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# AROC outcome targets report, inpatient - pathway 3 - Anywhere Hospital, July 2014 - June 2015

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# AROC outcome targets report, inpatient - pathway 3 - Anywhere Hospital, July 2014 - June 2015

## Abstract

The AROC Outcome Targets Report has been available to facilities since calendar year 2012. It 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

## Publication Details

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# AROC Outcome Targets Report
# Inpatient - Pathway 3

Anywhere Hospital

July 2014 - June 2015

# Table of Contents

# 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 six 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

The AROC Outcome Targets Report has been available to facilities since calendar year 2012. It 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 completed 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 (except for Target 1 which requires 5 episodes, complete or incomplete).

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 2015 (1 July 2014 to 30 June 2015 inclusive)

- 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 concatenated episode, not by patient

- NOTE: Commencing with 2013 Calendar Year reports, AROC has implemented a new analysis practice called **Data Concatenation** to identify groups of '*submitted episodes*' that should be joined to form a single *'AROC Reporting Episode'* – **prior to outcomes analysis**. For more detail about this practice please refer to Appendix 1

# How to interpret your graphs
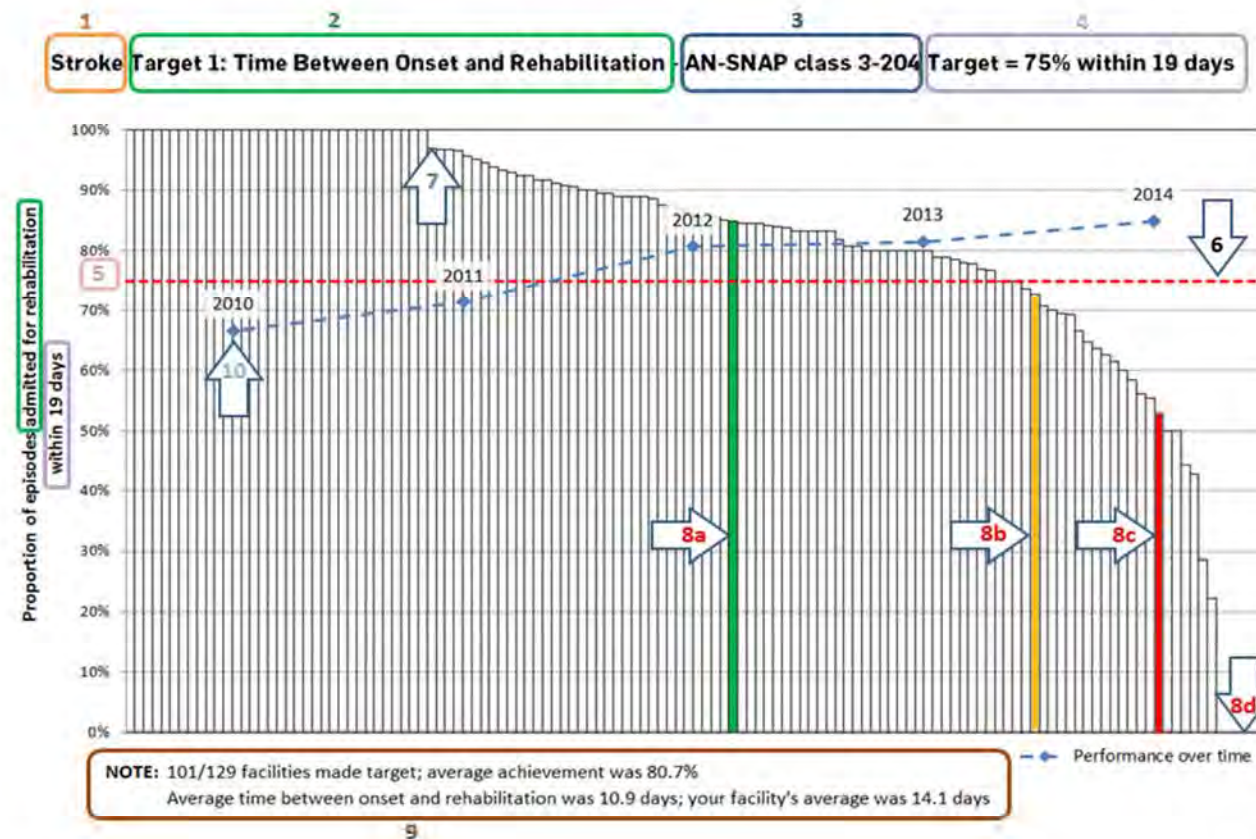


1. Impairment the graph is about
2. Target the graph is about
3. AN-SNAP class the graph is about
4. Target details for this AN-SNAP class for this impairment
5. Target value shown on graph
6. Line indicating target level
7. One bar per facility
8. Your facility will be highlighted if you had at least 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 did not achieve 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
10. Your facility's performance over five years

# 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)
- Outcome target analysis is now based on "completed" episodes of care (refer to Appendix 1 for definition)

# Summary of fractured neck of femur



**Distribution of completed episodes across facilities treating #NOF**

Y-axis: Number of completed episodes with #NOF (0 to 180)

Snapshot of target outcomes at your facility:

| AN-SNAP class | Completed episodes | Target Status | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| 3-227 | 99 | ✗ | ⚠ | ✗ | ✗ |
| 3-228 | 101 | ✗ | ✓ | ✗ | ✗ |
| 3-229 | 138 | ⚠ | ✓ | ✗ | ✗ |
| 3-230 | 48 | ✓ | ✓ | ⚠ | ✗ |
| All episodes | **386** | | | | |

| | |
|---|---|
| ✓ | Achieved target |
| ⚠ | Within 5% of target |
| ✗ | Did not achieve target |
| — | Not reported (0 - 4 episodes) |
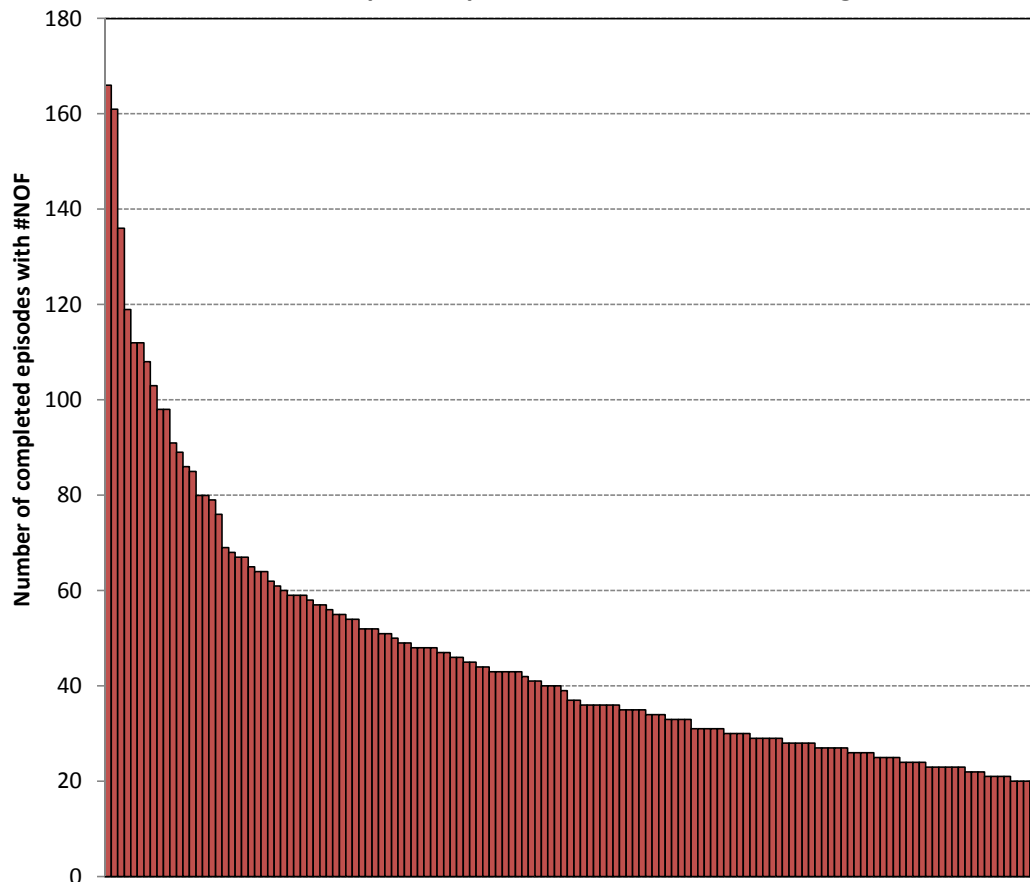
NOTE: 139 of 283 (49.1%) facilities reporting #NOF had fewer than 20 episodes.

# 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:
- Episodes where injury/onset/acute episode date are not provided or invalid

**NOTE:** At the time this target was developed, neither Australia or New Zealand had strong data upon which to develop a target, therefore the

At the time of creation of these targets AROC did not collect data from its members regarding date of surgery. As an 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. As a consequence, this report presents target 1 outcomes as time since onset to rehabilitation within 10 days.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

#NOF Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-227 Target = 80% within 10 days
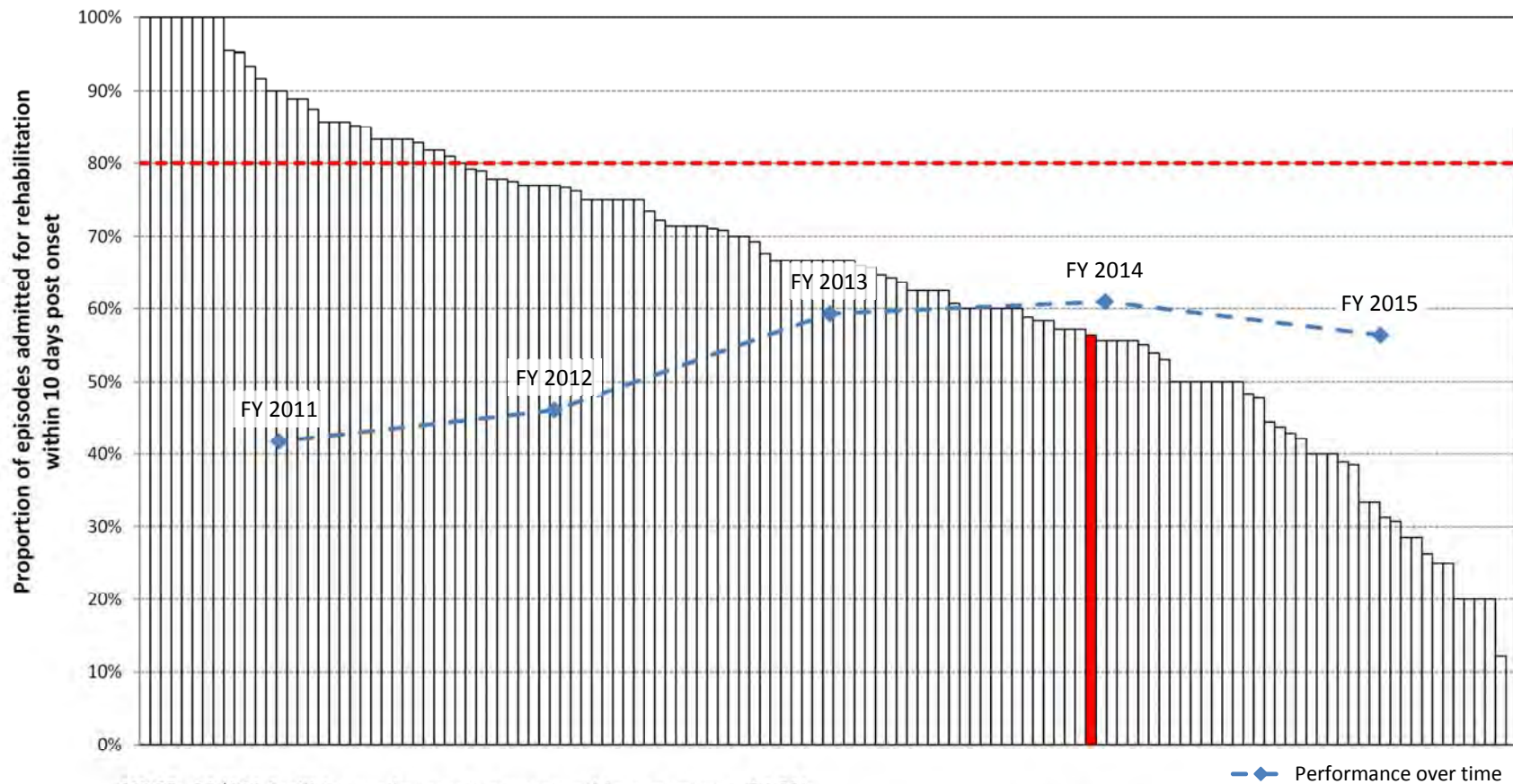
NOTE: 31/131 facilities made target; average achievement was 64.3%

Average time between onset and rehabilitation was 11.8 days; your facility's average was 13.2 days

#NOF Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-228 Target = 80% within 10 days

NOTE: 37/131 facilities made target; average achievement was 64.8%
Average time between onset and rehabilitation was 11.6 days; your facility's average was 10.5 days

#NOF Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-229 Target = 70% within 10 days

NOTE: 59/139 facilities made target; average achievement was 63.9%

Average time between onset and rehabilitation was 11.9 days; your facility's average was 10.9 days

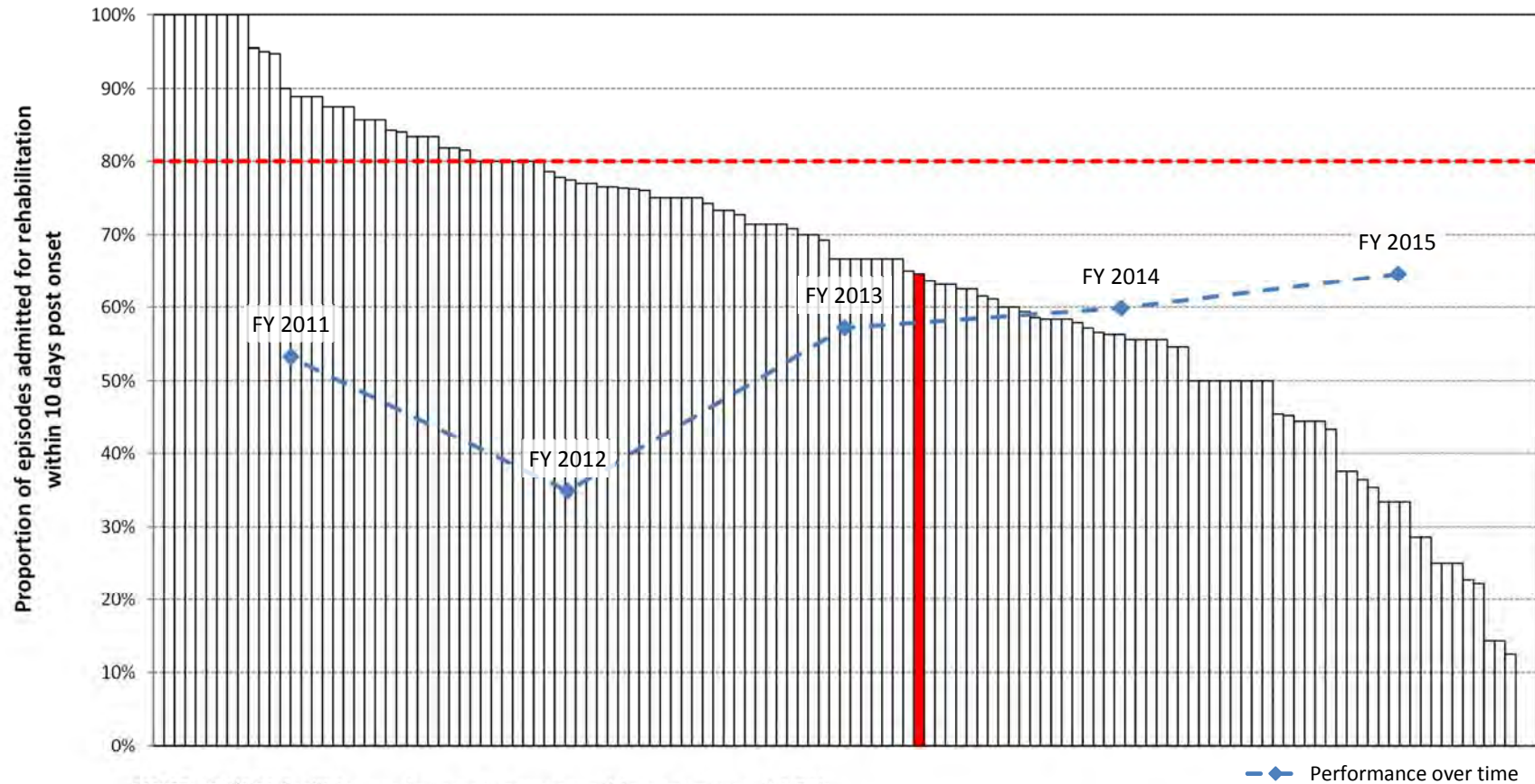#NOF Target 1: Time Between Onset and Rehabilitation — AN-SNAP class 3-230 Target = 60% within 10 days



**NOTE:** 47/68 facilities made target; average achievement was 66.8%
Average time between onset and rehabilitation was 11.2 days; your facility's average was 11.6 days
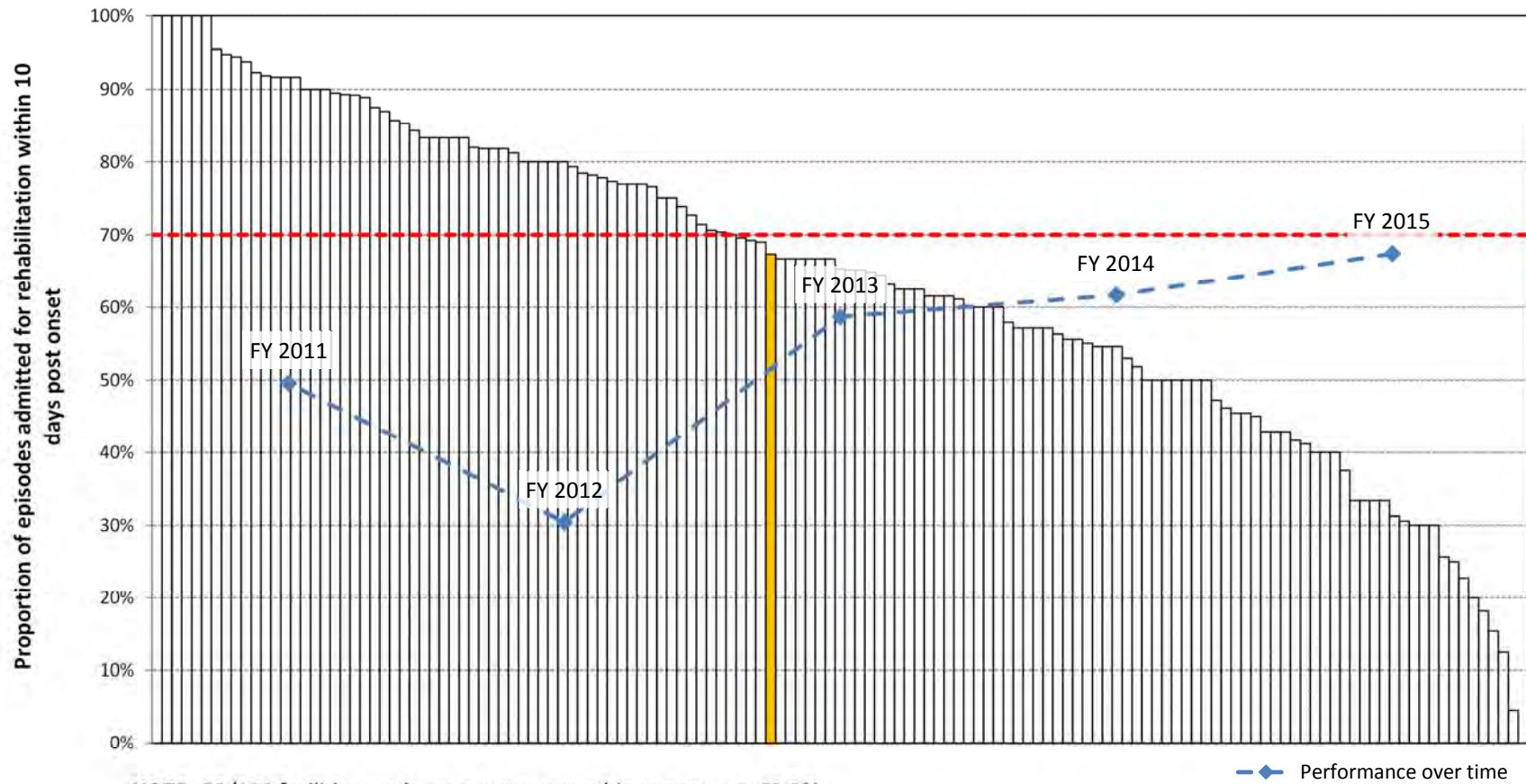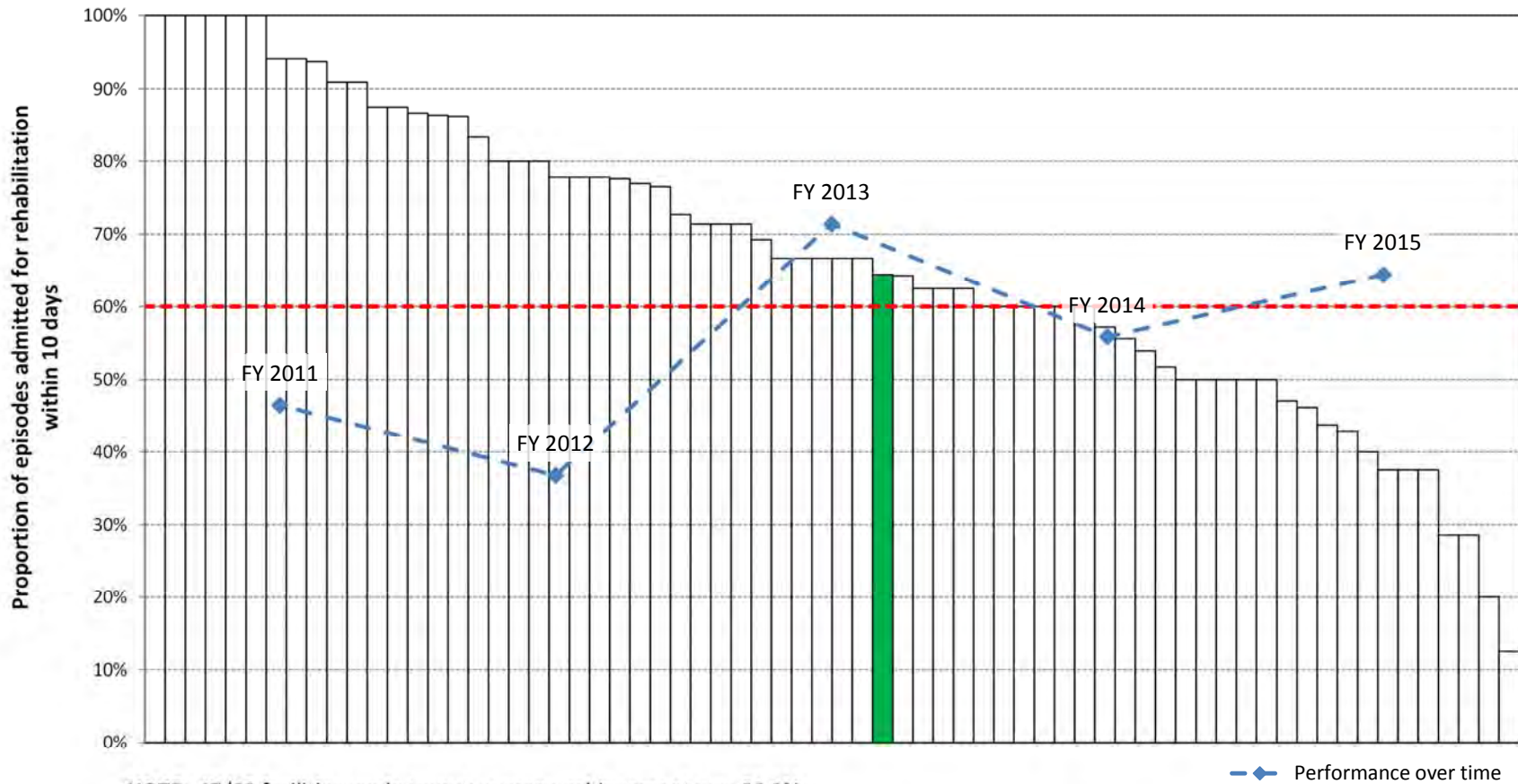
# Target 2: Length of stay

<div style="border: 1px solid black; padding: 10px;">

**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

</div>

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

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).

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

#NOF Target 2: Length of Stay — AN-SNAP class 3-227 Target = 14 days or less
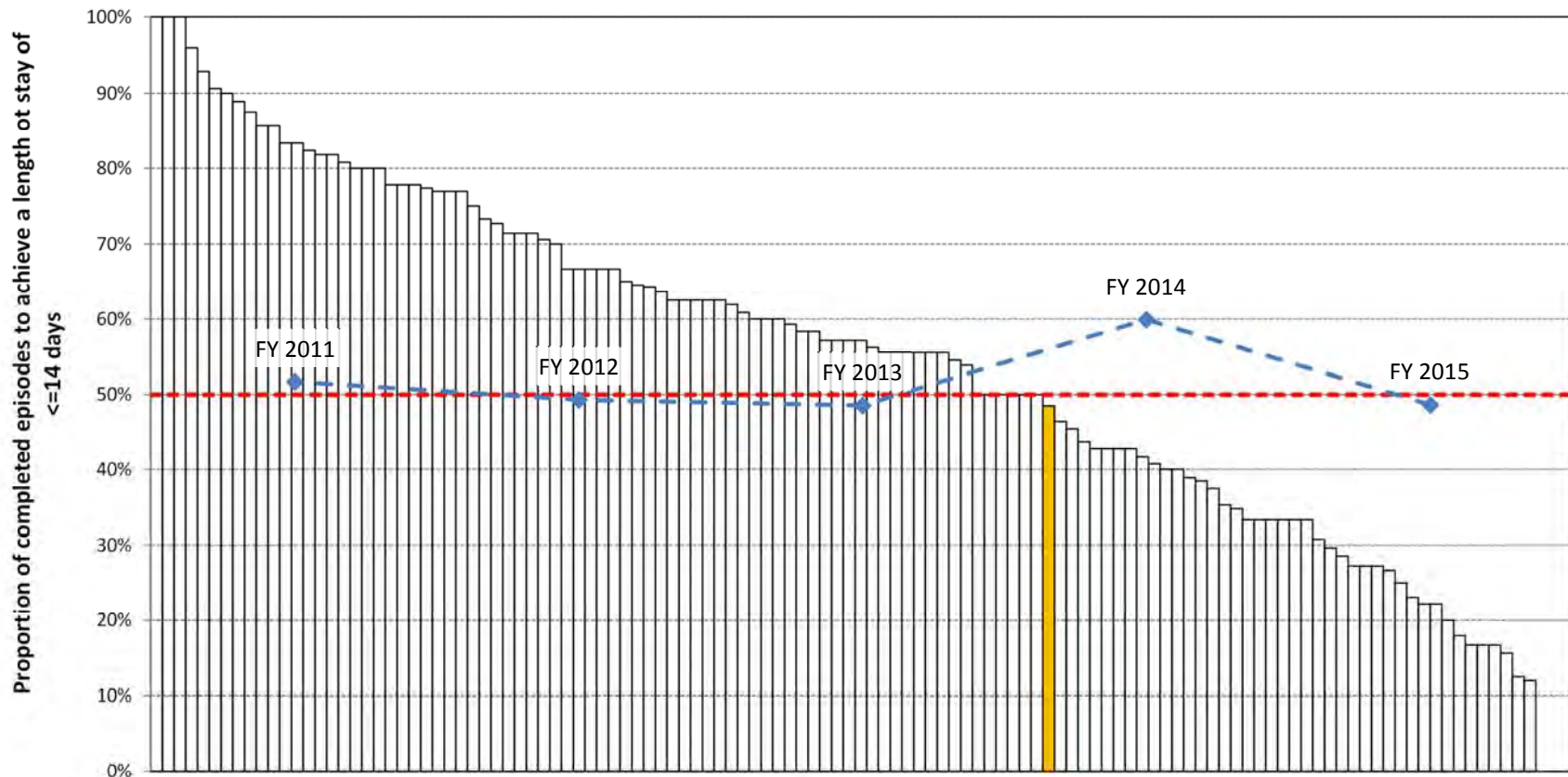
**NOTE:** 76/121 facilities made target; average achievement was 54.5%
Average length of stay was 15.4 days; your facility's average was 16.9 days

#NOF Target 2: Length of Stay — AN-SNAP class 3-228 Target = 18 days or less
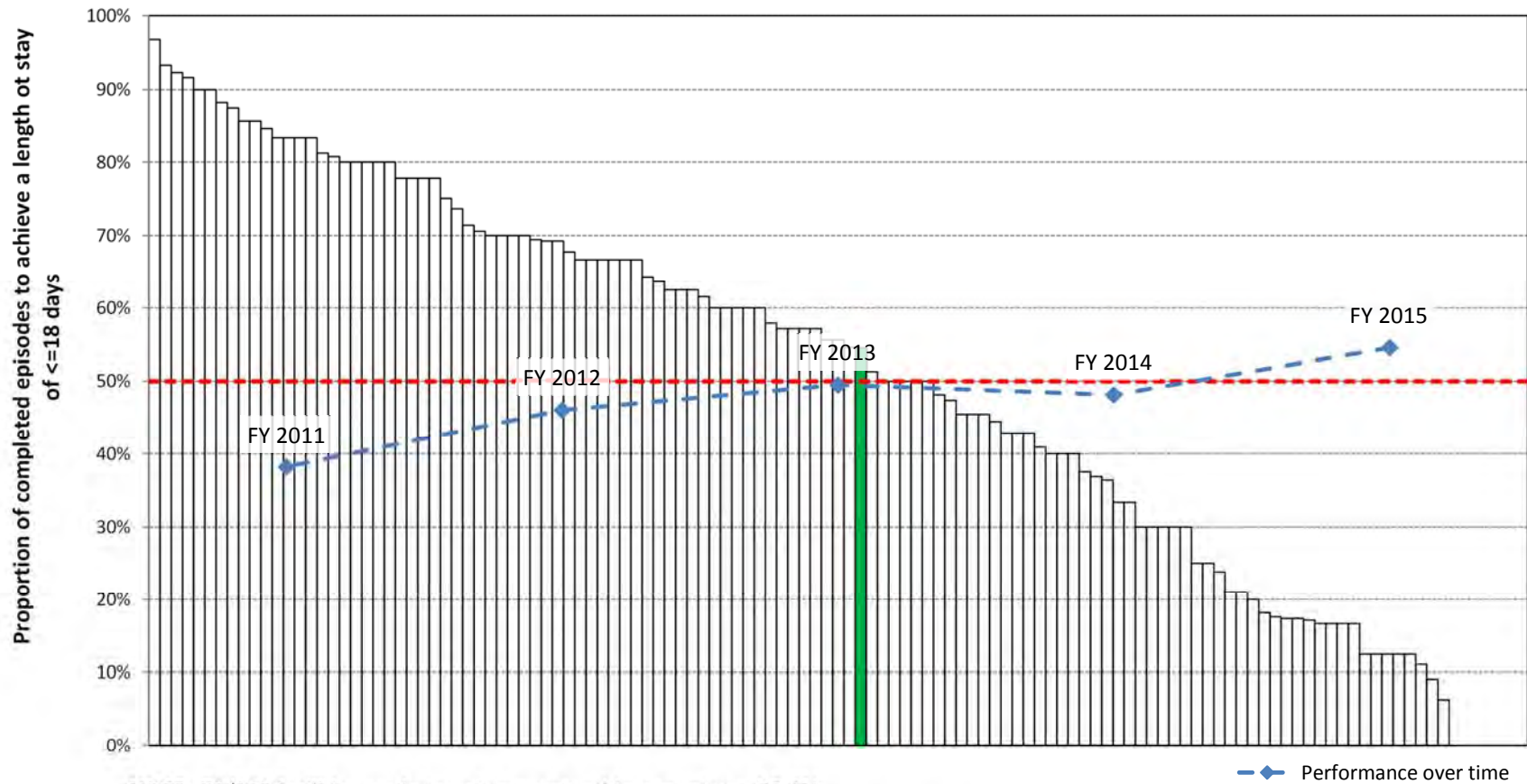
NOTE: 70/123 facilities made target; average achievement was 50.4%
Average length of stay was 20.4 days; your facility's average was 19.1 days

## #NOF Target 2: Length of Stay — AN-SNAP class 3-229 Target = 23 days or less



**NOTE:** 70/126 facilities made target; average achievement was 50.5%
Average length of stay was 26.1 days; your facility's average was 24.5 days

**#NOF Target 2: Length of Stay — AN-SNAP class 3-230 Target = 21 days or less**

NOTE: 30/56 facilities made target; average achievement was 47.0%
Average length of stay was 24.5 days; your facility's average was 25.3 days

# 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).

Graphs for this target are not shown when there are less than 5 facilities with sufficient data
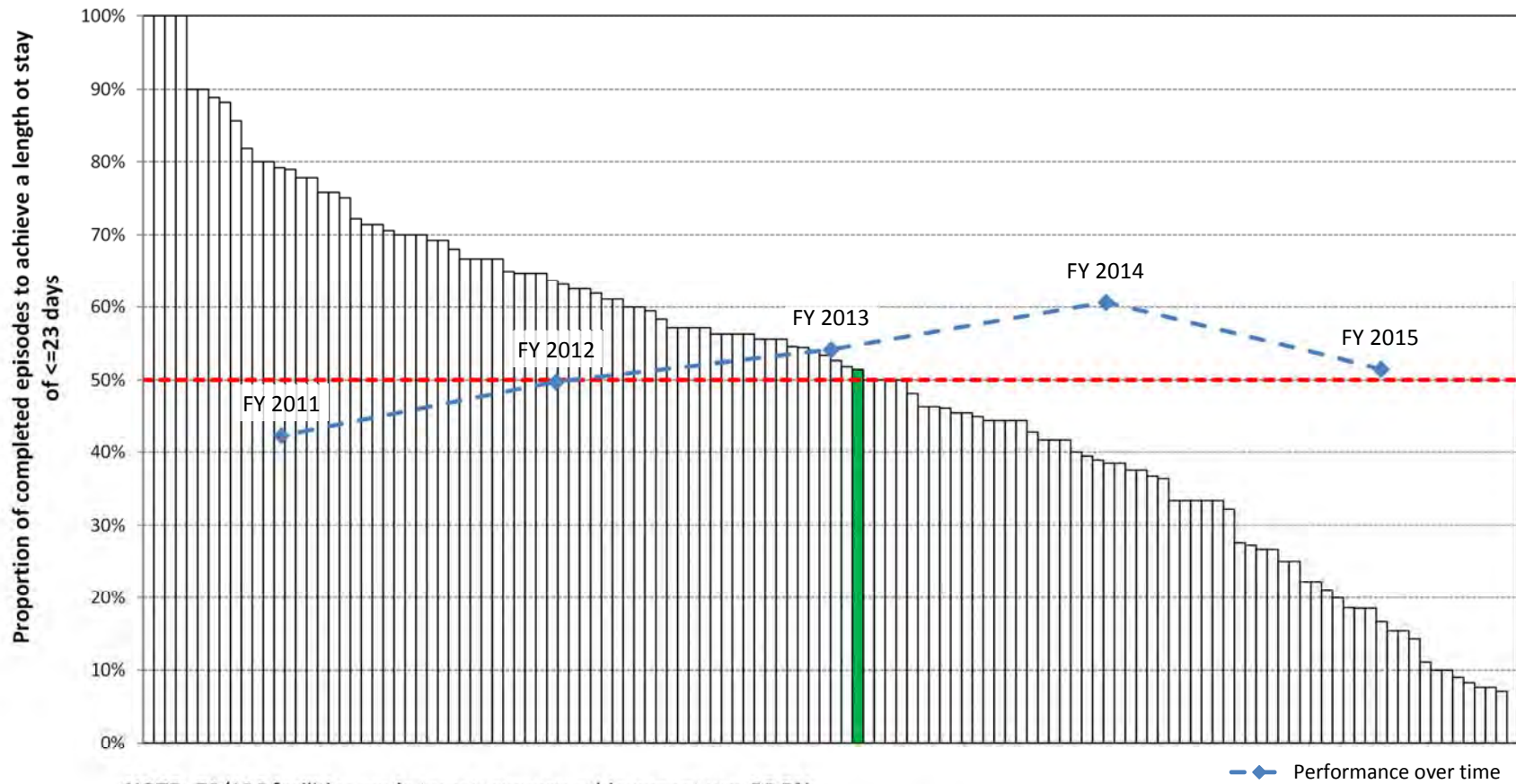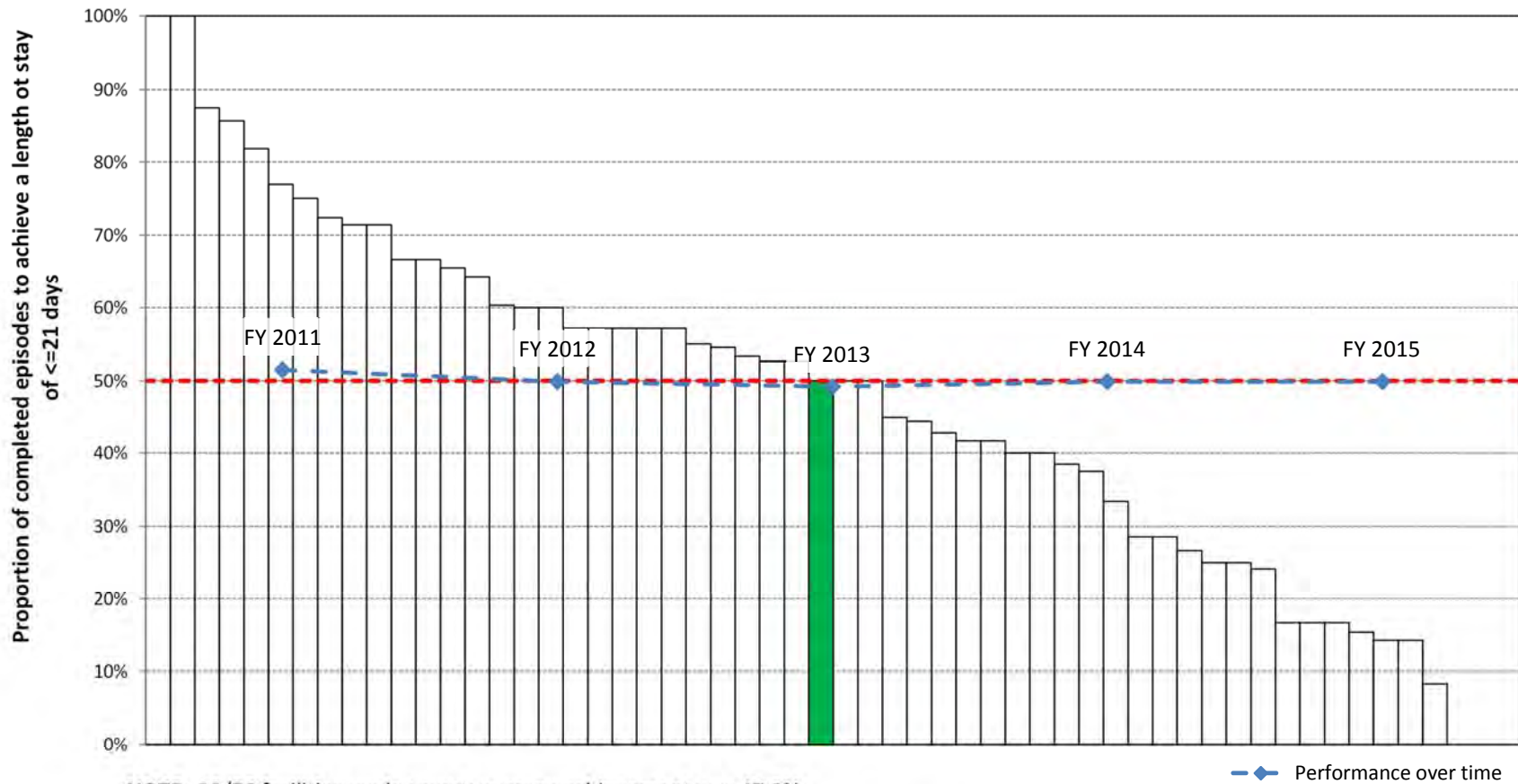
#NOF Target 3: FIM Change — AN-SNAP class 3-227 Target = 17 points or more
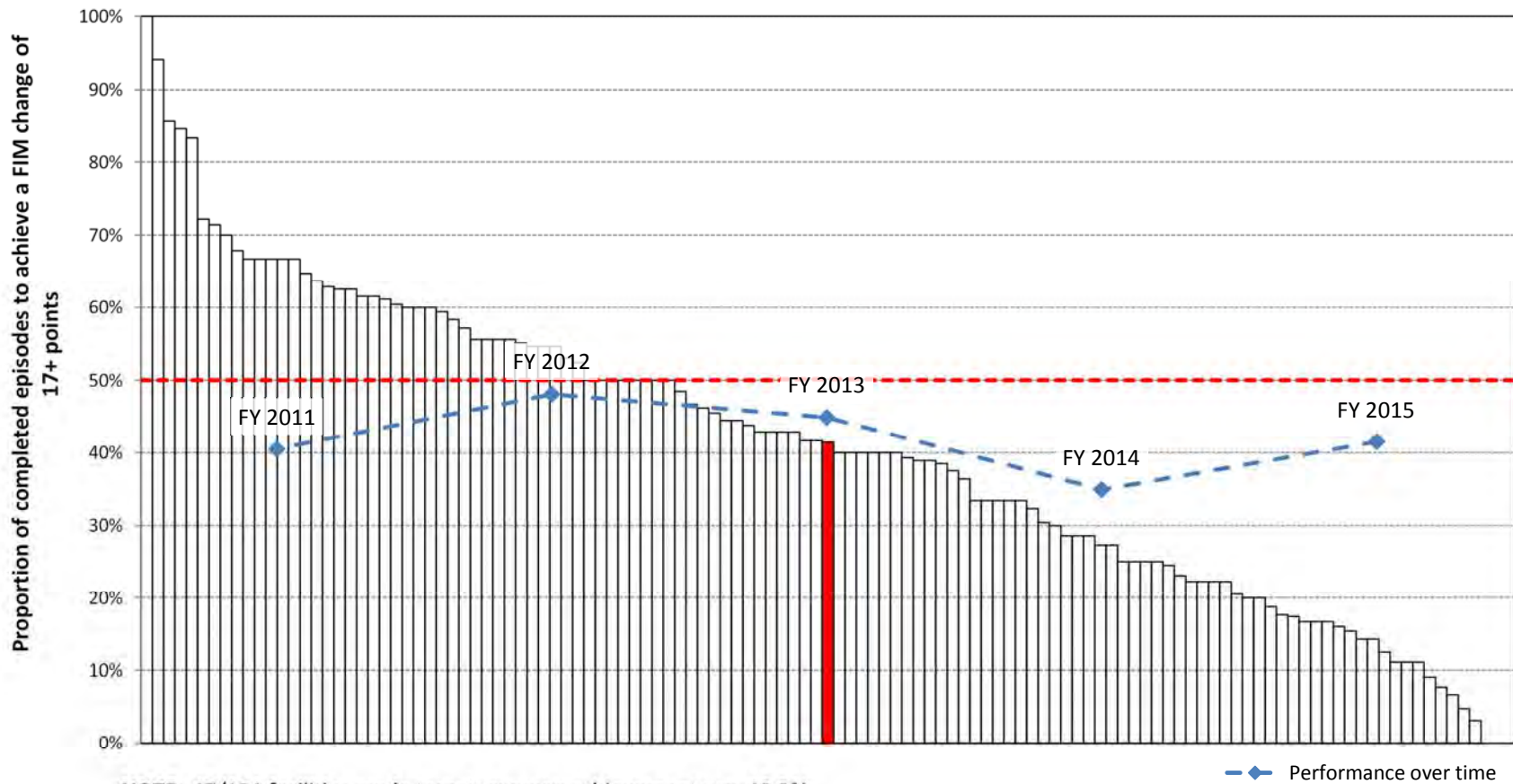
NOTE: 47/121 facilities made target; average achievement was 40.9%
Average FIM change was 14.4; your facility's average was 15.9

#NOF Target 3: FIM Change — AN-SNAP class 3-228 Target = 25 points or more

NOTE: 37/123 facilities made target; average achievement was 37.7%
Average FIM change was 21.5; your facility's average was 20.6

#NOF Target 3: FIM Change — AN-SNAP class 3-229 Target = 31 points or more

**NOTE:** 46/126 facilities made target; average achievement was 43.4%
Average FIM change was 27.6; your facility's average was 26.1

#NOF Target 3: FIM Change — AN-SNAP class 3-230 Target = 23 points or more
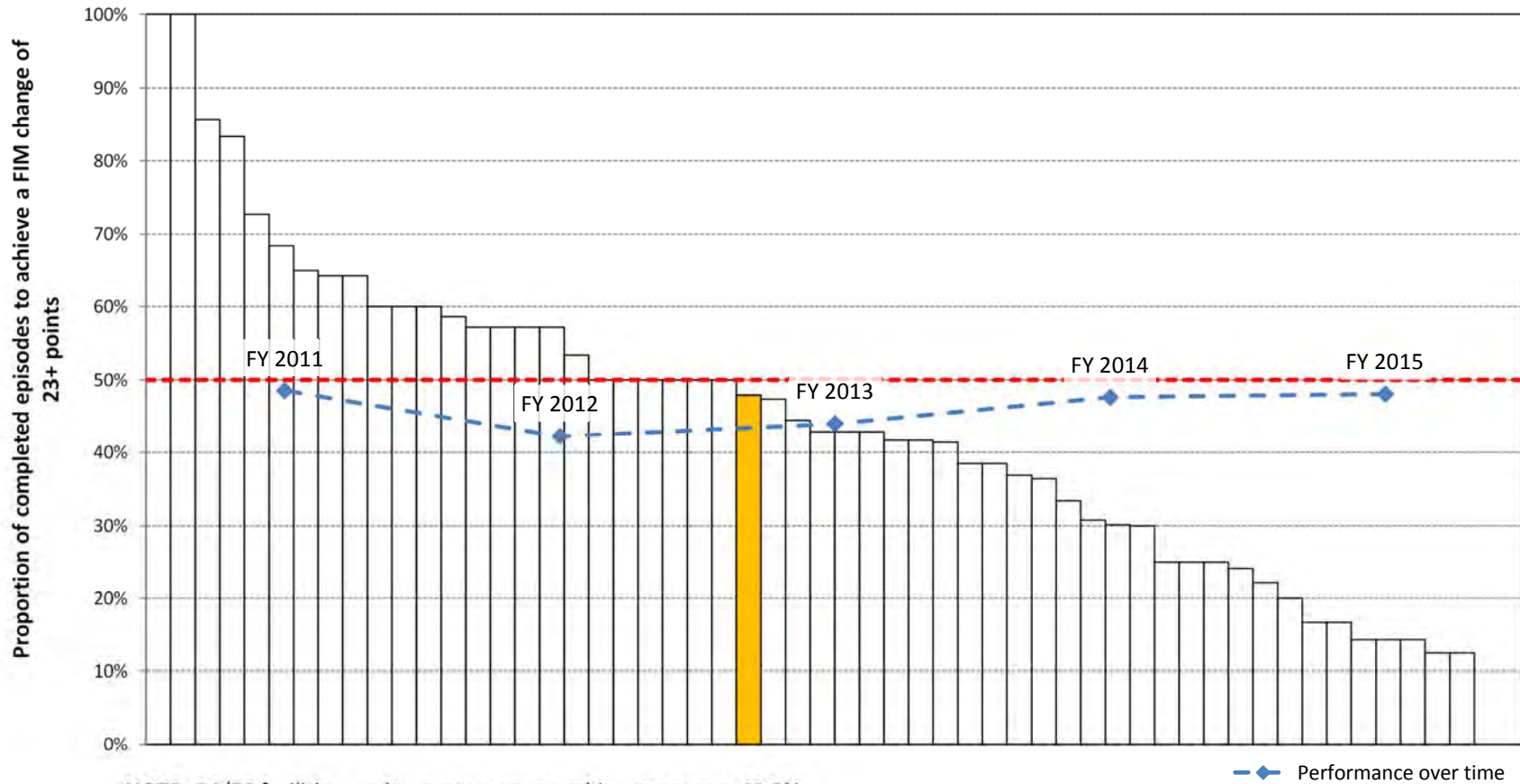
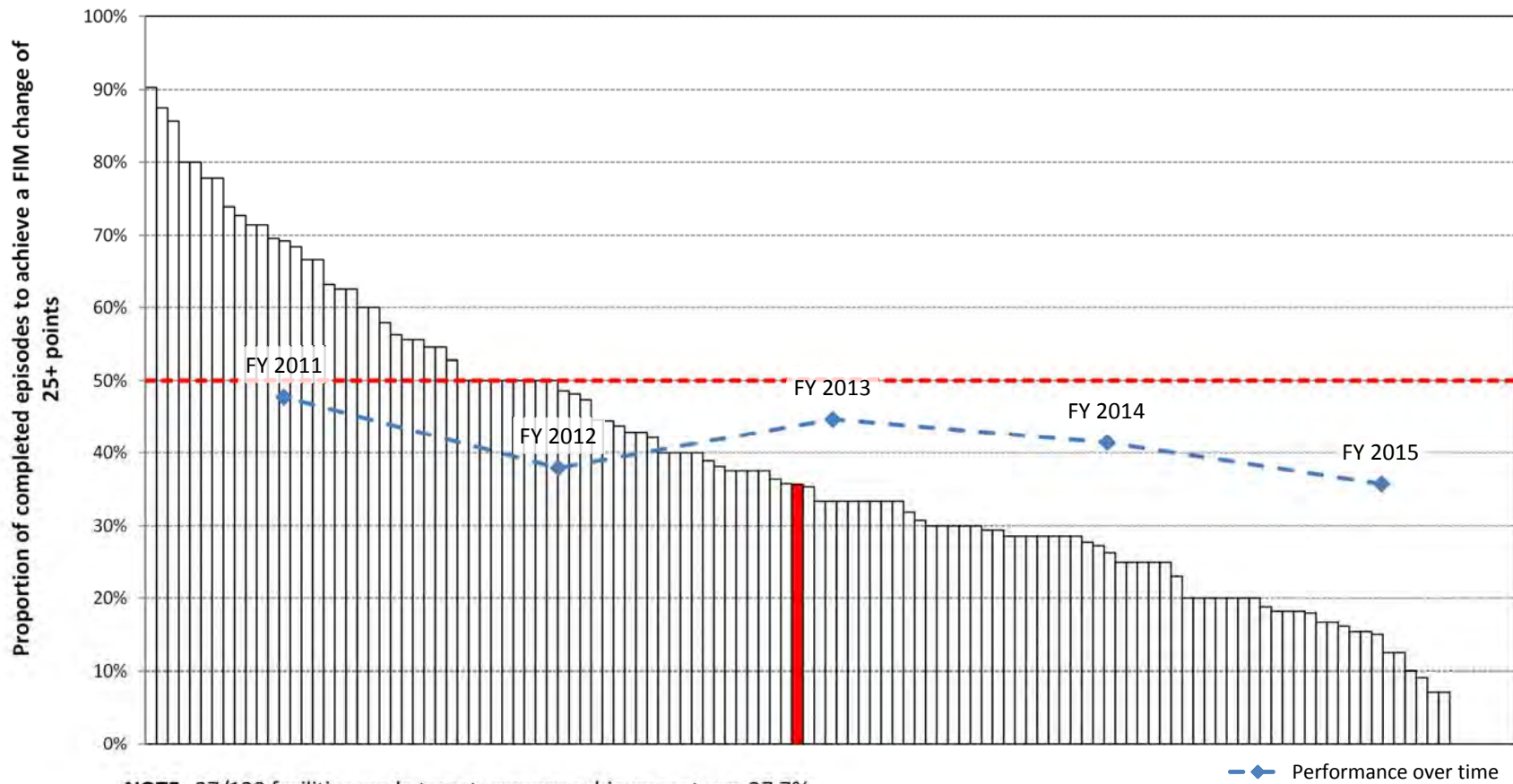NOTE: 24/56 facilities made target; average achievement was 43.5%
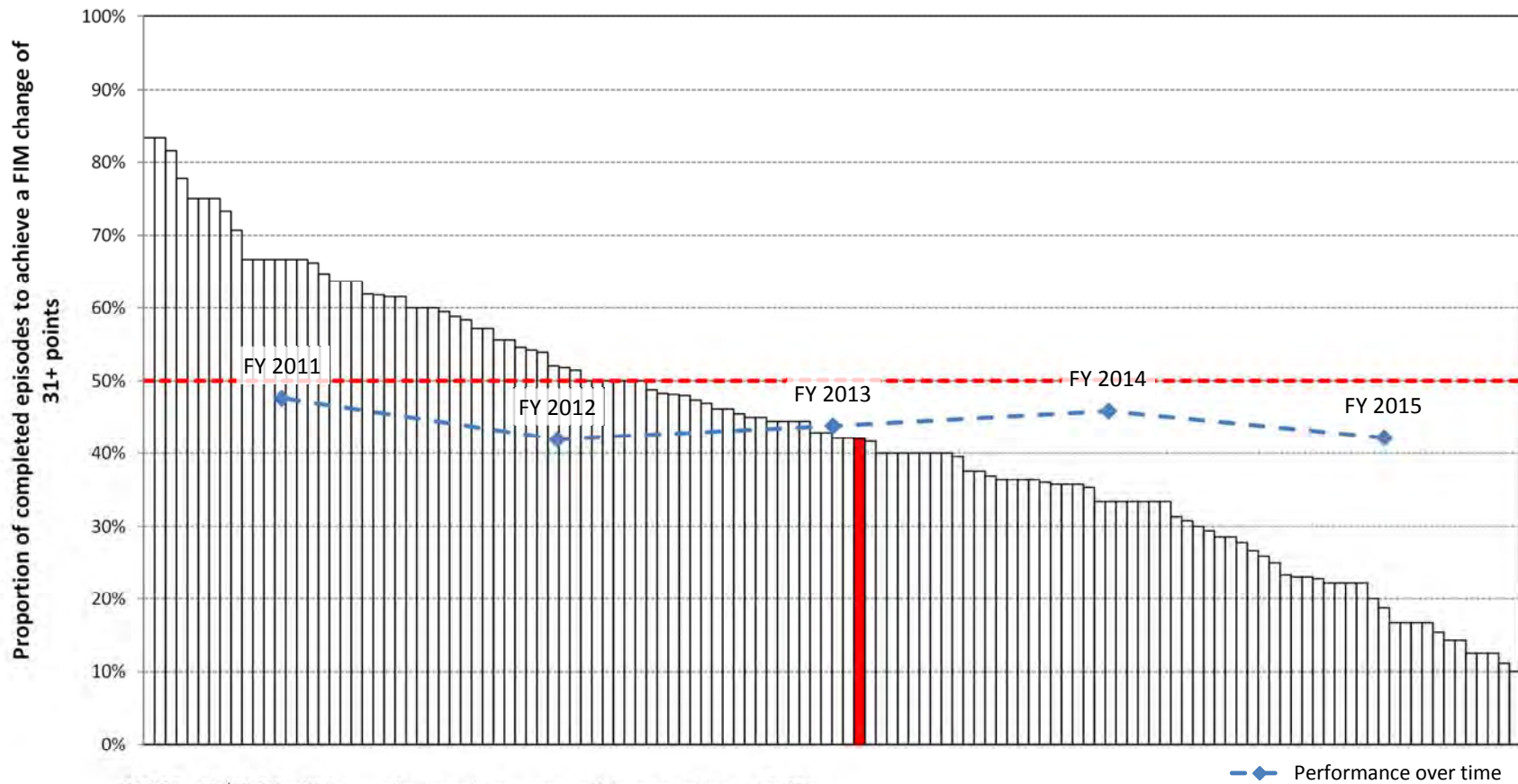Average FIM change was 20.6; your facility's average was 21.8

# 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.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

#NOF Target 4: Discharge Destination — AN-SNAP class 3-227 Target = 90% achieve same or greater independence
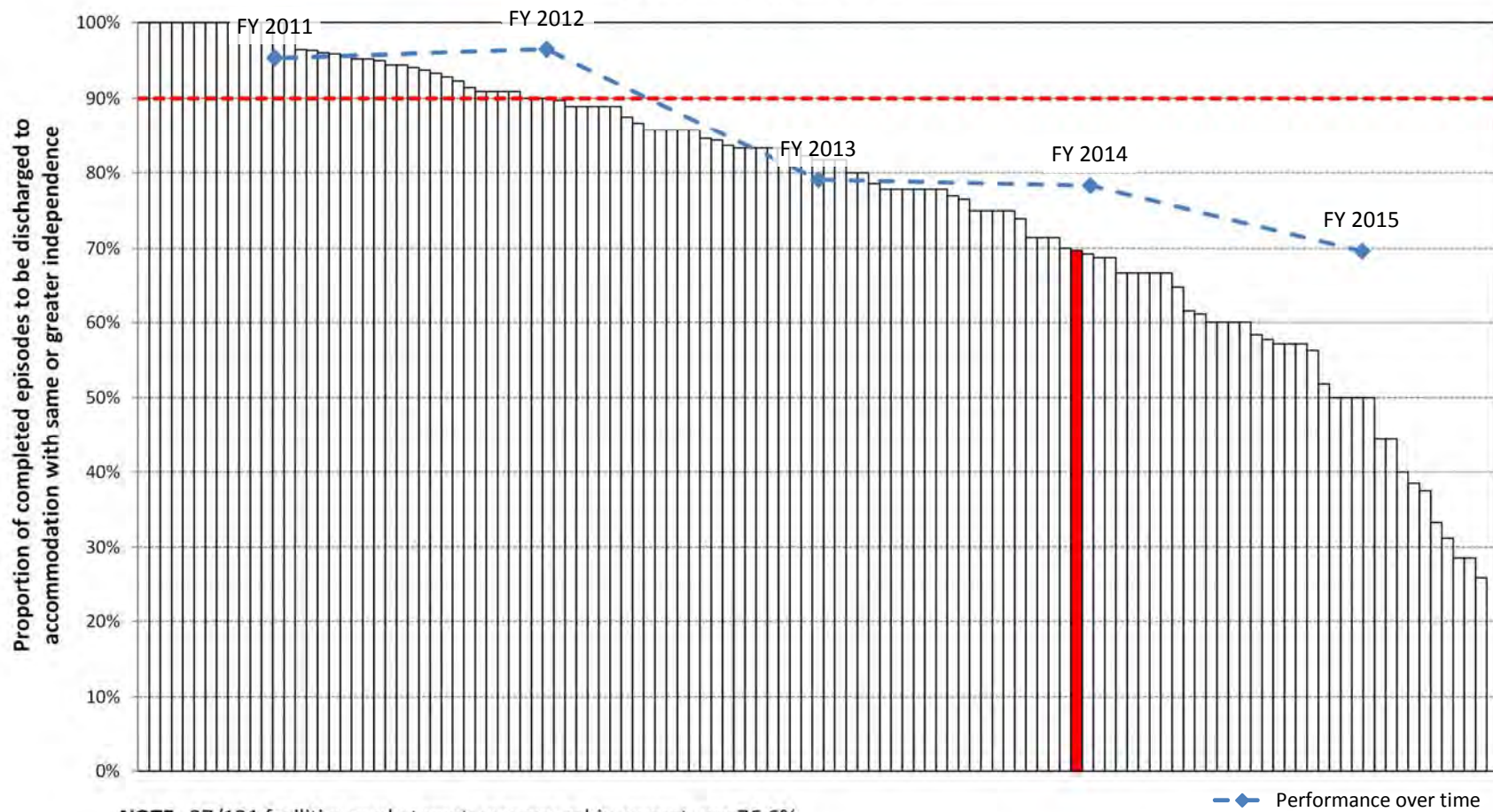
**NOTE:** 37/121 facilities made target; average achievement was 76.6%

#NOF Target 4: Discharge Destination — AN-SNAP class 3-228 Target = 80% achieve same or greater independence
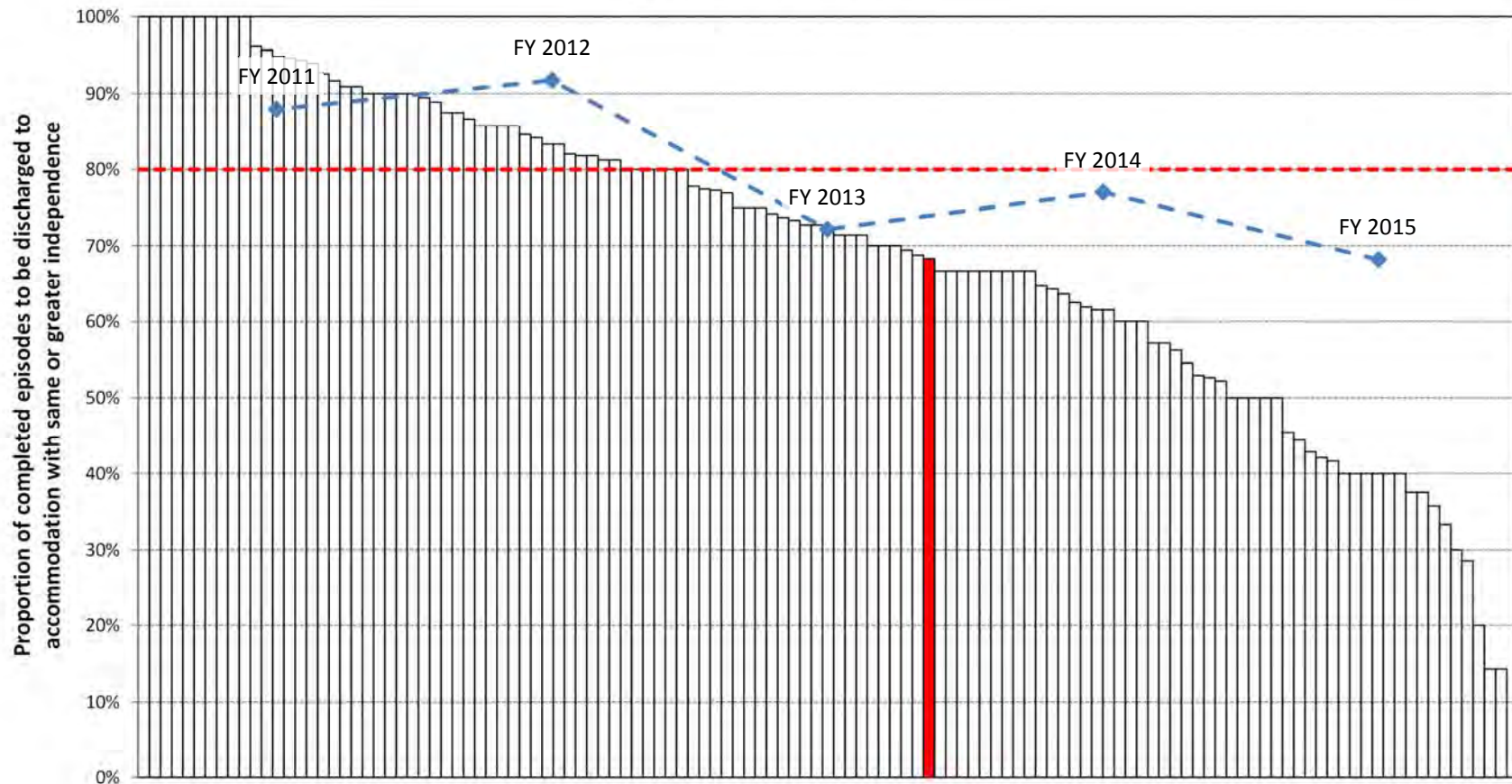
NOTE: 49/123 facilities made target; average achievement was 69.6%

#NOF Target 4: Discharge Destination — AN-SNAP class 3-229 Target = 75% achieve same or greater independence
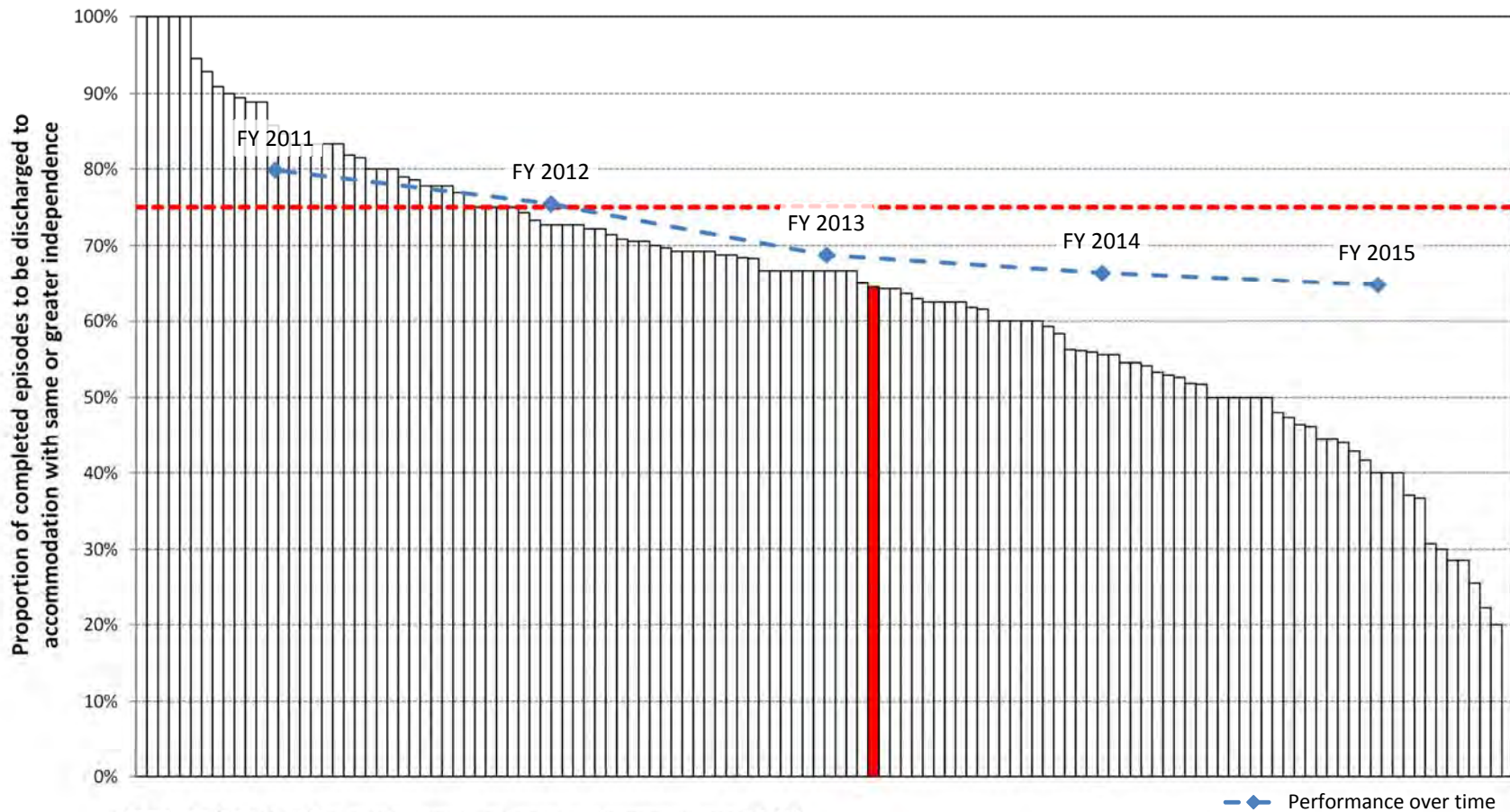
NOTE: 35/126 facilities made target; average achievement was 64.2%

#NOF Target 4: Discharge Destination — AN-SNAP class 3-230 Target = 70% achieve same or greater independence

NOTE: 25/56 facilities made target; average achievement was 62.0%

Performance over time
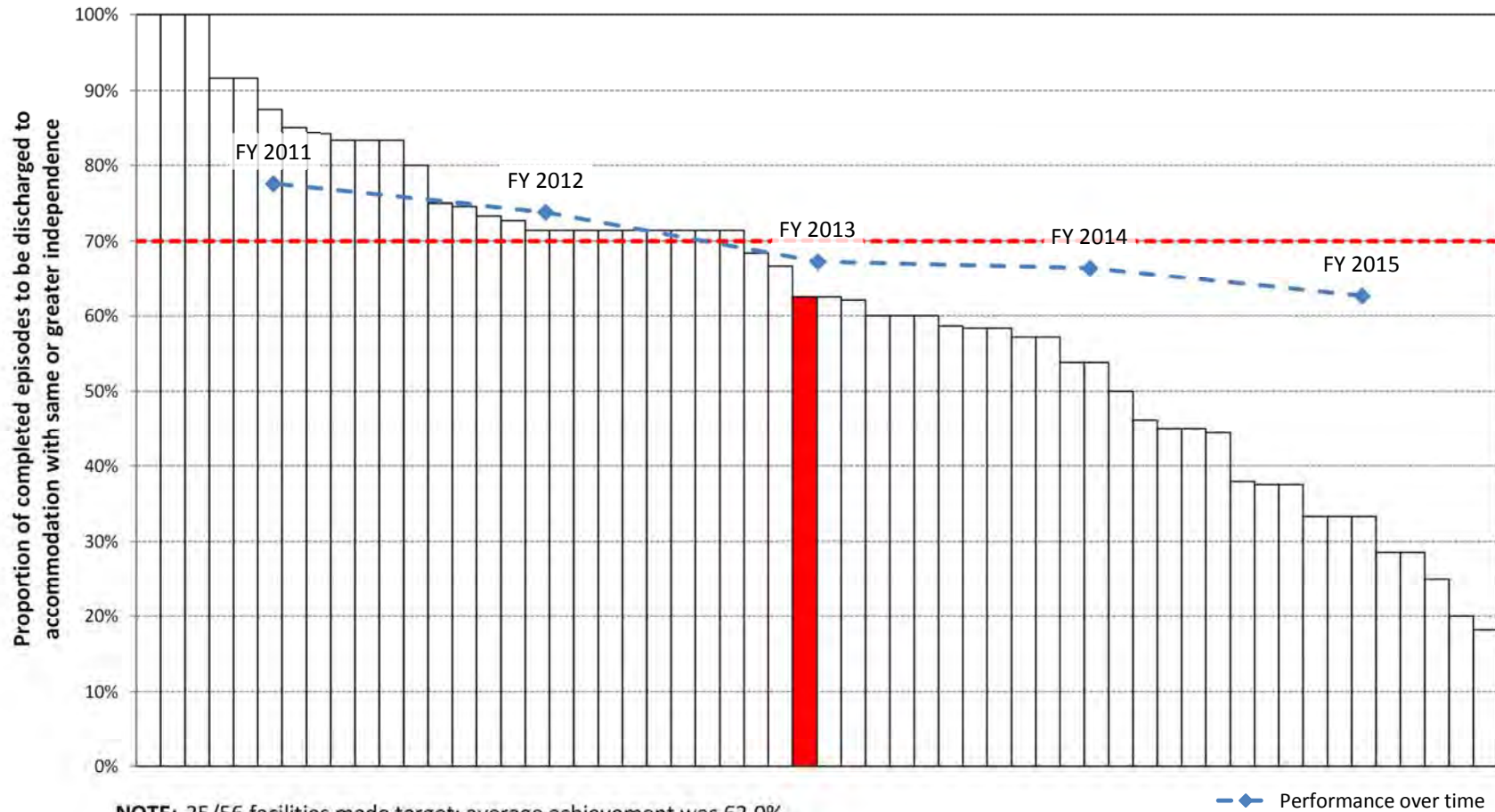
Stroke

# 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
- 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
- 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**
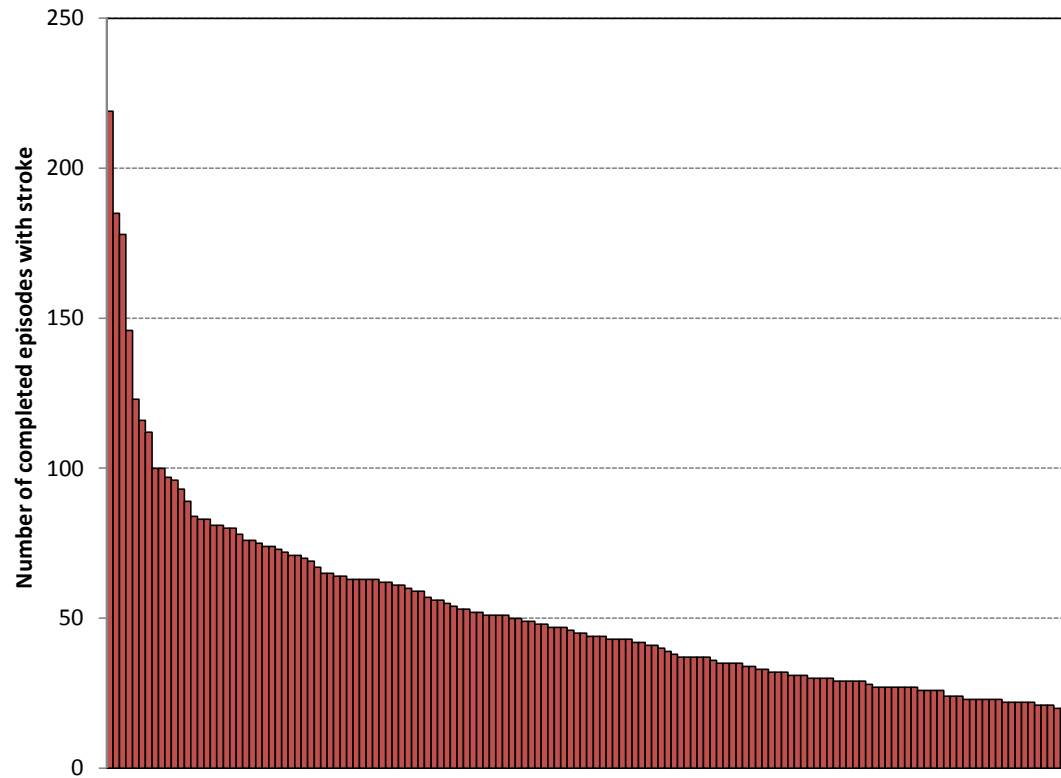


NOTE: 126 of 275 (45.8%) facilities reporting stroke had fewer than 20 episodes.

## Snapshot of target outcomes at your facility:

| AN-SNAP class | Completed episodes | Target Status | | | | |
|---|---|---|---|---|---|---|
| | | 1A | 1B | 2 | 3 | 4 |
| 3-204 | 161 | ✔ | ✔ | ✔ | ✘ | ✘ |
| 3-205 | 19 | ✘ | ✔ | ✔ | ✘ | ✘ |
| 3-206 | 97 | ✔ | ✔ | ✔ | ✔ | ✘ |
| 3-207 | 8 | ✔ | ✔ | ✘ | ✔ | ✘ |
| 3-208 | 93 | ✔ | 🔶 | 🔶 | ✘ | ✘ |
| 3-209 | 77 | ✔ | ✘ | 🔶 | ✔ | ✘ |
| All episodes | **455** | | | | | |

| | |
|---|---|
| ✔ | Achieved target |
| 🔶 | Within 5% of target |
| ✘ | Did not achieve target |
| — | Not reported (0 - 4 episodes) |

# Target 1: Time between onset and rehabilitation

**2011 time since surgery to 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:
- Episodes where onset date or time is not provided or invalid


Graphs for this target are not shown when there are less than 5 facilities with sufficient data

# 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
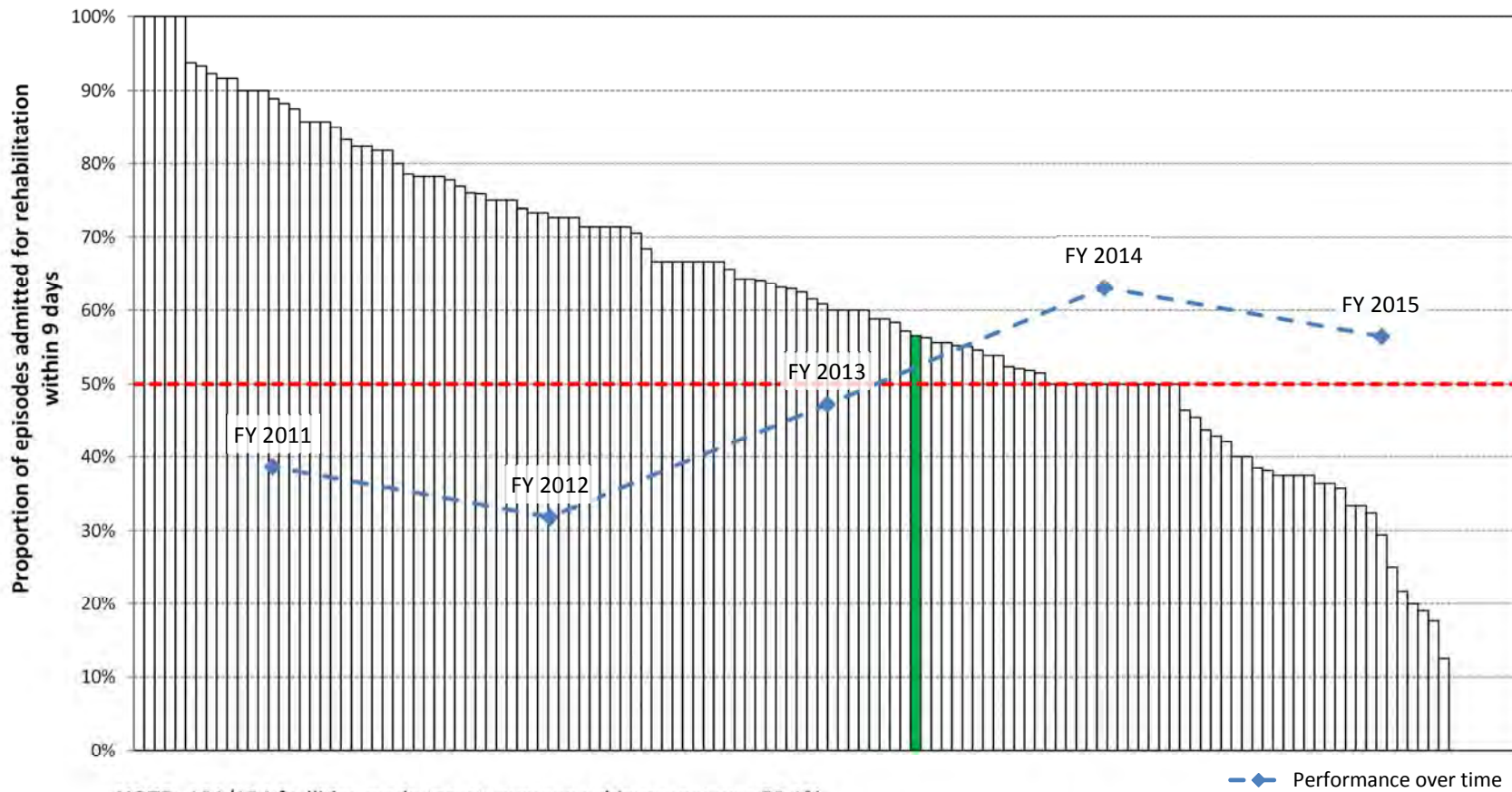
**NOTE:** 101/134 facilities made target; average achievement was 59.1%
Average time between onset and rehabilitation was 10.8 days; your facility's average was 10.7 days

Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-204 Target = 75% within 19 days

NOTE: 105/134 facilities made target; average achievement was 80.7%
Average time between onset and rehabilitation was 10.8 days; your facility's average was 10.7 days

Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-205 Target = 50% within 9 days

**NOTE:** 10/22 facilities made target; average achievement was 43.0%

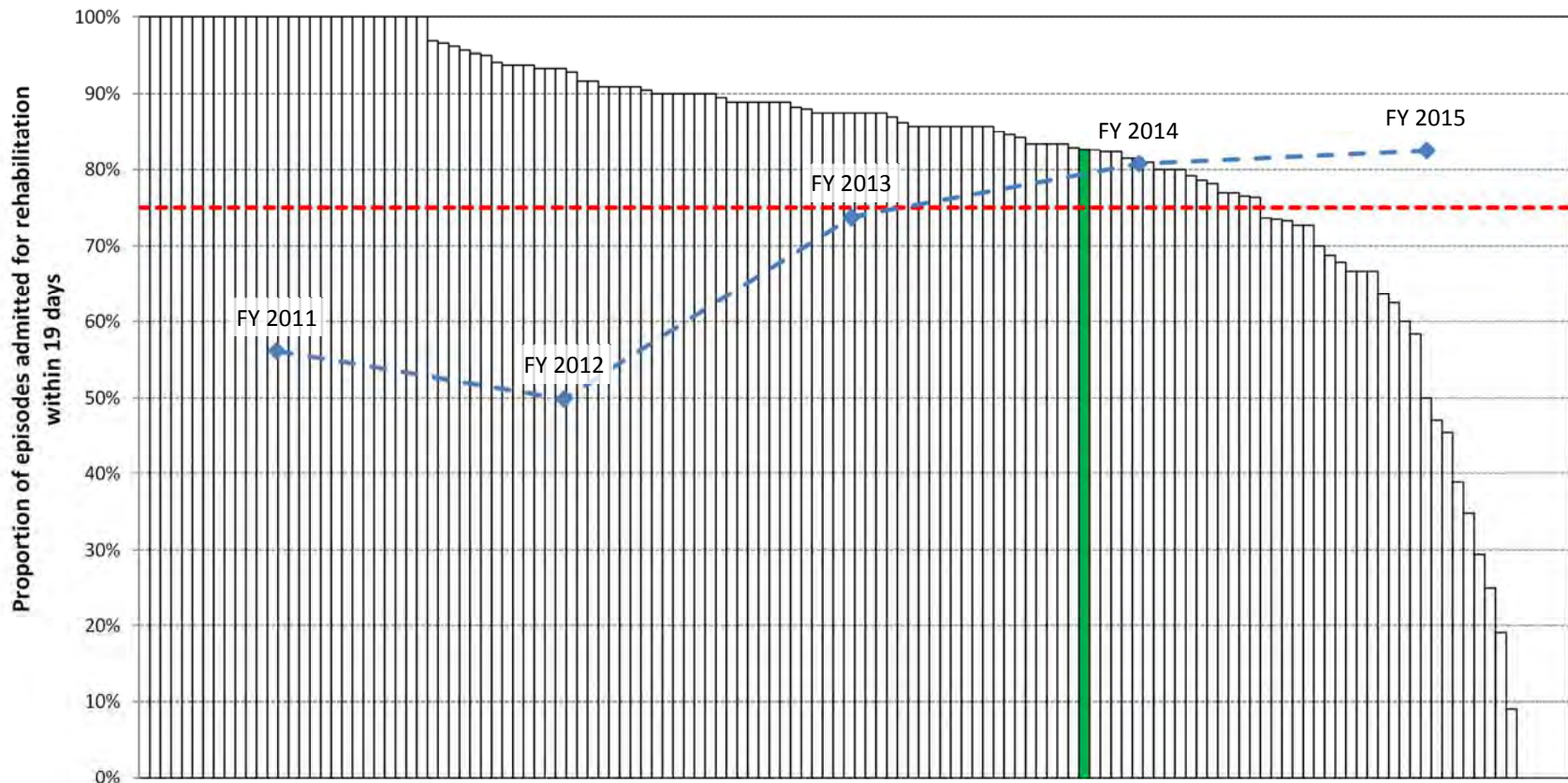Average time between onset and rehabilitation was 13.8 days; your facility's average was 10.6 days

Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-205 Target = 75% within 19 days

NOTE: 13/22 facilities made target; average achievement was 76.1%
Average time between onset and rehabilitation was 13.8 days; your facility's average was 10.6 days

Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-206 Target = 50% within 10 days

NOTE: 98/142 facilities made target; average achievement was 60.3%
Average time between onset and rehabilitation was 11.3 days; your facility's average was 9.9 days

Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-206 Target = 75% within 19 days

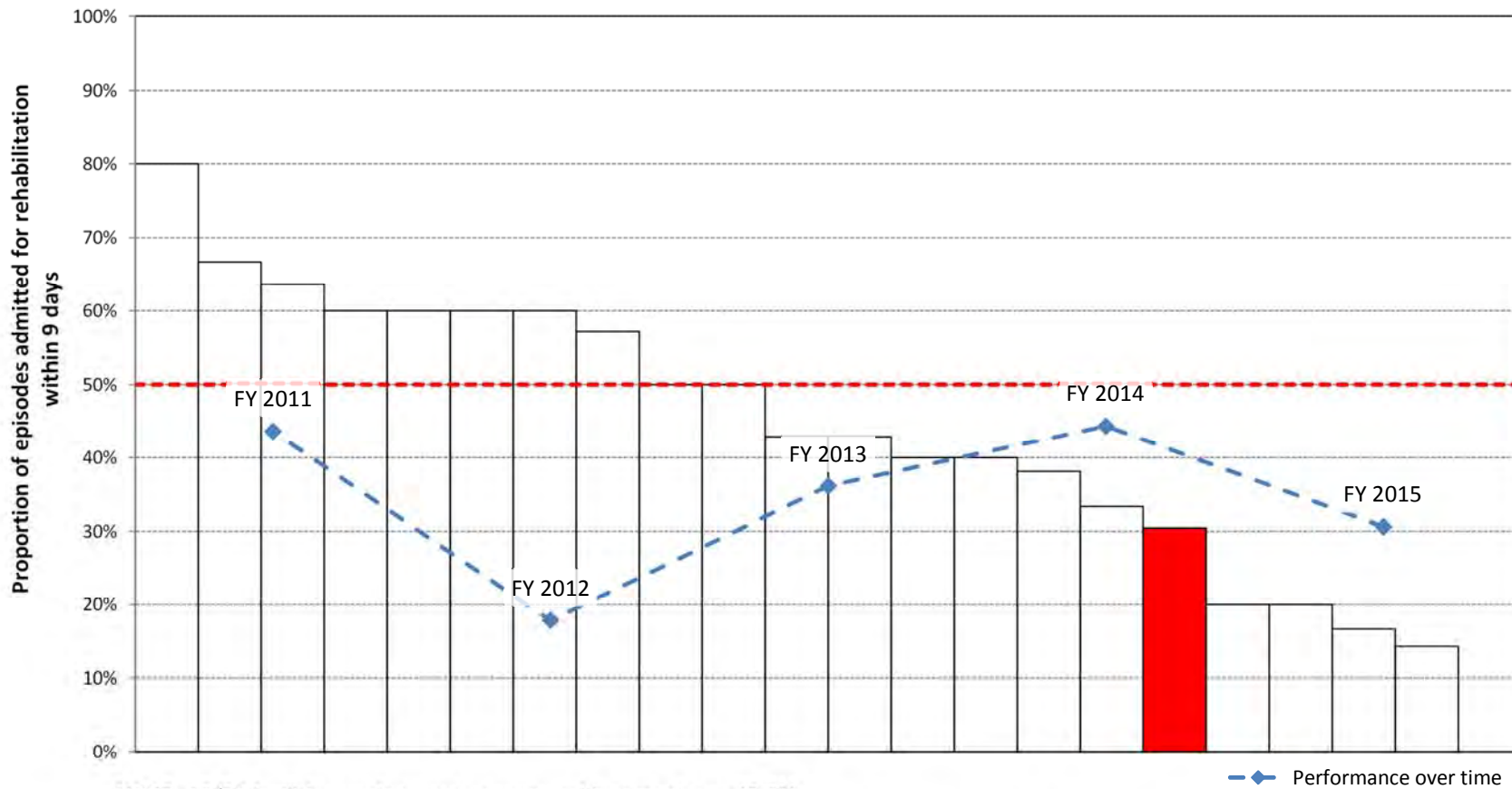NOTE: 106/142 facilities made target; average achievement was 79.7%

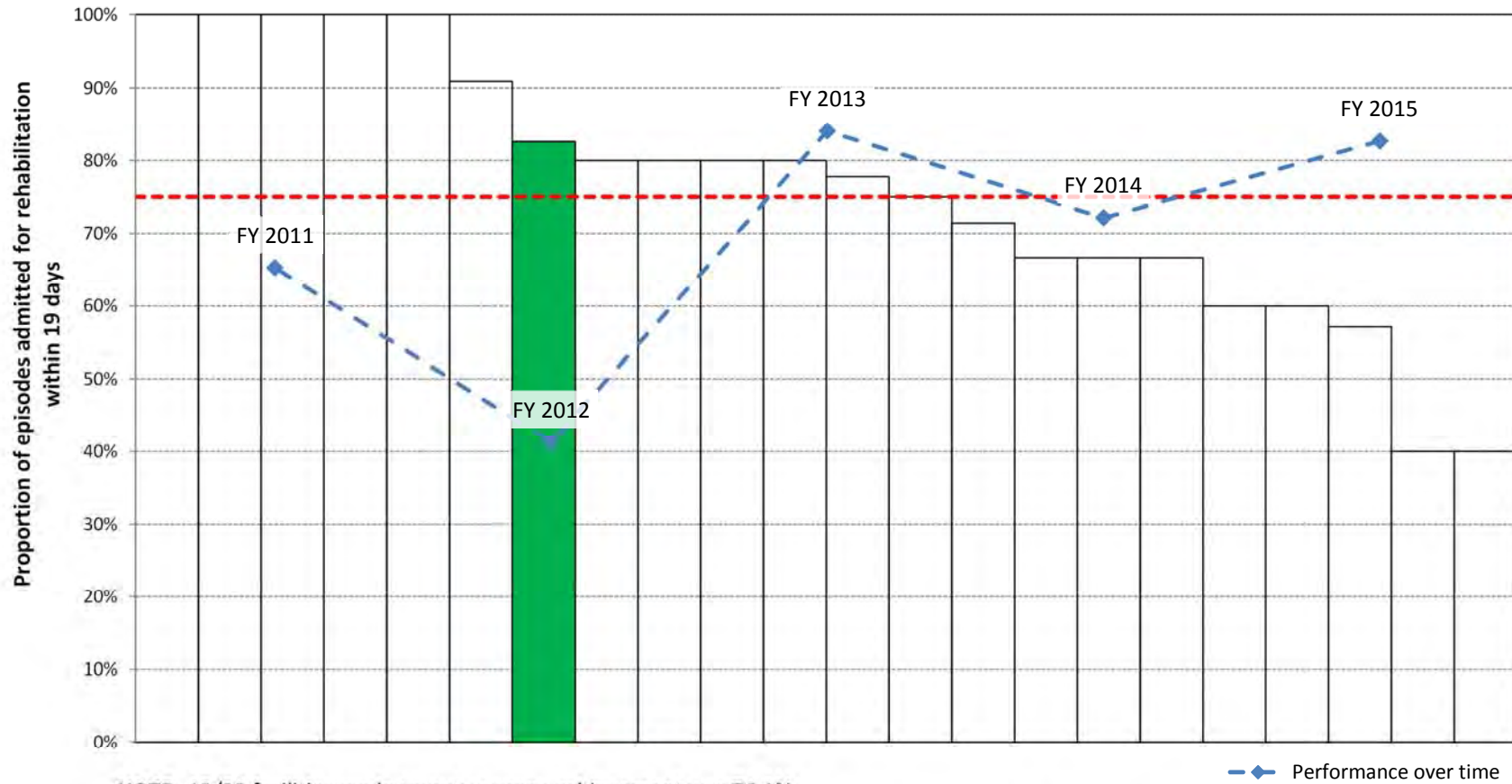Average time between onset and rehabilitation was 11.3 days; your facility's average was 9.9 days

Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-207 Target = 50% within 14 days

NOTE: 8/10 facilities made target; average achievement was 78.0%

Average time between onset and rehabilitation was 13.7 days; your facility's average was 5.8 days

Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-207 Target = 75% within 19 days
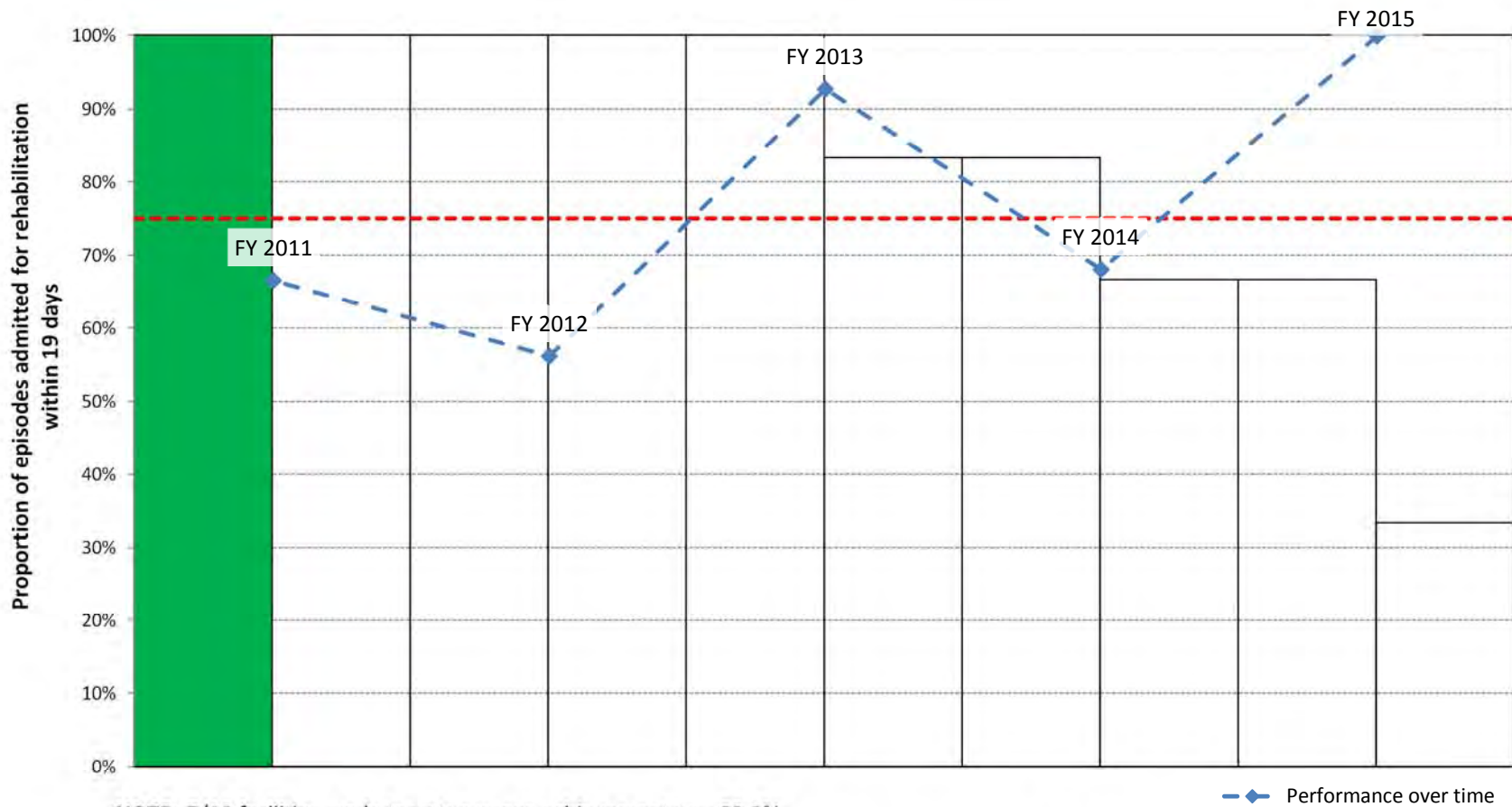
NOTE: 7/10 facilities made target; average achievement was 83.3%

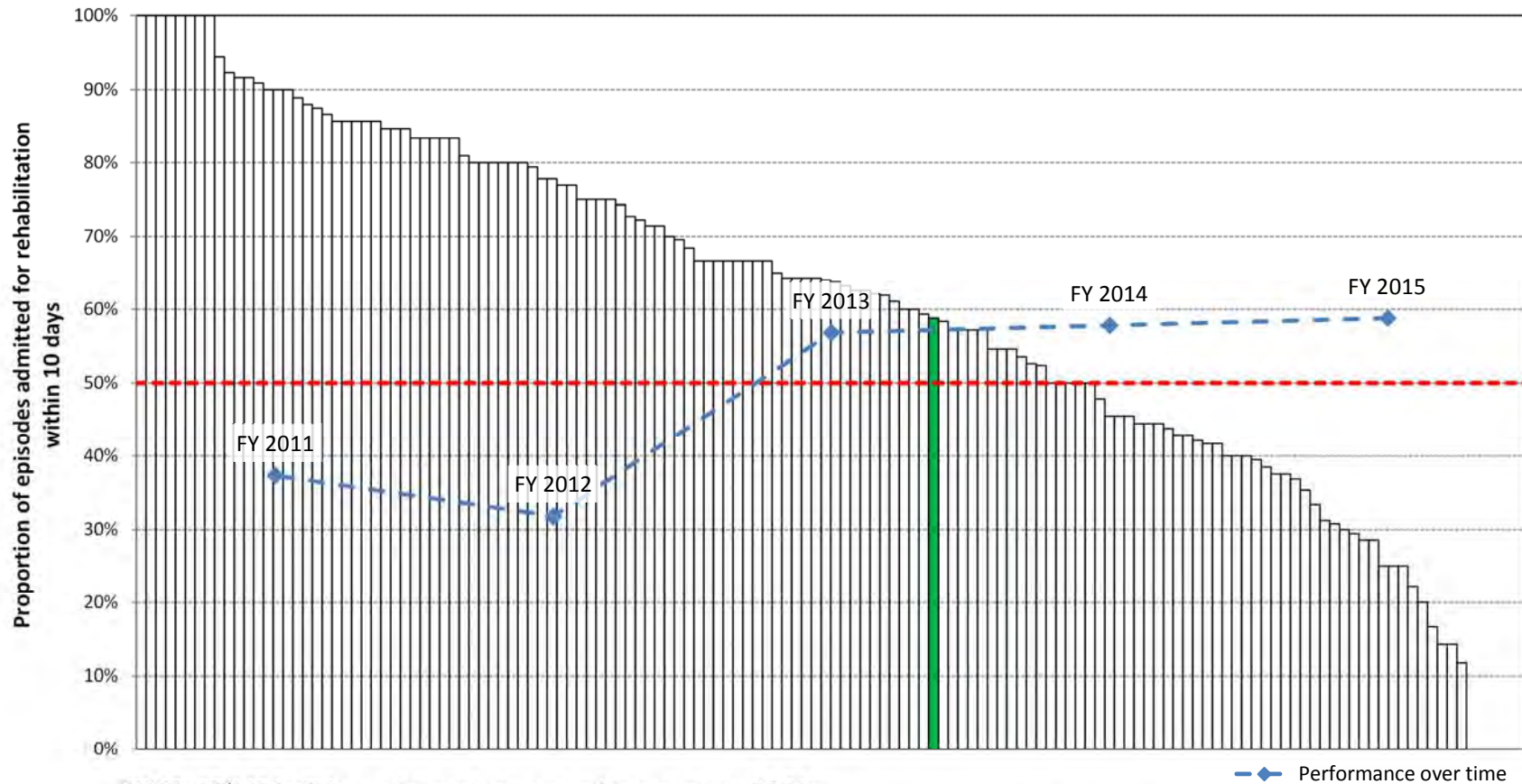Average time between onset and rehabilitation was 13.7 days; your facility's average was 5.8 days

Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-208 Target = 50% within 13 days
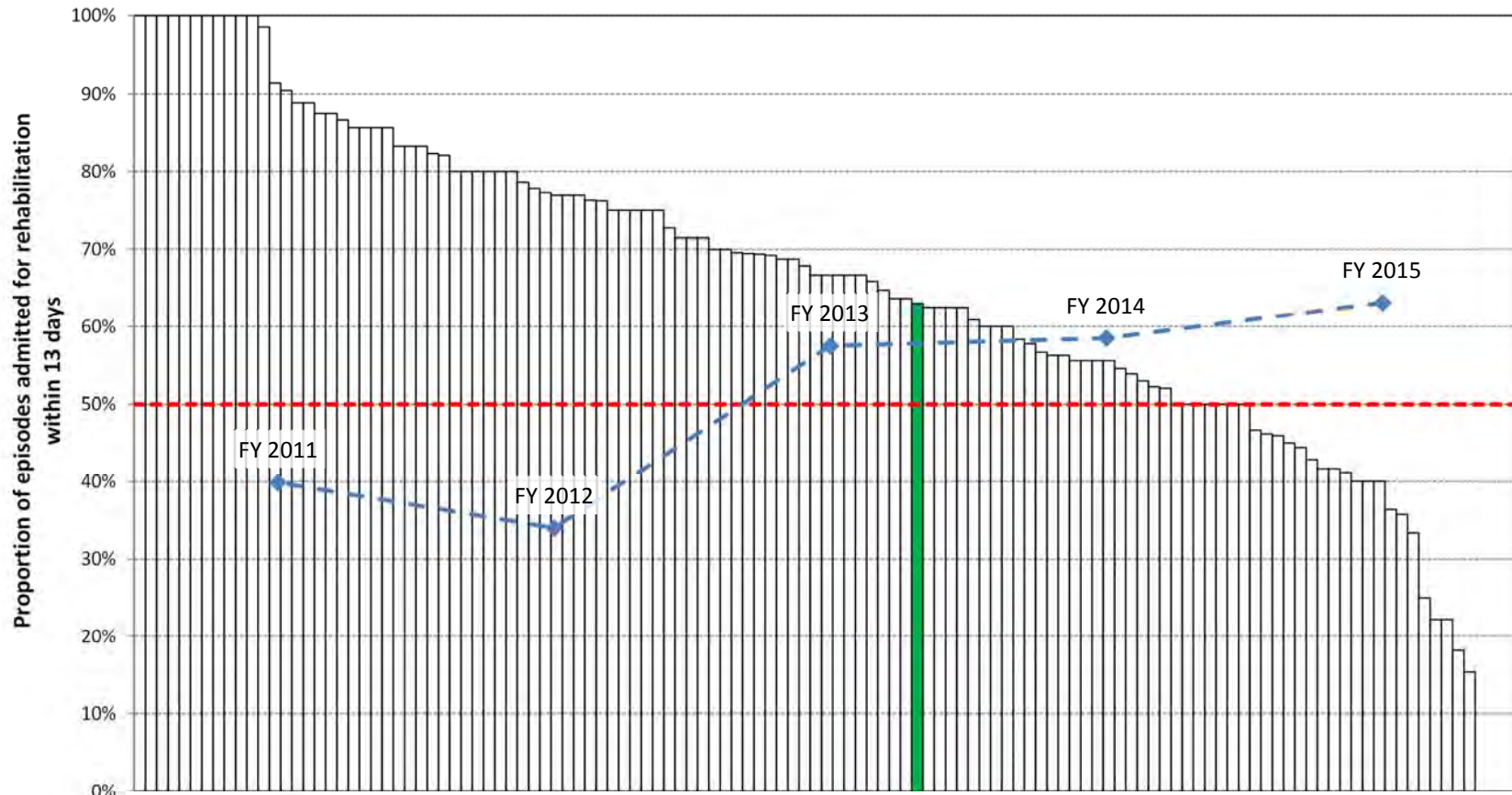
NOTE: 99/123 facilities made target; average achievement was 64.6%
Average time between onset and rehabilitation was 14.0 days; your facility's average was 15.5 days
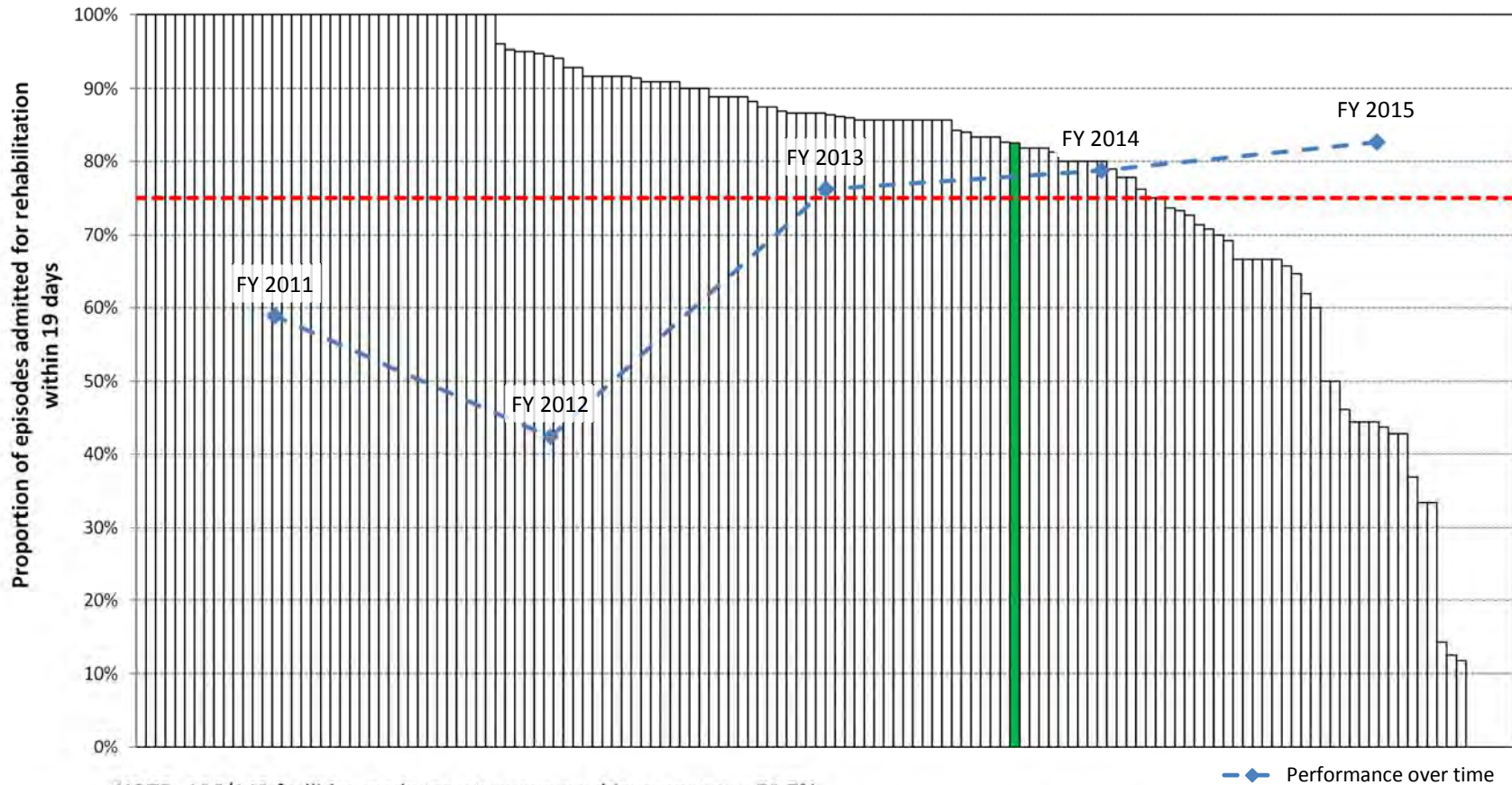
## Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-208 Target = 75% within 19 days
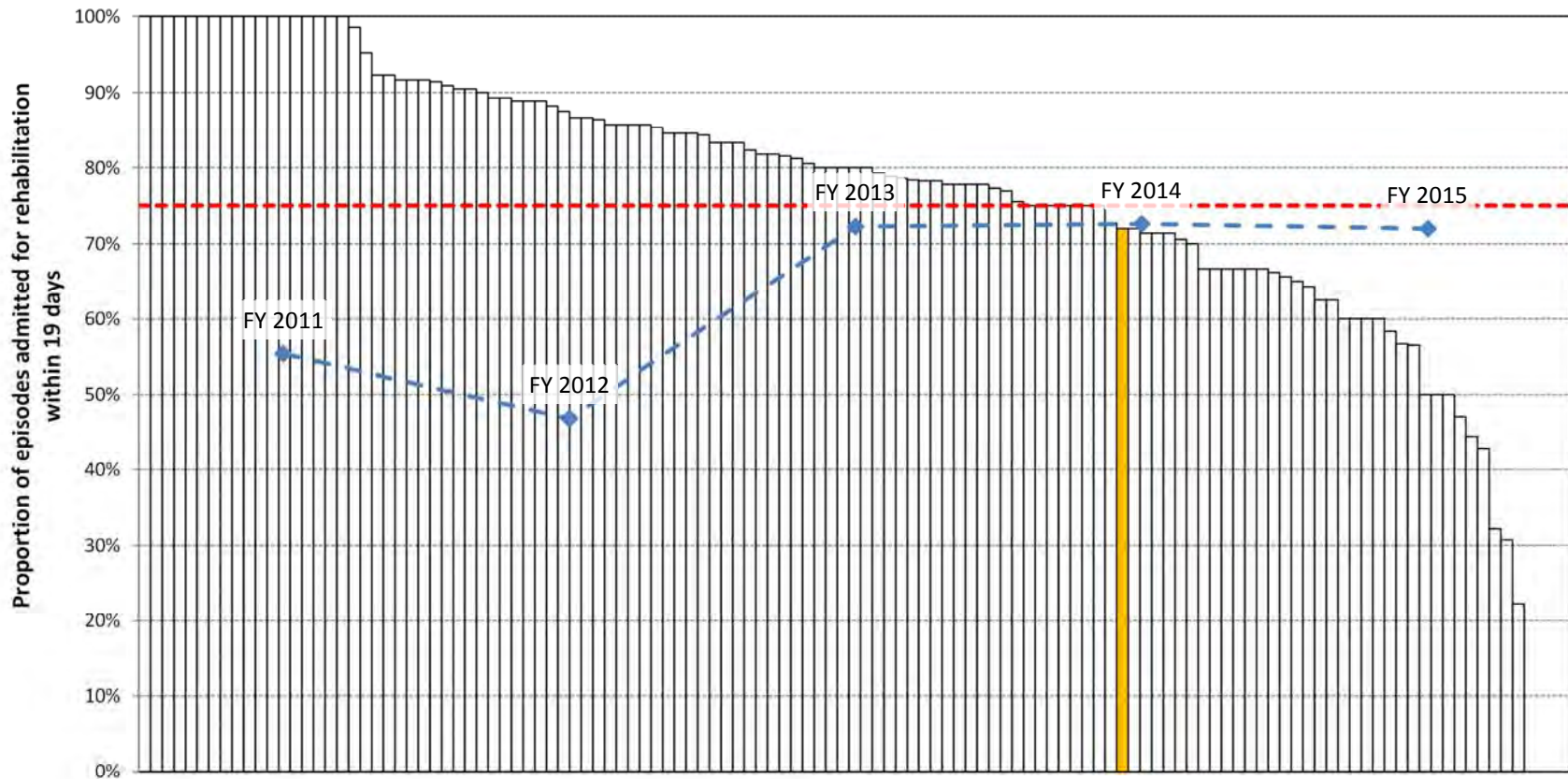


**NOTE:** 83/123 facilities made target; average achievement was 76.2%

Average time between onset and rehabilitation was 14.0 days; your facility's average was 15.5 days

## Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-209 Target = 50% within 16 days



NOTE: 76/100 facilities made target; average achievement was 61.3%

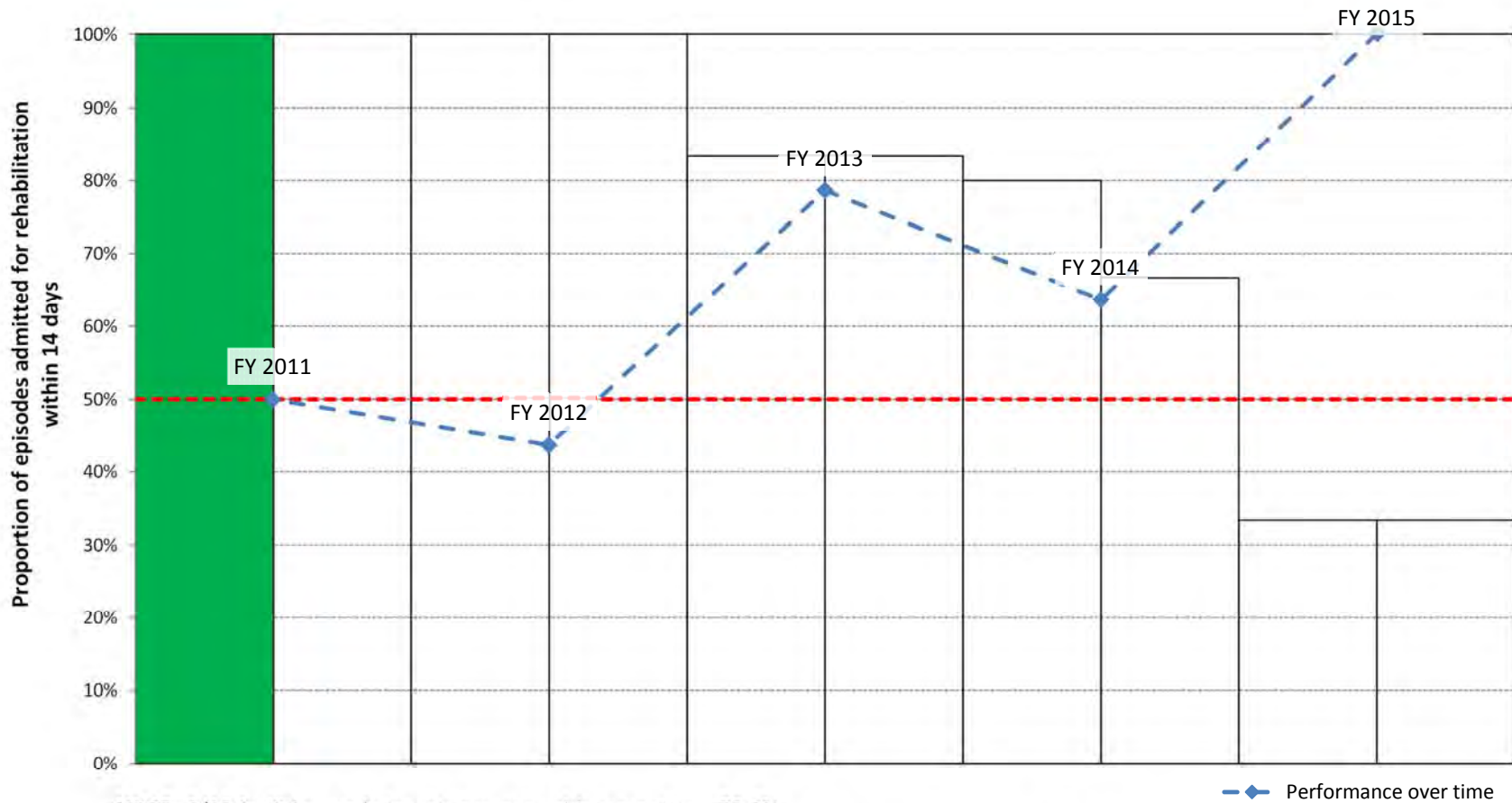Average time between onset and rehabilitation was 19.5 days; your facility's average was 25.8 days

Stroke Target 1: Time Between Onset and Rehabilitation - AN-SNAP class 3-209 Target = 75% within 19 days
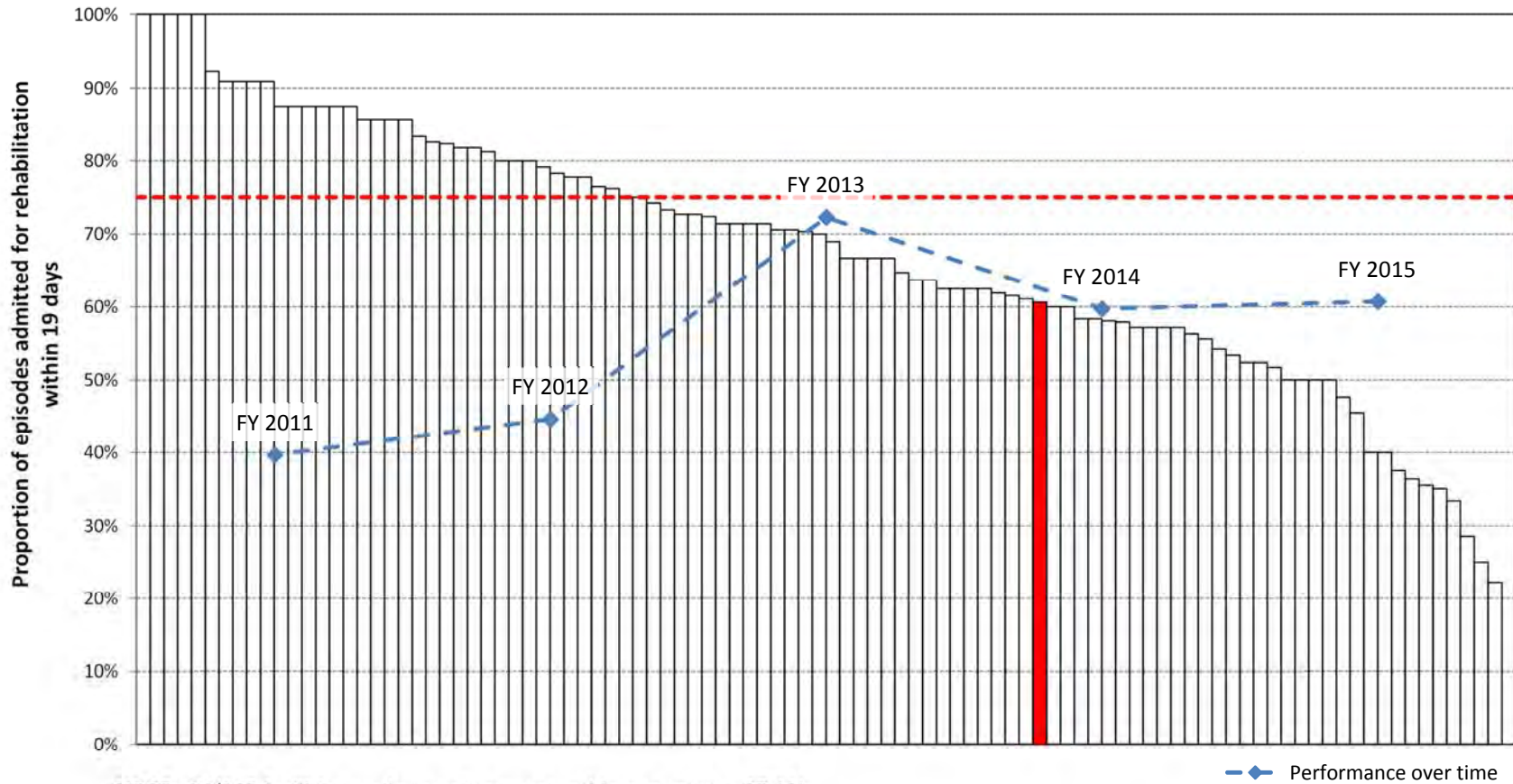
**NOTE:** 37/100 facilities made target; average achievement was 67.1%

Average time between onset and rehabilitation was 19.5 days; your facility's average was 25.8 days
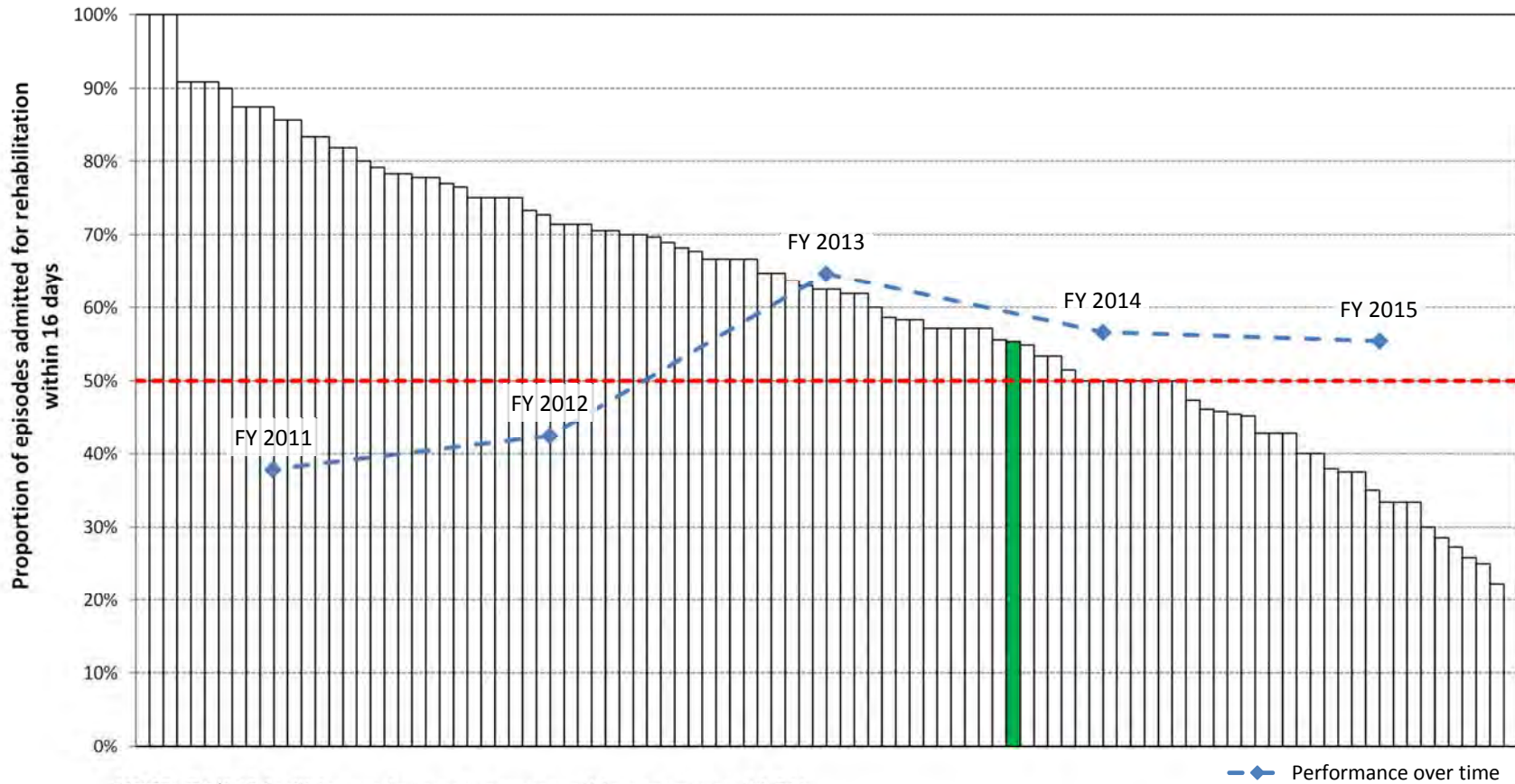
# Target 2: Length of stay



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.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Stroke Target 2: Length of Stay - AN-SNAP class 3-204 Target = 14 days or less
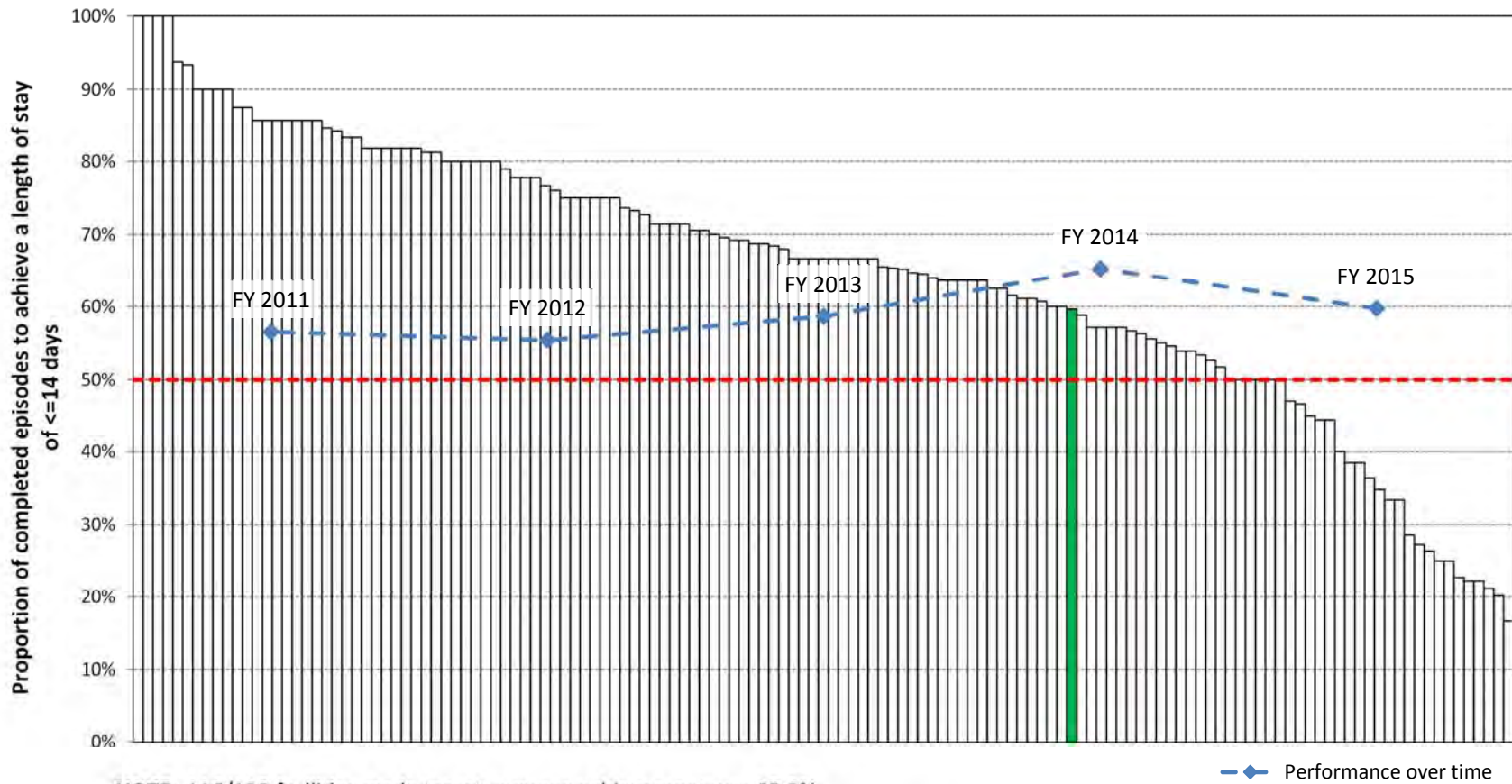
NOTE: 116/139 facilities made target; average achievement was 65.0%
Average length of stay was 14.3 days; your facility's average was 14.1 days

**Stroke Target 2: Length of Stay - AN-SNAP class 3-205 Target = 21 days or less**
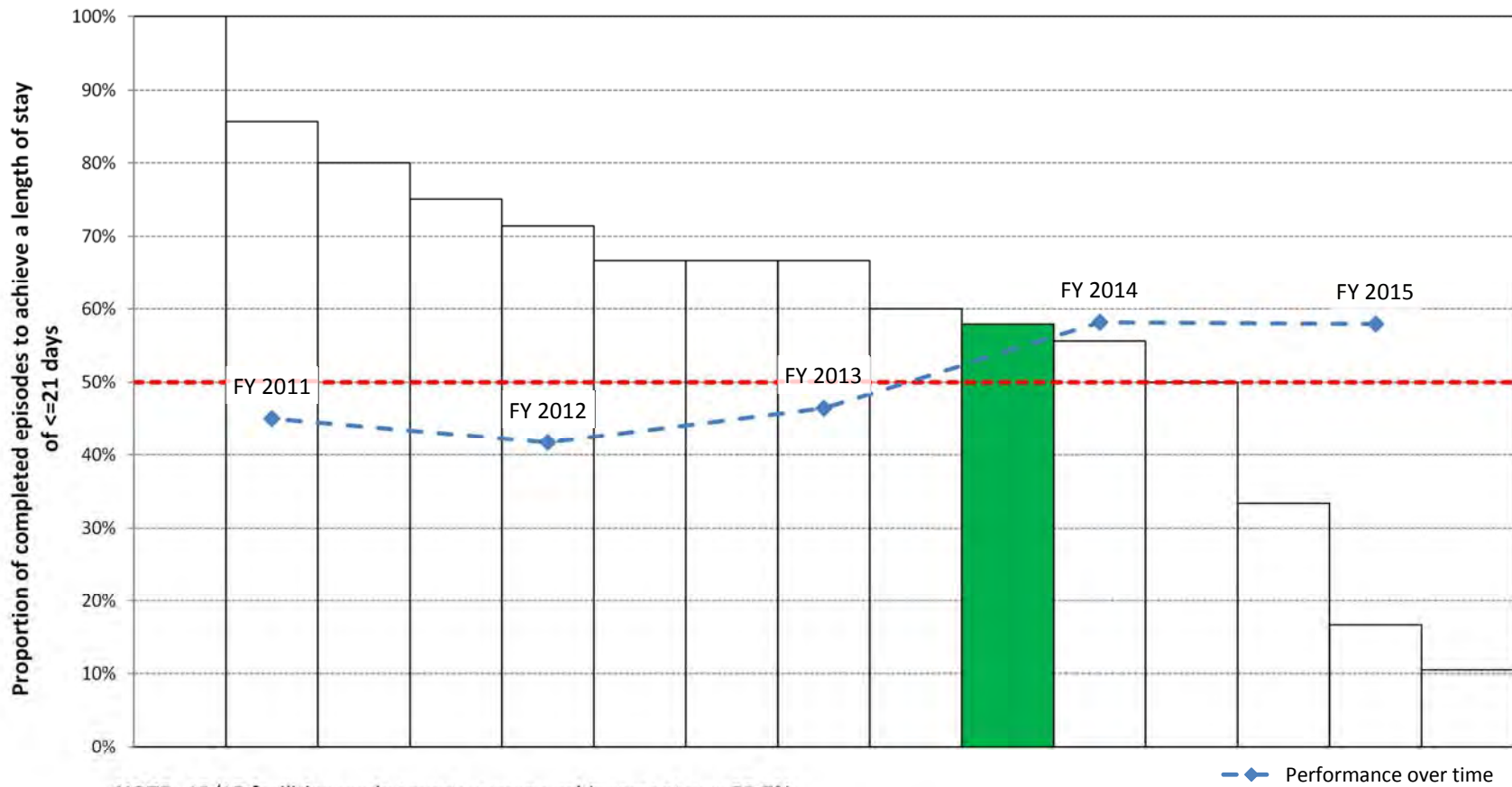
NOTE: 12/15 facilities made target; average achievement was 59.7%
Average length of stay was 29.6 days; your facility's average was 26.0 days

Stroke Target 2: Length of Stay - AN-SNAP class 3-206 Target = 20 days or less
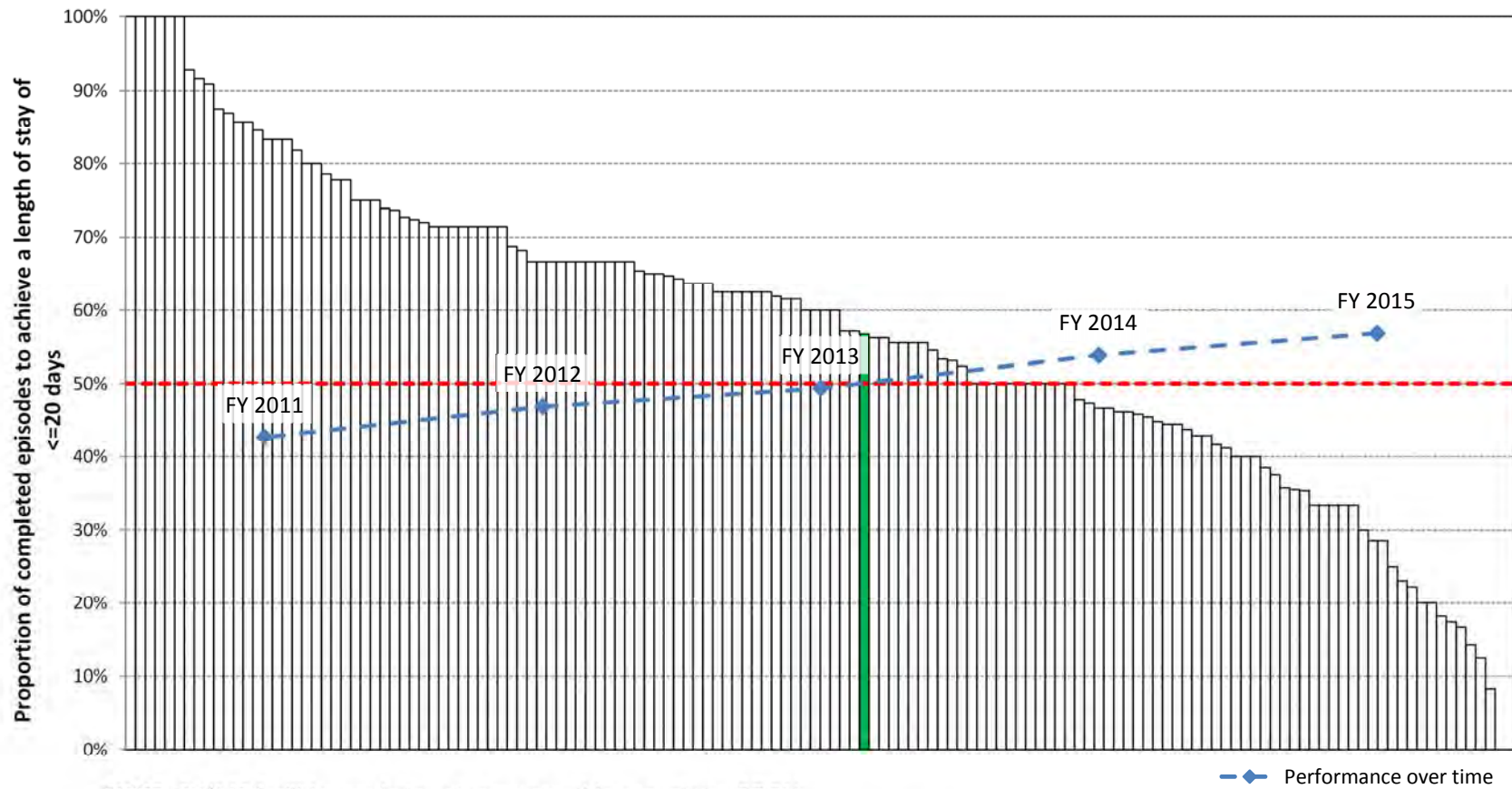
NOTE: 97/142 facilities made target; average achievement was 57.2%
Average length of stay was 21.1 days; your facility's average was 21.7 days

Stroke Target 2: Length of Stay - AN-SNAP class 3-207 Target = 26 days or less
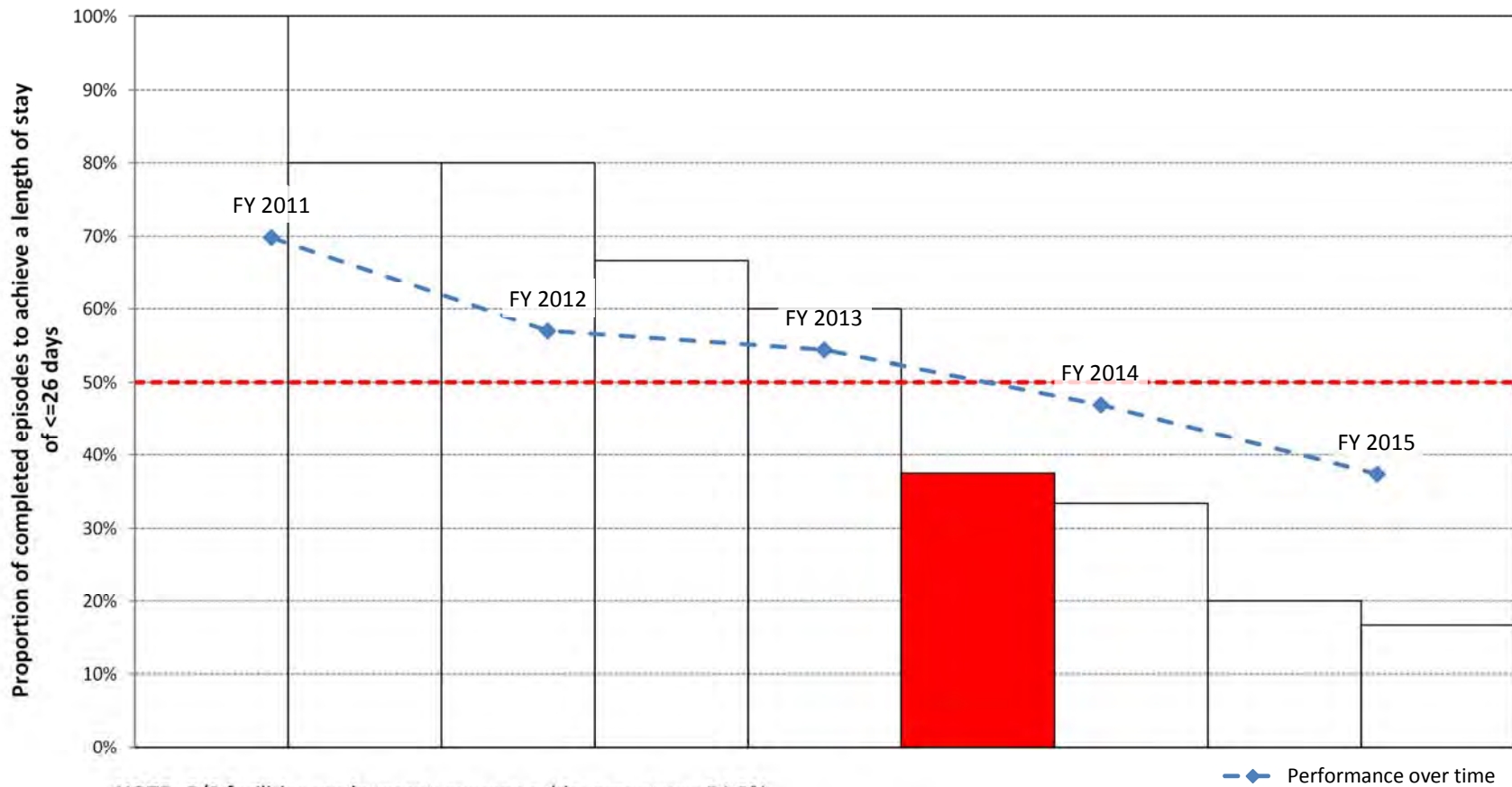
NOTE: 5/9 facilities made target; average achievement was 54.9%
Average length of stay was 27.0 days; your facility's average was 28.1 days

Stroke Target 2: Length of Stay - AN-SNAP class 3-208 Target = 29 days or less
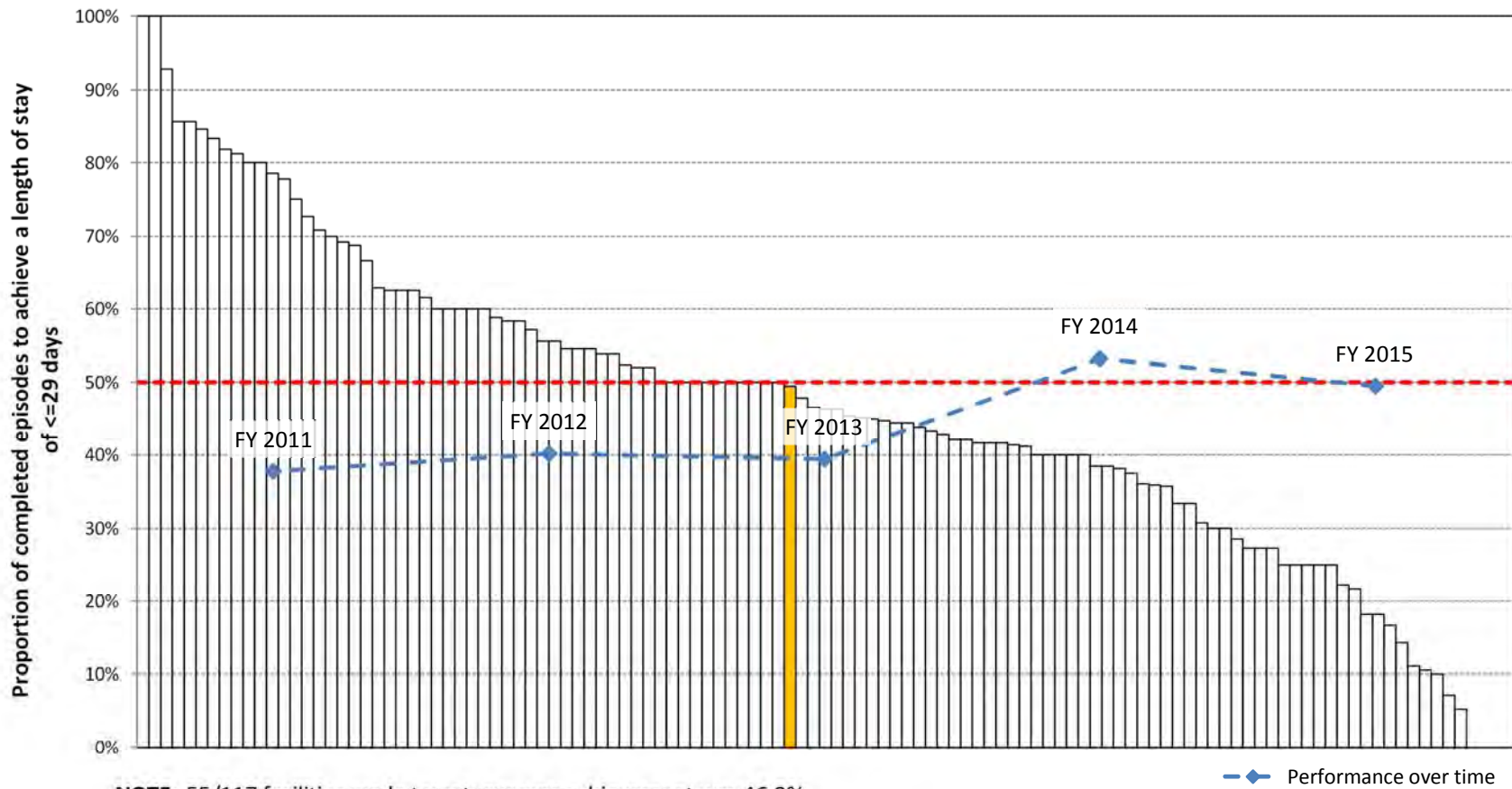
NOTE: 55/117 facilities made target; average achievement was 46.8%
Average length of stay was 35.5 days; your facility's average was 35.9 days

Stroke Target 2: Length of Stay - AN-SNAP class 3-209 Target = 38 days or less
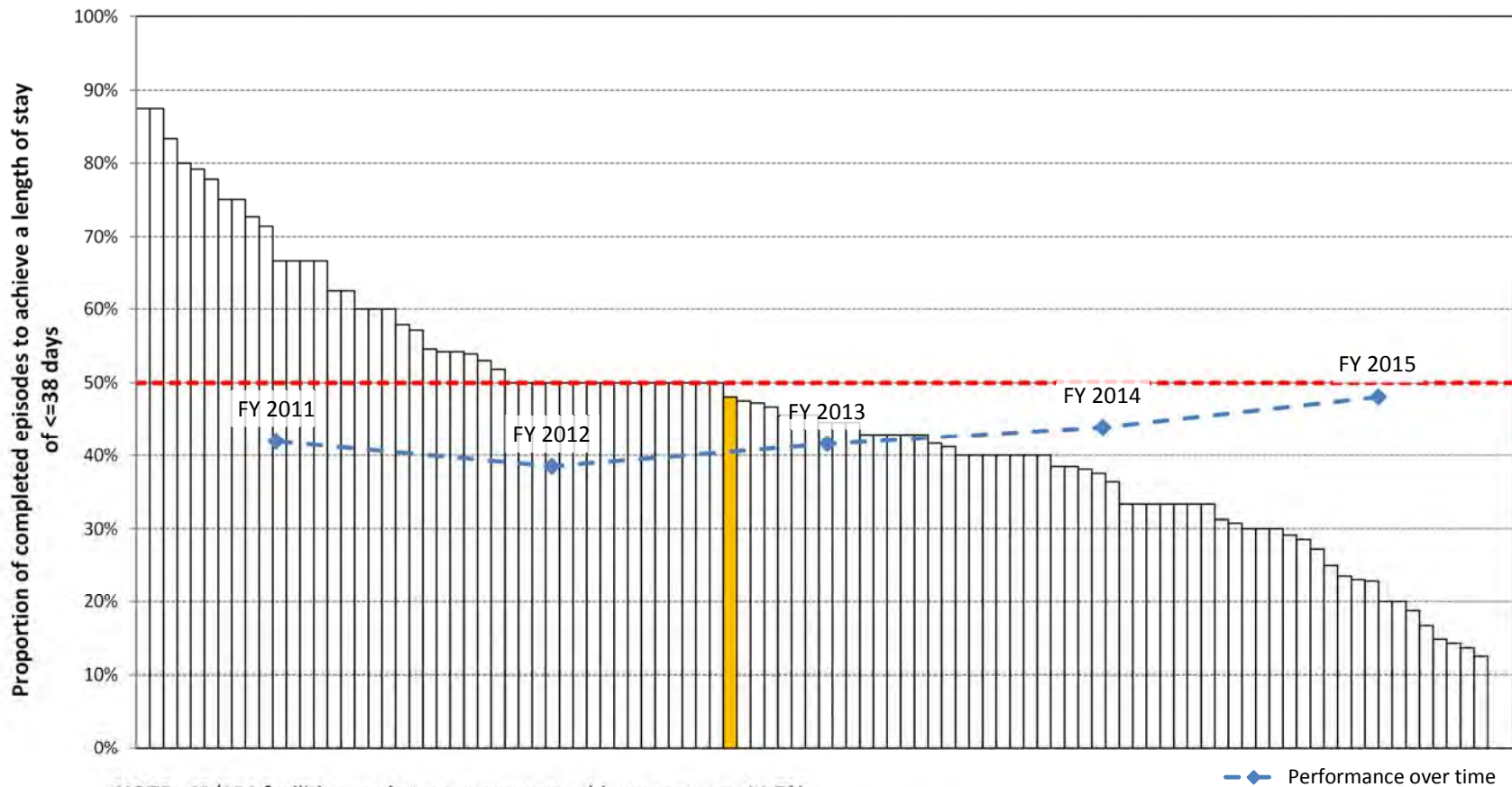
NOTE: 43/101 facilities made target; average achievement was 44.7%
Average length of stay was 49.6 days; your facility's average was 50.5 days

# 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 of more
- AN-SNAP class 3-205      18 points of more
- AN-SNAP class 3-206      25 points of more
- AN-SNAP class 3-207      29 points of more
- AN-SNAP class 3-208      28 points of more
- AN-SNAP class 3-209      39 points of 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.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Stroke Target 3: FIM Charge - AN-SNAP class 3-204 Target = 14 points or more
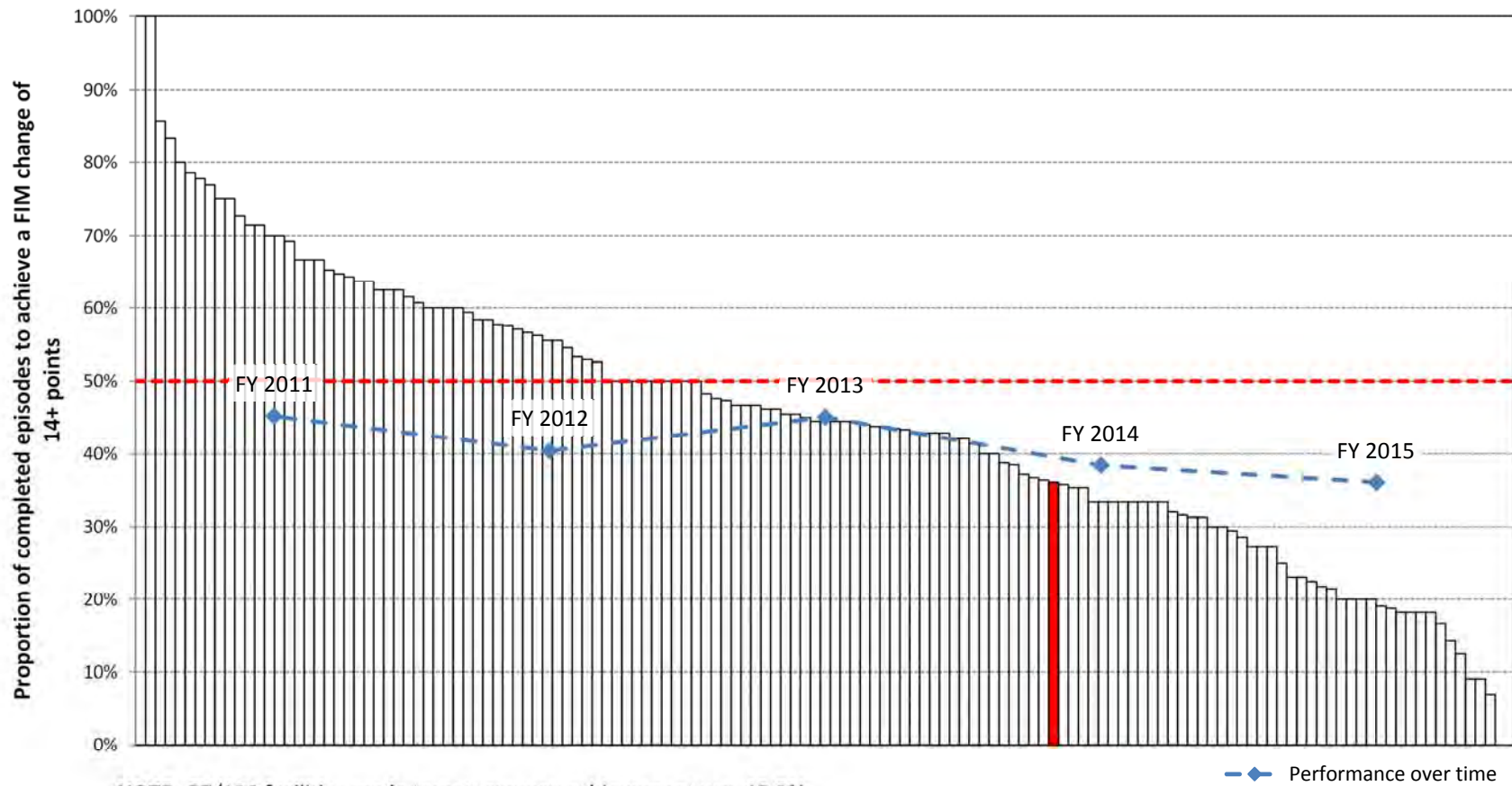
NOTE: 57/139 facilities made target; average achievement was 45.0%
Average FIM change was 11.9; your facility's average was 10.8

Stroke Target 3: FIM Charge - AN-SNAP class 3-205 Target = 18 points or more
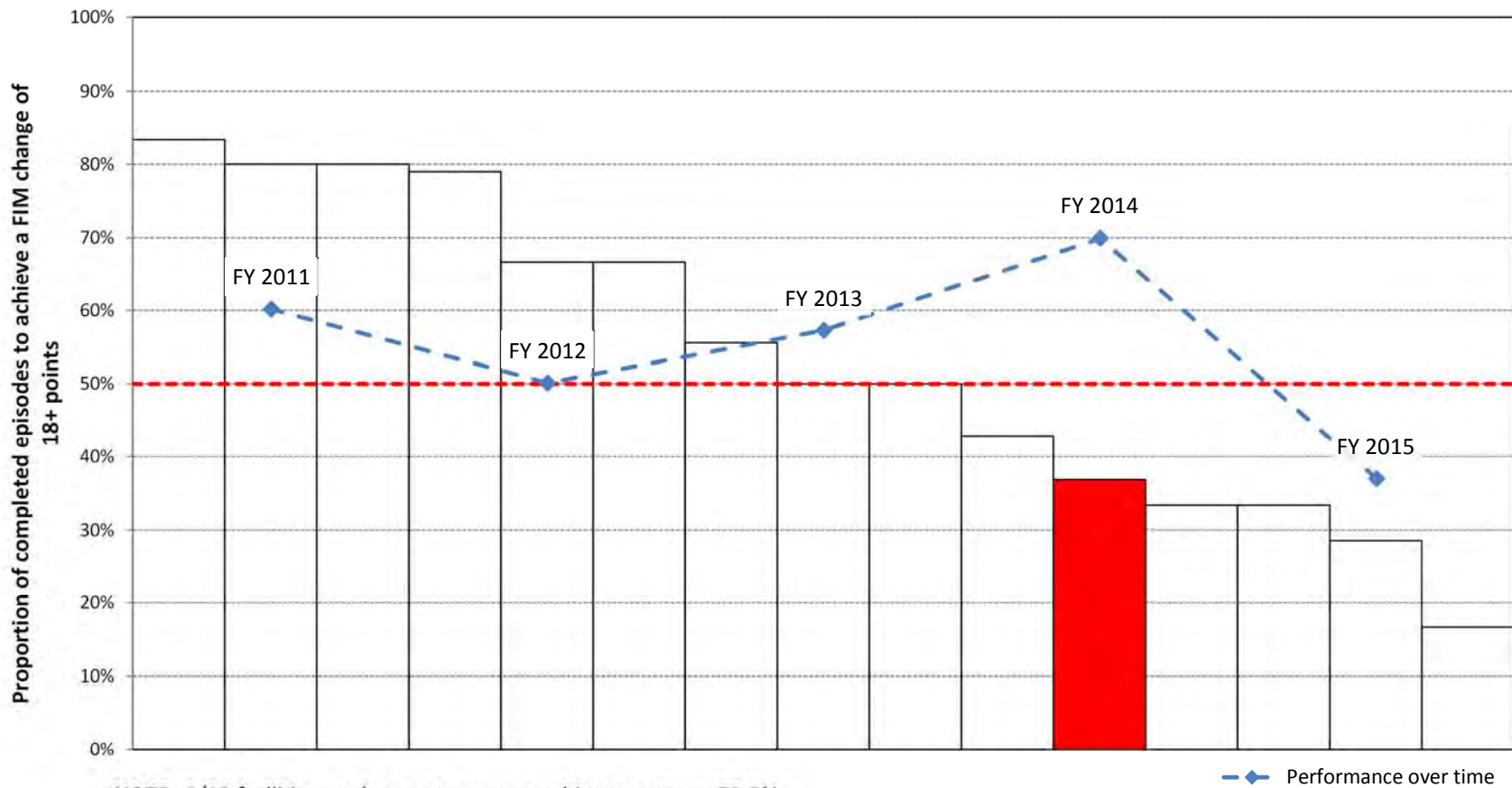
NOTE: 9/15 facilities made target; average achievement was 53.5%
Average FIM change was 17.0; your facility's average was 16.8

Stroke Target 3: FIM Charge - AN-SNAP class 3-206 Target = 25 points or more
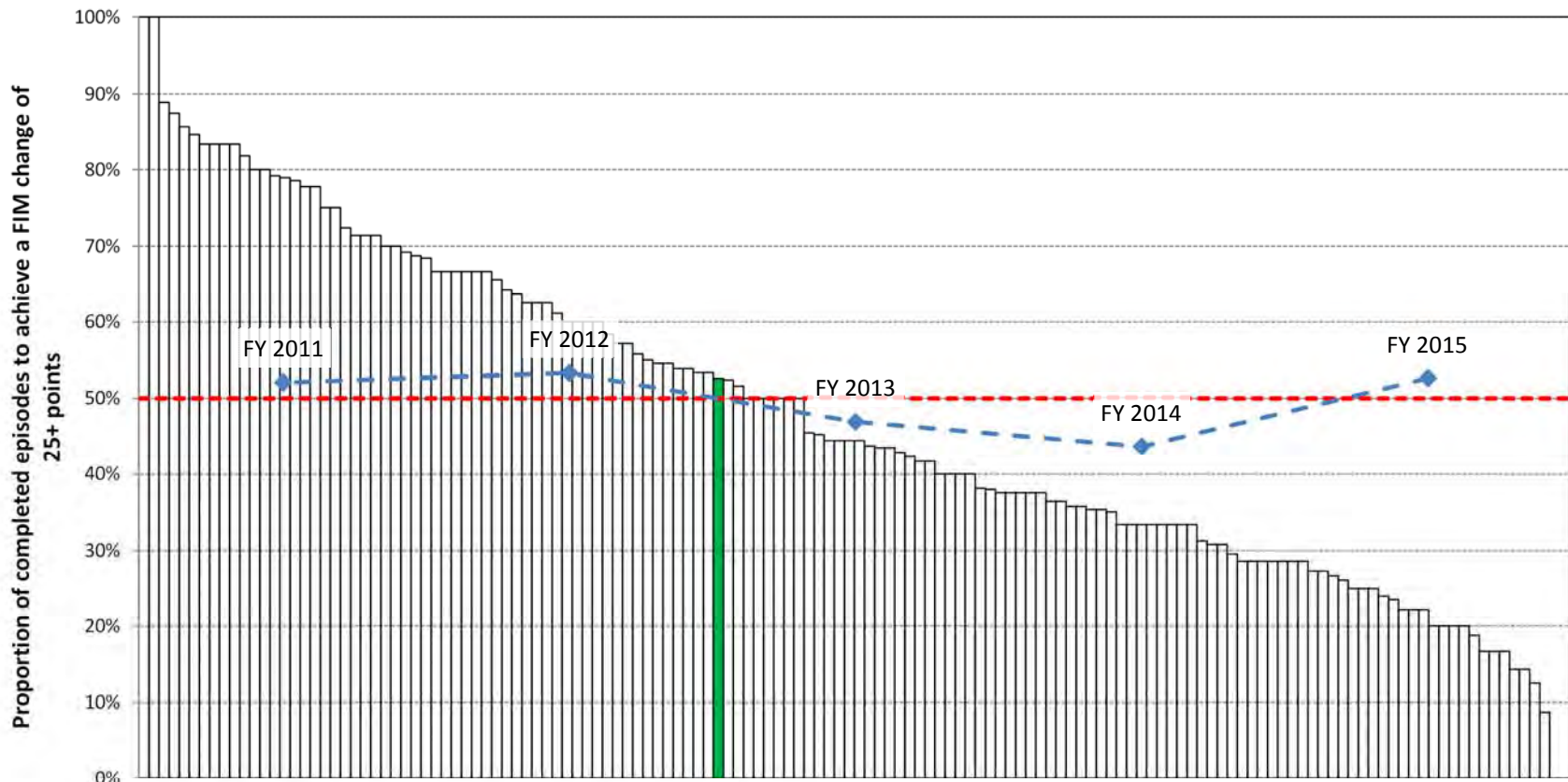
**NOTE:** 66/142 facilities made target; average achievement was 47.7%
Average FIM change was 23.4; your facility's average was 23.3

**Stroke Target 3: FIM Charge - AN-SNAP class 3-207 Target = 29 points or more**
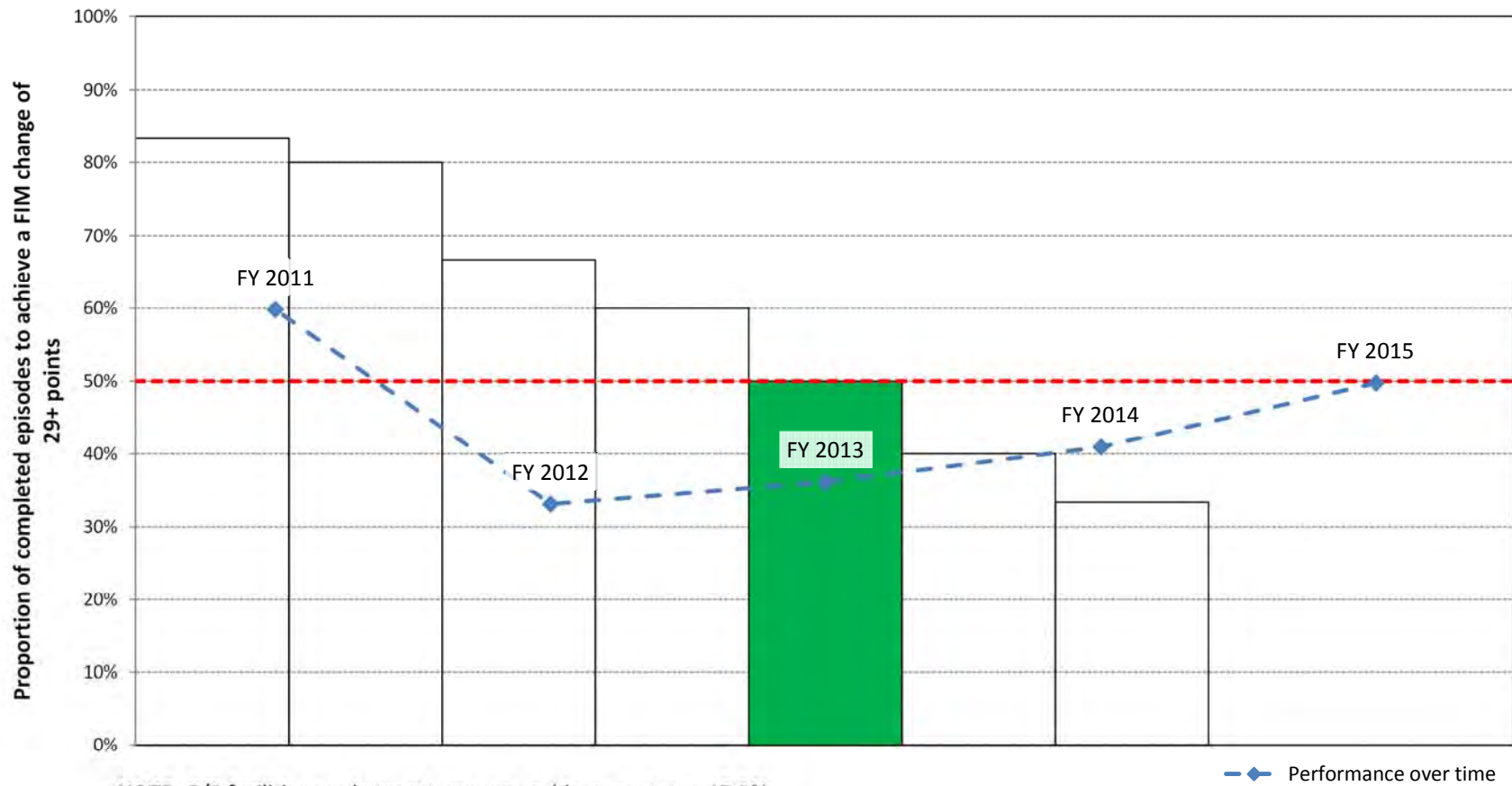
NOTE: 5/9 facilities made target; average achievement was 45.9%
Average FIM change was 24.4; your facility's average was 26.1

## Stroke Target 3: FIM Charge - AN-SNAP class 3-208 Target = 28 points or more
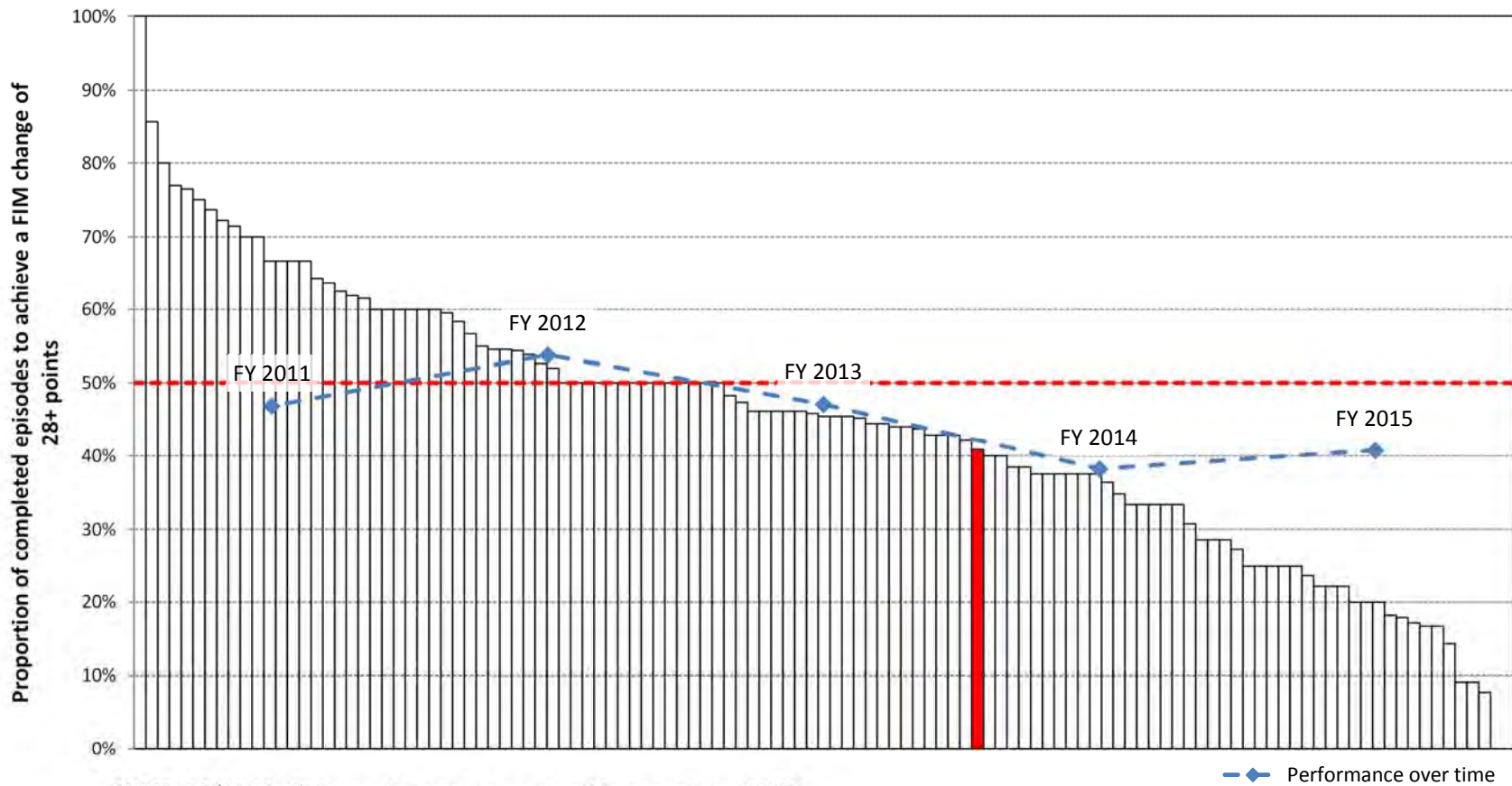


**NOTE:** 50/117 facilities made target; average achievement was 44.4%
Average FIM change was 25.2; your facility's average was 22.9

Stroke Target 3: FIM Charge - AN-SNAP class 3-209 Target = 39 points or more
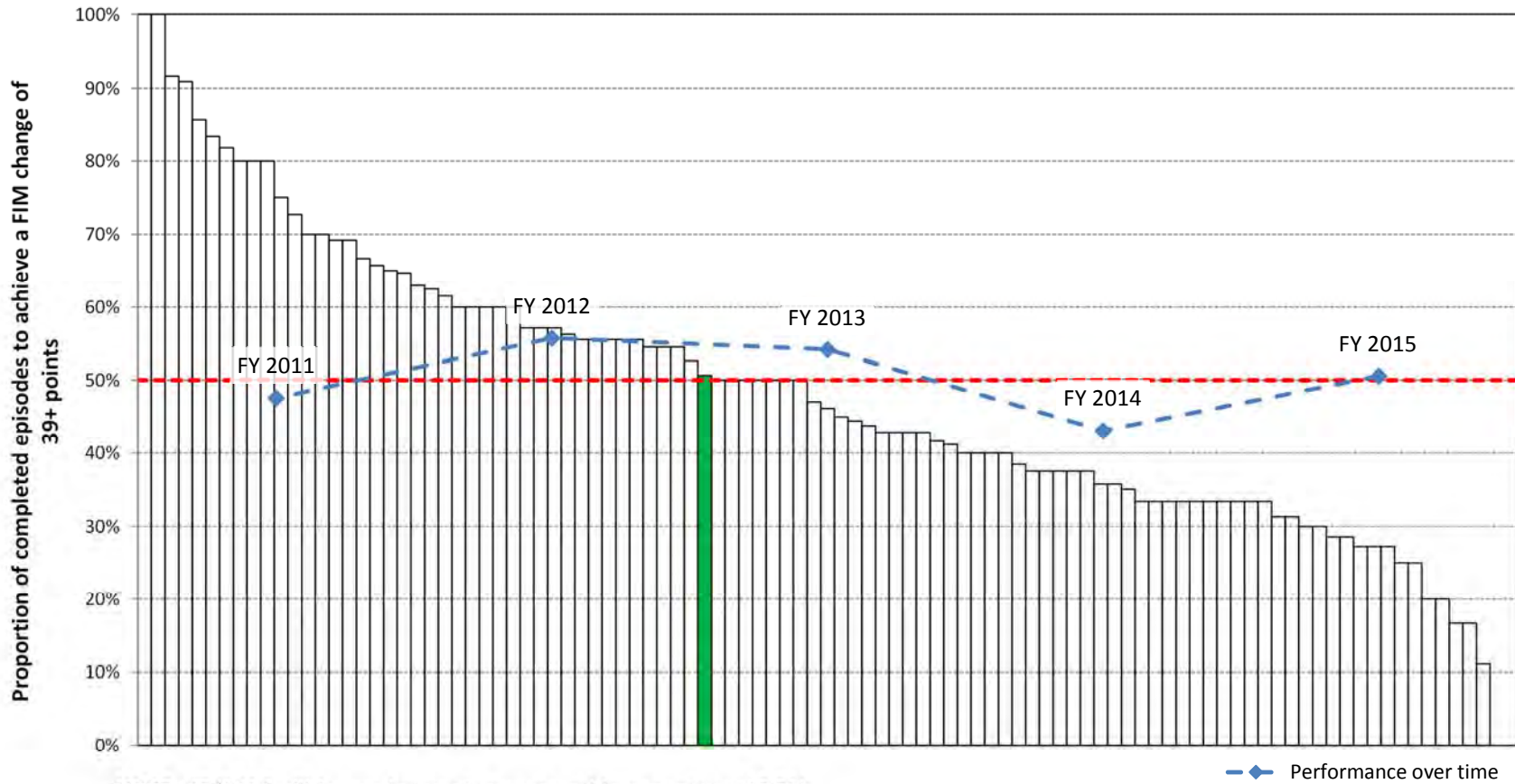
NOTE: 49/101 facilities made target; average achievement was 48.3%
Average FIM change was 37.1; your facility's average was 36.1

# 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.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Stroke Target 4: Discharge Destination — AN-SNAP class 3-204 Target = 82% achieve same or greater independence
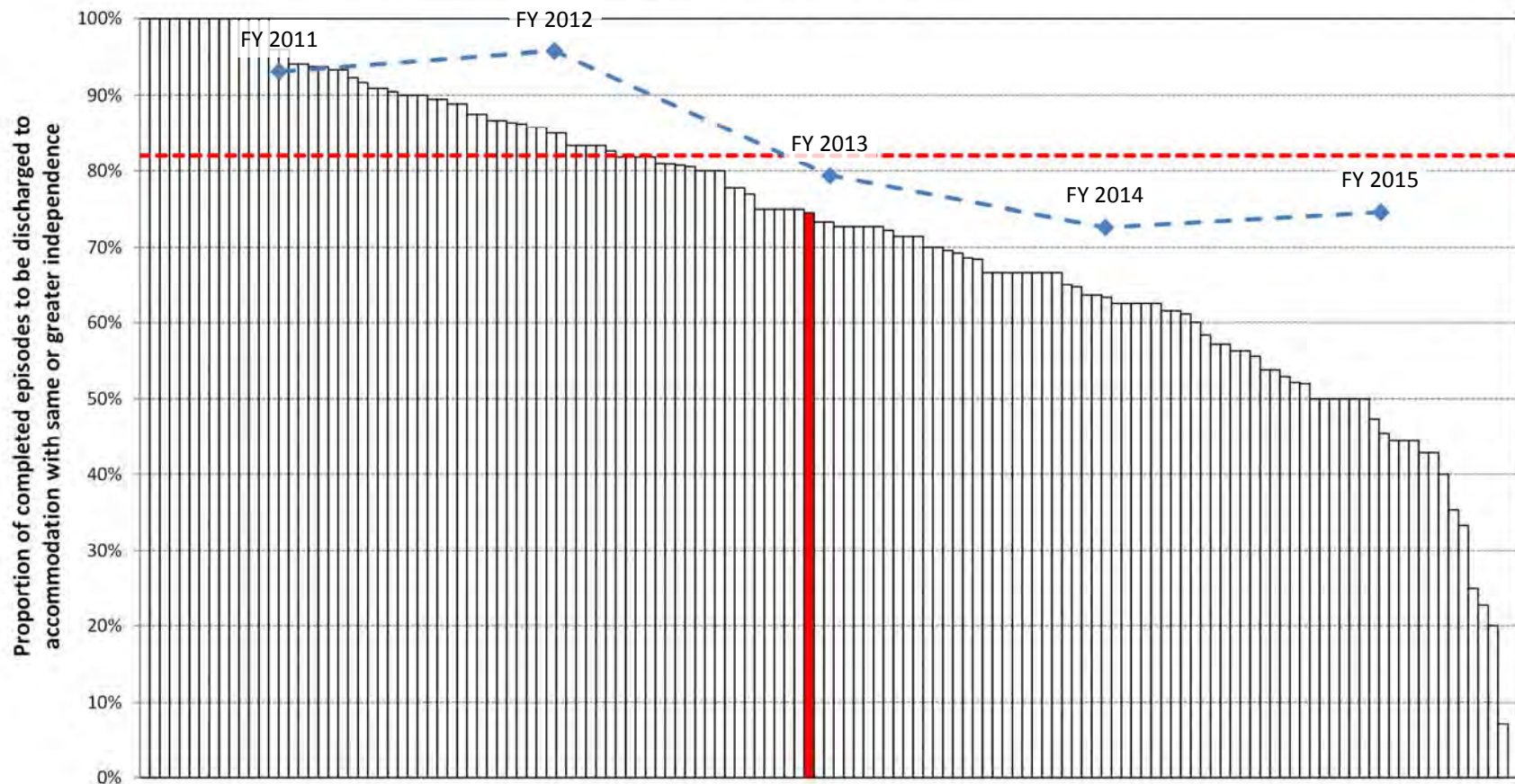
NOTE: 48/139 facilities made target; average achievement was 72.0%

Stroke Target 4: Discharge Destination — AN-SNAP class 3-205 Target = 77% achieve same or greater independence

NOTE: 2/15 facilities made target; average achievement was 51.3%

Stroke Target 4: Discharge Destination — AN-SNAP class 3-206 Target = 80% achieve same or greater independence

**NOTE:** 38/142 facilities made target; average achievement was 61.4%
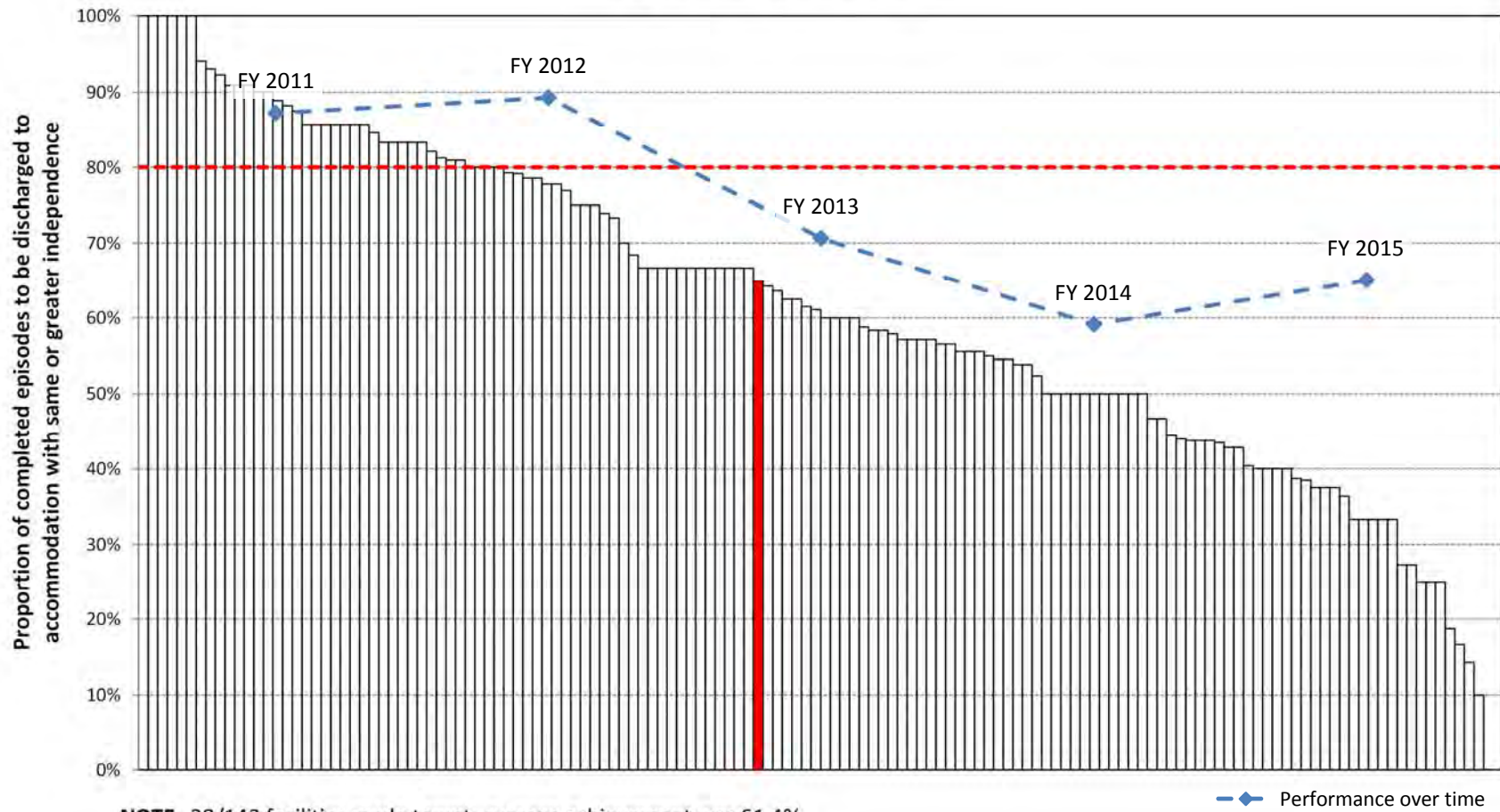
Stroke Target 4: Discharge Destination — AN-SNAP class 3-207 Target = 75% achieve same or greater independence
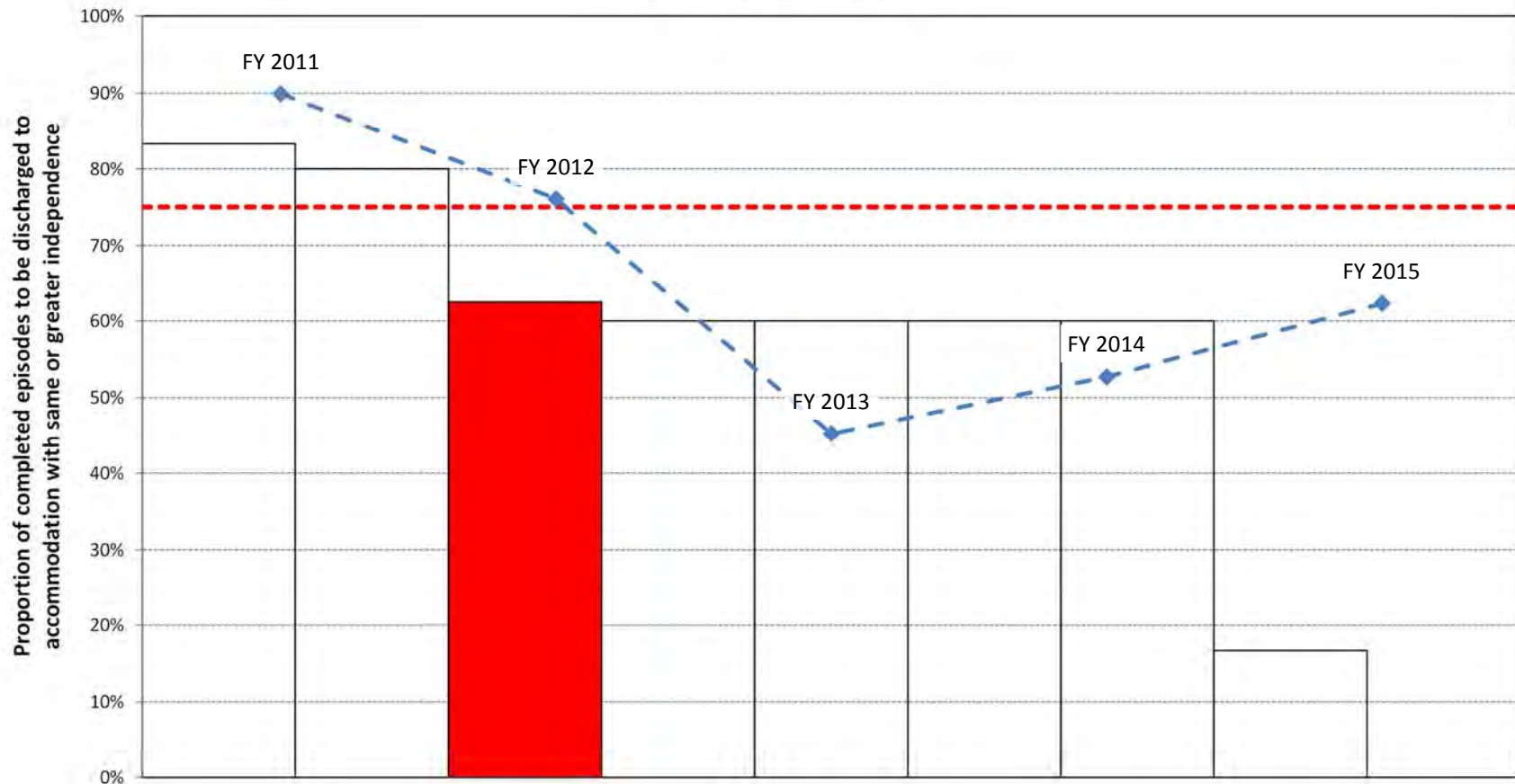
NOTE: 2/9 facilities made target; average achievement was 53.6%

Stroke Target 4: Discharge Destination — AN-SNAP class 3-208 Target = 61% achieve same or greater independence
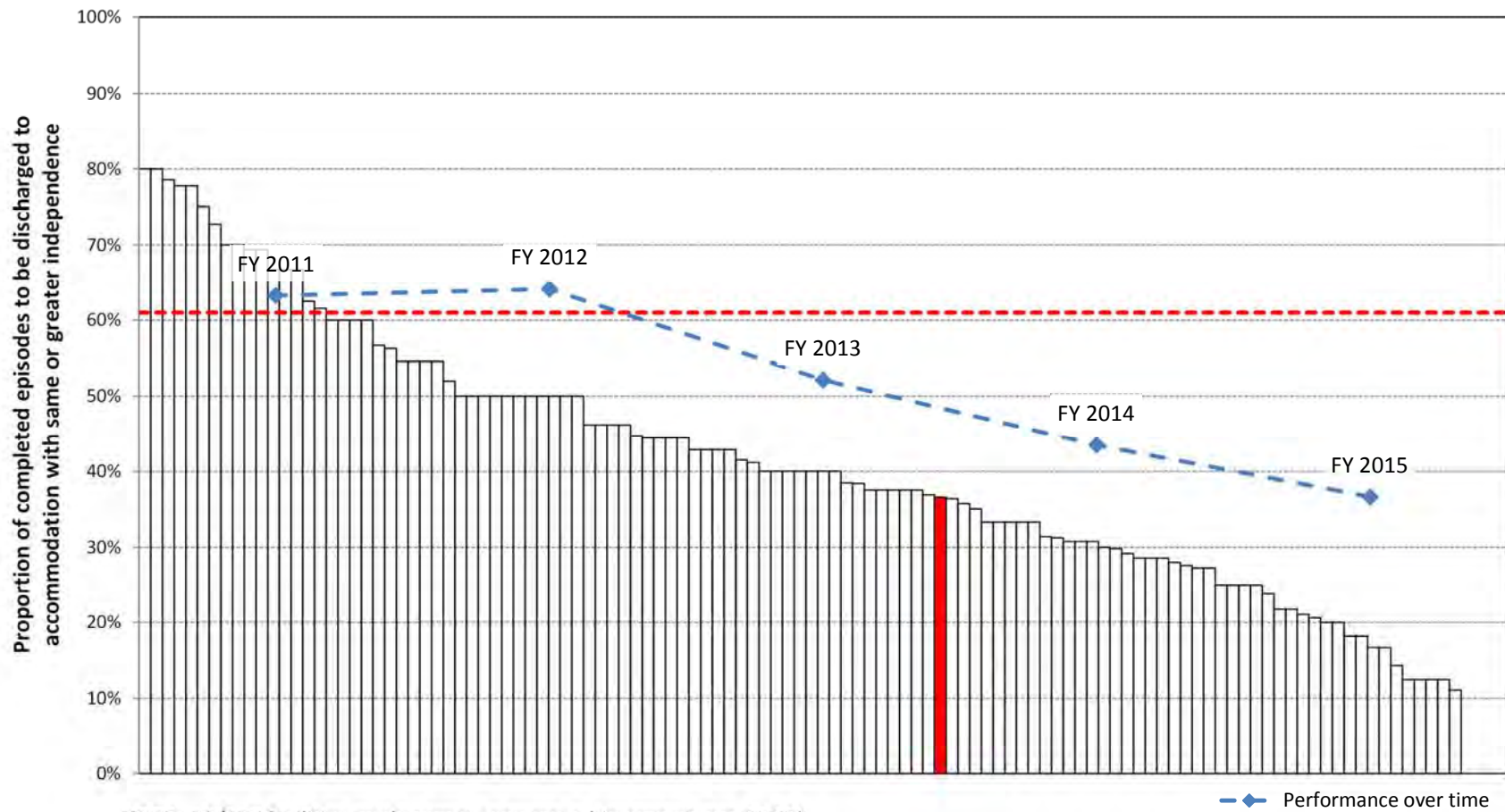
NOTE: 16/117 facilities made target; average achievement was 40.2%

Stroke Target 4: Discharge Destination — AN-SNAP class 3-209 Target = 78% achieve same or greater independence
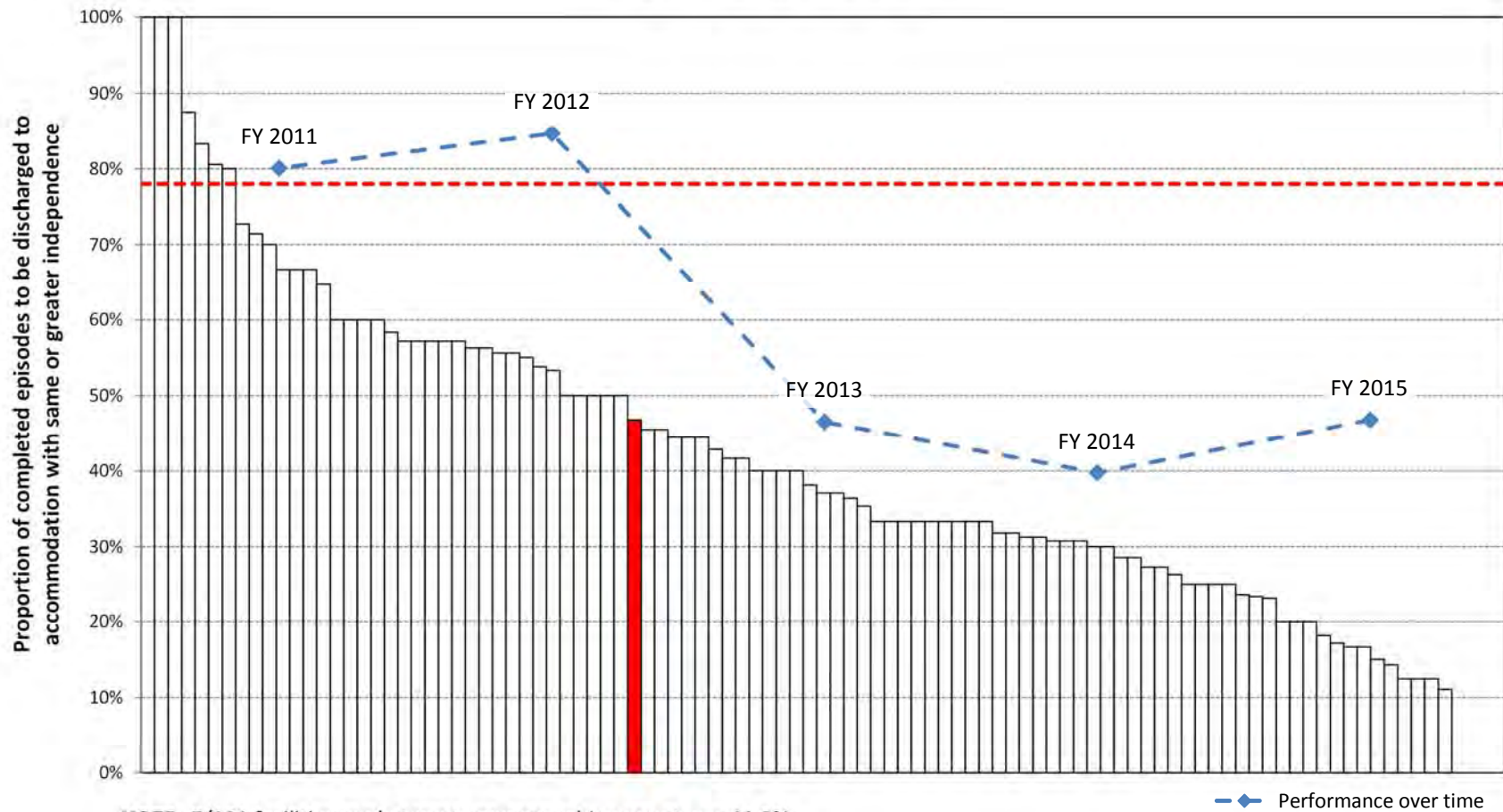
NOTE: 7/101 facilities made target; average achievement was 41.2%

# Traumatic 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. AROC later held a follow-up brain injury benchmarking workshop in November 2013. The objective of the follow-up workshop was to evaluate the achievements of brain injury outcome targets over the past four years and review the targets as deemed necessary. The reviewed targets for outcomes of treatment of brain injury as adjusted at this workshop were published in February 2014.

Brain injury targets were originally set by trauma categories, that is, traumatic brain injury (TBI) and non-traumatic brain injury (NTBI). At the follow-up workshop TBI were still considered to be an homogenous group so targets were maintained and updated for open and closed injury combined, and targets for AN-SNAP class 3-202 were added. At the follow-up workshop it was agreed that there was insufficient data to develop/maintain robust targets for NTBI so these targets were removed.

Traumatic 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 to private residence

# Episodes used to determine targets

Data was analysed using a subset of financial year 2012 brain injury episodes belonging to "specialist" Brain Injury Units identified from around Australia and New Zealand.

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

- 2.21 - Brain Dysfunction, Traumatic, open injury
- 2.22 - Brain Dysfunction, Traumatic, closed injury

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
- 3-202 Brain Dysfunction, Motor 13

# Summary of Traumatic Brain Injury (TBI)

**Distribution of completed episodes across facilities treating traumatic brain injury**
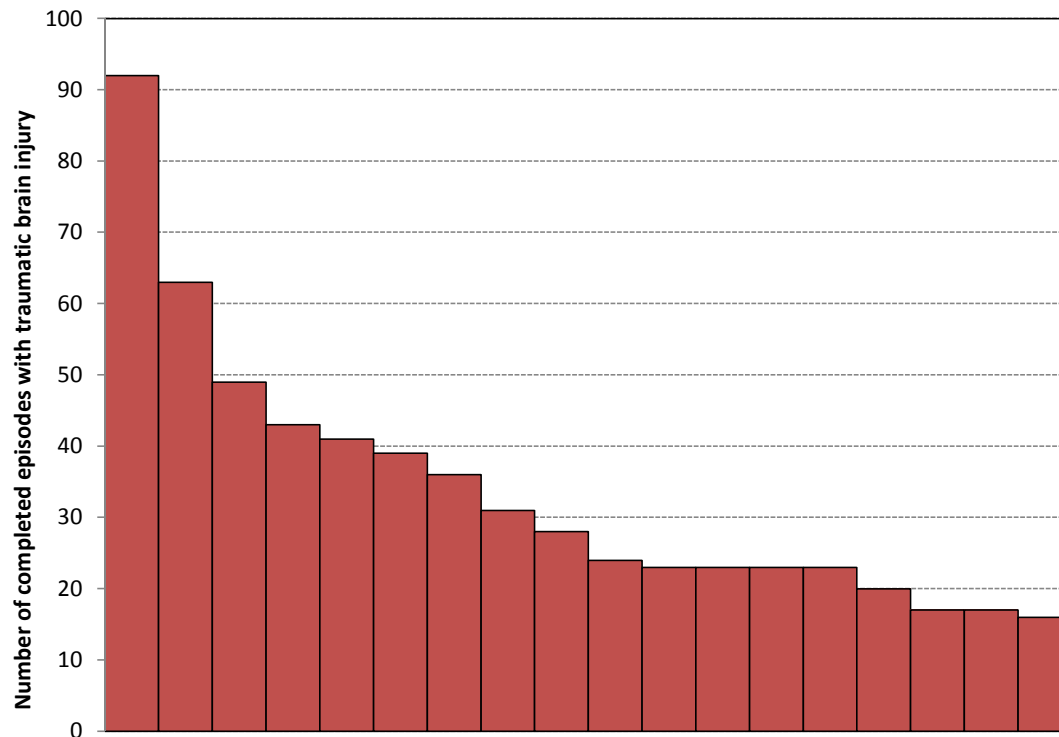


NOTE: 158 of 176 (89.8%) facilities reporting Traumatic Brain Dysfunction had fewer than 15 episodes.

**Snapshot of target outcomes at your facility:**

| AN-SNAP class | Completed episodes | Target Status | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| 3-210 | 5 | | ✔ | ✔ | |
| 3-211 | 21 | | ✔ | ✖ | |
| 3-212 | 3 | | — | — | |
| 3-213 | 13 | | ✔ | ✔ | |
| 3-214 | 19 | | ✔ | ✖ | |
| 3-215 | 2 | | — | — | |
| 3-202 | 1 | | — | — | |
| All episodes | **64** | ⚠ | | | ✔ |

| | |
|---|---|
| ✔ | Achieved target |
| ⚠ | Within 5% of target |
| ✖ | Did not achieve target |
| — | Not reported (0 - 4 episodes) |

# Target 1: Time between onset and rehabilitation

2014 time between onset and rehabilitation outcome targets

Traumatic Brain Injury:
- 50% of TBI episodes to start rehabilitation within 14 days of injury

Data **excluded**  from this analysis:
- Episodes where onset date or time is not provided or invalid

**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.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

TBI Target 1: Time Between Onset and Rehabilitation - Target = 50% within 14 days
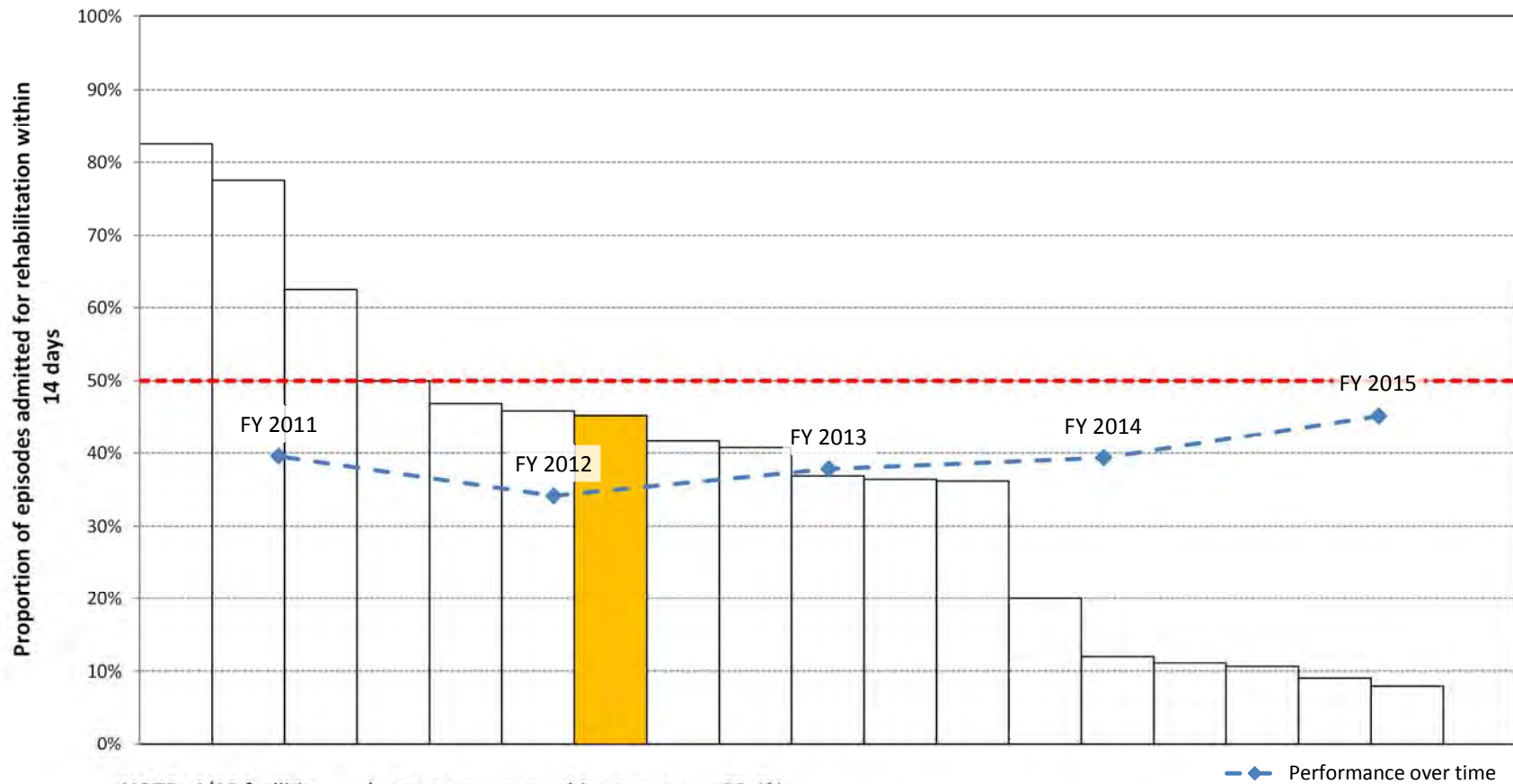
NOTE: 4/19 facilities made target; average achievement was 35.4%
Average time between onset and rehabilitation was 29.4 days; your facility's average was 24.8 days

# Target 2: Length of stay

2014 length of stay outcome targets

Half of all TBI episodes to achieve a length of stay of:
- AN-SNAP class 3-210      12 days or less
- AN-SNAP class 3-211      16 days or less
- AN-SNAP class 3-212      22 days or less
- AN-SNAP class 3-213      26 days or less
- AN-SNAP class 3-214      36 days or less
- AN-SNAP class 3-215      70 days or less
- AN-SNAP class 3-202      105 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 FY2012 median (50% mark) allowing 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 negatively impacting the LOS report for that unit.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

# TBI Target 2: Length of Stay - AN-SNAP class 3-211 Target = 16 days or less
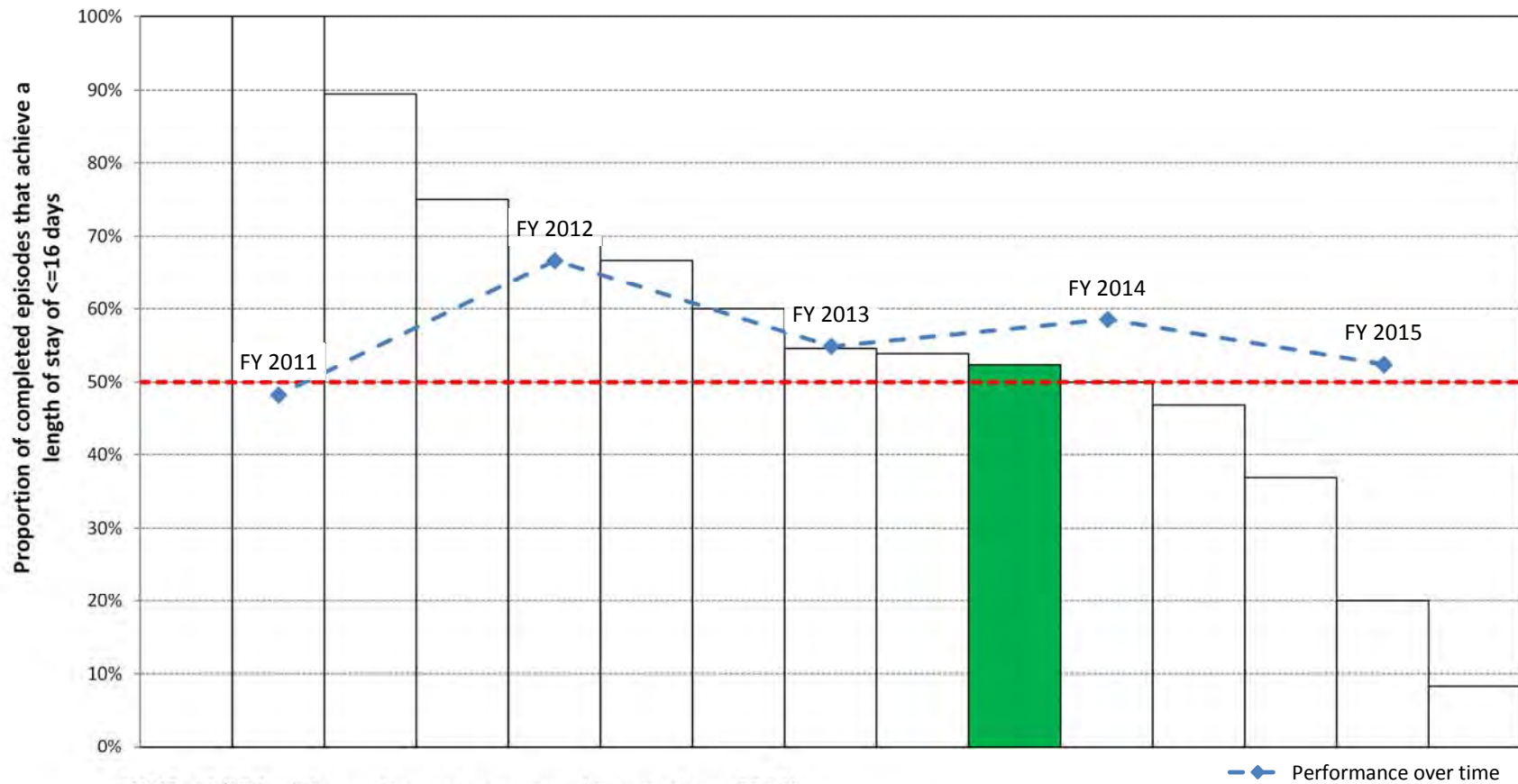


NOTE: 11/15 facilities made target; average achievement was 58.9%
Average length of stay was 16.9 days; your facility's average was 18.8 days

TBI Target 2: Length of Stay - AN-SNAP class 3-213 Target = 26 days or less
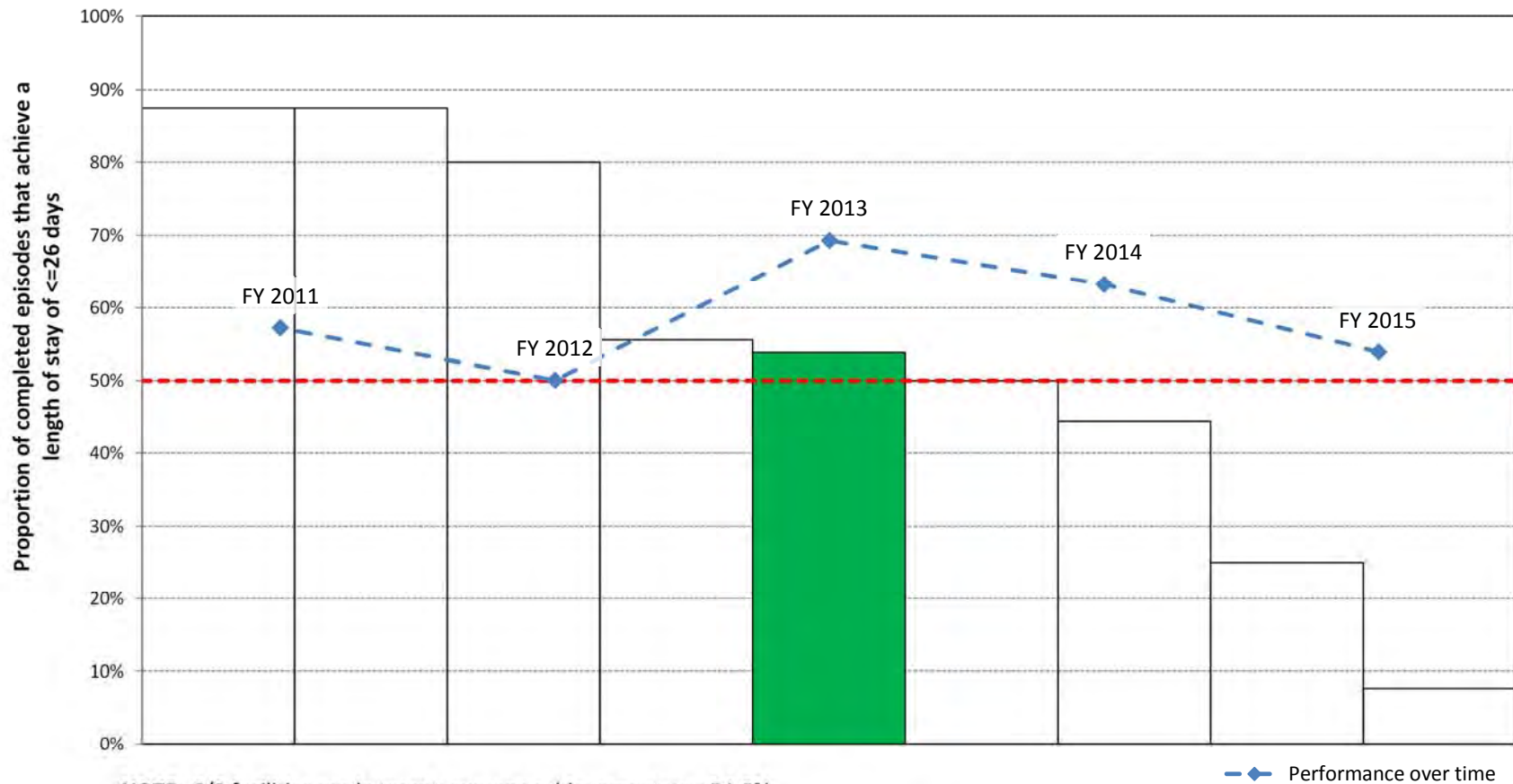
NOTE: 6/9 facilities made target; average achievement was 54.6%
Average length of stay was 38.8 days; your facility's average was 46.2 days

TBI Target 2: Length of Stay - AN-SNAP class 3-214 Target = 36 days or less
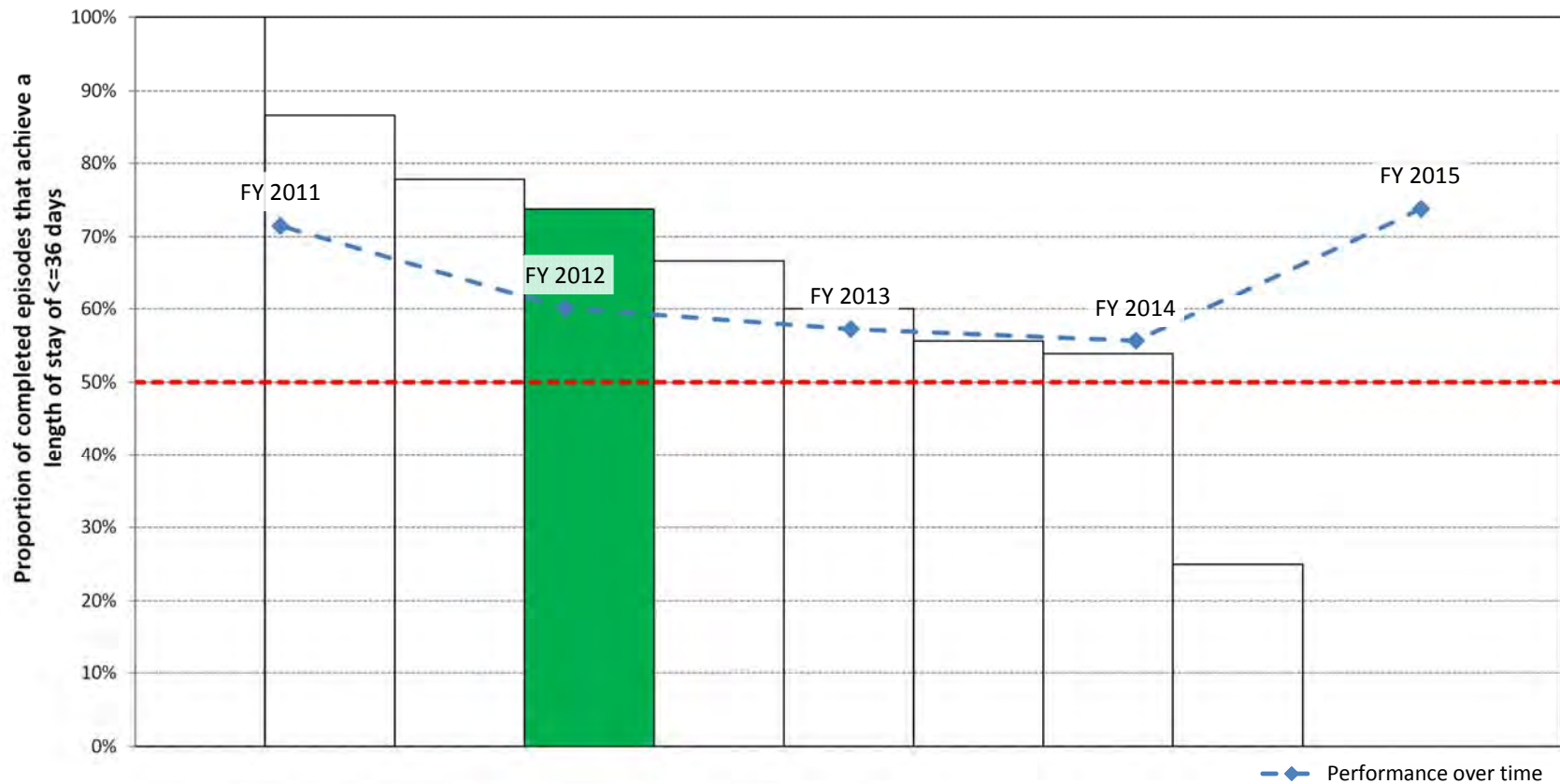
NOTE: 8/11 facilities made target; average achievement was 54.5%
Average length of stay was 44.1 days; your facility's average was 34.2 days

# Target 3: FIM change

2014 functional gain outcome targets

Half of all TBI episodes to achieve a FIM change of:
- AN-SNAP class 3-210      8 points or more
- AN-SNAP class 3-211     13 points or more
- AN-SNAP class 3-212     16 points or more
- AN-SNAP class 3-213     26 points or more
- AN-SNAP class 3-214     50 points or more
- AN-SNAP class 3-215     77 points or more
- AN-SNAP class 3-202     78 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:** Targets were set at the FY2012 median (50% mark) allowing for a long tail. This means that a subset of patients can have a significantly lower FIM change score, which can occur clinically, without risk of negatively impacting the FIM change report for that unit.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

## TBI Target 3: FIM Change - AN-SNAP class 3-211 Target = 13 points or more
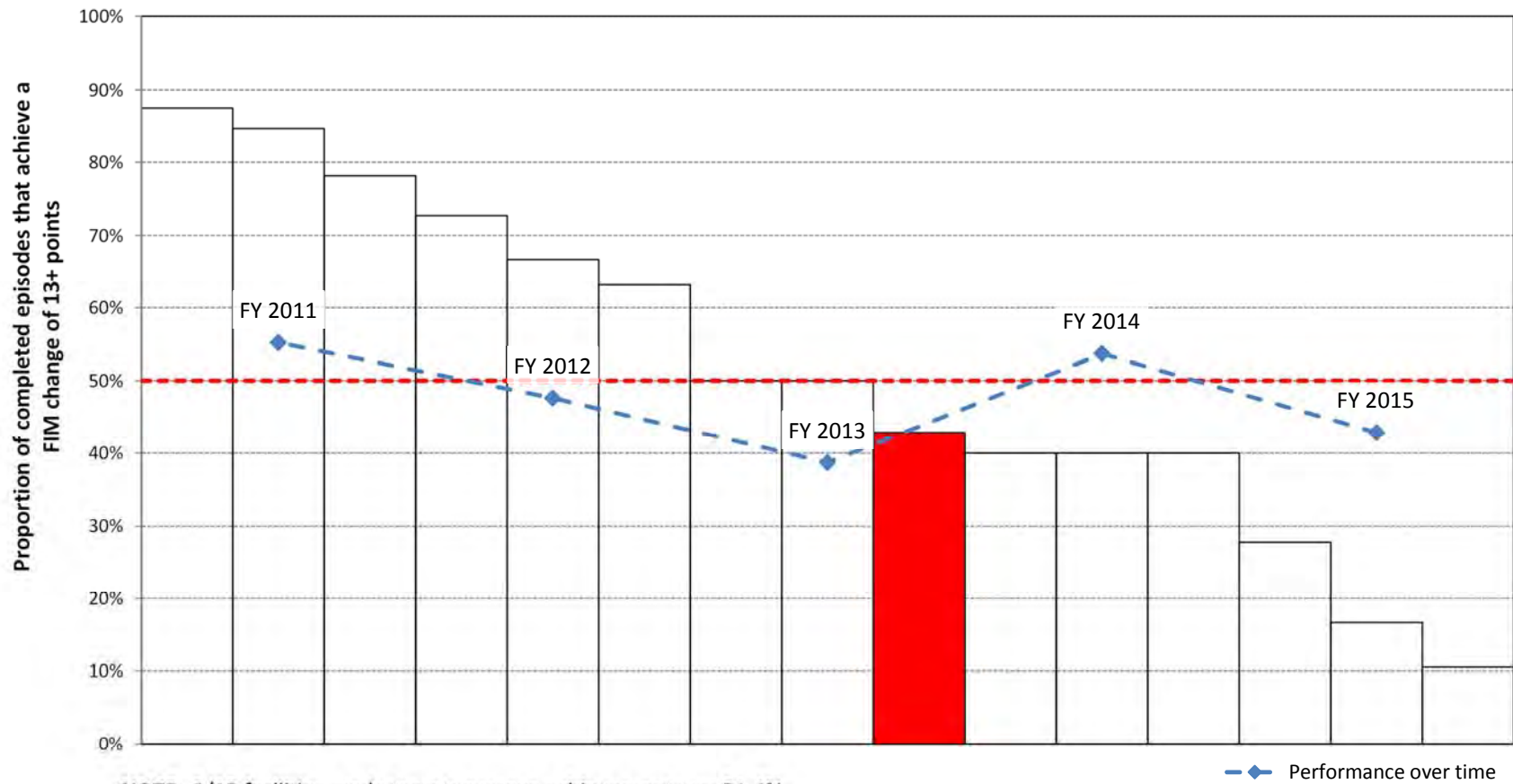


**NOTE:** 8/15 facilities made target; average achievement was 51.4%
Average FIM change was 14.4; your facility's average was 12.2

## TBI Target 3: FIM Change - AN-SNAP class 3-213 Target = 26 points or more
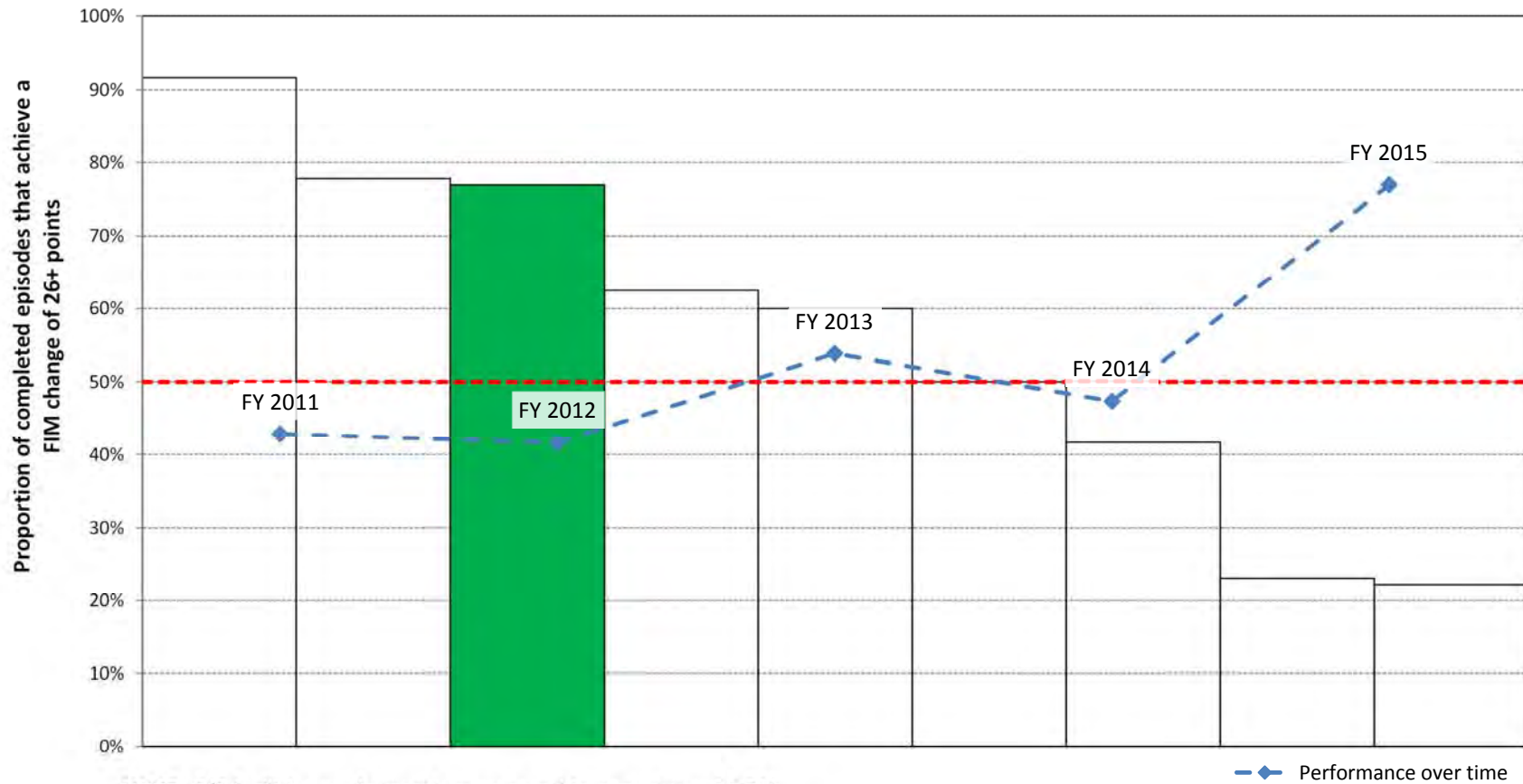


**NOTE:** 6/9 facilities made target; average achievement was 56.2%
Average FIM change was 27.3; your facility's average was 31.8

TBI Target 3: FIM Change - AN-SNAP class 3-214 Target = 50 points or more
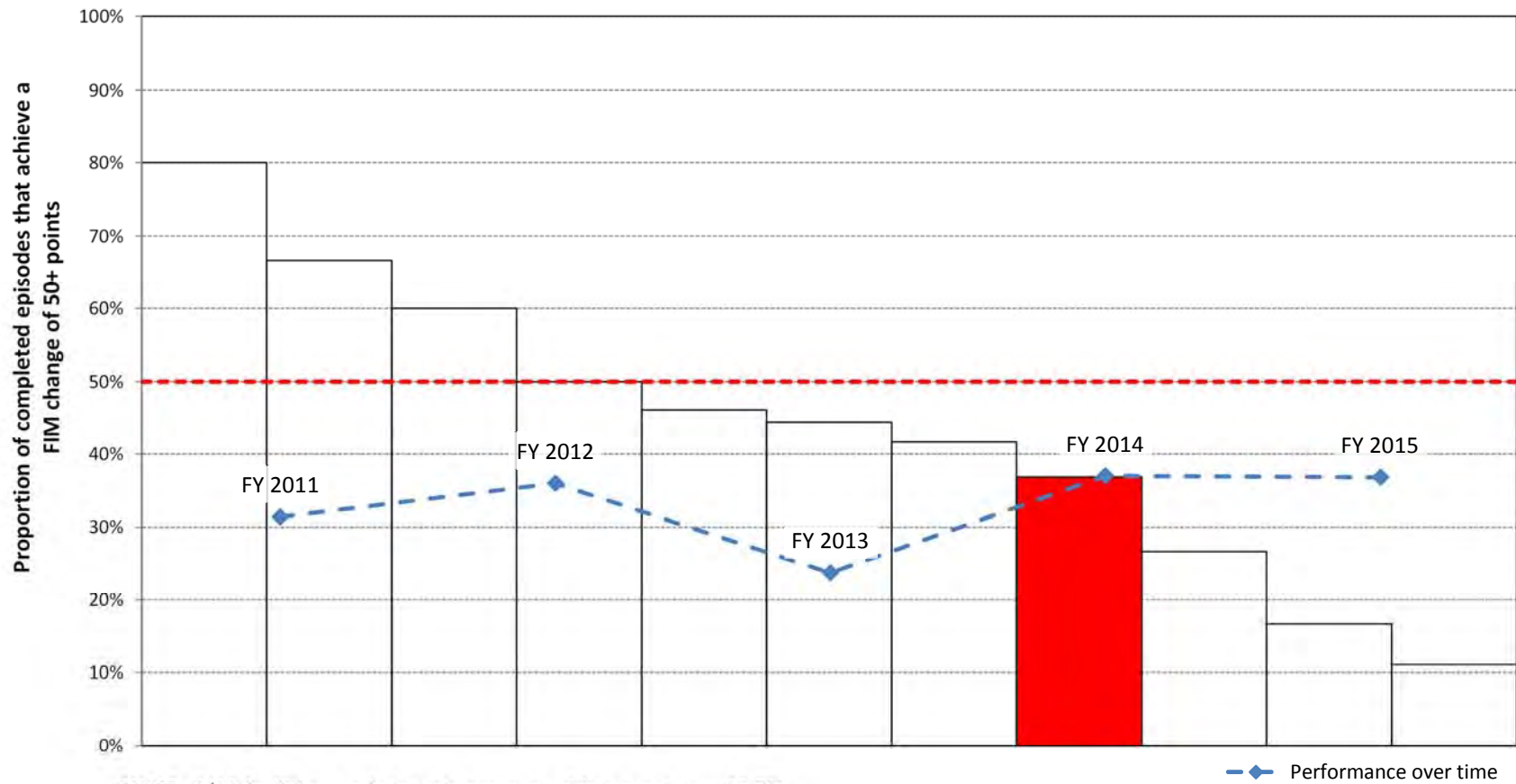
NOTE: 4/11 facilities made target; average achievement was 43.7%
Average FIM change was 46.6; your facility's average was 40.7

# Target 4: Discharge destination

<div style="border:1px solid black; padding:10px;">

**2014 discharge destination outcome targets**

Proportion of brain injury completed episodes discharged to the community
that will be discharged to a private residence:
- TBI            90%

</div>

Data **excluded** from this analysis:
- Incomplete episodes (refer to Appendix 1 for definition)

**NOTE:** Feedback from the workshop regarding discharge destination targets was mixed. It has been suggested that the target should reflect discharge to the most appropriate setting for their remaining disability, which is not necessarily the patient's home. This is a valid suggestion, however the current AROC dataset does not have a field for recording "appropriateness of discharge destination".

It was determined that this target should be set just above the proportion of the cohort discharged to the community, i.e. excluding episodes that remained in the hospital setting, and independent of AN-SNAP classes.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

## TBI Target 4: Discharge Destination — Target = 90% discharged to a private residence
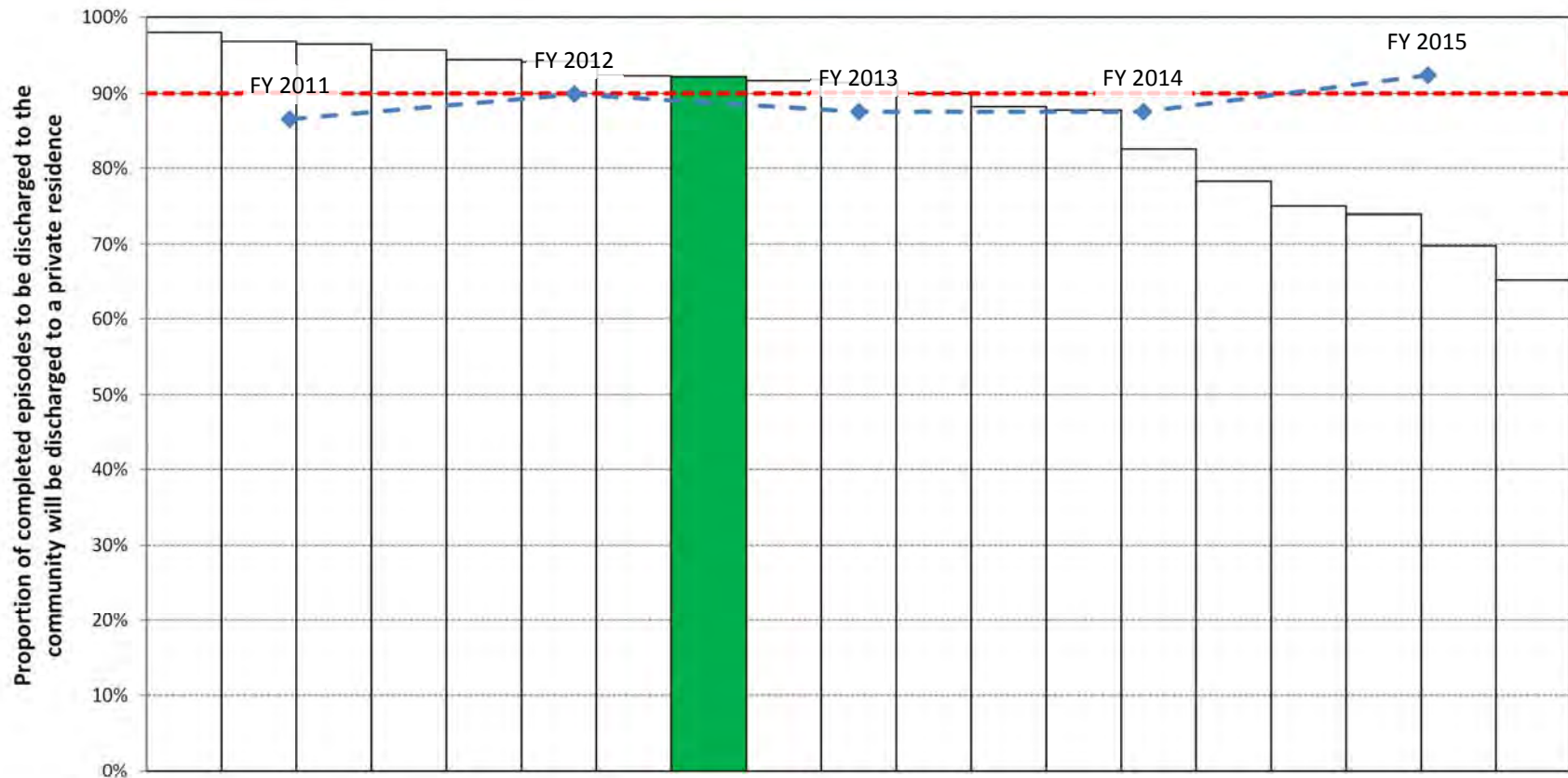


NOTE: 11/19 facilities made target; average achievement was 87.0%

# Reconditioning

# Background to target development

The first AROC reconditioning benchmarking workshop took place in July 2009. Targets developed at this workshop for outcomes of treatment of reconditioning were published in November 2009.

Reconditioning impairments are not a homogenous group and it was agreed at the workshop that targets needed to be developed at an impairment level.

The reconditioning outcome targets developed address three key aspects of rehabilitation:

- Target 1 - Length of inpatient hospital stay

- Target 2 - Functional gain achieved (as measured by FIM change)

- Target 3 - Discharge to accommodation, which allowed for same or greater independence

# Episodes used to determine targets

Data was analysed using calendar year 2008 data.

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

- 16.1 (reconditioning post surgery)
- 16.2 (reconditioning post medical illness)
- 16.3 (reconditioning post cancer)

Levels of functioning are categorised by V3 AN-SNAP classes:
- 3-242 - Other impairments, Motor 67-91
- 3-243 - Other impairments, Motor 53-66
- 3-244 - Other impairments, Motor 25-52
- 3-245 - Other impairments, Motor 14-24

# Summary of reconditioning post surgery

**Distribution of completed episodes across facilities treating reconditioning following surgery**
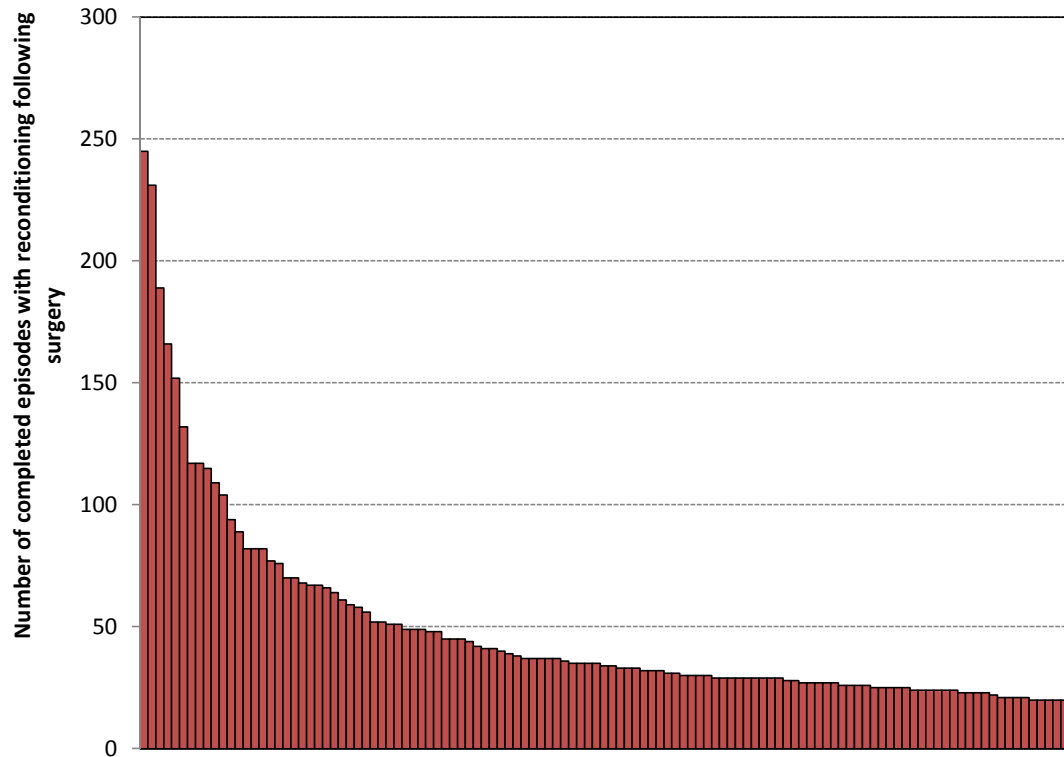


**Snapshot of target outcomes at your facility:**

| AN-SNAP class | Completed episodes | Target Status | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| 3-242 | 115 | ✔ | ✔ | ⚠ |
| 3-243 | 130 | ✔ | ✔ | ✖ |
| 3-244 | 89 | ✔ | ⚠ | ✖ |
| 3-245 | 11 | | | |
| All episodes | **345** | | | |

| | |
|---|---|
| ✔ | Achieved target |
| ⚠ | Within 5% of target |
| ✖ | Did not achieve target |
| — | Not reported (0 - 4 episodes) |

NOTE: 159 of 277 (57.4%) facilities reporting Reconditioning following Surgery had fewer than 20 episodes.

# Target 1: Length of stay

2009 reconditioning length of stay outcome targets
Half of all reconditioning post surgery episodes to achieve a length of stay of:

- AN-SNAP class 3-242        11 days or less
- AN-SNAP class 3-243        14 days or less
- AN-SNAP class 3-244        20 days or less
- AN-SNAP class 3-245        no target set due to insufficient episodes

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:** This target was set at the median of current data for the cohort discharged to the community. Statistically speaking setting the target as the median allows for a long tail. This means that a subset of patients can have a significantly longer LOS, which is often required clinically, without negatively impacting on the LOS report for that unit.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Reconditioning post surgery Target 1: Length of Stay - AN-SNAP class 3-242 Target = 11 days or less
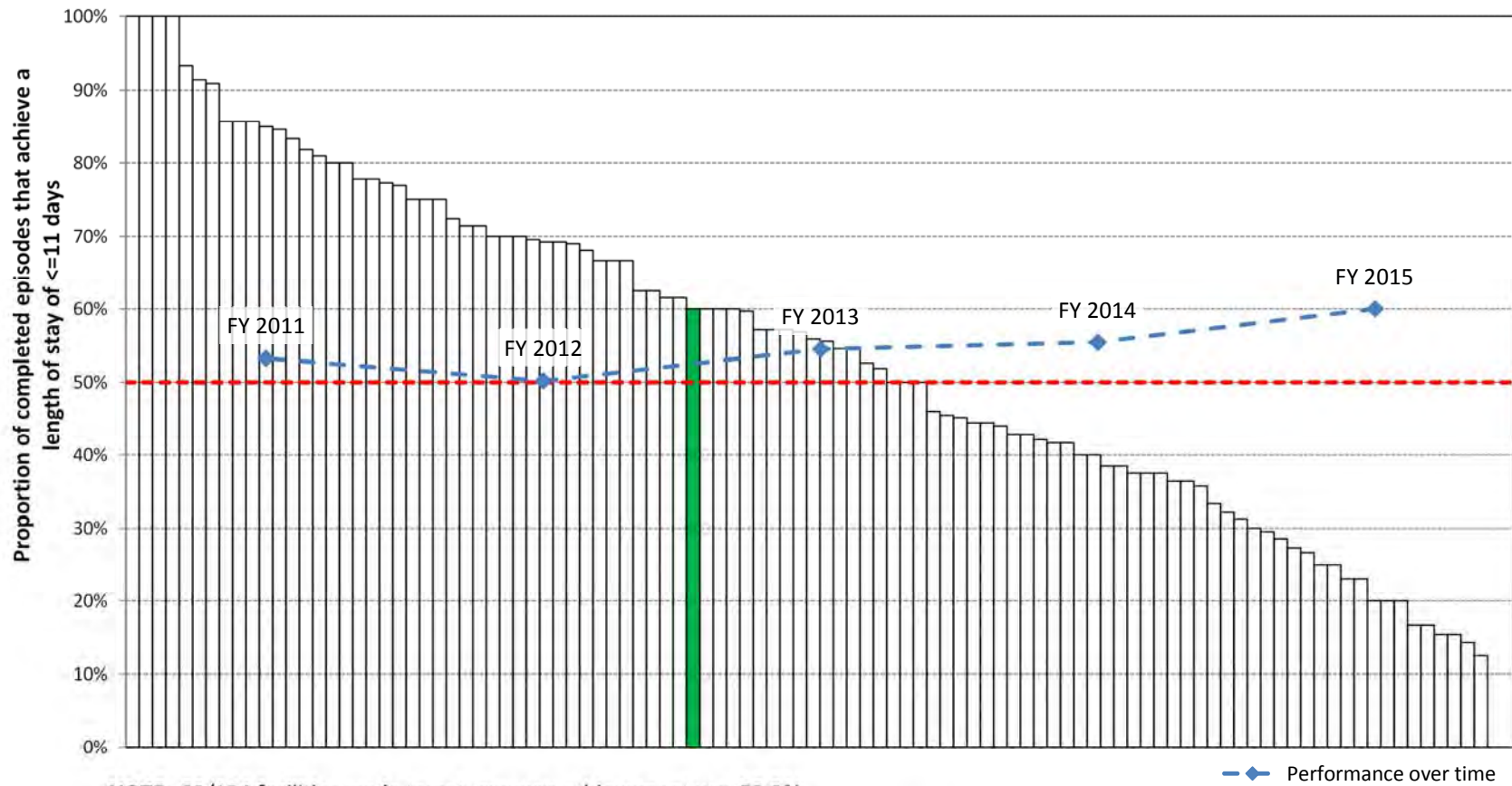
NOTE: 60/104 facilities made target; average achievement was 53.9%
Average length of stay was 12.1 days; your facility's average was 11.5 days

Reconditioning post surgery Target 1: Length of Stay - AN-SNAP class 3-243 Target = 14 days or less
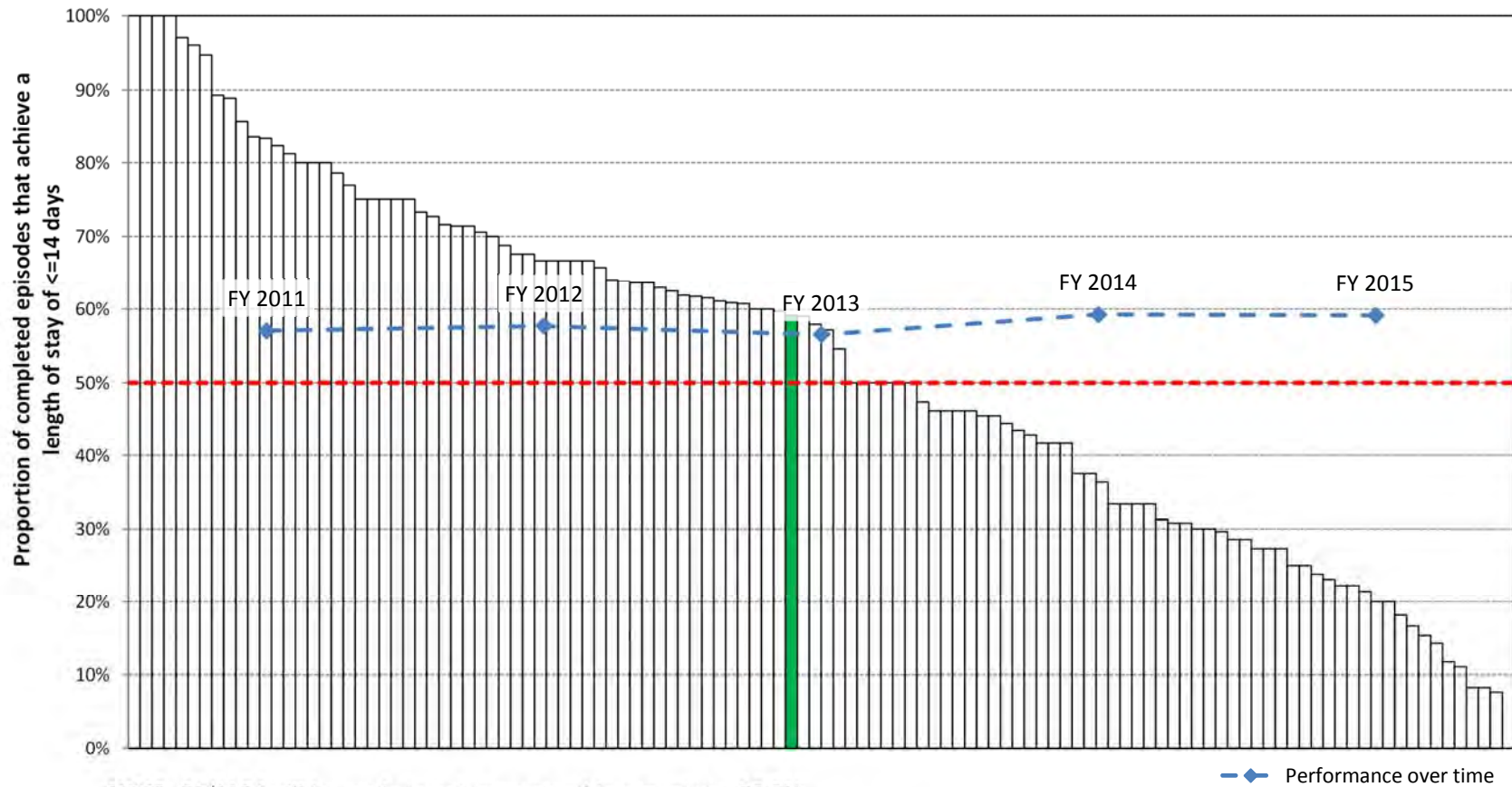
NOTE: 66/116 facilities made target; average achievement was 52.9%
Average length of stay was 15.3 days; your facility's average was 14.6 days

Reconditioning post surgery Target 1: Length of Stay - AN-SNAP class 3-244 Target = 20 days or less
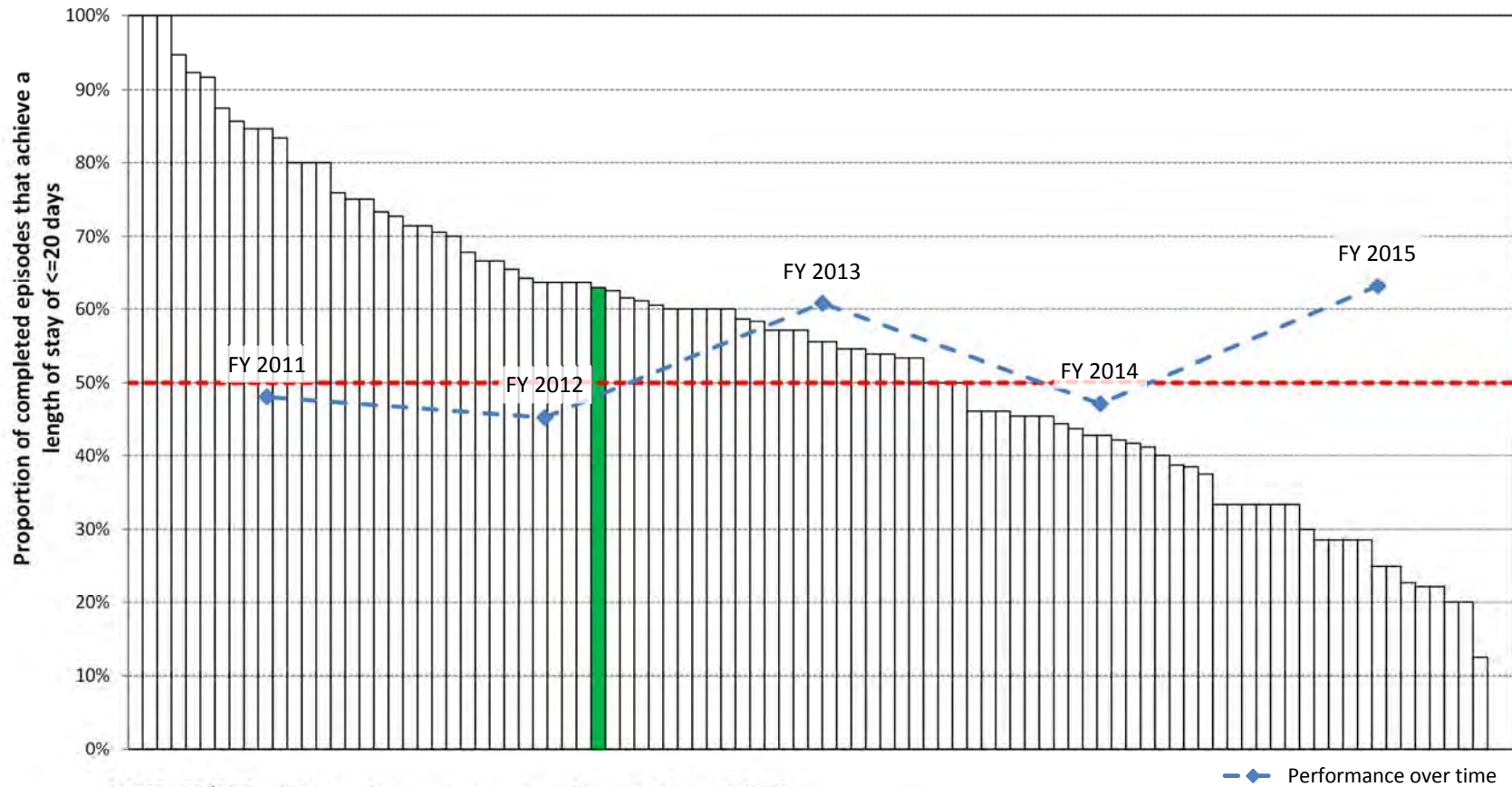
**NOTE:** 58/96 facilities made target; average achievement was 54.3%
Average length of stay was 21.4 days; your facility's average was 21.8 days

# Target 2: FIM change

**2009 reconditioning functional gains outcome targets**
**Half of all reconditioning post surgery episodes to achieve a FIM change of:**

- AN-SNAP class 3-242      10 points or more
- AN-SNAP class 3-243      19 points or more
- AN-SNAP class 3-244      26 points or more
- AN-SNAP class 3-245      no target set due to insufficient episodes

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:** This target was set at the median of 2008 data for the cohort discharged to the community. Statistically speaking setting the target as the median allows for a long tail. This means that a subset of patients can have significantly less FIM change, without negatively impacting on the FIM change report for that unit.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Reconditioning post surgery Target 2: FIM Change - AN-SNAP class 3-242 Target = 10 points or more
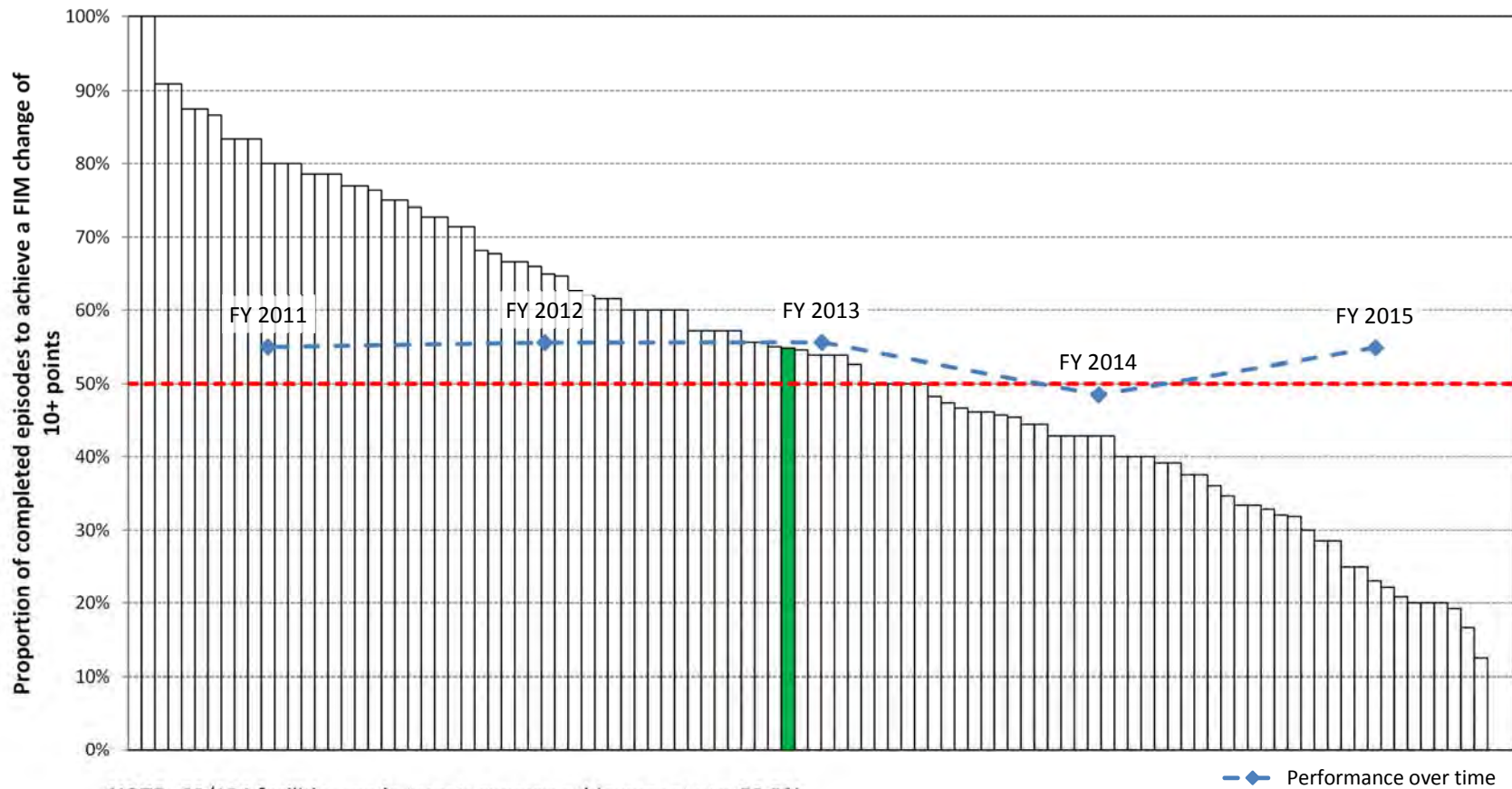
NOTE: 60/104 facilities made target; average achievement was 53.3%
Average FIM change was 10.4; your facility's average was 10.9

Reconditioning post surgery Target 2: FIM Change - AN-SNAP class 3-243 Target = 19 points or more
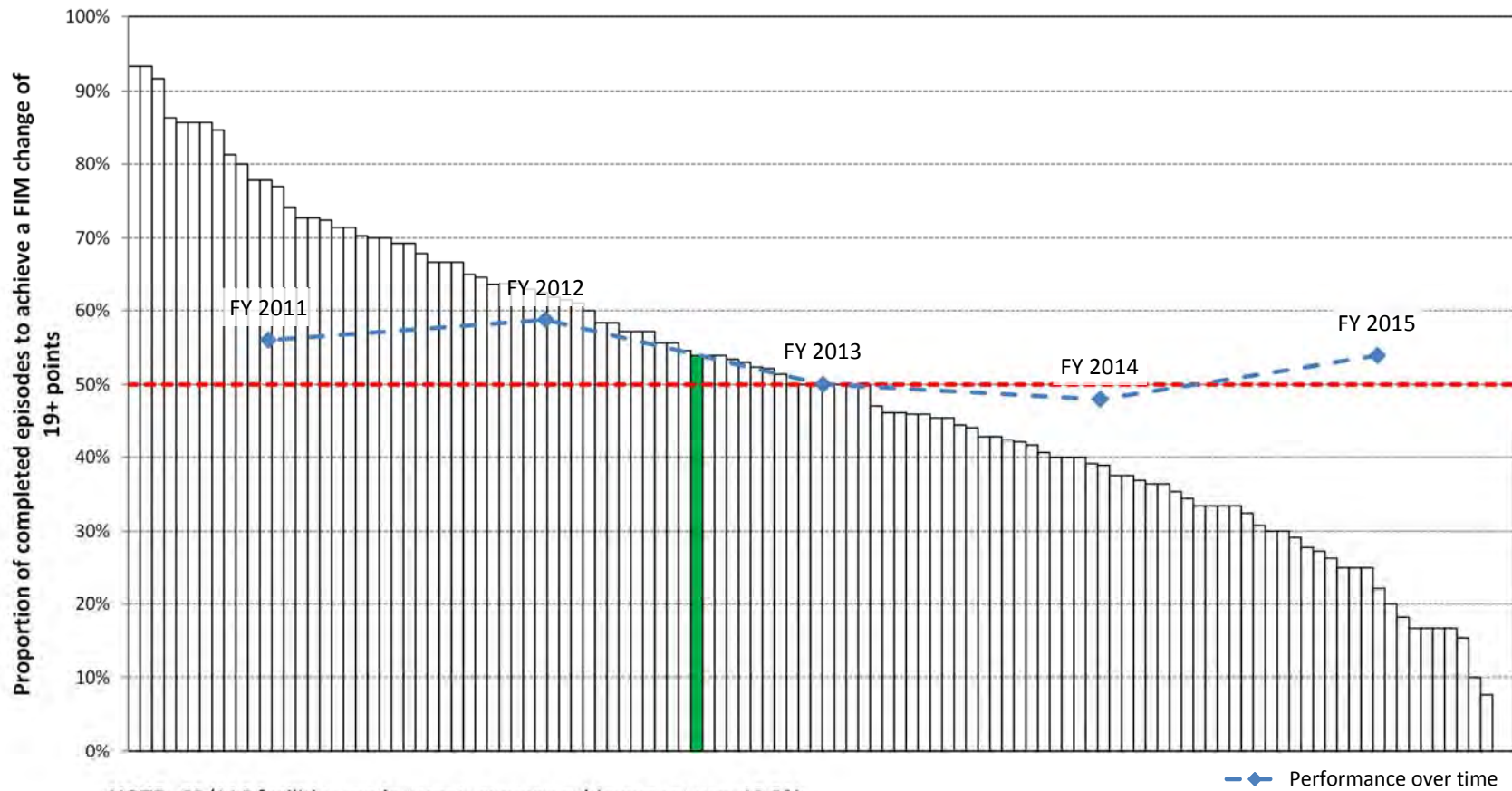
NOTE: 62/116 facilities made target; average achievement was 49.9%
Average FIM change was 18.9; your facility's average was 19.5

Performance over time

Reconditioning post surgery Target 2: FIM Change - AN-SNAP class 3-244 Target = 26 points or more
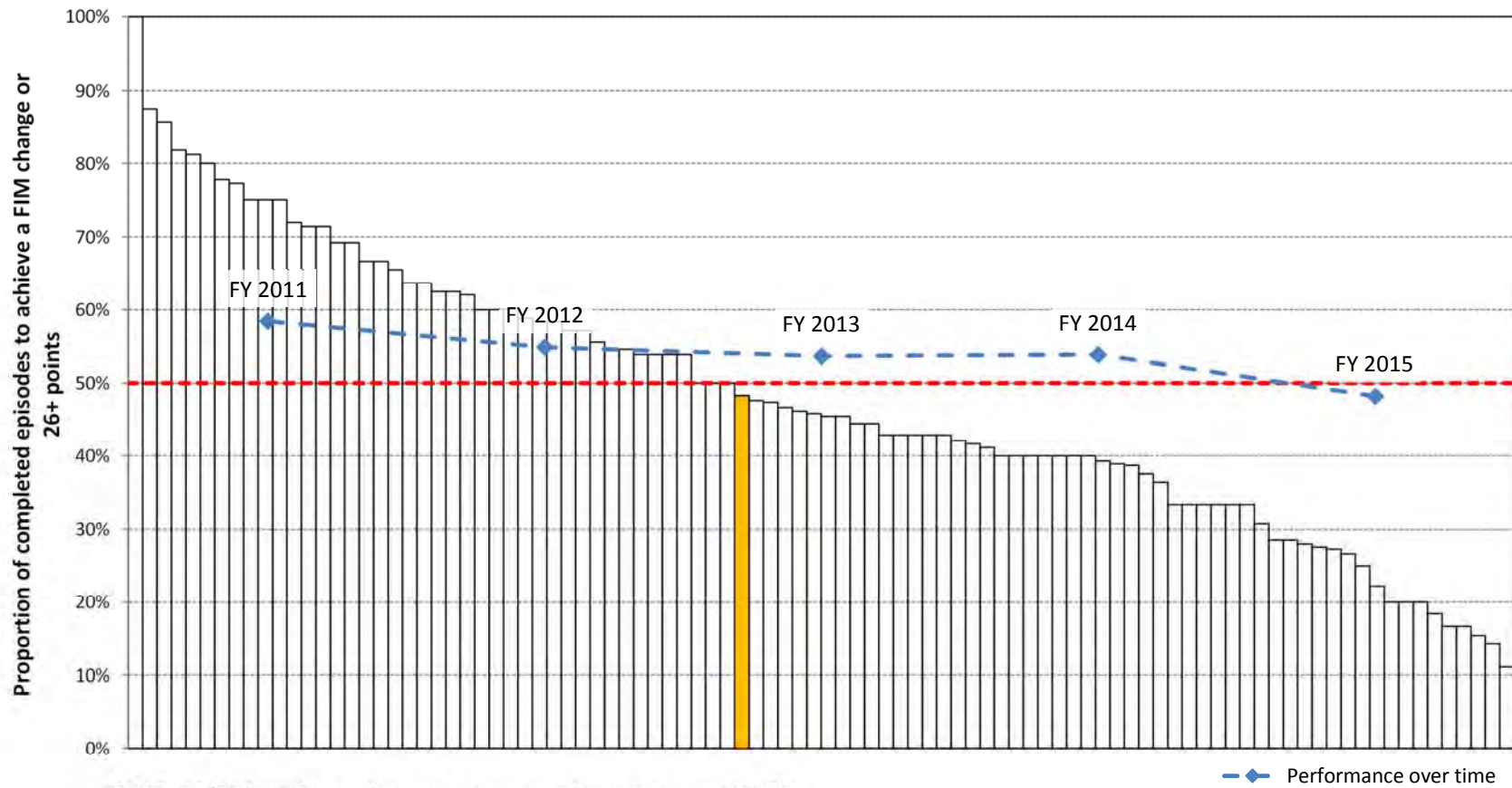
NOTE: 42/96 facilities made target; average achievement was 48.2%
Average FIM change was 24.5; your facility's average was 23.5

# Target 3: Discharge destination

2009 reconditioning discharge destination outcome targets
Proportion of reconditioning post surgery episodes discharged to accommodation that allows for same or greater independence:
- AN-SNAP class 3-242      84%
- AN-SNAP class 3-243      86%
- AN-SNAP class 3-244      79%
- AN-SNAP class 3-245      no target set due to insufficient episodes

Data **excluded** from this analysis:
- Incomplete episodes (refer to Appendix 1 for definition)

**NOTE:** This target is set at the 2008 proportion of episodes discharged to accommodation that allows for same or greater independence.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

**Reconditioning post surgery Target 3: Discharge Destination — AN-SNAP class 3-242 Target = 84% achieve same or greater independence**
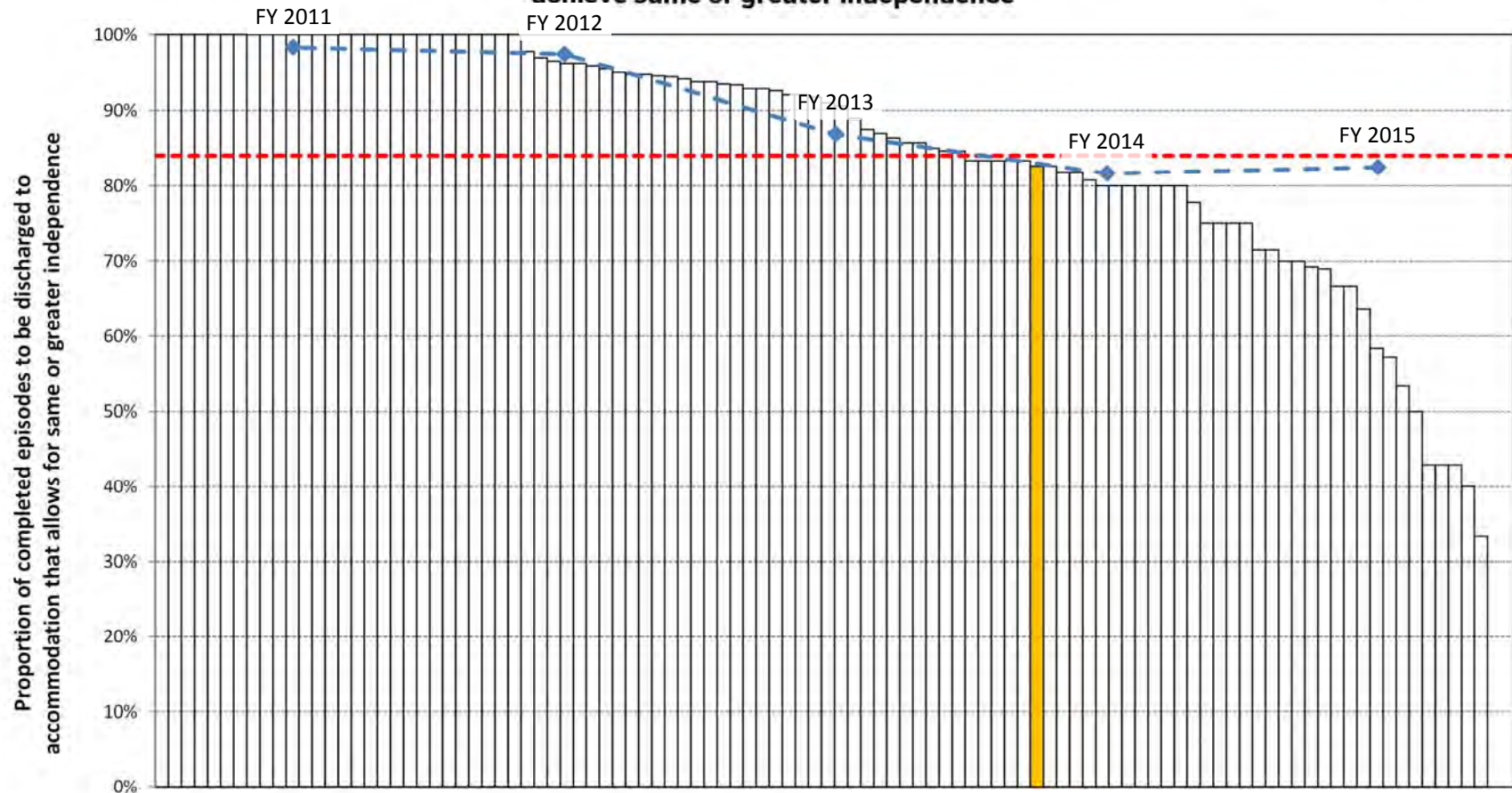
NOTE: 62/104 facilities made target; average achievement was 83.9%

Performance over time

**Reconditioning post surgery Target 3: Discharge Destination — AN-SNAP class 3-243 Target = 86%**
achieve same or greater independence

*Proportion of completed episodes to be discharged to accommodation that allows for same or greater independence* (y-axis, 0% to 100%)

FY 2011
FY 2012
FY 2013
FY 2014
FY 2015
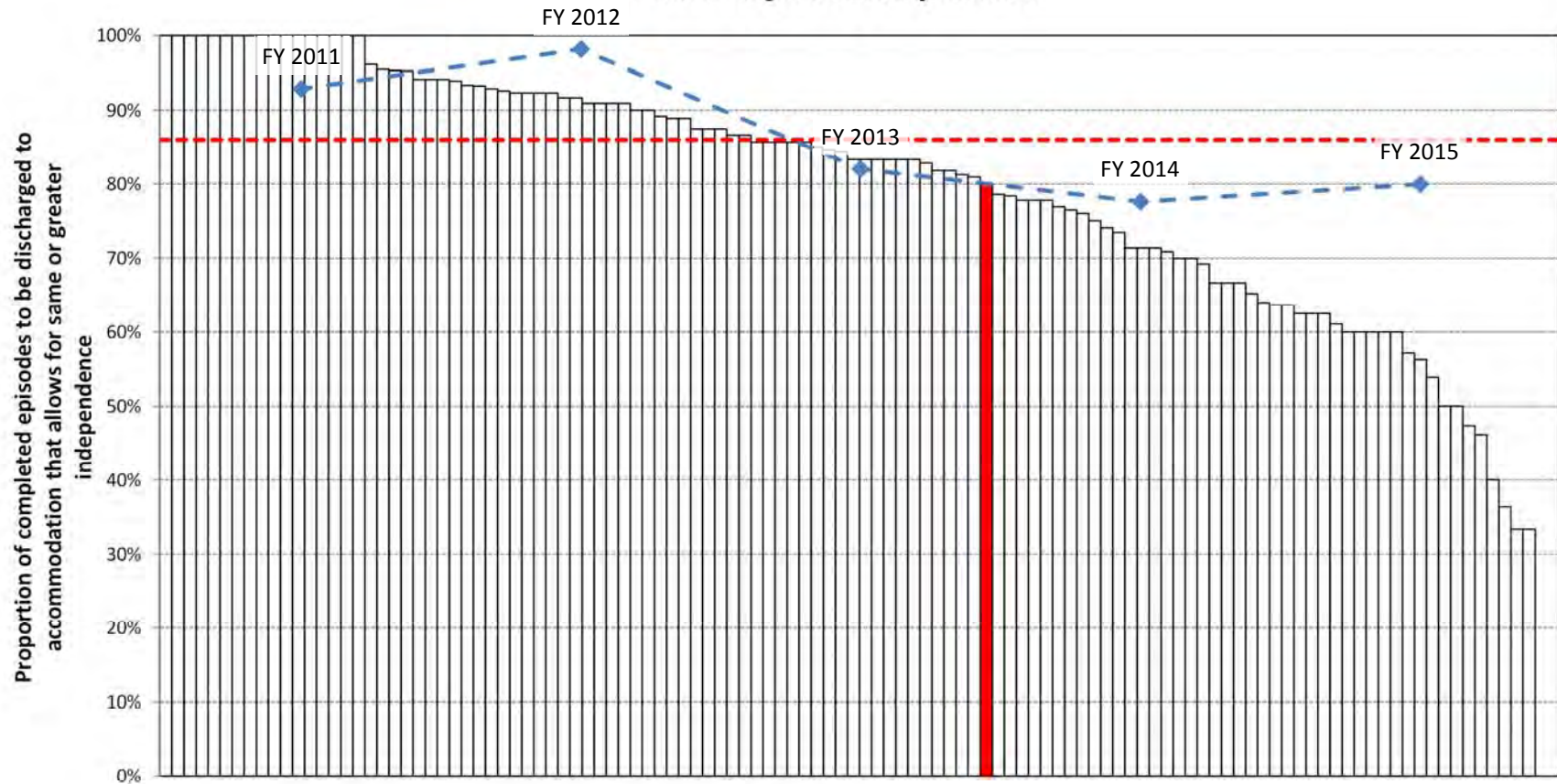
**NOTE:** 49/116 facilities made target; average achievement was 78.8%

Performance over time

Reconditioning post surgery Target 3: Discharge Destination — AN-SNAP class 3-244 Target = 79% achieve same or greater independence
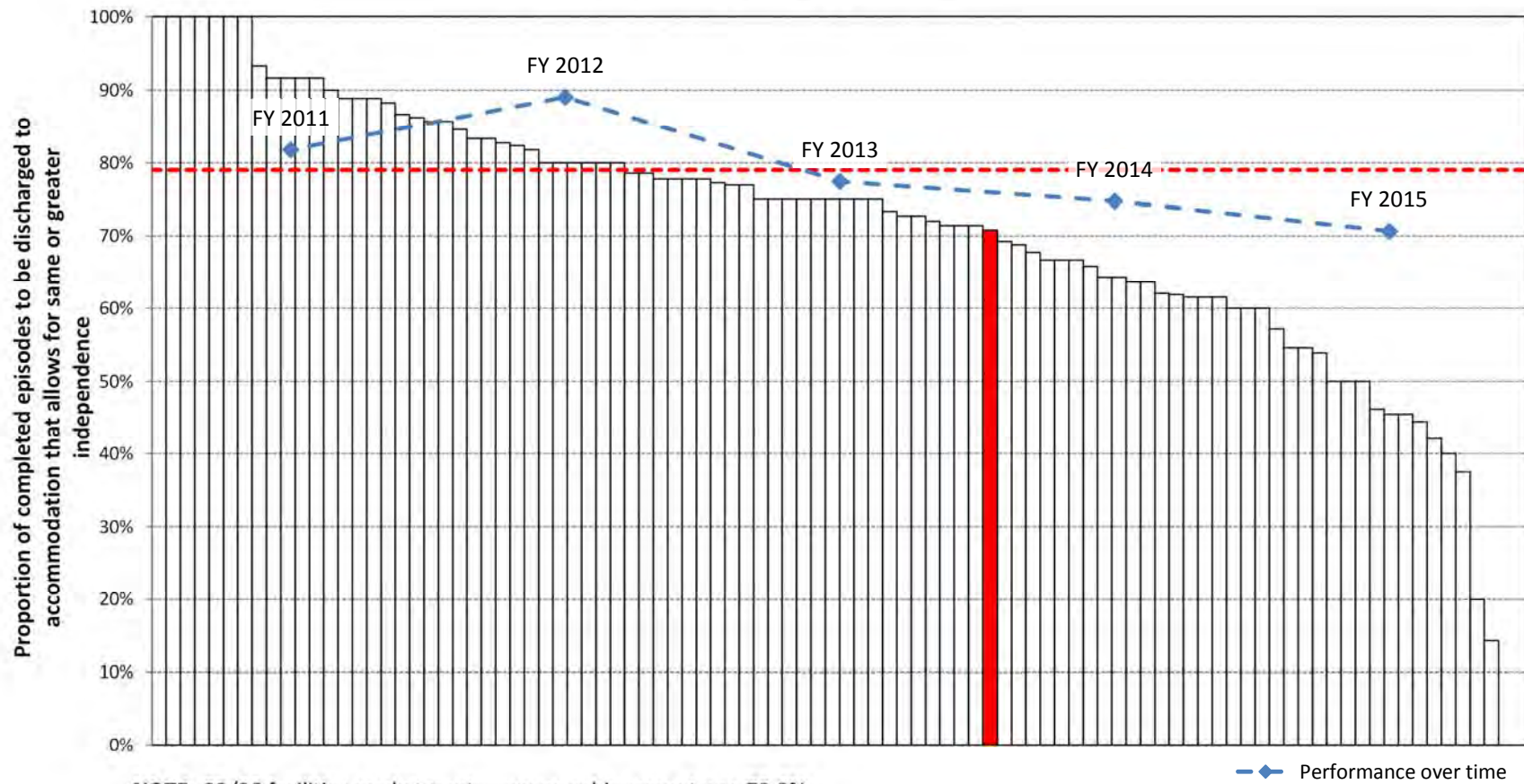
NOTE: 33/96 facilities made target; average achievement was 70.8%

# Summary of reconditioning post medical illness

**Distribution of completed episodes across facilities treating reconditioning following medical illness**



Number of completed episodes with reconditioning following medical illness

| Snapshot of target outcomes at your facility: | | | | |
|---|---|---|---|---|
| AN-SNAP class | Completed episodes | Target Status | | |
| | | 1 | 2 | 3 |
| 3-242 | 235 | ✔ | ⚠ | ⚠ |
| 3-243 | 333 | ✔ | ✔ | ✖ |
| 3-244 | 308 | ✔ | ✔ | ✖ |
| 3-245 | 41 | ✔ | ✔ | ⚠ |
| All episodes | **917** | | | |

| | |
|---|---|
| ✔ | Achieved target |
| ⚠ | Within 5% of target |
| ✖ | Did not achieve target |
| — | Not reported (0 - 4 episodes) |
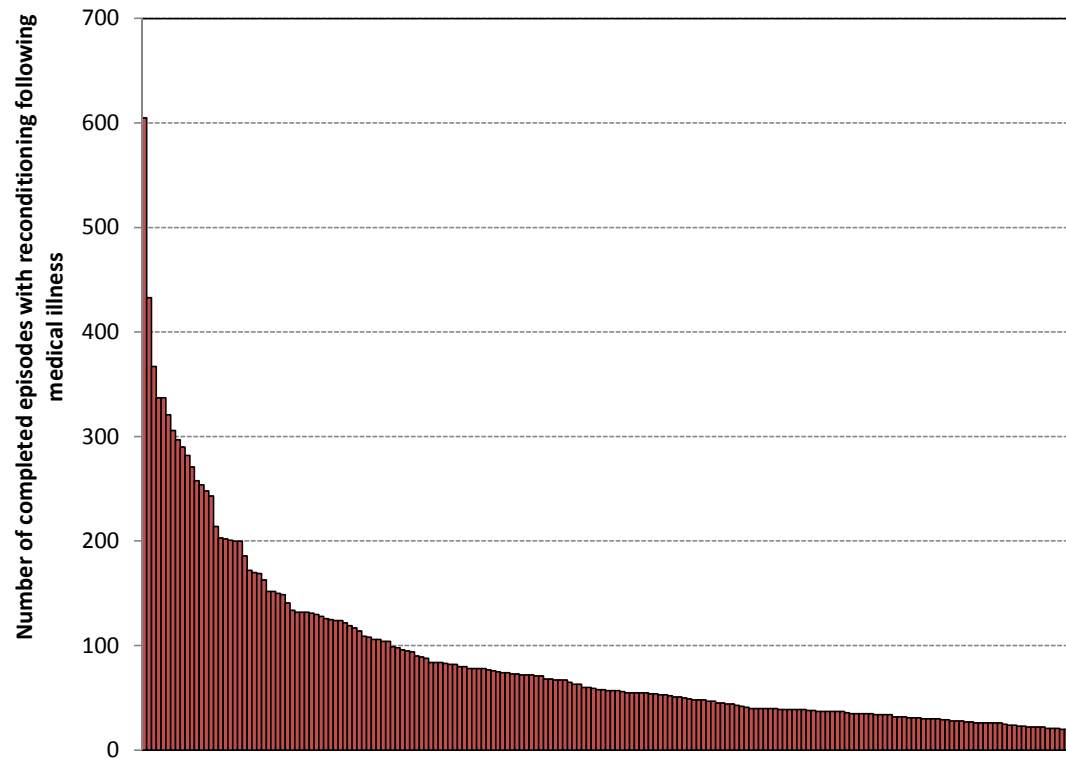
NOTE: 86 of 282 (30.5%) facilities reporting reconditioning following medical illness had fewer than 20 episodes.

# Target 1: Length of stay

2009 reconditioning length of stay outcome targets
Half of all reconditioning post surgery episodes to achieve a length of stay of:

- AN-SNAP class 3-242    13 days or less
- AN-SNAP class 3-243    15 days or less
- AN-SNAP class 3-244    20 days or less
- AN-SNAP class 3-245    26 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:** This target was set at the median of current data for the cohort discharged to the community. Statistically speaking setting the target as the median allows for a long tail. This means that a subset of patients can have a significantly longer LOS, which is often required clinically, without negatively impacting on the LOS report for that unit.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Reconditioning post medical illness Target 1: Length of Stay - AN-SNAP class 3-242 Target = 13 days or less

NOTE: 124/176 facilities made target; average achievement was 58.9%
Average length of stay was 14.0 days; your facility's average was 13.0 days

## Reconditioning post medical illness Target 1: Length of Stay - AN-SNAP class 3-243 Target = 15 days or less
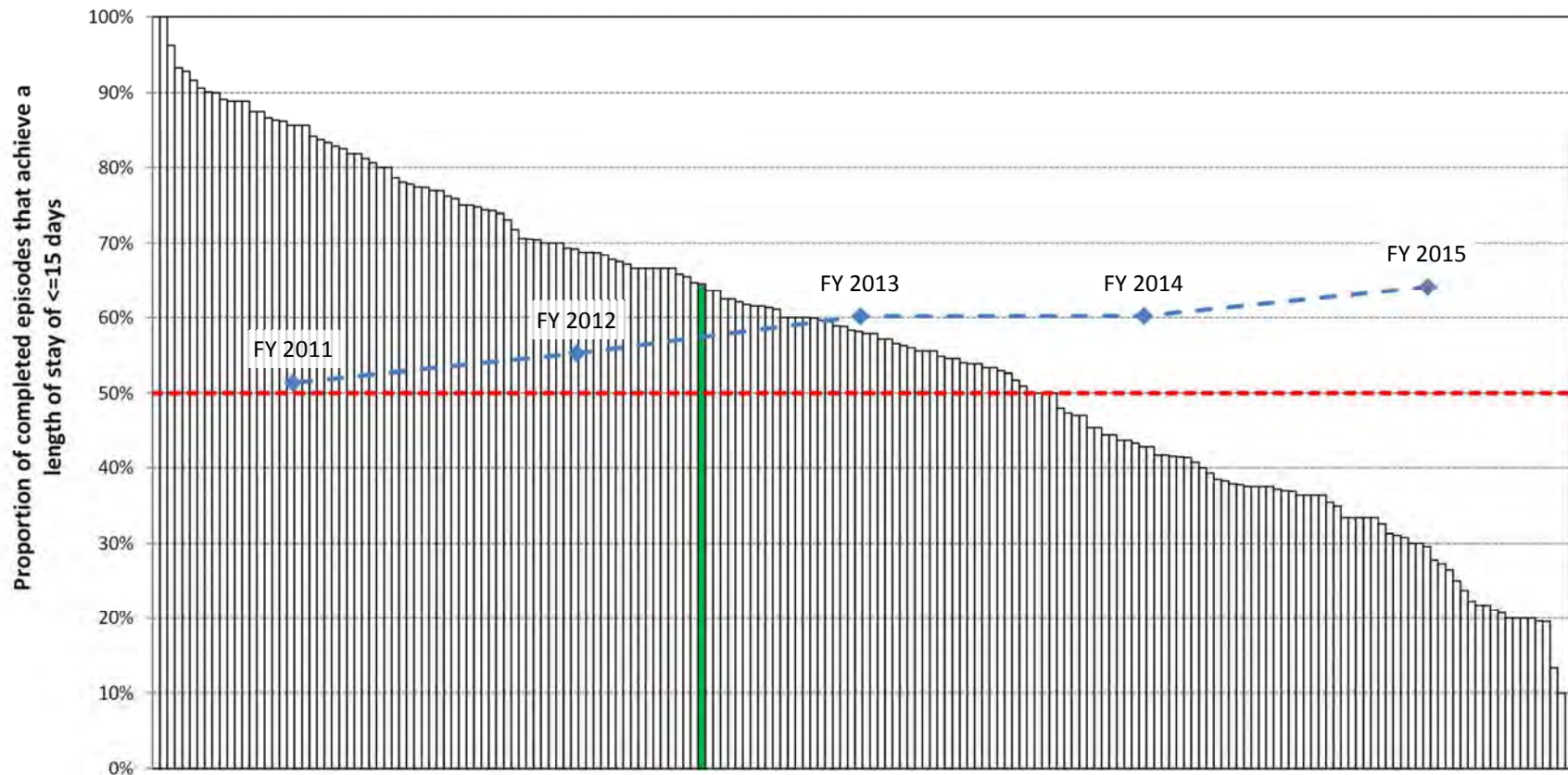


**NOTE:** 121/190 facilities made target; average achievement was 56.7%

Average length of stay was 16.2 days; your facility's average was 14.7 days

Reconditioning post medical illness Target 1: Length of Stay - AN-SNAP class 3-244 Target = 20 days or less
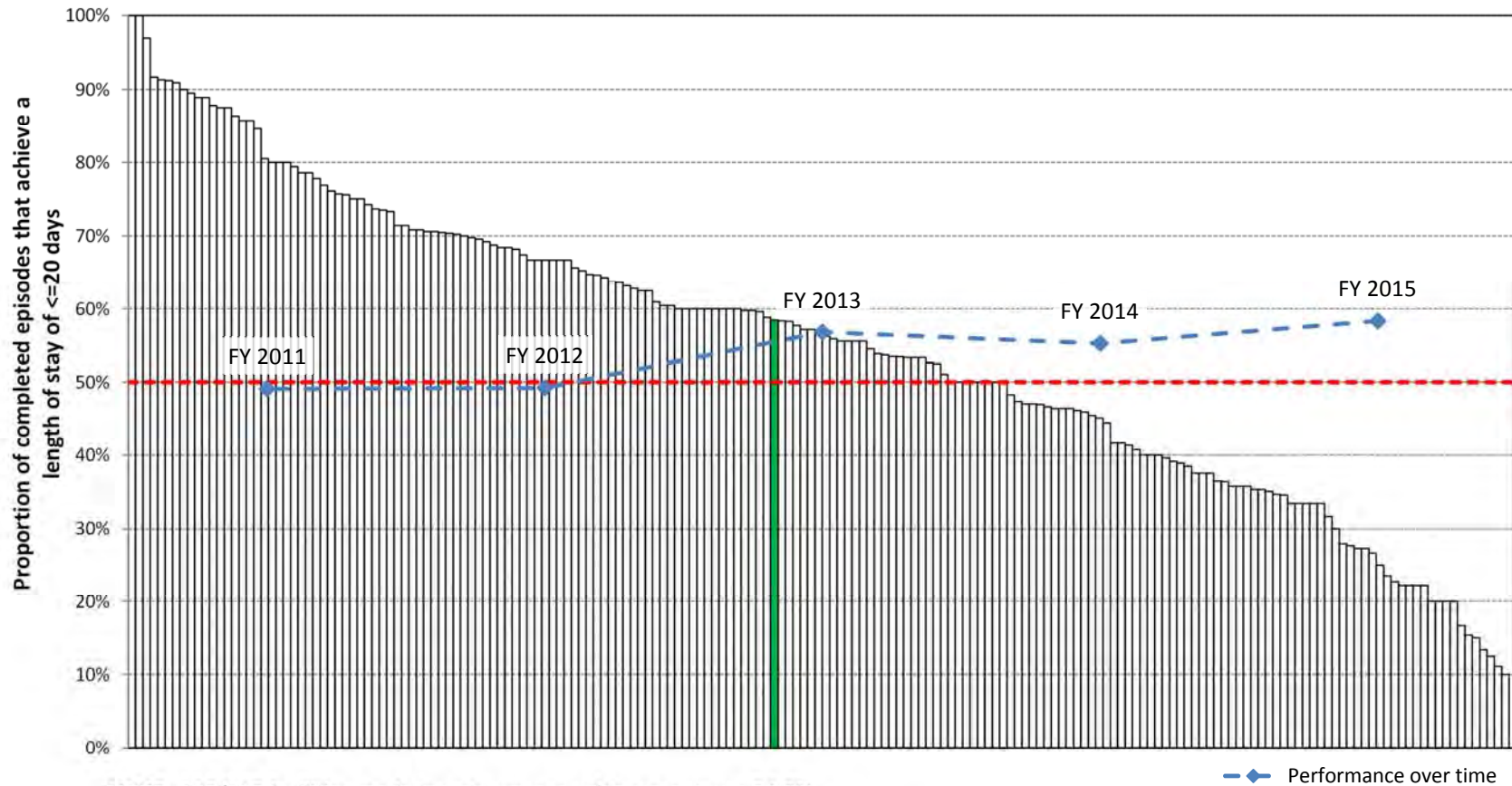
**NOTE:** 119/188 facilities made target; average achievement was 54.8%
Average length of stay was 21.1 days; your facility's average was 21.6 days

Reconditioning post medical illness Target 1: Length of Stay - AN-SNAP class 3-245 Target = 26 days or less
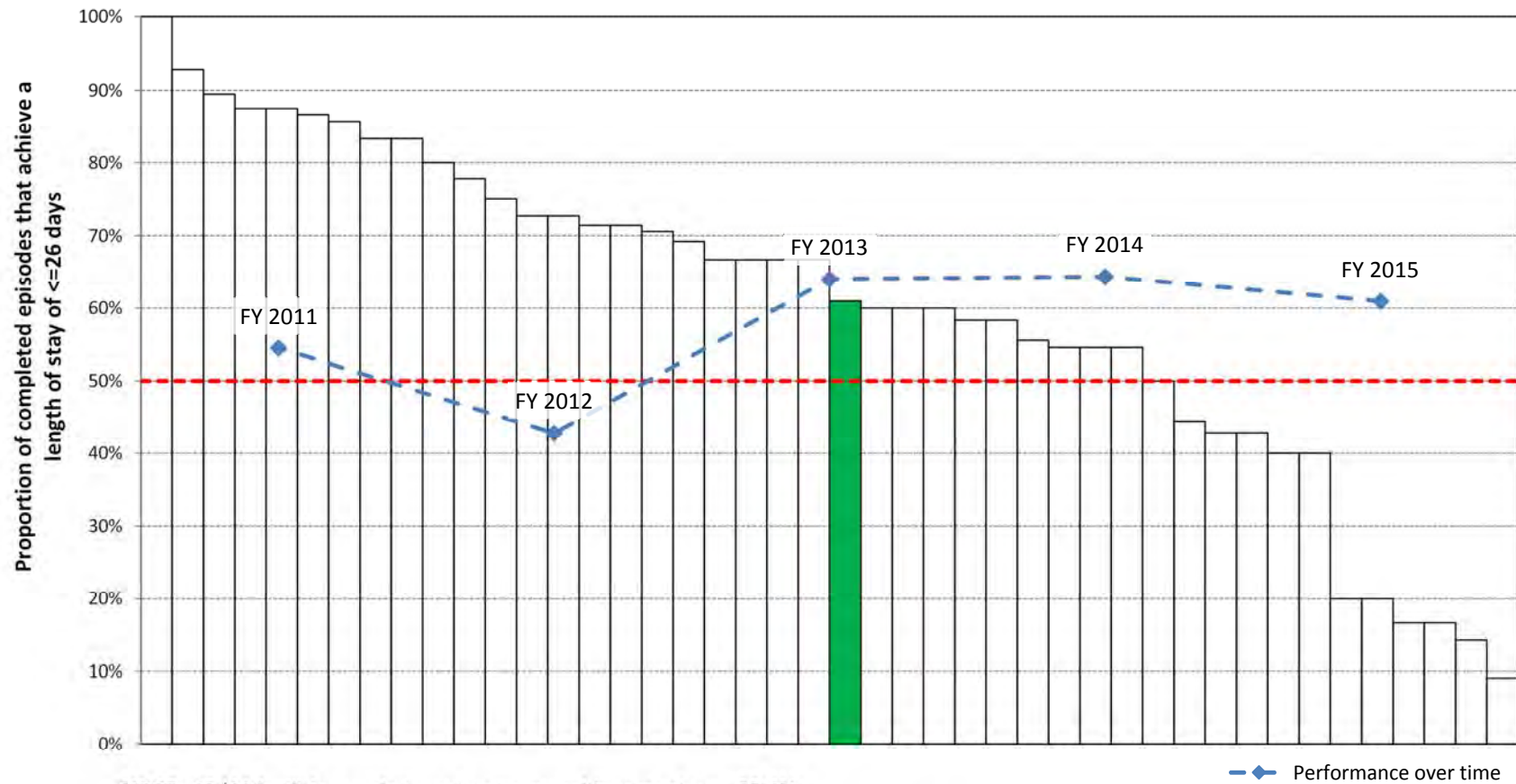
NOTE: 33/44 facilities made target; average achievement was 60.4%
Average length of stay was 26.7 days; your facility's average was 24.5 days

# Target 2: FIM change



**2009 reconditioning functional gains outcome targets**
**Half of all reconditioning post medical illness episodes to achieve a FIM change of:**

- AN-SNAP class 3-242        9 points or more
- AN-SNAP class 3-243        16 points or more
- AN-SNAP class 3-244        21 points or more
- AN-SNAP class 3-245        13 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:** This target was set at the median of 2008 data for the cohort discharged to the community. Statistically speaking setting the target as the median allows for a long tail. This means that a subset of patients can have significantly less FIM change, without negatively impacting on the FIM change report for that unit.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Reconditioning post medical illness Target 2: FIM Change - AN-SNAP class 3-242 Target = 9 points or more
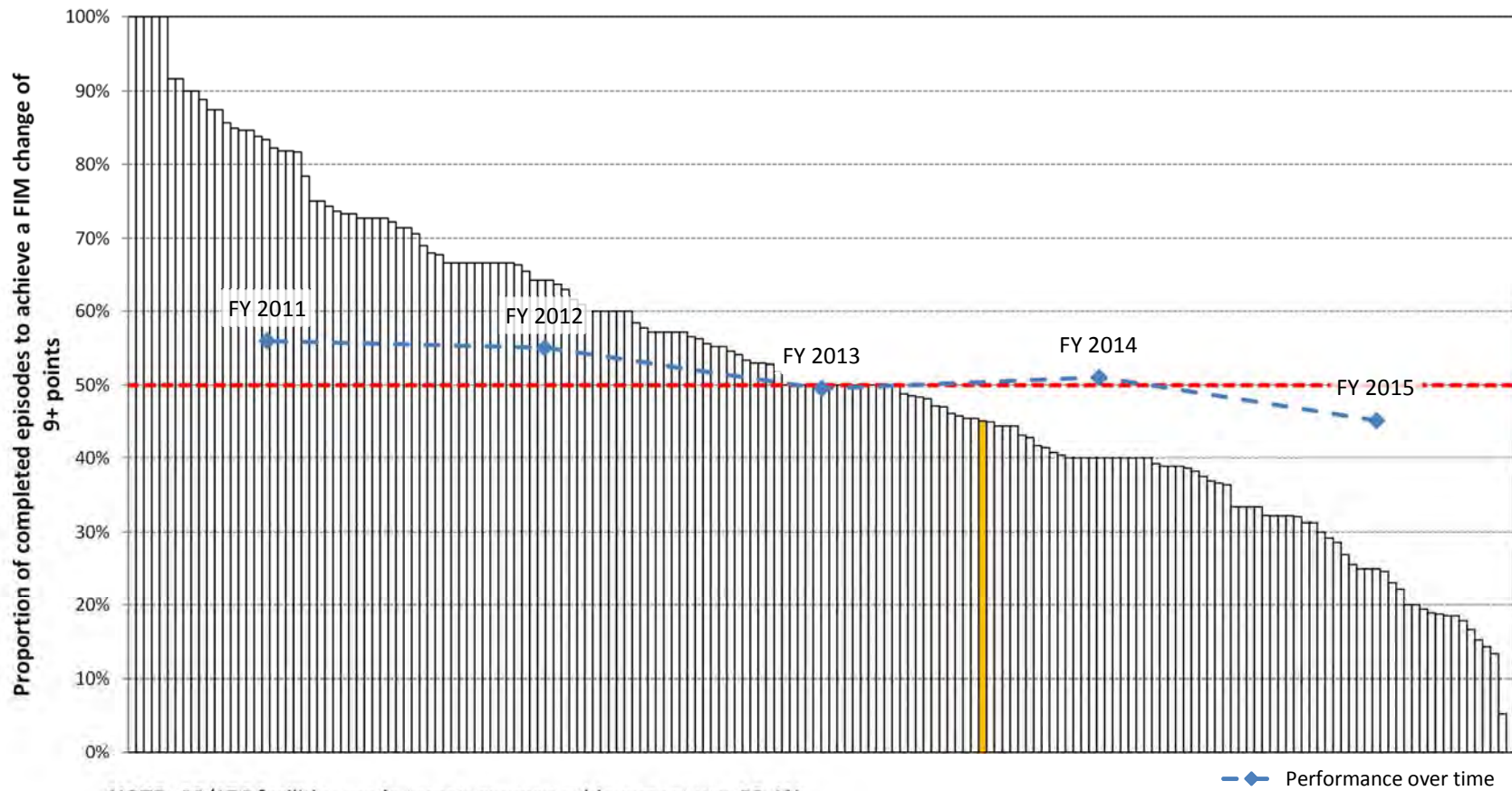
NOTE: 98/176 facilities made target; average achievement was 52.4%
Average FIM change was 8.9; your facility's average was 8.3

Reconditioning post medical illness Target 2: FIM Change - AN-SNAP class 3-243 Target = 16 points or more
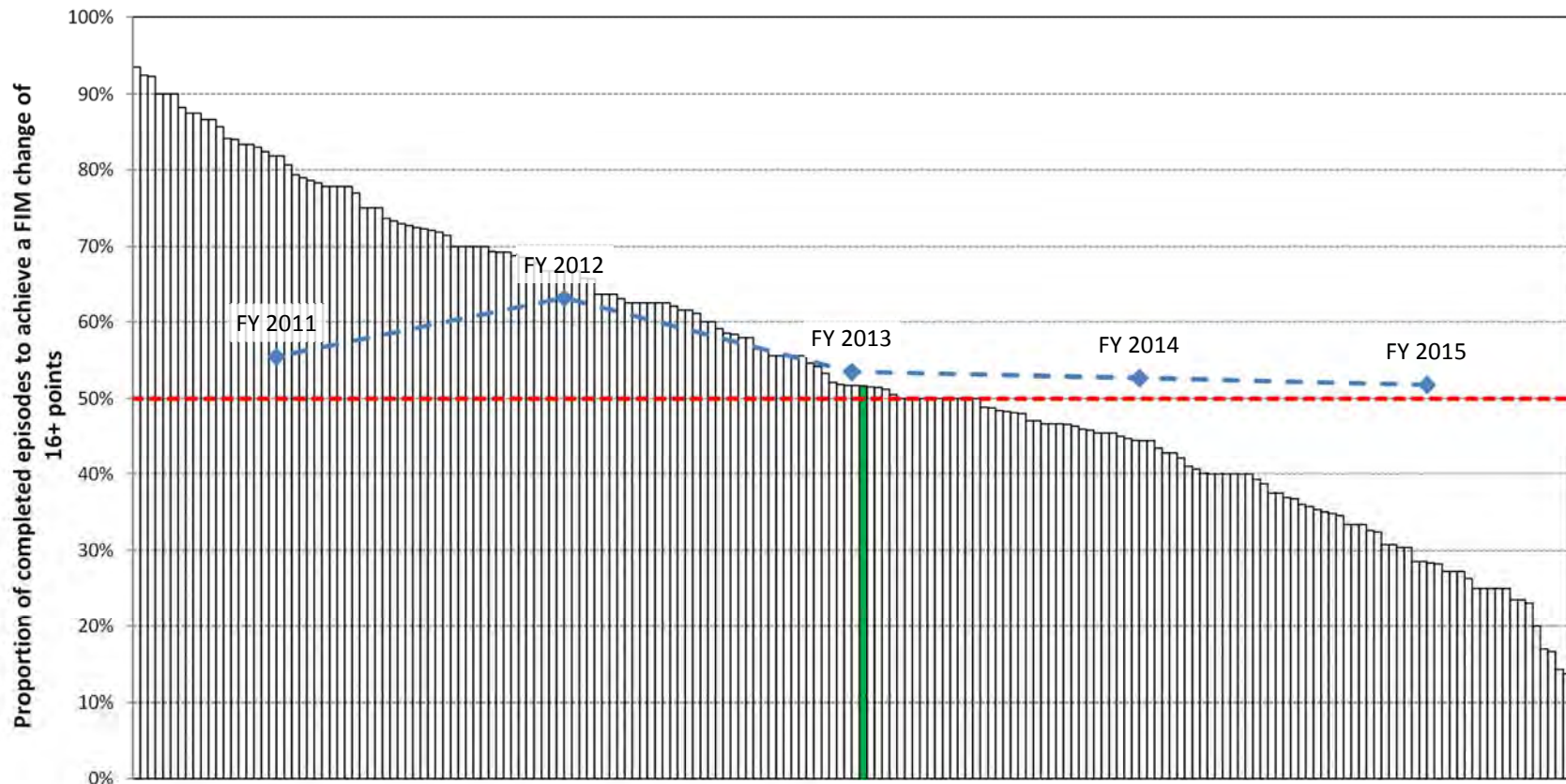


NOTE: 112/190 facilities made target; average achievement was 54.6%
Average FIM change was 15.9; your facility's average was 16.2

Performance over time

Reconditioning post medical illness Target 2: FIM Change - AN-SNAP class 3-244 Target = 21 points or more
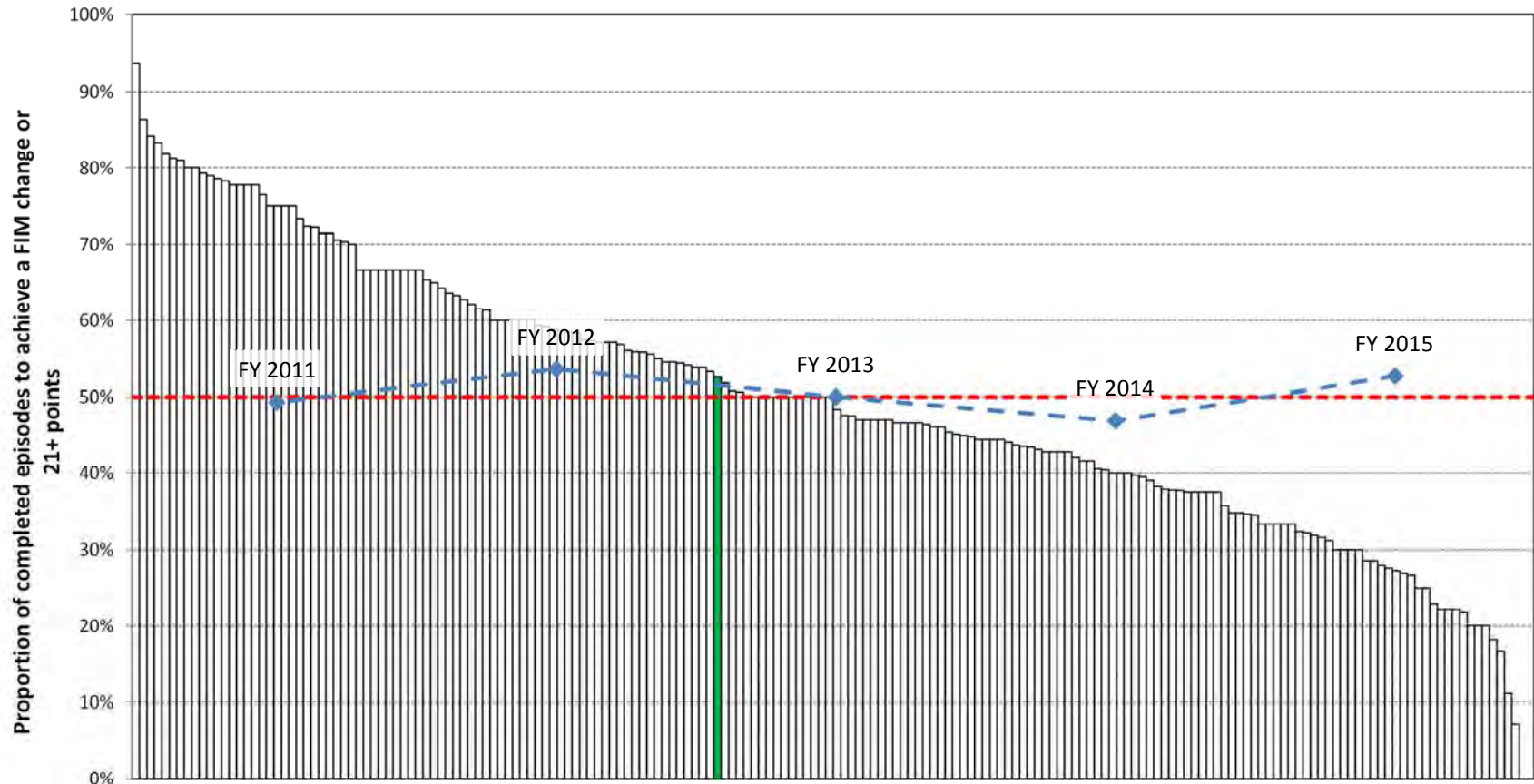
NOTE: 94/188 facilities made target; average achievement was 49.7%
Average FIM change was 20.5; your facility's average was 21.1

## Reconditioning post medical illness Target 2: FIM Change - AN-SNAP class 3-245 Target = 13 points or more
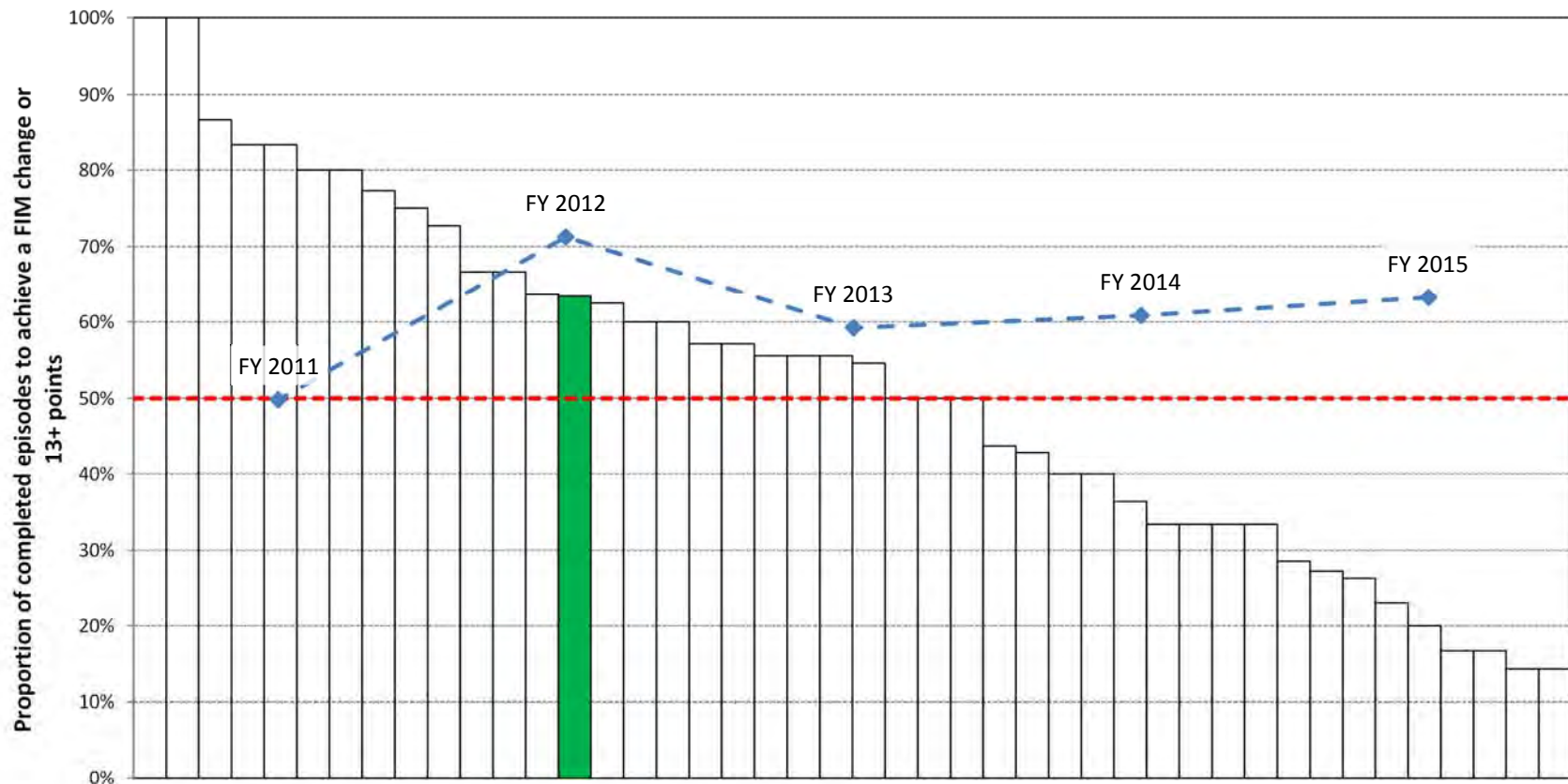


NOTE: 26/44 facilities made target; average achievement was 52.0%
Average FIM change was 20.7; your facility's average was 24.8

Performance over time

# Target 3: Discharge destination

2009 reconditioning discharge destination outcome targets
Proportion of reconditioning post medical illness episodes discharged to accommodation that allows for same or greater independence:
- AN-SNAP class 3-242      83%
- AN-SNAP class 3-243      82%
- AN-SNAP class 3-244      75%
- AN-SNAP class 3-245      61%

Data **excluded** from this analysis:
- Incomplete episodes (refer to Appendix 1 for definition)

**NOTE:** This target is set at the 2008 proportion of episodes discharged to accommodation that allows for same or greater independence.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Reconditioning post medical illness Target 3: Discharge Destination — AN-SNAP class 3-242 Target = 83% achieve same or greater independence
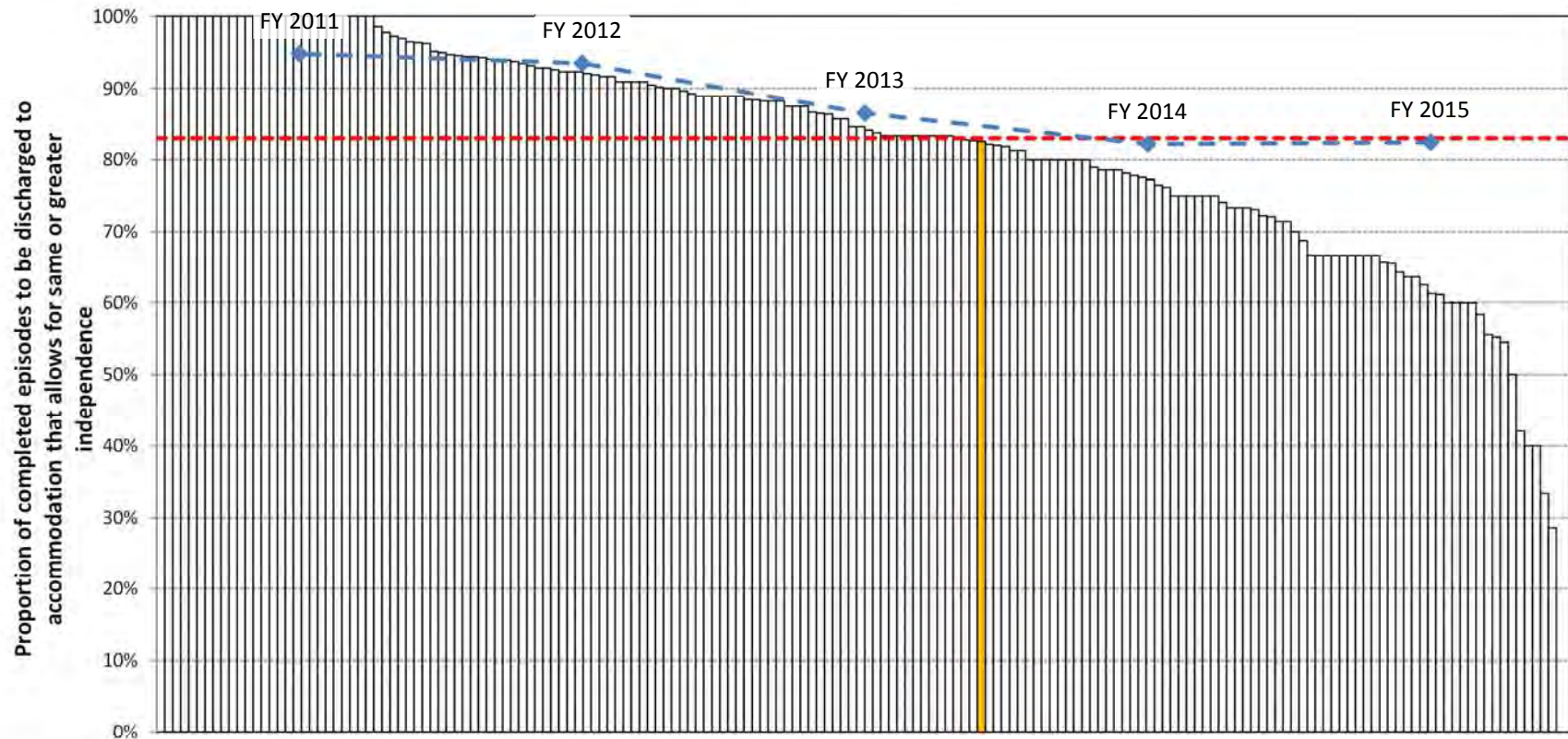
NOTE: 99/176 facilities made target; average achievement was 81.8%

Reconditioning post medical illness Target 3: Discharge Destination — AN-SNAP class 3-243 Target = 82% achieve same or greater independence
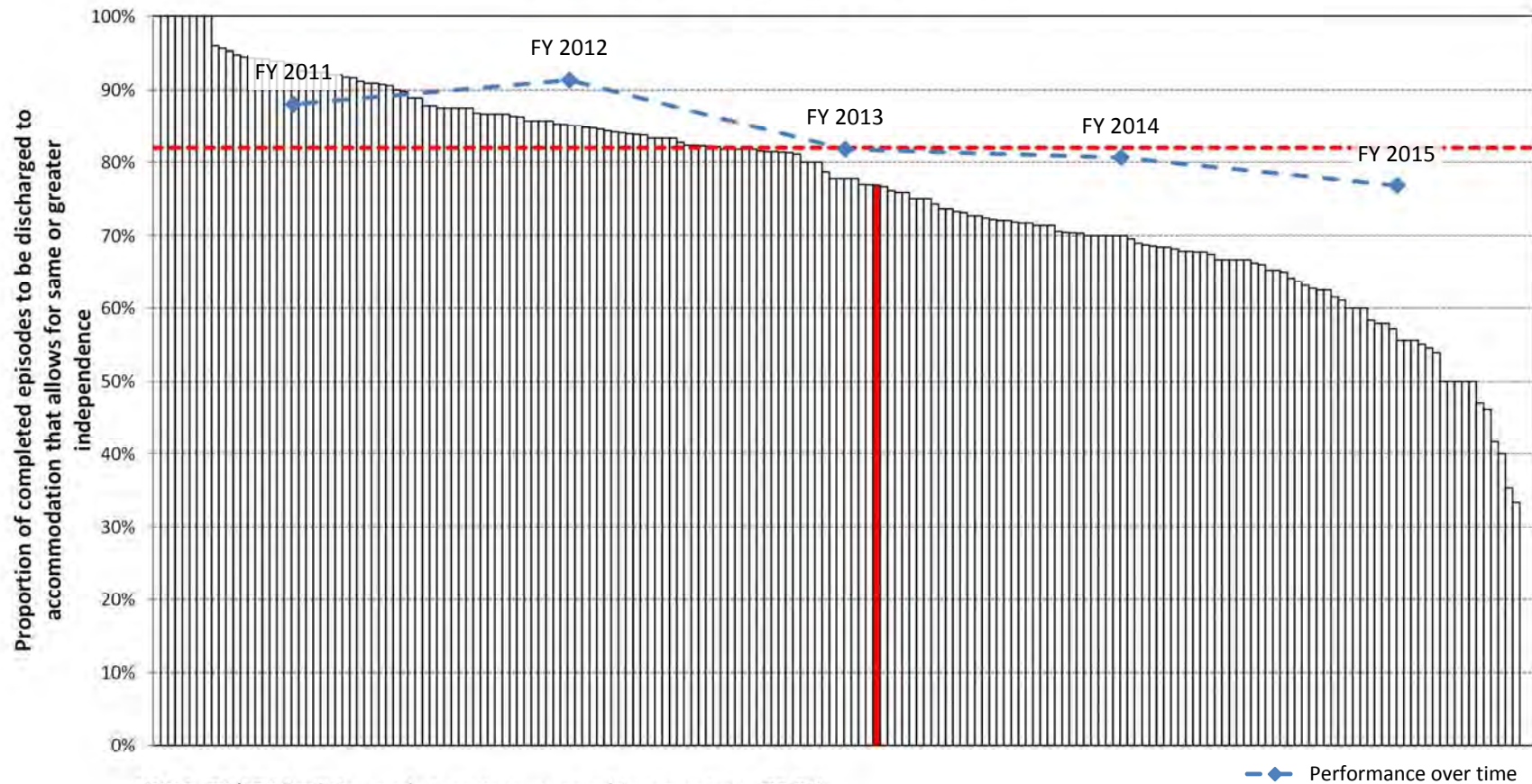
**NOTE:** 78/190 facilities made target; average achievement was 75.8%

Reconditioning post medical illness Target 3: Discharge Destination — AN-SNAP class 3-244 Target = 75% achieve same or greater independence
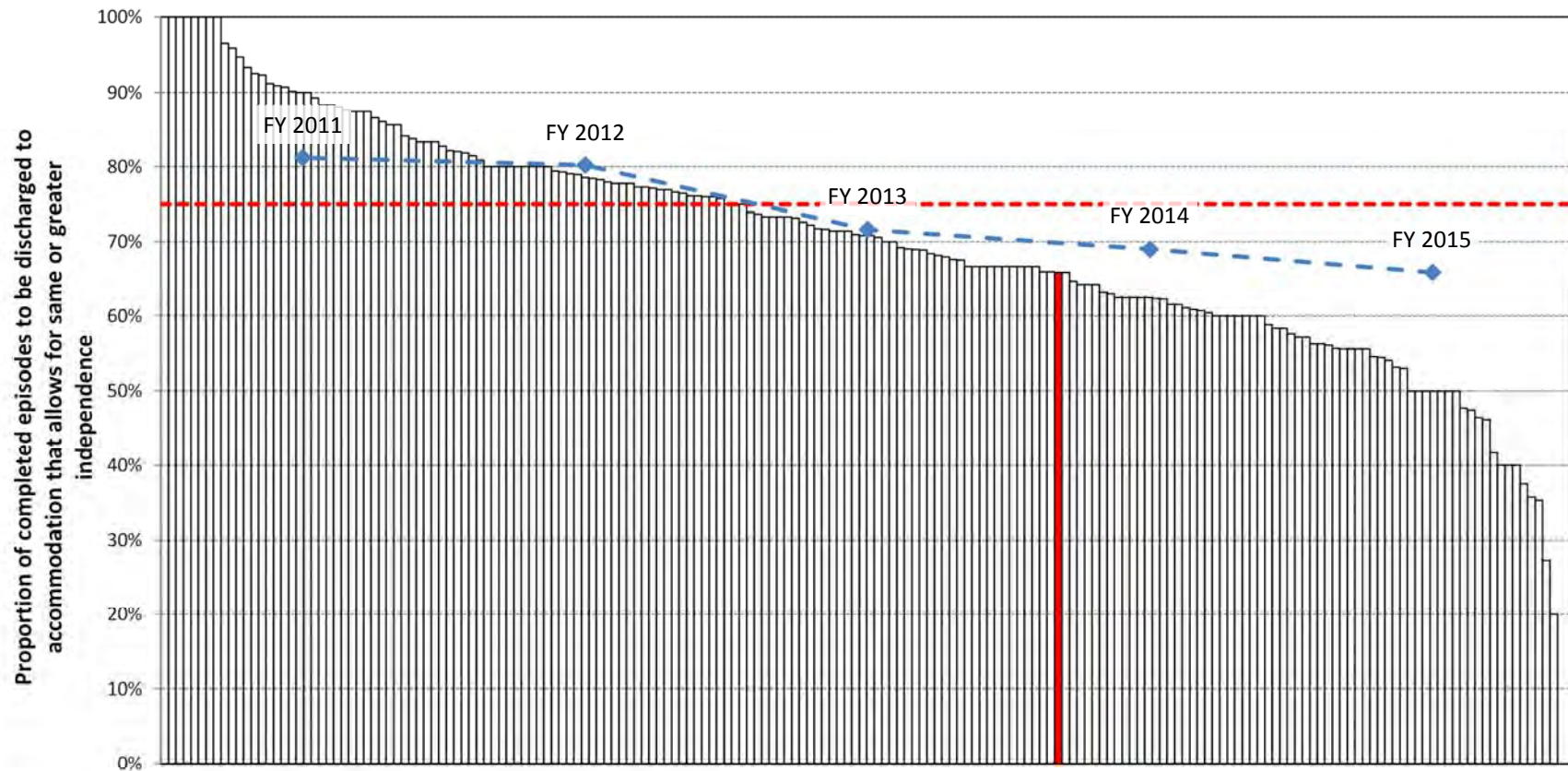
NOTE: 78/188 facilities made target; average achievement was 69.7%

Reconditioning post medical illness Target 3: Discharge Destination — AN-SNAP class 3-245 Target = 61% achieve same or greater independence

NOTE: 23/44 facilities made target; average achievement was 58.2%
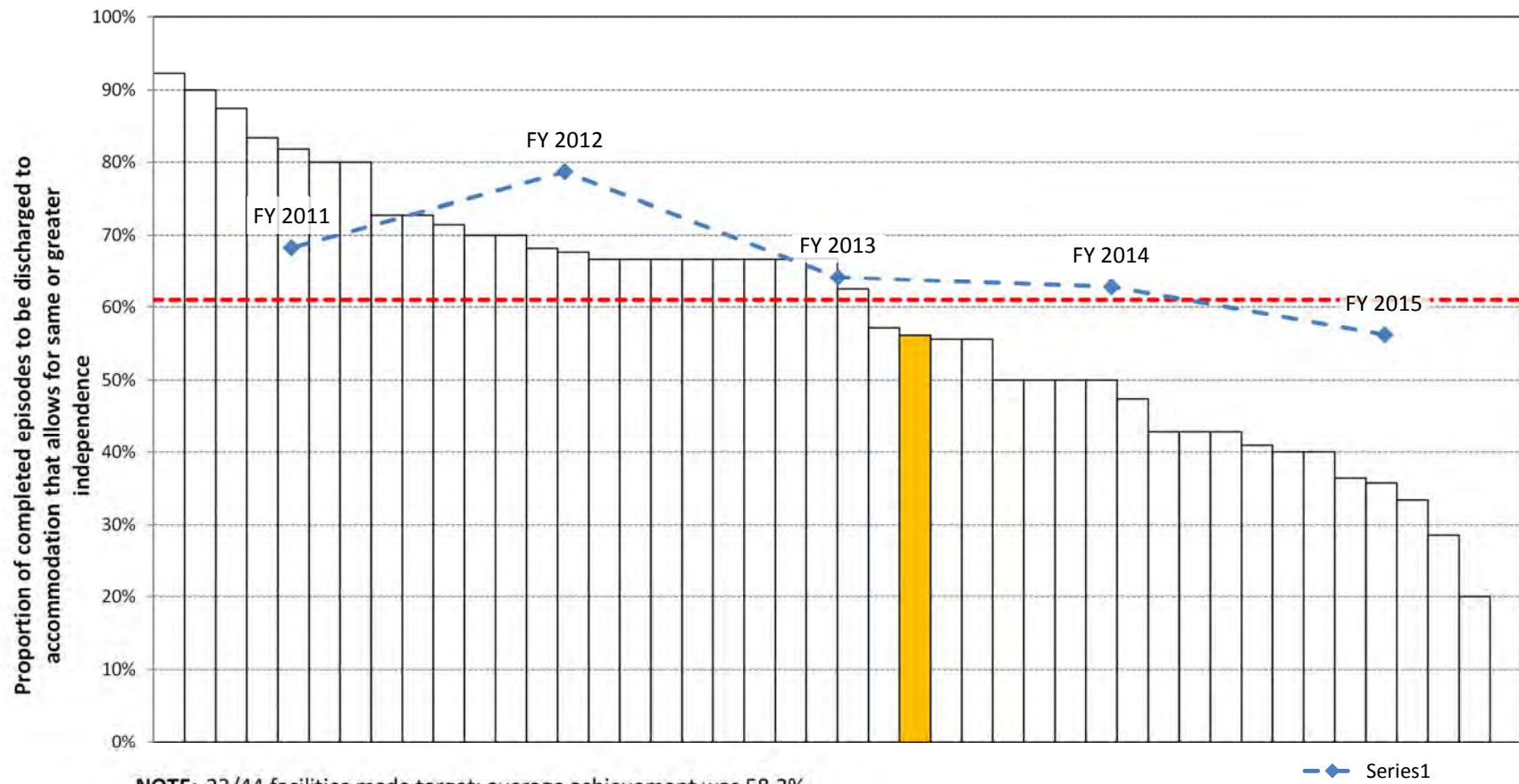
# Summary of reconditioning post cancer

**Distribution of completed episodes across facilities treating reconditioning following cancer**



**Snapshot of target outcomes at your facility:**

| AN-SNAP class | Completed episodes | Target Status | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| 3-242 | 15 | ✔ | ✔ | ✘ |
| 3-243 | 21 | ✔ | ⚠ | ✘ |
| 3-244 | 9 | ✔ | ✘ | ✔ |
| 3-245 | 0 | | | |
| All episodes | **503** | | | |

| | |
|---|---|
| ✔ | Achieved target |
| ⚠ | Within 5% of target |
| ✘ | Did not achieve target |
| — | Not reported (0 - 4 episodes) |
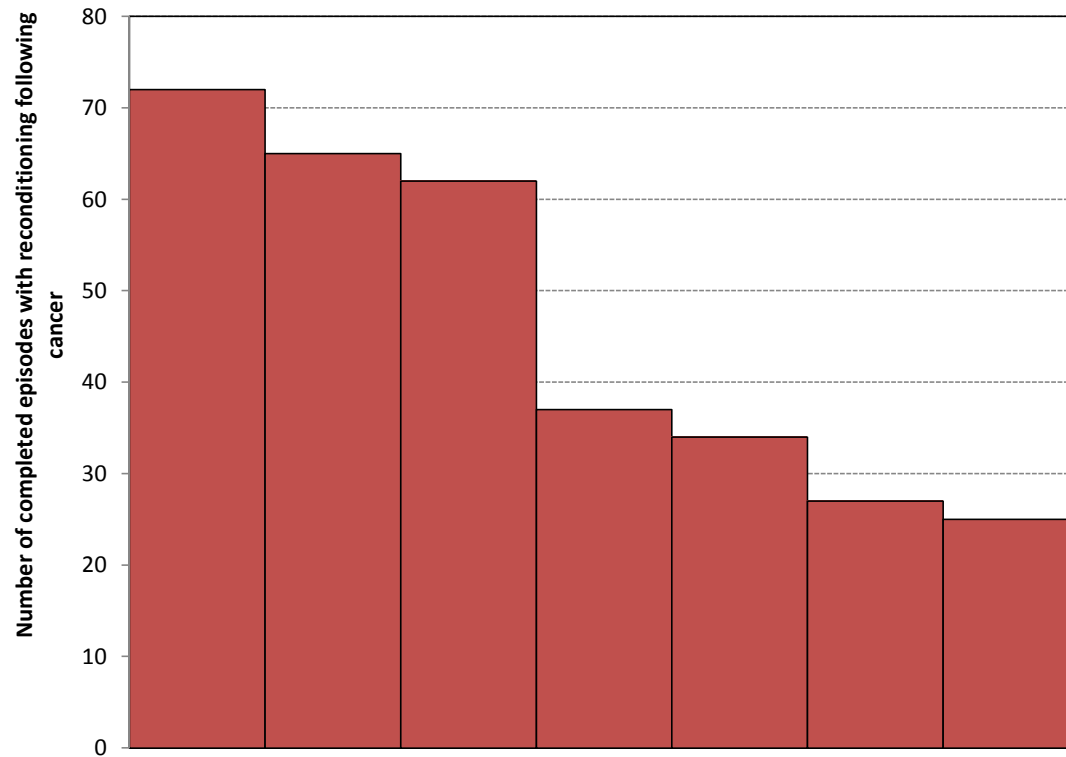
NOTE: 191 of 198 (96.5%) facilities reporting reconditioning following cancer had fewer than 20 episodes.

# Target 1: Length of stay

2009 reconditioning length of stay outcome targets
Half of all reconditioning post cancer episodes to achieve a length of stay of:

- AN-SNAP class 3-242     13 days or less
- AN-SNAP class 3-243     14 days or less
- AN-SNAP class 3-244     20 days or less
- AN-SNAP class 3-245     no target set due to insufficient episodes

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:** This target was set at the median of current data for the cohort discharged to the community. Statistically speaking setting the target as the median allows for a long tail. This means that a subset of patients can have a significantly longer LOS, which is often required clinically, without negatively impacting on the LOS report for that unit.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Reconditioning post cancer Target 1: Length of Stay - AN-SNAP class 3-242 Target = 13 days or less

**NOTE:** 8/8 facilities made target; average achievement was 71.5%
Average length of stay was 10.6 days; your facility's average was 11.4 days

**Reconditioning post cancer Target 1: Length of Stay - AN-SNAP class 3-243 Target = 14 days or less**

Proportion of completed episodes that achieve a length of stay of <=14 days

FY 2011
FY 2012
FY 2013
FY 2014
FY 2015

- - ◆ - Performance over time
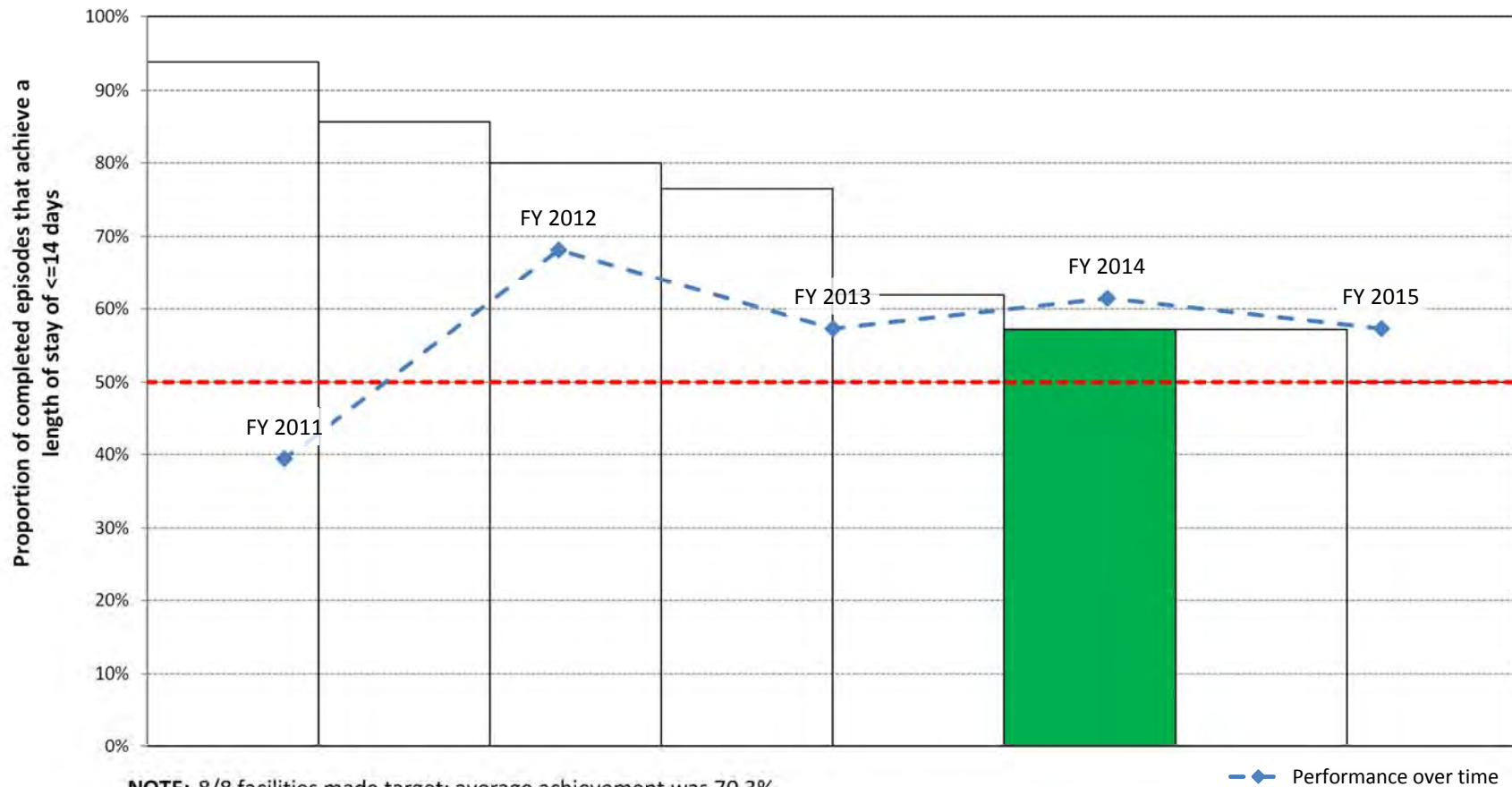
**NOTE:** 8/8 facilities made target; average achievement was 70.3%
Average length of stay was 12.6 days; your facility's average was 19.9 days

Reconditioning post cancer Target 1: Length of Stay - AN-SNAP class 3-244 Target = 20 days or less
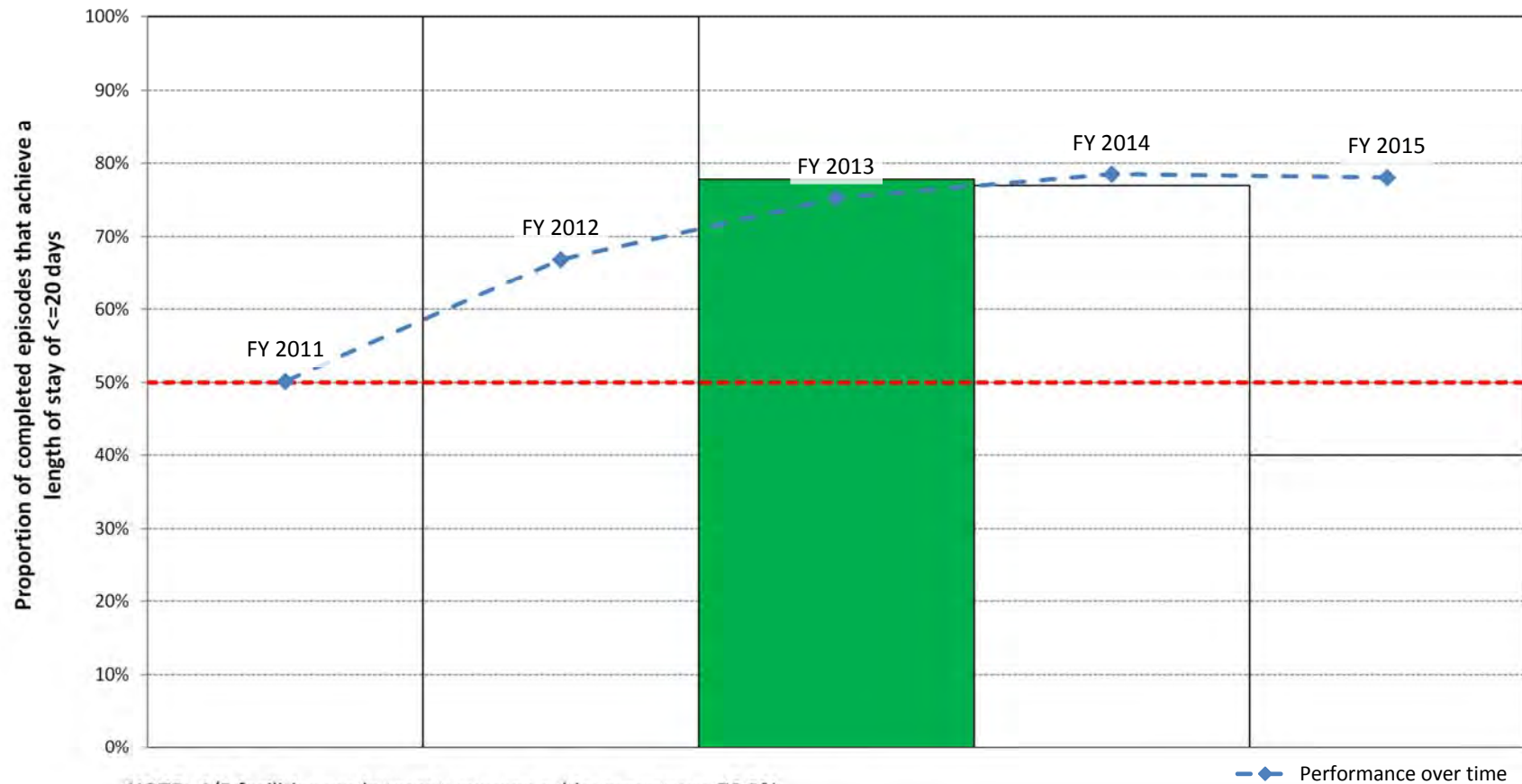
**NOTE:** 4/5 facilities made target; average achievement was 78.9%
Average length of stay was 15.7 days; your facility's average was 18.0 days

# Target 2: FIM change

**2009 reconditioning functional gains outcome targets**
**Half of all reconditioning post cancer episodes to achieve a FIM change of:**

- AN-SNAP class 3-242        8 points or more
- AN-SNAP class 3-243        19 points or more
- AN-SNAP class 3-244        23 points or more
- AN-SNAP class 3-245        no target set due to insufficient episodes

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:** This target was set at the median of 2008 data for the cohort discharged to the community. Statistically speaking setting the target as the median allows for a long tail. This means that a subset of patients can have significantly less FIM change, without negatively impacting on the FIM change report for that unit.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Reconditioning post surgery Target 2: FIM Change - AN-SNAP class 3-242 Target = 8 points or more
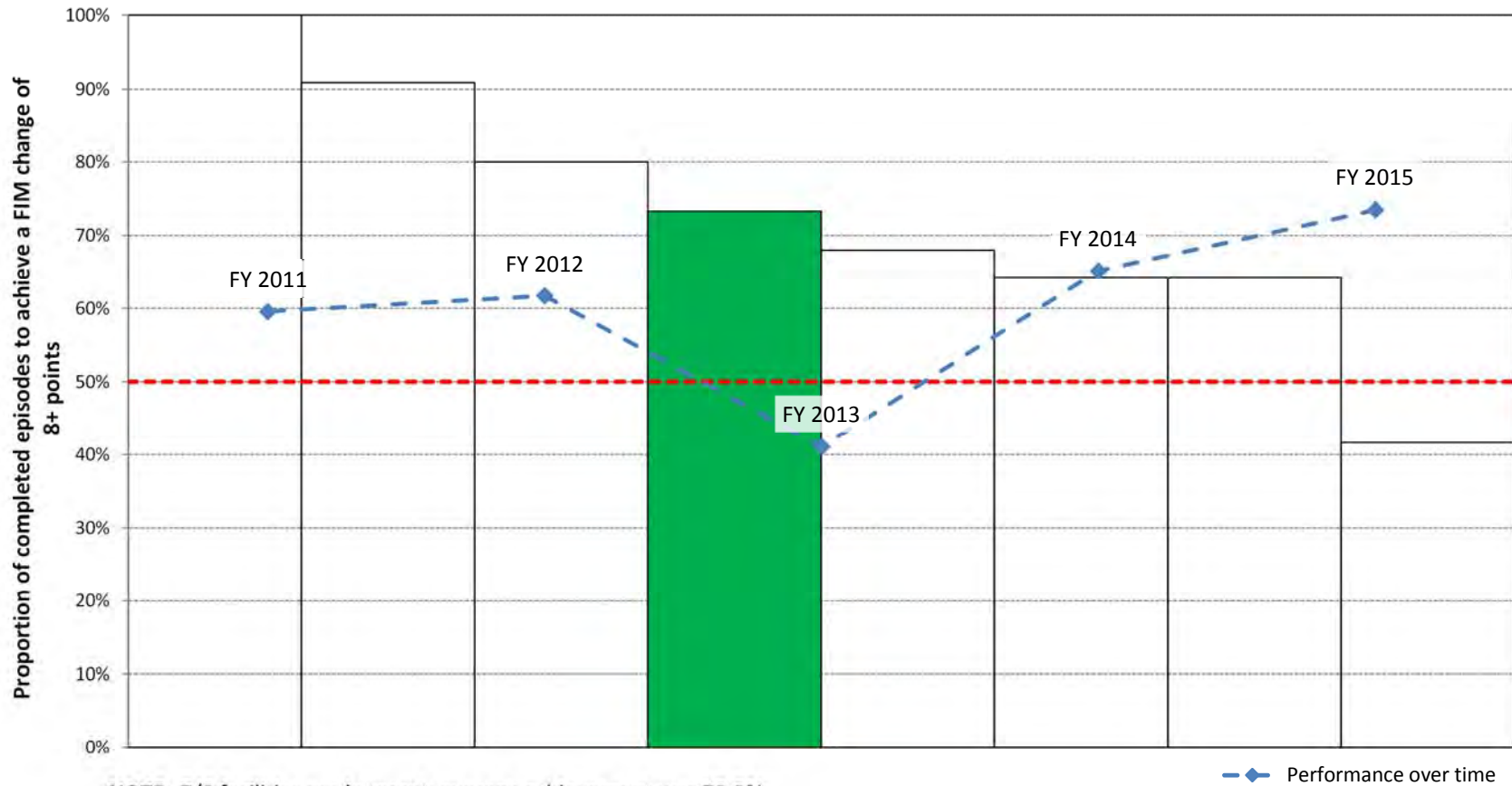
**NOTE:** 7/8 facilities made target; average achievement was 72.8%
Average FIM change was 11.4; your facility's average was 10.6

Reconditioning post cancer Target 2: FIM Change - AN-SNAP class 3-243 Target = 19 points or more
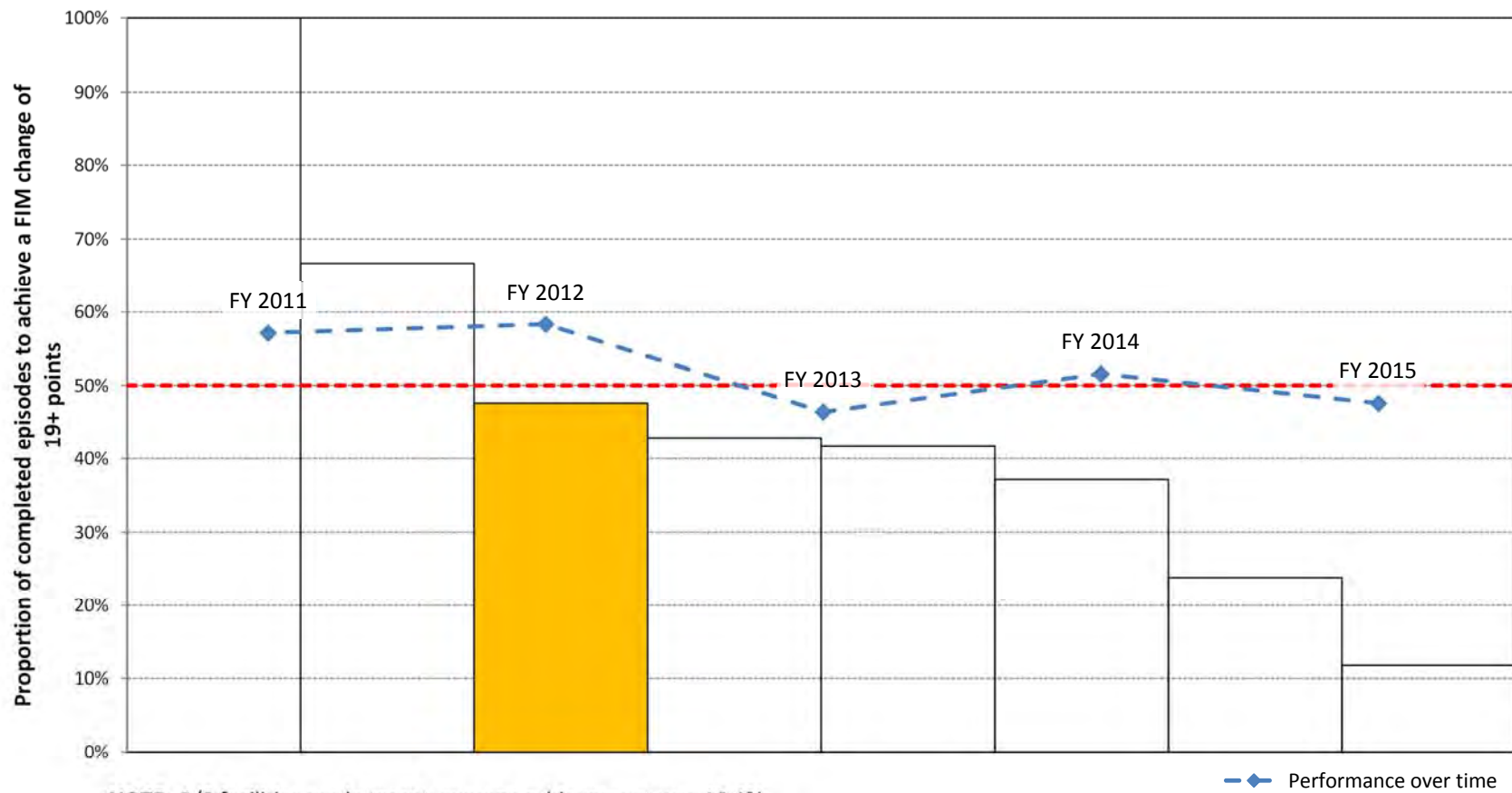
**NOTE:** 2/8 facilities made target; average achievement was 46.4%
Average FIM change was 20.4; your facility's average was 18.3

**Reconditioning post cancer Target 2: FIM Change - AN-SNAP class 3-244 Target = 23 points or more**
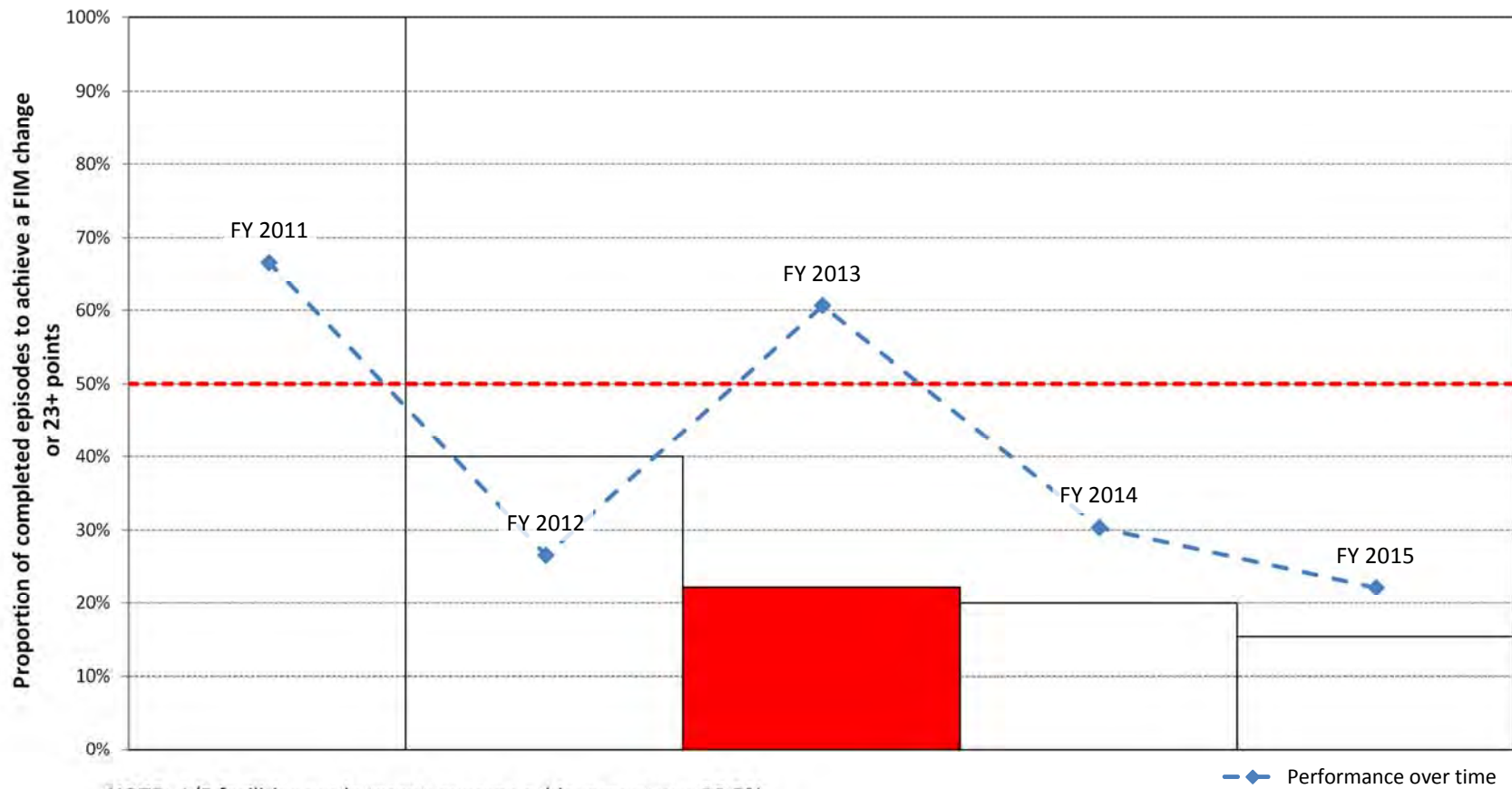


NOTE: 1/5 facilities made target; average achievement was 39.5%
Average FIM change was 19.5; your facility's average was 15.9

# Target 3: Discharge destination

2009 reconditioning discharge destination outcome targets
Proportion of reconditioning post cancer episodes discharged to accommodation that
allows for same or greater independence:
- AN-SNAP class 3-242      88%
- AN-SNAP class 3-243      84%
- AN-SNAP class 3-244      77%
- AN-SNAP class 3-245      no target set due to insufficient episodes

Data **excluded** from this analysis:
- Incomplete episodes (refer to Appendix 1 for definition)

**NOTE:** This target is set at the 2008 proportion of episodes discharged to accommodation that allows for same or greater independence.

Graphs for this target are not shown when there are less than 5 facilities with sufficient data

Reconditioning post cancer Target 3: Discharge Destination — AN-SNAP class 3-242 Target = 88% achieve same or greater independence

NOTE: 5/8 facilities made target; average achievement was 86.3%
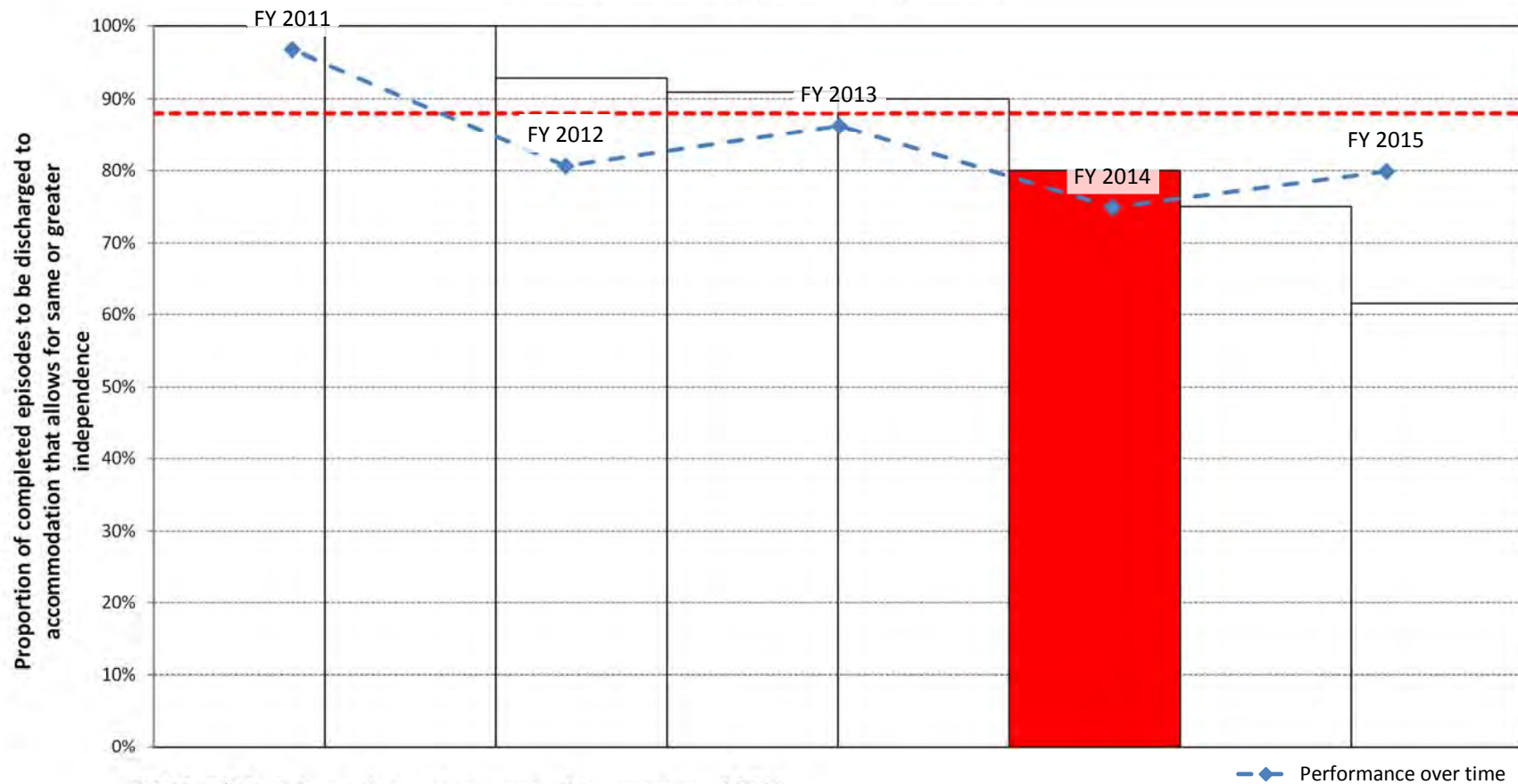
Reconditioning post cancer Target 3: Discharge Destination — AN-SNAP class 3-243 Target = 84% achieve same or greater independence
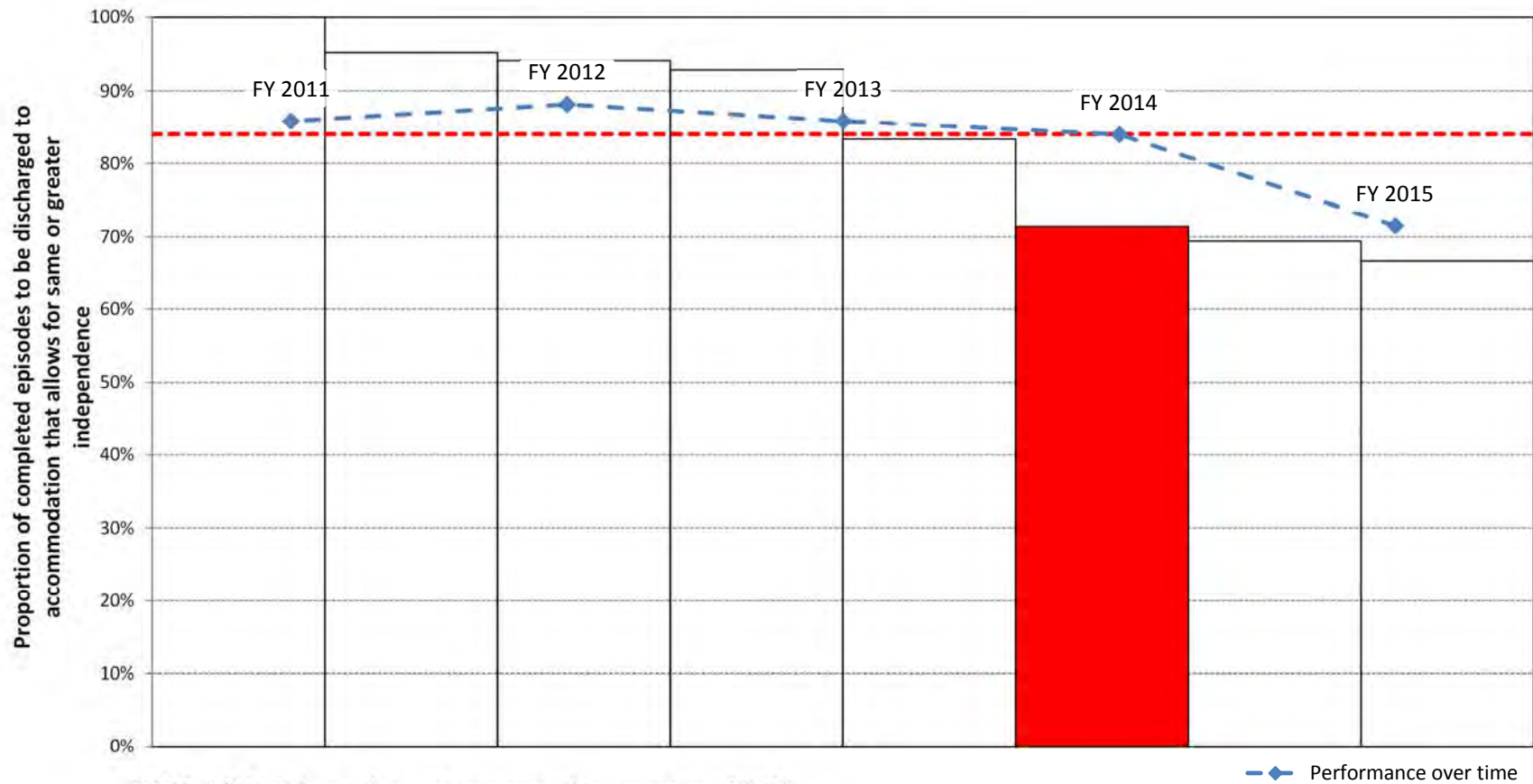
NOTE: 4/8 facilities made target; average achievement was 84.1%

Reconditioning post cancer Target 3: Discharge Destination — AN-SNAP class 3-244 Target = 77% achieve same or greater independence

**NOTE:** 4/5 facilities made target; average achievement was 88.9%

# Appendix 1: Glossary

### AN-SNAP

The Australian National Sub-Acute and Non-Acute Patient Classification (AN-SNAP) is a casemix classification for sub-acute and non-acute care provided in a variety of treatment settings. Version 3, introduced in January 2012, is used in these reports; refer to Appendix 3 for the full list of classes.

### Change in FIM score

The change in functional status from the beginning to the end of the episode is measured by the change in FIM score. This is calculated as the FIM score at the end of the episode minus the FIM score at the start of the episode. In some instances the change in total FIM score (the sum of items 1 to 18) is calculated. In other cases either the change in FIM motor score (the sum of items 1 to 13) or the change in FIM cognition score (the sum of items 14 to 18) is calculated.

A higher FIM score corresponds to higher level of function while a lower FIM score represents less functional independence. This means that a positive value for the change in FIM score indicates functional improvement of the client during the episode. A negative value for the change in FIM score indicates a decline in functional independence during the episode.

### Complete/incomplete episode

An episode is considered "complete" for the purpose of calculating outcome statistics in this report if (A) the mode of episode end was either 1 (discharged to usual accommodation) or 2 (discharged to interim accommodation) AND total FIM score at episode end was greater than 18, or (B) the mode of episode end was 7 (change of care type within sub-acute/non-acute care) AND length of stay greater than 6 days.

# Glossary ... continued

**Data Concatenation**

Increasingly some jurisdictions have introduced business rules around data collection that have resulted in episodes of rehabilitation being ended and then re-commenced a few days later. AROC definitions would record these as one episode with the period in between defined as a suspension of rehabilitation. Such business rules result in two (or more) episodes of rehabilitation being reported to AROC when only one full episode should be reported.

Whilst this happens much more frequently in some impairment groups (e.g. spinal cord injury & brain injury) it does impact all impairments to some degree. Reporting of multiple episodes impacts outcomes analysis, resulting in shorter than real length of stays and reduced FIM change being reported.

Concatenated episodes will have a revised Length of stay and FIM change (start details will be taken from the identified primary episode; end details from the identified final episode), and will also have a revised number of suspensions (being the sum across all concatenated 'submitted episodes' plus the number of breaks between 'submitted episodes') and a revised number of suspension days (being the sum across all concatenated 'submitted episodes' plus the sum of all days between 'submitted episodes').

Reported episodes to AROC are identified for concatenation based on the following rules:
- Subsequent episodes MUST have same impairment code and be from same reporting facility with same MRN and DOB
- Leading episode must be discharged into the hospital system with following episode being admitted from hospital system
- Number of days between episodes being 0-14 days for spinal and 0-7 days for all other impairments

To make it easier for AROC to identify episodes that should be concatenated in January 2014 the data item Mode of Episode Start had an additional code set value added: 9 = recommenced rehabilitation episode following suspension

# Glossary ... continued

**FIM**

The Functional Independence Measure (FIM) is used as a tool to assess the functional independence of patients at episode start and end. Details of the specific FIM instrument used in these reports can be found in "UDSmr Adult FIM Workshop – Participant Manual, Version 5.1 (Australia). Buffalo, NY 14214: State University of New York at Buffalo; 2008."

**Length of Stay**

The length of stay of an episode is the number of days on which care has been provided. It is calculated as the end date minus the start date, minus the number of leave days during the episode.

**Version 4 data set**

Version 4 (V4) of the AROC dataset was introduced on 1 July 2012. V4 is designed as a bank of data items, combinations of which are used to describe 6 possible pathways of care (see the AROC website for more information about the different pathways).

This report utilises only Pathway 3 data (inpatient direct care).

# Appendix 2: AROC impairment codes

**STROKE**

Haemorrhagic

- 1.11 Left body involvement
- 1.12 Right body involvement
- 1.13 Bilateral involvement
- 1.14 No paresis
- 1.19 Other stroke

Ischaemic

- 1.21 Left body involvement (right brain)
- 1.22 Right body involvement (left brain)
- 1.23 Bilateral involvement
- 1.24 No paresis
- 1.29 Other stroke

**BRAIN DYSFUNCTION**

Non-traumatic

- 2.11 Sub-arachnoid haemorrhage
- 2.12 Anoxic brain damage
- 2.13 Other non-traumatic brain dysfunction

Traumatic

- 2.21 Open injury
- 2.22 Closed injury

**NEUROLOGICAL CONDITIONS**

- 3.1 Multiple sclerosis
- 3.2 Parkinsonism
- 3.3 Polyneuropathy
- 3.4 Guillain-Barre
- 3.5 Cerebral palsy
- 3.8 Neuromuscular disorders
- 3.9 Other neurological conditions

**SPINAL CORD DYSFUNCTION**

Non-traumatic spinal cord dysfunction

- 4.111 Paraplegia, incomplete
- 4.112 Paraplegia, complete
- 4.1211 Quadriplegia, incomplete C1-4
- 4.1212 Quadriplegia, incomplete C5-8
- 4.1221 Quadriplegia, complete C1-4
- 4.1222 Quadriplegia, complete C5-8
- 4.13 Other non-traumatic spinal cord dysfunction

Traumatic spinal cord dysfunction

- 4.211 Paraplegia, incomplete
- 4.212 Paraplegia, complete
- 4.2211 Quadriplegia, incomplete C1-4
- 4.2212 Quadriplegia, incomplete C5-8
- 4.2221 Quadriplegia, complete C1-4
- 4.2222 Quadriplegia, complete C5-8
- 4.23 Other traumatic spinal cord dysfunction

**AMPUTATION OF LIMB**

Not resulting from trauma

- 5.11 Single upper above elbow
- 5.12 Single upper below elbow
- 5.13 Single upper above knee (includes through knee)
- 5.14 Single lower below knee
- 5.15 Double lower above knee (includes through knee)
- 5.16 Double lower above/below knee
- 5.17 Double lower below knee
- 5.18 Partial foot (single or double)
- 5.19 Other amputation not from trauma

Resulting from trauma

- 5.2 Single upper above elbow
- 5.2 Single upper below elbow
- 5.2 Single upper above knee (includes through knee)
- 5.2 Single lower below knee
- 5.3 Double lower above knee (includes through knee)
- 5.3 Double lower above/below knee
- 5.3 Double lower below knee
- 5.3 Partial foot (single or double)
- 5.3 Other amputation from trauma

# AROC impairment codes ... continued

**ARTHRITIS**

- 6.1 Rheumatoid arthritis
- 6.2 Osteoarthritis
- 6.9 Other arthritis

**PAIN SYNDROMES**

- 7.1 Neck pain
- 7.2 Back pain
- 7.3 Extremity pain
- 7.4 Headache (includes migraine)
- 7.5 Multi-site pain
- 7.9 Other pain (includes abdo/chest wall)

**ORTHOPAEDIC CONDITIONS**

Fractures (includes dislocations)

- 8.111 Fracture of the hip, unilateral (including #NOF)
- 8.112 Fracture of the hip, bilateral (including #NOF)
- 8.12 Fracture of shaft of femur
- 8.13 Fracture of pelvis
- 8.141 Fracture of knee
- 8.142 Fracture of lower leg, ankle, foot
- 8.15 Fracture of upper limb
- 8.16 Fracture of spine
- 8.17 Fracture of multiple sites
- 8.19 Other orthopaedic fracture

Post Orthopaedic Surgery

- 8.211 Unilateral hip replacement
- 8.212 Bilateral hip replacement
- 8.221 Unilateral knee replacement
- 8.222 Bilateral knee replacement
- 8.231 Knee and hip replacement, same side
- 8.232 Knee and hip replacement, different sides
- 8.24 Shoulder replacement
- 8.25 Post spinal surgery
- 8.26 Other orthopaedic surgery

Soft Tissue Injury

- 8.3 Soft tissue injury

**CARDIAC**

- 9.1 Following recent onset of new cardiac impairment
- 9.2 Chronic cardiac insufficiency
- 9.3 Heart and heart/lung transplant

**PULMONARY**

- 10.1 Chronic obstructive pulmonary disease
- 10.2 Lung transplant
- 10.9 Other pulmonary

**BURNS**

- 11 Burns

**CONGENITAL DEFORMITIES**

- 12.1 Spina bifida
- 12.9 Other congenital deformity

**OTHER DISABLING IMPAIRMENTS**

- 13.1 Lymphoedema
- 13.3 Conversion disorder
- 13.9 Other disabling impairments that can't be classified into a specific group

**MAJOR MULTIPLE TRAUMA**

- 14.1 Brain + spinal cord injury
- 14.2 Brain + multiple fracture/amputation
- 14.3 Spinal cord + multi fracture/amputation
- 14.9 Other multiple trauma

**DEVELOPMENTAL DISABILITIES**

- 15.1 Developmental disabilities (excludes cerebral palsy)

**RE-CONDITIONING**

- 16.1 Re-conditioning following surgery
- 16.2 Re-conditioning following medical illness
- 16.3 Cancer rehabilitation

# Appendix 3: AN-SNAP V3 overnight rehabilitation classes

| CLASS | DESCRIPTION OF AN-SNAP CLASS |
|---|---|
| 3-201 | Rehabilitation, admit for assessment only |
| 3-202 | Brain, Neurological, Spinal & Major Multiple Trauma, FIM motor 13 |
| 3-203 | All other impairments, FIM motor 13 |
| 3-204 | Stroke, FM motor 63-91, FIM cognition 20-35 |
| 3-205 | Stroke, FM motor 63-91, FIM cognition 5-19 |
| 3-206 | Stroke, FM motor 47-62, FIM cognition 16-35 |
| 3-207 | Stroke, FM motor 47-62, FIM cognition 5-15 |
| 3-208 | Stroke, FIM motor 14-46, age >= 75 |
| 3-209 | Stroke, FIM motor 14-46, age <= 75 |
| 3-210 | Brain Dysfunction, FIM motor 56-91, FIM cognition 32-35 |
| 3-211 | Brain Dysfunction, FIM motor 56-91, FIM cognition 24-31 |
| 3-212 | Brain Dysfunction, FIM motor 56-91, FIM cognition 20-23 |
| 3-213 | Brain Dysfunction, FIM motor 56-91, FIM cognition 5-19 |
| 3-214 | Brain Dysfunction, FIM motor 24-55 |
| 3-215 | Brain Dysfunction, FIM motor 14-23 |
| 3-216 | Neurological, FIM motor 63-91 |
| 3-217 | Neurological, FIM motor 49-62 |
| 3-218 | Neurological, FIM motor 18-48 |
| 3-219 | Neurological, FIM motor 14-17 |
| 3-220 | Spinal Cord Dysfunction, FIM motor 81-91 |
| 3-221 | Spinal Cord Dysfunction, FIM motor 47-80 |
| 3-222 | Spinal Cord Dysfunction, FIM motor 14-46, age>=33 |
| 3-223 | Spinal Cord Dysfunction, FIM motor 14-46, age<=32 |

| CLASS | DESCRIPTION OF AN-SNAP CLASS |
|---|---|
| 3-224 | Amputation of limb, FIM motor 72-91 |
| 3-225 | Amputation of limb, FIM motor 14-71 |
| 3-226 | Pain syndromes |
| 3-227 | Orthopaedic conditions, fractures, FIM motor 58-91 |
| 3-228 | Orthopaedic conditions, fractures, FIM motor 48-57 |
| 3-229 | Orthopaedic conditions, fractures, FIM motor 14-47, FIM cognition 19-35 |
| 3-230 | Orthopaedic conditions, fractures, FIM motor 14-47, FIM cognition 5-18 |
| 3-231 | Orthopaedic conditions, replacement, FIM motor 72-91 |
| 3-232 | Orthopaedic conditions, replacement, FIM motor 49-71 |
| 3-233 | Orthopaedic conditions, replacement, FIM motor 14-48 |
| 3-234 | Orthopaedic conditions, all other, FIM motor 68-91 |
| 3-235 | Orthopaedic conditions, all other, FIM motor 53-67 |
| 3-236 | Orthopaedic conditions, all other, FIM motor 14-52 |
| 3-237 | Cardiac |
| 3-238 | Major Multiple Trauma, FIM total 101-126 |
| 3-239 | Major Multiple Trauma, FIM total 74-100 or Burns |
| 3-240 | Major Multiple Trauma, FIM total 44-73 |
| 3-241 | Major Multiple Trauma, FIM total 19-43 |
| 3-242 | All other impairments, FIM motor 67-91 |
| 3-243 | All other impairments, FIM motor 53-66 |
| 3-244 | All other impairments, FIM motor 25-52 |
| 3-245 | All other impairments, FIM motor 14-24 |

**NOTE:** AN-SNAP classes for inpatient rehabilitation have not changed between V2 and V3

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## Disclaimer

AROC has made every effort to ensure that the data used in these reports are accurate. Data submitted to AROC are checked for anomalies and facilities are asked to re-submit data prior to the production of AROC reports. We have provided general guidelines on the interpretation of the information reported but would advise readers to use their professional judgement in considering all information contained in this report.

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