td>
<td>26</td>
<td>26</td>
<td>23</td>
<td>184</td>
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<td>Proportion of episodes</td>
<td>14.7%</td>
<td>25.5%</td>
<td>19.0%</td>
<td>14.1%</td>
<td>14.1%</td>
<td>12.5%</td>
<td>100.0%</td>
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<tr>
<td>Gender (%)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>55.6%</td>
<td>38.3%</td>
<td>54.3%</td>
<td>50.0%</td>
<td>23.1%</td>
<td>17.4%</td>
<td>40.8%</td>
</tr>
<tr>
<td>Male</td>
<td>44.4%</td>
<td>61.7%</td>
<td>45.7%</td>
<td>50.0%</td>
<td>76.9%</td>
<td>82.6%</td>
<td>59.2%</td>
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<tr>
<td>Age group (%)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>44.4%</td>
<td>40.4%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>57.7%</td>
<td>100.0%</td>
<td>70.7%</td>
</tr>
<tr>
<td>Over 65</td>
<td>55.6%</td>
<td>59.6%</td>
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<td>0.0%</td>
<td>42.3%</td>
<td>0.0%</td>
<td>29.3%</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>65.4 (62.2-68.5)</td>
<td>68.5 (65.3-71.8)</td>
<td>34.7 (31.5-37.9)</td>
<td>30.9 (26.7-35.0)</td>
<td>65.0 (61.2-68.7)</td>
<td>27.6 (23.4-31.7)</td>
<td>50.7 (47.7-53.6)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>91.9 (86.0-97.9)</td>
<td>58.7 (56.2-61.2)</td>
<td>101.9 (96.7-107.2)</td>
<td>61.3 (58.6-64.1)</td>
<td>42.1 (38.5-45.7)</td>
<td>46.2 (43.9-48.5)</td>
<td>68.9 (65.2-72.7)</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>30.1 (24.3-35.9)</td>
<td>60.1 (51.1-69.1)</td>
<td>20.0 (16.6-23.4)</td>
<td>70.2 (56.6-83.8)</td>
<td>75.4 (63.4-87.4)</td>
<td>91.9 (75.3-108.4)</td>
<td>54.8 (49.3-60.2)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>82.8%</td>
<td>84.9%</td>
<td>97.2%</td>
<td>92.3%</td>
<td>88.5%</td>
<td>91.3%</td>
<td>89.1%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>17.2%</td>
<td>15.1%</td>
<td>2.8%</td>
<td>7.7%</td>
<td>11.5%</td>
<td>8.7%</td>
<td>10.9%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>20.9 (15.9-25.9)</td>
<td>29.8 (23.9-35.7)</td>
<td>16.0 (11.3-20.7)</td>
<td>47.5 (40.3-54.8)</td>
<td>18.9 (10.1-27.6)</td>
<td>25.7 (13.6-37.7)</td>
<td>26.1 (22.9-29.3)</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>0.7</td>
<td>0.5</td>
<td>0.8</td>
<td>0.7</td>
<td>0.3</td>
<td>0.3</td>
<td>0.5</td>
</tr>
</tbody>
</table>
### Spinal cord dysfunction episodes in 2016 - Non specialist facilities

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4AD1</th>
<th>4AD2</th>
<th>4AD3</th>
<th>4AD4</th>
<th>4AZ1</th>
<th>4AZ2</th>
<th>All Spinal cord dysfunction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>16</td>
<td>21</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>52</td>
</tr>
<tr>
<td>Proportion of episodes</td>
<td>30.8%</td>
<td>40.4%</td>
<td>21.2%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>100.0%</td>
</tr>
<tr>
<td>Gender (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>31.3%</td>
<td>38.1%</td>
<td>36.4%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>34.6%</td>
</tr>
<tr>
<td>Male</td>
<td>68.8%</td>
<td>61.9%</td>
<td>63.6%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>65.4%</td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>37.5%</td>
<td>38.1%</td>
<td>100.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>51.9%</td>
</tr>
<tr>
<td>Over 65</td>
<td>62.5%</td>
<td>61.9%</td>
<td>0.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>48.1%</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>69.1 (63.9-74.3)</td>
<td>70.4 (65.7-75.0)</td>
<td>35.1 (28.3-41.9)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>61.5 (56.5-66.5)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>91.6 (84.5-98.8)</td>
<td>60.0 (54.7-65.3)</td>
<td>94.4 (84.9-103.9)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>76.7 (69.9-83.4)</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>13.4 (9.3-17.5)</td>
<td>27.3 (19.2-35.4)</td>
<td>15.4 (9.2-21.6)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>24.4 (17.3-31.5)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>73.7%</td>
<td>65.2%</td>
<td>90.9%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>67.2%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>26.3%</td>
<td>34.8%</td>
<td>9.1%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>32.8%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>15.4 (9.7-21.2)</td>
<td>18.8 (9.7-27.9)</td>
<td>14.3 (6.7-21.9)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>16.5 (12.3-20.7)</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>1.1</td>
<td>0.7</td>
<td>0.9</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>0.7</td>
</tr>
</tbody>
</table>
Spinal cord dysfunction discharge destination by AN-SNAP class – Specialist facilities

Specialist - Discharge destination - Spinal cord dysfunction

Percentage

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

AN-SNAP class

- 4AD1 (n=27)
- 4AD2 (n=47)
- 4AD3 (n=35)
- 4AD4 (n=26)
- 4AZ1 (n=26)
- 4AZ2 (n=23)
- All Spinal cord dysfunction (n=184)
Spinal cord dysfunction discharge destination by AN-SNAP class – Non specialist facilities

Non specialist - Discharge destination - Spinal cord dysfunction

Percentage

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

AN-SNAP class

- 4AD1 (n=16)
- 4AD2 (n=21)
- 4AD3 (n=11)
- 4AD4 (n<5)
- 4AZ1 (n<5)
- 4AZ2 (n<5)
- All Spinal cord dysfunction (n=52)
Spinal cord dysfunction LOS and FIM change by AN-SNAP class – Specialist facilities

Specialist - LOS and FIM change by AN-SNAP class

Mean days/score

AN-SNAP class

4AD1 (n=27) 4AD2 (n=47) 4AD3 (n=35) 4AD4 (n=26) 4AZ1 (n=26) 4AZ2 (n=23)
Spinal cord dysfunction LOS and FIM change by AN-SNAP class – Non specialist facilities

Non specialist - LOS and FIM change by AN-SNAP class

AN-SNAP class

4AD1 (n=16)  4AD2 (n=21)  4AD3 (n=11)  4AD4 (n<5)  4AZ1 (n<5)  4AZ2 (n<5)

Mean days/score

Mean LOS  Mean FIM improvement
Change in outcome measures in spinal cord dysfunction, 2015 to 2016 - Specialist facilities

2015

<table>
<thead>
<tr>
<th>2015 (n = 174)</th>
<th>2016 (n = 184)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>48.0</td>
</tr>
<tr>
<td>Length of stay (days)</td>
<td>63.6</td>
</tr>
<tr>
<td>FIM admission score</td>
<td>63.1</td>
</tr>
<tr>
<td>FIM discharge score</td>
<td>90.5</td>
</tr>
<tr>
<td>FIM change (adm to disch)</td>
<td>27.4</td>
</tr>
<tr>
<td>FIM efficiency (per week)</td>
<td>3.0</td>
</tr>
<tr>
<td>Disch to community (%)</td>
<td>99.4</td>
</tr>
</tbody>
</table>

Lower than 2015 data | Higher than 2015 data

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Change in outcome measures in spinal cord dysfunction, 2015 to 2016 - Non specialist facilities

Non specialist - Difference from 2015 data - All Spinal cord dysfunction

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>2015</th>
<th>2016</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>61.2</td>
<td>61.2</td>
<td>0</td>
</tr>
<tr>
<td>Length of stay (days)</td>
<td>28.2</td>
<td>28.2</td>
<td>0</td>
</tr>
<tr>
<td>FIM admission score</td>
<td>74.3</td>
<td>74.3</td>
<td>0</td>
</tr>
<tr>
<td>FIM discharge score</td>
<td>94.6</td>
<td>94.6</td>
<td>0</td>
</tr>
<tr>
<td>FIM change (admission to discharge)</td>
<td>20.3</td>
<td>20.3</td>
<td>0</td>
</tr>
<tr>
<td>FIM efficiency (per week)</td>
<td>5.0</td>
<td>5.0</td>
<td>0</td>
</tr>
<tr>
<td>Disch to community (%)</td>
<td>93.8</td>
<td>93.8</td>
<td>0</td>
</tr>
</tbody>
</table>

2015 (n = 48)  
2016 (n = 52)
Amputation episodes over time

Number of episodes by quarter - Amputation of limb

Year - Quarter

Number of episodes

Amputation casemix over time
### Amputation episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4AE1</th>
<th>4AE2</th>
<th>4AE3</th>
<th>4AE4</th>
<th>4AZ3</th>
<th>4AZ4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>7</td>
<td>111</td>
<td>36</td>
<td>21</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Proportion of episodes</td>
<td>3.7%</td>
<td>59.4%</td>
<td>19.3%</td>
<td>11.2%</td>
<td>3.7%</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Gender (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>42.9%</td>
<td>40.5%</td>
<td>55.6%</td>
<td>33.3%</td>
<td>57.1%</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Male</td>
<td>57.1%</td>
<td>59.5%</td>
<td>44.4%</td>
<td>66.7%</td>
<td>42.9%</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>28.6%</td>
<td>22.5%</td>
<td>2.8%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Over 65</td>
<td>71.4%</td>
<td>77.5%</td>
<td>97.2%</td>
<td>0.0%</td>
<td>100.0%</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>68.0 (60.5-75.5)</td>
<td>71.3 (69.7-72.9)</td>
<td>81.4 (78.8-84.0)</td>
<td>45.4 (42.4-48.3)</td>
<td>78.7 (70.9-86.6)</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>114.0 (112.1-115.9)</td>
<td>82.8 (79.6-86.0)</td>
<td>51.8 (49.1-54.5)</td>
<td>98.1 (93.4-102.9)</td>
<td>29.0 (24.4-33.6)</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>18.7 (6.3-31.2)</td>
<td>21.9 (19.5-24.3)</td>
<td>31.6 (23.8-39.4)</td>
<td>21.9 (14.9-28.9)</td>
<td>33.3 (5.7-60.9)</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>100.0%</td>
<td>91.0%</td>
<td>88.9%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>0.0%</td>
<td>9.0%</td>
<td>11.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>2.7 (0.3-5.2)</td>
<td>13.1 (11.0-15.3)</td>
<td>20.8 (15.3-26.4)</td>
<td>12.5 (8.7-16.4)</td>
<td>16.0 (4.6-27.4)</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>0.1</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
<td>0.5</td>
<td>n &lt; 5</td>
</tr>
</tbody>
</table>
Amputation discharge destination by AN-SNAP class

Discharge destination - Amputation of limb

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>Discharge destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>4AE1 (n=7)</td>
<td>Remaining in hospital system (85%)</td>
</tr>
<tr>
<td>4AE2 (n=111)</td>
<td>Unknown residence (5%)</td>
</tr>
<tr>
<td>4AE3 (n=36)</td>
<td>Other supported residence (2%)</td>
</tr>
<tr>
<td>4AE4 (n=21)</td>
<td>Private residence - ?? Support (10%)</td>
</tr>
<tr>
<td>4AZ3 (n=7)</td>
<td>Private residence - with support (5%)</td>
</tr>
<tr>
<td>4AZ4 (n&lt;5)</td>
<td>Private residence - no support (2%)</td>
</tr>
</tbody>
</table>

All Amputation of limb (n=187)
Amputation LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

- Mean LOS
- Mean FIM improvement

AN-SNAP class

4AE1 (n=7)
4AE2 (n=111)
4AE3 (n=36)
4AE4 (n=21)
4AZ3 (n=7)
4AZ4 (n<5)
Change in outcome measures in amputation, 2015 to 2016

- **Age (years)**: 70.1
- **Length of stay (days)**: 27.3
- **FIM admission score**: 80.4
- **FIM discharge score**: 96.4
- **FIM change (adm to disch)**: 16.0
- **FIM efficiency (per week)**: 4.1
- **Disch to community (%)**: 93.3

**Difference from 2015 data - All Amputation of limb**

- **Lower than 2015 data**
  - Age (years)
  - Length of stay (days)
  - FIM admission score
  - FIM change (adm to disch)
  - FIM efficiency (per week)
  - Disch to community (%)

- **Higher than 2015 data**

**Note:**
- 2015 (n = 165)
- 2016 (n = 187)
Arthritis episodes over time

Number of episodes by quarter - Arthritis

Year - Quarter

Number of episodes

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Arthritis casemix over time

Proportion of episodes within year

Year

2012
2013
2014
2015
2016

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## Arthritis episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4A91</th>
<th>4A92</th>
<th>4A93</th>
<th>4AZ3</th>
<th>4AZ4</th>
<th>All Arthritis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>13</td>
<td>19</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>44</td>
</tr>
<tr>
<td>Proportion of episodes</td>
<td>29.5%</td>
<td>43.2%</td>
<td>18.2%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>100.0%</td>
</tr>
<tr>
<td>Gender (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>53.8%</td>
<td>42.1%</td>
<td>62.5%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>52.3%</td>
</tr>
<tr>
<td>Male</td>
<td>46.2%</td>
<td>57.9%</td>
<td>37.5%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>47.7%</td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>7.7%</td>
<td>15.8%</td>
<td>0.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>11.4%</td>
</tr>
<tr>
<td>Over 65</td>
<td>92.3%</td>
<td>78.9%</td>
<td>100.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>86.4%</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>78.4 (72.8-83.9)</td>
<td>73.1 (67.4-78.8)</td>
<td>73.1 (68.6-77.7)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>74.9 (71.7-78.1)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>96.8 (88.8-104.7)</td>
<td>72.3 (68.2-76.4)</td>
<td>53.8 (49.2-58.3)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>73.5 (67.3-79.8)</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>10.8 (7.5-14.2)</td>
<td>17.8 (14.0-21.6)</td>
<td>16.0 (10.7-21.3)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>15.5 (12.9-18.1)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>100.0%</td>
<td>94.7%</td>
<td>100.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>97.7%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>0.0%</td>
<td>5.3%</td>
<td>0.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>2.3%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>11.6 (7.5-15.7)</td>
<td>21.3 (13.5-29.1)</td>
<td>18.0 (2.8-33.2)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>18.7 (13.9-23.6)</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>1.1</td>
<td>1.2</td>
<td>1.1</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>1.2</td>
</tr>
</tbody>
</table>
Arthritis discharge destination by AN-SNAP class

Discharge destination - Arthritis

Percentage

AN-SNAP class

Remaining in hospital system
Unknown residence
Other supported residence
Private residence - ?? Support
Private residence - with support
Private residence - no support

4A91 (n=13)
4A92 (n=19)
4A93 (n=8)
4AZ3 (n<5)
4AZ4 (n<5)
All Arthritis (n=44)
Arthritis LOS and FIM change by AN-SNAP class

![Graph showing LOS and FIM change by AN-SNAP class](image-url)

- **Mean LOS**
- **Mean FIM improvement**

Data points:
- 4A91 (n=13)
- 4A92 (n=19)
- 4A93 (n=8)
- 4AZ3 (n<5)
- 4AZ4 (n<5)
Change in outcome measures in arthritis, 2015 to 2016

Disch to community (%)    100.0
FIM efficiency (per week)      6.8
FIM change (adm to disch)    16.1
FIM discharge score  99.1
FIM admission score    82.9
Length of stay (days)    16.5
Age (years)    78.3

2015 (n = 36) 2016 (n = 44)

Lower than 2015 data  Higher than 2015 data

Difference from 2015 data - All Arthritis
Orthopaedic fracture episodes over time

Number of episodes by quarter - Orthopaedic fractures

Year - Quarter

Number of episodes
Orthopaedic fracture casemix over time
### Orthopaedic fracture episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>4AH1</th>
<th>4AH2</th>
<th>4AH3</th>
<th>4AH4</th>
<th>4AZ3</th>
<th>4AZ4</th>
<th>All Orthopaedic fractures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>620</td>
<td>996</td>
<td>801</td>
<td>1,039</td>
<td>300</td>
<td>1</td>
<td>3,775</td>
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<tr>
<td>Proportion of episodes</td>
<td>16.4%</td>
<td>26.4%</td>
<td>21.2%</td>
<td>27.5%</td>
<td>7.9%</td>
<td>n &lt; 5</td>
<td>100.0%</td>
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<tr>
<td>Gender (%)</td>
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<tr>
<td>Female</td>
<td>73.5%</td>
<td>73.3%</td>
<td>72.0%</td>
<td>73.2%</td>
<td>75.0%</td>
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<td>73.2%</td>
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<td>26.3%</td>
<td>26.6%</td>
<td>28.0%</td>
<td>26.8%</td>
<td>25.0%</td>
<td>n &lt; 5</td>
<td>26.8%</td>
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<td>Age group (%)</td>
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<tr>
<td>Under 65</td>
<td>10.2%</td>
<td>4.5%</td>
<td>2.7%</td>
<td>2.8%</td>
<td>0.0%</td>
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<tr>
<td>Over 65</td>
<td>89.2%</td>
<td>94.8%</td>
<td>96.9%</td>
<td>96.5%</td>
<td>100.0%</td>
<td>n &lt; 5</td>
<td>95.2%</td>
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<tr>
<td>Age (Mean+95%CI)</td>
<td>78.2 (77.3-79.1)</td>
<td>82.1 (81.6-82.7)</td>
<td>83.3 (82.7-84.0)</td>
<td>83.8 (83.3-84.3)</td>
<td>86.6 (85.9-87.4)</td>
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<td>82.6 (82.3-82.9)</td>
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<td>Admission FIM (Mean+95%CI)</td>
<td>96.6 (95.9-97.3)</td>
<td>83.1 (82.5-83.7)</td>
<td>68.1 (67.5-68.7)</td>
<td>51.0 (50.3-51.6)</td>
<td>29.4 (28.4-30.4)</td>
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<td>69.3 (68.6-70.0)</td>
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<tr>
<td>LOS (Mean+95%CI)</td>
<td>14.4 (13.0-15.9)</td>
<td>15.4 (14.8-16.1)</td>
<td>20.4 (19.7-21.2)</td>
<td>23.3 (22.5-24.1)</td>
<td>21.1 (19.7-22.6)</td>
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<td>18.9 (18.5-19.4)</td>
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<tr>
<td>Discharge destination (%)</td>
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<tr>
<td>Discharged to community</td>
<td>98.5%</td>
<td>99.0%</td>
<td>98.2%</td>
<td>96.5%</td>
<td>97.2%</td>
<td>n &lt; 5</td>
<td>97.9%</td>
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<tr>
<td>Remaining in hospital system</td>
<td>1.5%</td>
<td>1.0%</td>
<td>1.8%</td>
<td>3.5%</td>
<td>2.8%</td>
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<td>2.1%</td>
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<td>FIM change (Mean+95%CI)</td>
<td>13.6 (12.9-14.3)</td>
<td>15.3 (14.7-15.9)</td>
<td>24.1 (23.3-24.9)</td>
<td>26.0 (24.9-27.0)</td>
<td>18.3 (16.1-20.5)</td>
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<td>20.0 (19.6-20.5)</td>
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<td>1.2</td>
<td>1.1</td>
<td>0.9</td>
<td>n &lt; 5</td>
<td>1.1</td>
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Orthopaedic fracture discharge destination by AN-SNAP class

Discharge destination - Orthopaedic fractures

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>Discharge destination</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>4AH1 (n=620)</td>
<td>20%</td>
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</tr>
<tr>
<td>4AH2 (n=996)</td>
<td>20%</td>
<td></td>
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<tr>
<td>4AH3 (n=801)</td>
<td>20%</td>
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</tr>
<tr>
<td>4AH4 (n=1,039)</td>
<td>20%</td>
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</tr>
<tr>
<td>4AZ3 (n=300)</td>
<td>20%</td>
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<tr>
<td>4AZ4 (n&lt;5)</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>All Orthopaedic fractures (n=3,775)</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>
Orthopaedic fracture LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Mean days/score

Mean LOS

Mean FIM improvement

AN-SNAP class

4AH1 (n=620)

4AH2 (n=996)

4AH3 (n=801)

4AH4 (n=1,039)

4AZ3 (n=300)

4AZ4 (n<5)
Change in outcome measures in orthopaedic fracture, 2015 to 2016

Difference from 2015 data - All Orthopaedic fractures

- Age (years) 82.7
- Length of stay (days) 19.1
- FIM admission score 70.5
- FIM discharge score 90.1
- FIM change (adm to disch) 19.7
- FIM efficiency (per week) 7.2
- Disch to community (%) 97.3

2015 (n = 3,882) 2016 (n = 3,775)

Lower than 2015 data Higher than 2015 data
Orthopaedic replacement episodes over time

Number of episodes by quarter - Orthopaedic replacements

Year - Quarter

Number of episodes


Number of episodes
Orthopaedic replacement casemix over time
## Orthopaedic replacement episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4A21</th>
<th>4A22</th>
<th>4A23</th>
<th>4AZ3</th>
<th>4AZ4</th>
<th>All Orthopaedic replacements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>70</td>
<td>143</td>
<td>91</td>
<td>3</td>
<td>0</td>
<td>309</td>
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<td>Proportion of episodes</td>
<td>22.7%</td>
<td>46.3%</td>
<td>29.4%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>100.0%</td>
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<tr>
<td>Gender (%)</td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>60.0%</td>
<td>73.4%</td>
<td>69.2%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>68.9%</td>
</tr>
<tr>
<td>Male</td>
<td>40.0%</td>
<td>26.6%</td>
<td>30.8%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
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<tr>
<td>Age group (%)</td>
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<tr>
<td>Under 65</td>
<td>11.4%</td>
<td>5.6%</td>
<td>5.5%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>6.8%</td>
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<tr>
<td>Over 65</td>
<td>88.6%</td>
<td>92.3%</td>
<td>93.4%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>91.9%</td>
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<tr>
<td>Age (Mean+95%CI)</td>
<td>76.7 (74.7-78.8)</td>
<td>79.5 (78.1-80.9)</td>
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<td>n &lt; 5</td>
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<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>103.2 (101.6-104.8)</td>
<td>85.7 (84.3-87.1)</td>
<td>60.9 (58.2-63.6)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>82.1 (80.0-84.2)</td>
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<tr>
<td>LOS (Mean+95%CI)</td>
<td>8.8 (7.8-9.7)</td>
<td>13.0 (11.8-14.1)</td>
<td>22.4 (19.3-25.5)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>14.9 (13.6-16.1)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
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<td></td>
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</tr>
<tr>
<td>Discharged to community</td>
<td>100.0%</td>
<td>99.3%</td>
<td>97.8%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>98.7%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>0.0%</td>
<td>0.7%</td>
<td>2.2%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>1.3%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>8.0 (6.8-9.2)</td>
<td>17.6 (16.3-18.8)</td>
<td>28.4 (25.6-31.3)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>18.7 (17.3-20.0)</td>
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<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>0.9</td>
<td>1.4</td>
<td>1.3</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>1.3</td>
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</tbody>
</table>
Orthopaedic replacement discharge destination by AN-SNAP class

Discharge destination - Orthopaedic replacements

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>Discharge destination</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A21 (n=70)</td>
<td>Remaining in hospital system</td>
<td>90%</td>
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<tr>
<td></td>
<td>Unknown residence</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Other supported residence</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Private residence - ?? Support</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Private residence - with support</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Private residence - no support</td>
<td>0%</td>
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<tr>
<td>4A22 (n=143)</td>
<td>Remaining in hospital system</td>
<td>90%</td>
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<td>Unknown residence</td>
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<td>Other supported residence</td>
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</tr>
<tr>
<td></td>
<td>Private residence - ?? Support</td>
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</tr>
<tr>
<td></td>
<td>Private residence - with support</td>
<td>0%</td>
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<tr>
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<td>Private residence - no support</td>
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<tr>
<td>4A23 (n=91)</td>
<td>Remaining in hospital system</td>
<td>90%</td>
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<tr>
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<td>Other supported residence</td>
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<tr>
<td></td>
<td>Private residence - ?? Support</td>
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<td></td>
<td>Private residence - with support</td>
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<tr>
<td></td>
<td>Private residence - no support</td>
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<td>4AZ3 (n&lt;5)</td>
<td>Remaining in hospital system</td>
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<td>Unknown residence</td>
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<td>Other supported residence</td>
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<td>Private residence - ?? Support</td>
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<td>Private residence - with support</td>
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<td>4AZ4 (n&lt;5)</td>
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<td>Other supported residence</td>
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<td>Private residence - no support</td>
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<tr>
<td>All Orthopaedic replacements (n=309)</td>
<td>Remaining in hospital system</td>
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<td>Private residence - no support</td>
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</table>
Orthopaedic replacement LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Mean LOS
Mean FIM improvement

AN-SNAP class

4A21 (n=70)
4A22 (n=143)
4A23 (n=91)
4AZ3 (n<5)
4AZ4 (n<5)
Change in outcome measures in orthopaedic replacement, 2015 to 2016

![Graph showing the change in outcome measures from 2015 to 2016.](image)

- **Age (years)**: 79.3
- **Length of stay (days)**: 14.9
- **FIM admission score**: 81.9
- **FIM discharge score**: 99.5
- **FIM change (adm to disch)**: 17.6
- **FIM efficiency (per week)**: 8.3
- **Disch to community (%)**: 98.0

<table>
<thead>
<tr>
<th>Measure</th>
<th>2015 (n = 352)</th>
<th>2016 (n = 309)</th>
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</thead>
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<tr>
<td>Disch to community (%)</td>
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<td>FIM discharge score</td>
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<td>FIM change (adm to disch)</td>
<td>17.6</td>
<td>17.6</td>
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<td>Length of stay (days)</td>
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<td>14.9</td>
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<td>Age (years)</td>
<td>79.3</td>
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</tr>
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</table>

Lower than 2015 data

Higher than 2015 data
All orthopaedic episodes over time

Number of episodes by quarter - All orthopaedic conditions

<table>
<thead>
<tr>
<th>Year - Quarter</th>
<th>Ortho fracture</th>
<th>Ortho replacement</th>
<th>Soft tissue injury</th>
<th>Other ortho</th>
<th>All orthopaedic</th>
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## All orthopaedic episodes in 2016

<table>
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<tr>
<th>AN-SNAP class:</th>
<th>Ortho fracture</th>
<th>Ortho replacement</th>
<th>Soft tissue injury</th>
<th>Other ortho</th>
<th>All orthopaedic conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>3,775</td>
<td>309</td>
<td>335</td>
<td>125</td>
<td>4,544</td>
</tr>
<tr>
<td>Proportion of episodes</td>
<td>83.1%</td>
<td>6.8%</td>
<td>7.4%</td>
<td>2.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Gender (%)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>73.2%</td>
<td>68.9%</td>
<td>66.9%</td>
<td>52.8%</td>
<td>71.9%</td>
</tr>
<tr>
<td>Male</td>
<td>26.8%</td>
<td>31.1%</td>
<td>33.1%</td>
<td>47.2%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>4.2%</td>
<td>6.8%</td>
<td>2.1%</td>
<td>21.6%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Over 65</td>
<td>95.2%</td>
<td>91.9%</td>
<td>97.3%</td>
<td>74.4%</td>
<td>94.5%</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>82.6 (82.3-82.9)</td>
<td>79.1 (78.1-80.1)</td>
<td>84.6 (83.7-85.5)</td>
<td>73.6 (71.2-75.9)</td>
<td>82.2 (82.0-82.5)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>69.3 (68.6-70.0)</td>
<td>82.1 (80.0-84.2)</td>
<td>76.5 (74.2-78.8)</td>
<td>80.4 (77.0-83.8)</td>
<td>71.0 (70.4-71.7)</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>18.9 (18.5-19.4)</td>
<td>14.9 (13.6-16.1)</td>
<td>14.2 (13.2-15.3)</td>
<td>15.4 (13.4-17.3)</td>
<td>18.2 (17.8-18.6)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>97.9%</td>
<td>98.7%</td>
<td>96.7%</td>
<td>97.6%</td>
<td>97.9%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>2.1%</td>
<td>1.3%</td>
<td>3.3%</td>
<td>2.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>20.0 (19.6-20.5)</td>
<td>18.7 (17.3-20.0)</td>
<td>16.0 (14.6-17.3)</td>
<td>19.4 (17.3-21.5)</td>
<td>19.6 (19.2-20.0)</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>1.1</td>
<td>1.3</td>
<td>1.1</td>
<td>1.3</td>
<td>1.1</td>
</tr>
</tbody>
</table>
All Orthopaedic episodes discharge destination by orthopaedic group

Discharge destination - All orthopaedic conditions

Orthopaedic group
- Ortho fracture (n=3,775)
- Ortho replacement (n=309)
- Soft tissue injury (n=335)
- Other ortho (n=125)
- All orthopaedic conditions (n=4,544)

Percentage
- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support
All orthopaedic conditions LOS and FIM change by orthopaedic group

LOS and FIM change by AN-SNAP class

- Ortho fracture (n=3,775)
- Ortho replacement (n=309)
- Soft tissue injury (n=335)
- Other ortho (n=125)

Mean days/score

Orthopaedic group
Change in outcome measures in orthopaedic conditions, 2015 to 2016

- Age (years): 82.1
- Length of stay (days): 18.5
- FIM admission score: 72.3
- FIM discharge score: 91.4
- FIM change (adm to disch): 19.0
- FIM efficiency (per week): 7.2
- Disch to community (%): 97.5

2015 (n = 4,698)
2016 (n = 4,544)

Lower than 2015 data
Higher than 2015 data
Pulmonary episodes over time

Number of episodes by quarter - Pulmonary

Year - Quarter
Pulmonary casemix over time
## Pulmonary episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4A31</th>
<th>4A32</th>
<th>4A33</th>
<th>4A34</th>
<th>4AZ3</th>
<th>4AZ4</th>
<th>All Pulmonary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>18</td>
<td>23</td>
<td>12</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>58</td>
</tr>
<tr>
<td>Proportion of episodes</td>
<td>31.0%</td>
<td>39.7%</td>
<td>20.7%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>100.0%</td>
</tr>
<tr>
<td>Gender (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>44.4%</td>
<td>47.8%</td>
<td>50.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>50.0%</td>
</tr>
<tr>
<td>Male</td>
<td>55.6%</td>
<td>52.2%</td>
<td>50.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>50.0%</td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>5.6%</td>
<td>0.0%</td>
<td>16.7%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>5.2%</td>
</tr>
<tr>
<td>Over 65</td>
<td>94.4%</td>
<td>100.0%</td>
<td>75.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>93.1%</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>74.5 (70.2-78.8)</td>
<td>79.2 (75.9-82.5)</td>
<td>77.7 (70.2-85.2)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>78.0 (75.5-80.5)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>109.6 (106.0-113.3)</td>
<td>90.9 (88.3-93.4)</td>
<td>71.2 (65.0-77.3)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>87.7 (81.8-93.5)</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>10.9 (8.0-13.7)</td>
<td>13.7 (10.4-17.0)</td>
<td>21.3 (14.8-27.9)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>14.8 (12.5-17.2)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>100.0%</td>
<td>95.7%</td>
<td>100.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>98.2%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>0.0%</td>
<td>4.3%</td>
<td>0.0%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>1.8%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>5.1 (2.7-7.4)</td>
<td>14.8 (11.0-18.6)</td>
<td>21.0 (12.6-29.4)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>12.9 (9.8-15.9)</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>0.5</td>
<td>1.1</td>
<td>1.0</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>0.9</td>
</tr>
</tbody>
</table>
Pulmonary discharge destination by AN-SNAP class

Discharge destination - Pulmonary

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

AN-SNAP class

- 4A31 (n=18)
- 4A32 (n=23)
- 4A33 (n=12)
- 4A34 (n<5)
- 4AZ3 (n<5)
- 4AZ4 (n<5)
- All Pulmonary (n=58)
Pulmonary LOS and FIM change by AN-SNAP class

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>Mean LOS</th>
<th>Mean FIM improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A31 (n=18)</td>
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<td></td>
</tr>
<tr>
<td>4A32 (n=23)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4A33 (n=12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4A34 (n&lt;5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4AZ3 (n&lt;5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4AZ4 (n&lt;5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean days/score
Change in outcome measures in pulmonary, 2015 to 2016

2015

-6  -4  -2  0  2  4  6  8  10

Age (years)  81.5
Length of stay (days)  16.2
FIM admission score  79.5
FIM discharge score  91.9
FIM change (adm to disch)  12.3
FIM efficiency (per week)  5.3
Disch to community (%)  98.0

2015 (n = 101)
2016 (n = 58)

Difference from 2015 data - All Pulmonary

Lower than 2015 data  Higher than 2015 data
Reconditioning episodes over time

Number of episodes by quarter - Reconditioning

Year - Quarter

Number of episodes
Reconditioning casemix over time

Proportion of episodes within year

Year


4AZ4
4AZ3
4AR6
4AR5
4AR4
4AR3
4AR2
4AR1
Reconditioning episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4AR1</th>
<th>4AR2</th>
<th>4AR3</th>
<th>4AR4</th>
<th>4AR5</th>
<th>4AR6</th>
<th>4AZ3</th>
<th>4AZ4</th>
<th>All</th>
<th>Reconditioning</th>
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</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>752</td>
<td>667</td>
<td>477</td>
<td>125</td>
<td>568</td>
<td>481</td>
<td>155</td>
<td>35</td>
<td>3,314</td>
<td></td>
</tr>
<tr>
<td>Proportion of episodes</td>
<td>22.7%</td>
<td>20.1%</td>
<td>14.4%</td>
<td>3.8%</td>
<td>17.1%</td>
<td>14.5%</td>
<td>4.7%</td>
<td>1.1%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Gender (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>56.1%</td>
<td>53.2%</td>
<td>54.1%</td>
<td>53.6%</td>
<td>51.8%</td>
<td>47.8%</td>
<td>51.6%</td>
<td>37.1%</td>
<td>52.8%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>43.9%</td>
<td>46.6%</td>
<td>45.9%</td>
<td>46.4%</td>
<td>48.1%</td>
<td>51.8%</td>
<td>48.4%</td>
<td>62.9%</td>
<td>47.0%</td>
<td></td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>10.9%</td>
<td>6.1%</td>
<td>6.7%</td>
<td>17.6%</td>
<td>5.5%</td>
<td>8.9%</td>
<td>0.0%</td>
<td>100.0%</td>
<td>8.7%</td>
<td></td>
</tr>
<tr>
<td>Over 65</td>
<td>88.0%</td>
<td>93.6%</td>
<td>92.9%</td>
<td>82.4%</td>
<td>94.0%</td>
<td>90.4%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>90.8%</td>
<td></td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>78.1 (77.3-79.0)</td>
<td>79.8 (79.0-80.5)</td>
<td>81.2 (80.3-82.2)</td>
<td>76.4 (73.9-78.8)</td>
<td>81.6 (80.8-82.5)</td>
<td>79.4 (78.3-80.5)</td>
<td>82.2 (80.9-83.4)</td>
<td>43.9 (39.0-48.8)</td>
<td>79.5 (79.1-79.9)</td>
<td></td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>102.8 (102.2-103.5)</td>
<td>88.2 (87.7-88.6)</td>
<td>75.8 (75.2-76.4)</td>
<td>75.6 (74.8-76.4)</td>
<td>63.2 (62.6-63.9)</td>
<td>47.5 (46.6-48.4)</td>
<td>30.5 (28.9-32.1)</td>
<td>44.3 (41.3-47.4)</td>
<td>76.4 (75.6-77.2)</td>
<td></td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>12.2 (11.6-12.8)</td>
<td>15.2 (14.4-15.9)</td>
<td>16.7 (15.8-17.6)</td>
<td>20.0 (17.3-22.6)</td>
<td>19.4 (18.3-20.6)</td>
<td>25.6 (23.3-27.9)</td>
<td>24.0 (21.7-26.3)</td>
<td>52.7 (33.9-71.5)</td>
<td>17.9 (17.3-18.4)</td>
<td></td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>98.5%</td>
<td>98.2%</td>
<td>98.9%</td>
<td>96.7%</td>
<td>96.7%</td>
<td>95.9%</td>
<td>92.9%</td>
<td>94.3%</td>
<td>97.5%</td>
<td></td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>1.5%</td>
<td>1.8%</td>
<td>1.1%</td>
<td>3.3%</td>
<td>3.3%</td>
<td>4.1%</td>
<td>7.1%</td>
<td>5.7%</td>
<td>2.5%</td>
<td></td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>7.3 (6.8-7.8)</td>
<td>15.1 (14.4-15.7)</td>
<td>14.2 (13.2-15.2)</td>
<td>22.7 (20.3-25.1)</td>
<td>18.8 (17.6-19.9)</td>
<td>22.7 (21.0-24.5)</td>
<td>16.7 (13.2-20.3)</td>
<td>18.3 (10.0-26.7)</td>
<td>15.2 (14.7-15.7)</td>
<td></td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>0.6</td>
<td>1.0</td>
<td>0.9</td>
<td>1.1</td>
<td>1.0</td>
<td>0.9</td>
<td>0.7</td>
<td>0.3</td>
<td>0.9</td>
<td></td>
</tr>
</tbody>
</table>
Reconditioning discharge destination by AN-SNAP class

Discharge destination - Reconditioning

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

AN-SNAP class

- 4AR1 (n=752)
- 4AR2 (n=667)
- 4AR3 (n=477)
- 4AR4 (n=125)
- 4AR5 (n=568)
- 4AR6 (n=481)
- 4AZ3 (n=155)
- 4AZ4 (n=35)
- All Reconditioning (n=3,314)
Reconditioning LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Mean days/score

AN-SNAP class

4AR1 (n=752) 4AR2 (n=667) 4AR3 (n=477) 4AR4 (n=125) 4AR5 (n=568) 4AR6 (n=481) 4AZ3 (n=155) 4AZ4 (n=35)
Change in outcome measures in reconditioning, 2015 to 2016

- Age (years) - 79.9
- Length of stay (days) - 17.2
- FIM admission score - 76.4
- FIM discharge score - 91.2
- FIM change (adm to disch) - 14.8
- FIM efficiency (per week) - 6.0
- Disch to community (%) - 96.8

2015 (n = 3,211)  
2016 (n = 3,314)
Other impairment episodes over time

Number of episodes by quarter - Other impairments

- Pain
- Cardiac
- Major Multiple trauma
Other impairments casemix over time
Other impairment episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>Pain</th>
<th>Cardiac</th>
<th>MMT</th>
<th>Burns</th>
<th>Congenital deformity</th>
<th>Developmental disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>285</td>
<td>121</td>
<td>95</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Proportion of total episodes in 2016</td>
<td>2.4%</td>
<td>1.0%</td>
<td>0.8%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Gender (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>68.4%</td>
<td>47.1%</td>
<td>26.3%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Male</td>
<td>30.9%</td>
<td>52.9%</td>
<td>73.7%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>5.3%</td>
<td>7.4%</td>
<td>76.8%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Over 65</td>
<td>94.4%</td>
<td>90.9%</td>
<td>23.2%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>81.1 (80.0-82.3)</td>
<td>81.0 (79.2-82.8)</td>
<td>46.7 (42.7-50.7)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>82.5 (79.9-85.0)</td>
<td>81.4 (77.3-85.4)</td>
<td>65.7 (59.6-71.8)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>15.0 (13.6-16.5)</td>
<td>17.1 (15.2-19.0)</td>
<td>46.7 (37.9-55.5)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>98.2%</td>
<td>91.5%</td>
<td>97.9%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>1.8%</td>
<td>8.5%</td>
<td>2.1%</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>15.7 (14.2-17.3)</td>
<td>14.7 (12.2-17.3)</td>
<td>39.4 (33.9-45.0)</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>1.0</td>
<td>0.9</td>
<td>0.8</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
<td>n &lt; 5</td>
</tr>
</tbody>
</table>
Other impairment discharge destination by impairment group

Discharge destination - Other impairments

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

- Pain (n=285)
- Cardiac (n=121)
- MMT (n=95)
- Burns (n<5)
- Congenital deformity (n<5)
- Developmental disability (n<5)
Other impairment LOS and FIM change by impairment group

LOS and FIM change by AN-SNAP class

Mean LOS

Mean FIM improvement

Mean days/score

Other impairment

Pain (n=285)

Cardiac (n=121)

MMT (n=95)

Burns (n<5)

Congenital deformity (n<5)

Developmental disability (n<5)
Change in outcome measures in pain, 2015 to 2016

2015

Lower than 2015 data

Higher than 2015 data

Age (years) 81.0
Length of stay (days) 15.1
FIM admission score 83.2
FIM discharge score 98.6
FIM change (adm to disch) 15.4
FIM efficiency (per week) 7.1
Disch to community (%) 98.8

2015 (n = 327)
2016 (n = 285)
Change in outcome measures in cardiac, 2015 to 2016

Disch to community (%)  97.7  
FIM efficiency (per week)  5.3  
FIM change (adm to disch)  12.6  
FIM discharge score  95.5  
FIM admission score  82.9  
Length of stay (days)  16.6  
Age (years)  82.6  

Difference from 2015 data - Cardiac

Lower than 2015 data

Higher than 2015 data
Change in outcome measures in MMT, 2015 to 2016

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>2015</th>
<th>2016</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>45.9</td>
<td>45.9</td>
<td>0.0</td>
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<tr>
<td>Length of stay (days)</td>
<td>38.8</td>
<td>38.8</td>
<td>0.0</td>
</tr>
<tr>
<td>FIM admission score</td>
<td>77.7</td>
<td>77.7</td>
<td>0.0</td>
</tr>
<tr>
<td>FIM discharge score</td>
<td>108.4</td>
<td>108.4</td>
<td>0.0</td>
</tr>
<tr>
<td>FIM change (adm to disch)</td>
<td>30.6</td>
<td>30.6</td>
<td>0.0</td>
</tr>
<tr>
<td>FIM efficiency (per week)</td>
<td>5.5</td>
<td>5.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Disch to community (%)</td>
<td>97.4</td>
<td>97.4</td>
<td>0.0</td>
</tr>
</tbody>
</table>

2015 (n = 117)
2016 (n = 95)
Other disabling impairment episodes over time

Number of episodes by quarter - Other disabling impairments

Year - Quarter

Number of episodes

Other disabling impairments casemix over time

Year
- 2012
- 2013
- 2014
- 2015
- 2016

Proportion of episodes within year
- 4AZ4
- 4AZ3
- 4A93
- 4A92
- 4A91
## Other disabling impairment episodes in 2016

<table>
<thead>
<tr>
<th>AN-SNAP class:</th>
<th>4A91</th>
<th>4A92</th>
<th>4A93</th>
<th>4AZ3</th>
<th>4AZ4</th>
<th>All Other disabling impairments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of episodes</td>
<td>162</td>
<td>86</td>
<td>33</td>
<td>11</td>
<td>2</td>
<td>296</td>
</tr>
<tr>
<td>Proportion of episodes</td>
<td>54.7%</td>
<td>29.1%</td>
<td>11.1%</td>
<td>3.7%</td>
<td>n &lt; 5</td>
<td>100.0%</td>
</tr>
<tr>
<td>Gender (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>64.8%</td>
<td>60.5%</td>
<td>51.5%</td>
<td>54.5%</td>
<td>n &lt; 5</td>
<td>61.5%</td>
</tr>
<tr>
<td>Male</td>
<td>35.2%</td>
<td>39.5%</td>
<td>48.5%</td>
<td>45.5%</td>
<td>n &lt; 5</td>
<td>38.5%</td>
</tr>
<tr>
<td>Age group (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 65</td>
<td>15.4%</td>
<td>4.7%</td>
<td>3.0%</td>
<td>0.0%</td>
<td>n &lt; 5</td>
<td>10.8%</td>
</tr>
<tr>
<td>Over 65</td>
<td>84.0%</td>
<td>95.3%</td>
<td>97.0%</td>
<td>100.0%</td>
<td>n &lt; 5</td>
<td>88.5%</td>
</tr>
<tr>
<td>Age (Mean+95%CI)</td>
<td>75.3 (72.7-78.0)</td>
<td>81.1 (78.8-83.4)</td>
<td>82.8 (79.7-85.8)</td>
<td>83.5 (79.7-87.2)</td>
<td>n &lt; 5</td>
<td>78.0 (76.3-79.7)</td>
</tr>
<tr>
<td>Admission FIM (Mean+95%CI)</td>
<td>96.3 (94.3-98.3)</td>
<td>70.5 (68.3-72.6)</td>
<td>49.3 (45.5-53.1)</td>
<td>25.9 (19.6-32.2)</td>
<td>n &lt; 5</td>
<td>80.6 (77.9-83.2)</td>
</tr>
<tr>
<td>LOS (Mean+95%CI)</td>
<td>17.0 (12.3-21.8)</td>
<td>19.9 (16.9-22.9)</td>
<td>19.7 (14.9-24.5)</td>
<td>31.1 (20.9-41.3)</td>
<td>n &lt; 5</td>
<td>18.8 (15.9-21.7)</td>
</tr>
<tr>
<td>Discharge destination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharged to community</td>
<td>98.8%</td>
<td>98.8%</td>
<td>93.9%</td>
<td>100.0%</td>
<td>n &lt; 5</td>
<td>98.3%</td>
</tr>
<tr>
<td>Remaining in hospital system</td>
<td>1.2%</td>
<td>1.2%</td>
<td>6.1%</td>
<td>0.0%</td>
<td>n &lt; 5</td>
<td>1.7%</td>
</tr>
<tr>
<td>FIM change (Mean+95%CI)</td>
<td>8.7 (7.5-10.0)</td>
<td>17.8 (14.9-20.6)</td>
<td>19.3 (13.1-25.5)</td>
<td>21.1 (4.9-37.3)</td>
<td>n &lt; 5</td>
<td>13.4 (11.8-15.0)</td>
</tr>
<tr>
<td>FIM efficiency (FIM change/LOS)</td>
<td>0.5</td>
<td>0.9</td>
<td>1.0</td>
<td>0.7</td>
<td>n &lt; 5</td>
<td>0.7</td>
</tr>
</tbody>
</table>
Other disabling impairment discharge destination by AN-SNAP class

Discharge destination - Other disabling impairments

- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

<table>
<thead>
<tr>
<th>AN-SNAP class</th>
<th>Remaining in hospital system</th>
<th>Unknown residence</th>
<th>Other supported residence</th>
<th>Private residence - ?? Support</th>
<th>Private residence - with support</th>
<th>Private residence - no support</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A91 (n=162)</td>
<td>10%</td>
<td>10%</td>
<td>30%</td>
<td>50%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>4A92 (n=86)</td>
<td>10%</td>
<td>10%</td>
<td>30%</td>
<td>50%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>4A93 (n=33)</td>
<td>10%</td>
<td>10%</td>
<td>30%</td>
<td>50%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>4AZ3 (n=11)</td>
<td>10%</td>
<td>10%</td>
<td>30%</td>
<td>50%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>4AZ4 (n&lt;5)</td>
<td>10%</td>
<td>10%</td>
<td>30%</td>
<td>50%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>All Other disabling impairments (n=296)</td>
<td>10%</td>
<td>10%</td>
<td>30%</td>
<td>50%</td>
<td>10%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Other disabling impairment LOS and FIM change by AN-SNAP class
Change in outcome measures in other disabling impairments, 2015 to 2016

Difference from 2015 data - All Other disabling impairments

2015

Lower than 2015 data

Higher than 2015 data

-3 -2 -1 0 1 2 3 4 5 6 7 8

Age (years) 79.9
Length of stay (days) 20.0
FIM admission score 75.9
FIM discharge score 87.2
FIM change (adm to disch) 11.3
FIM efficiency (per week) 3.9
Disch to community (%) 99.4

2015 (n = 513)
2016 (n = 296)
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