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Integrating benchmarking into your rehabilitation processes: AROC data and your everyday decisions

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Abstract

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Integrating Benchmarking Into Your Rehabilitation Processes

AROC Data and Your Everyday Decisions

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A short history of life in rehabilitation during the 80's B. A (Before AROC ...)

- No way of classifying rehabilitation outside of acute system
  - Diagnostic Related Groups (DRG's), have 3 rehabilitation codes
  - ICD-10, 1 code for rehabilitation
- Personally remember literature (mostly out of US) stating Rehab was very expensive and made little or no difference

How did we work without national benchmark data ?

- We used our "gut feelings" to estimate
- We spent an inordinate amount of time counting at our desks
- We spent time trying to compare apples and oranges
- We sought out or developed groups to be included in and tried to agree on what we wanted to collect

AROC – At the new innovation campus in Wollongong….and my office on the Gold Coast

AROC as sector advocate

- AROC well positioned to promote the importance of rehabilitation in the continuum of care
- Well provided rehabilitation is the 'glue' that sticks together acute care and community services
- Well provided rehabilitation results in people with greater functional ability and more independence and thus:
  - lowers the incidence of readmission back to acute care
  - minimises the requirement (and cost) of community services required

What is benchmarking?

- **Benchmarking** is the process of comparing one's own processes and performance to industry bests...
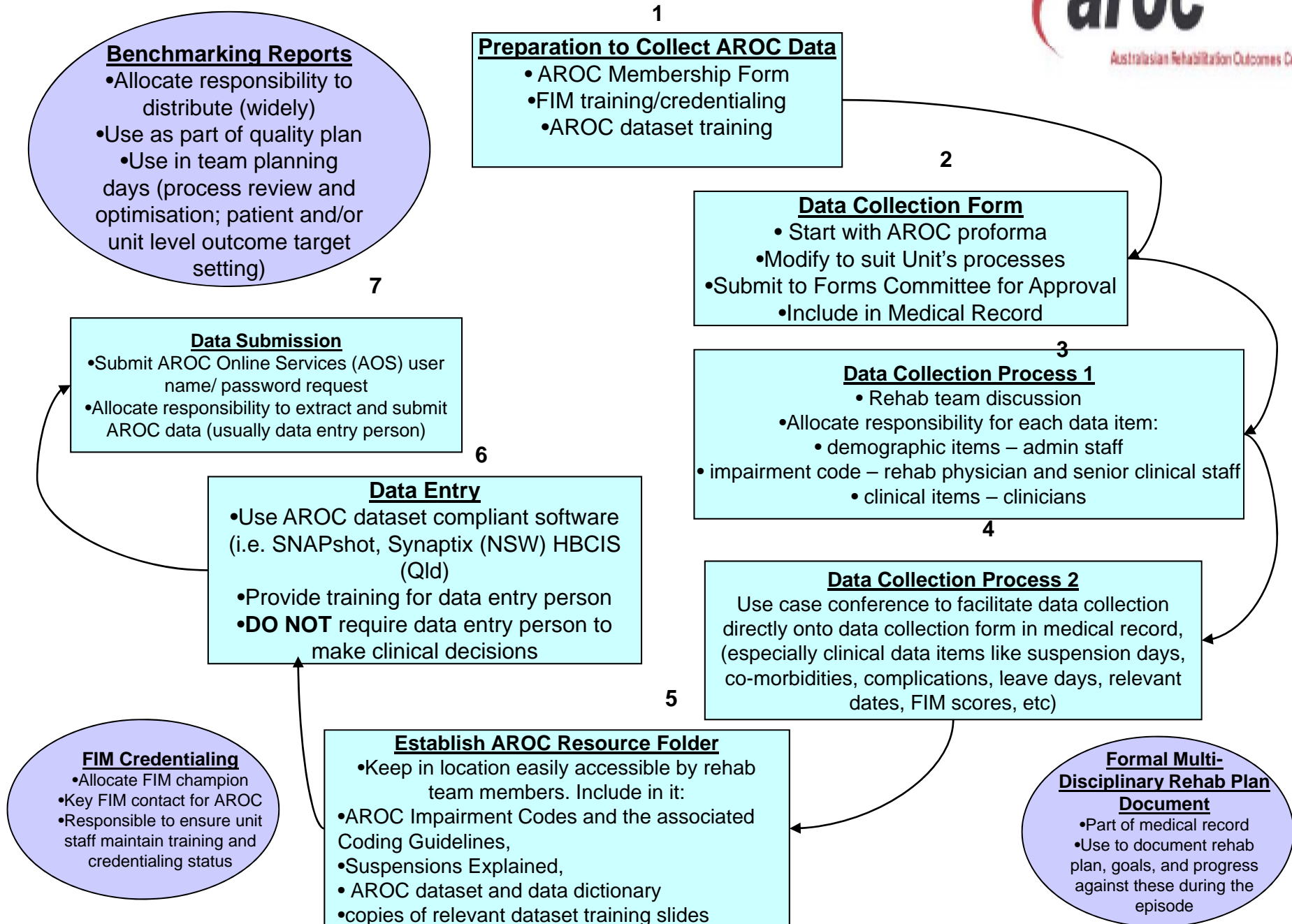
Benchmarking Outcomes in Rehabilitation

Be clear about the relationships within the data.

Rehabilitation is complex and can not be measured by any single measure.

It is a combination of elements that will tell the full story:

- Admission FIM
- FIM change (Discharge FIM- Admission FIM)
- LOS
- Discharge destination
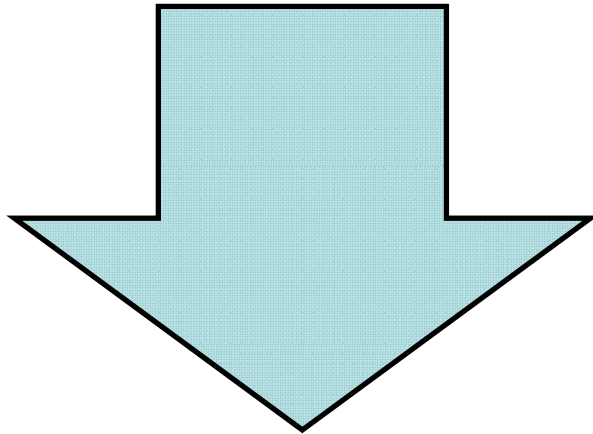- Age and co-morbidities also add context

Recommended AROC Data Collection Process

1

Preparation to Collect AROC Data
- AROC Membership Form
- FIM training/credentialing
- AROC dataset training

2

Data Collection Form
- Start with AROC proforma
- Modify to suit Unit's processes
- Submit to Forms Committee for Approval
- Include in Medical Record

3

Data Collection Process 1
- Rehab team discussion
- Allocate responsibility for each data item:
- demographic items – admin staff
- impairment code – rehab physician and senior clinical staff
- clinical items – clinicians

4

Data Collection Process 2
Use case conference to facilitate data collection directly onto data collection form in medical record, (especially clinical data items like suspension days, co-morbidities, complications, leave days, relevant dates, FIM scores, etc)

5

Establish AROC Resource Folder
- Keep in location easily accessible by rehab team members. Include in it:
- AROC Impairment Codes and the associated Coding Guidelines,
- Suspensions Explained,
- AROC dataset and data dictionary
- copies of relevant dataset training slides

Formal Multi-Disciplinary Rehab Plan Document
- Part of medical record
- Use to document rehab plan, goals, and progress against these during the episode

6

Data Entry
- Use AROC dataset compliant software (i.e. SNAPshot, Synaptix (NSW) HBCIS (Qld)
- Provide training for data entry person
- **DO NOT** require data entry person to make clinical decisions

FIM Credentialing
- Allocate FIM champion
- Key FIM contact for AROC
- Responsible to ensure unit staff maintain training and credentialing status

7

Data Submission
- Submit AROC Online Services (AOS) user name/ password request
- Allocate responsibility to extract and submit AROC data (usually data entry person)

Benchmarking Reports
- Allocate responsibility to distribute (widely)
- Use as part of quality plan
- Use in team planning days (process review and optimisation; patient and/or unit level outcome target setting)
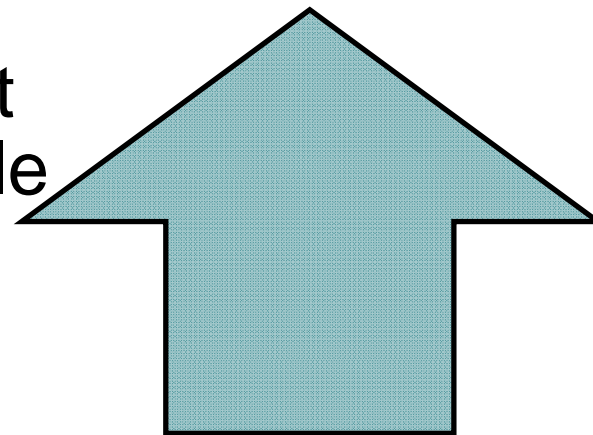
How does your team operate?

We have always done things this way, it works well

We do things according to best practice standards, and available industry standards ...

it causes us to challenge ourselves

There are two main sources to access AROC data to benchmark with...

Facility reports –

- – 120 page report
- – provided every six months
- – "Rolling report" as it uses the previous 12 months data
- – Reports include your own facility data, benchmark group and national data

Website –

- – Australian and NZ benchmark and national data
- – Refreshed with new data every six months using the previous twelve months data
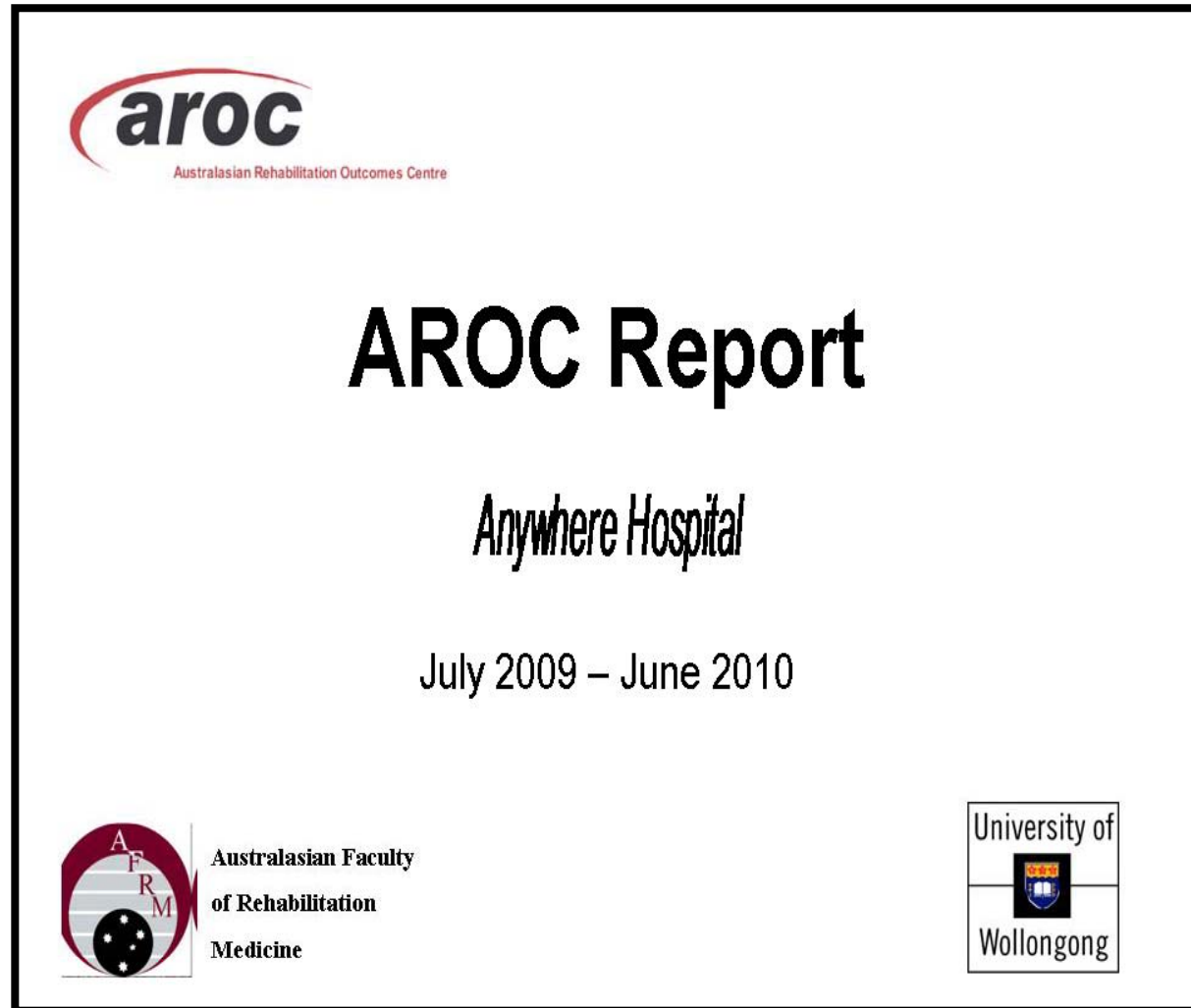
Benchmarking Reports

- AROC provides analysis of each individual member facilities data for that member, and also compares that data to:
    - themselves over time (calendar year reports only)
    - analysis of the overall sector (public or private in Aust and <65 or >65 in NZ)
    - the national data overall
    - industry developed impairment specific target outcomes

Benchmarking reports

- AROC Benchmarking Reports are distributed to facility members electronically twice yearly

Become familiar with the report

- Know what your benchmark groups are.
- Good summary page for your facility
- Gives top three impairments showing "your core business"
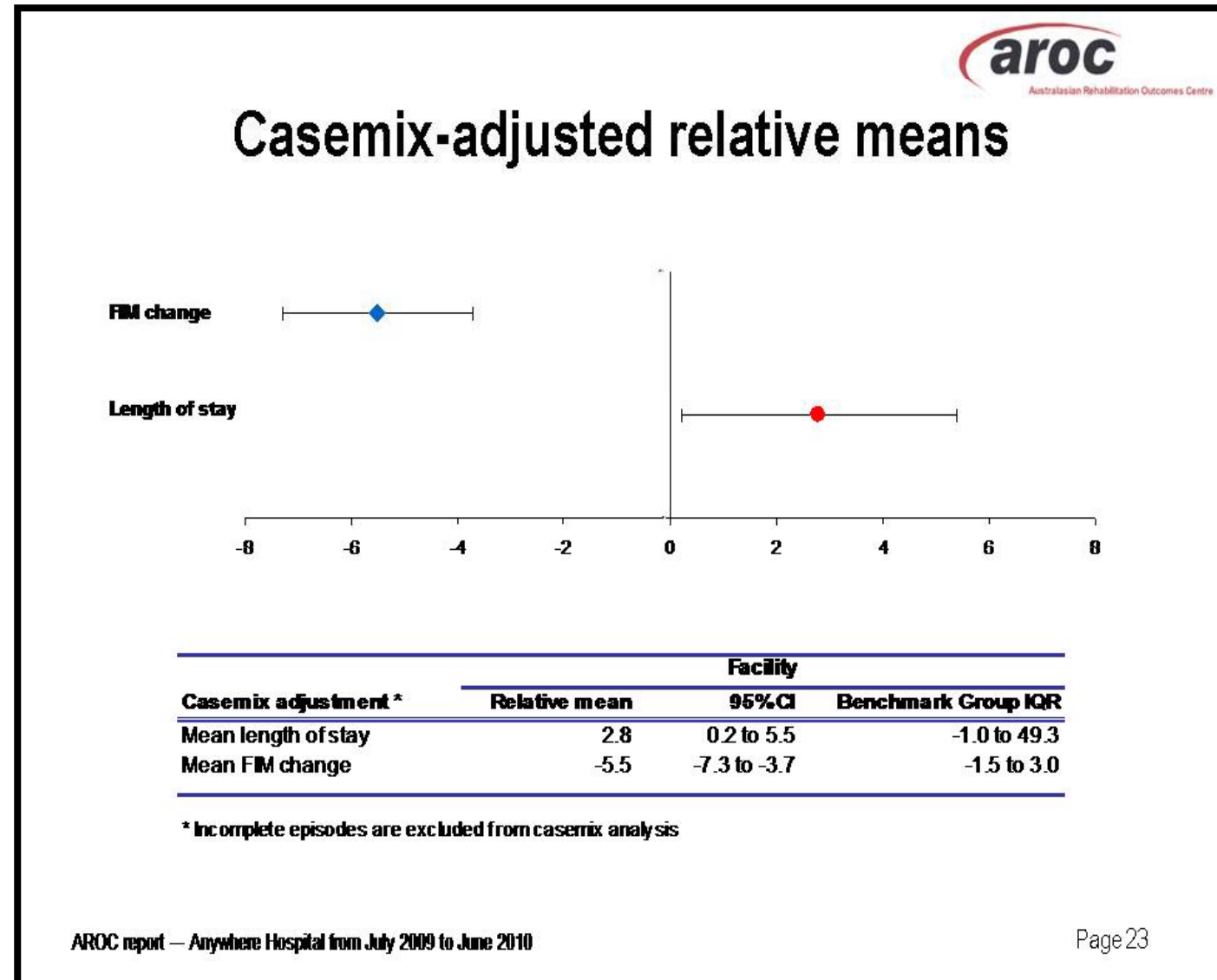

Facility summary:

Anywhere Hospital

- Reporting period is July 2009 to June 2010
- Benchmark Group is Older than 65 years data (74.8% of all episodes)
- 222 episodes submitted covering the period Jul 2009 to Jun 2010
    - 191 of these episodes (or 86.0%) were considered complete*
- Data quality score for the reporting period is 93.5%
- Impairments with the largest volume are:
    - Orthopaedic fractures
    - Re-conditioning / restorative
    - Stroke

*The definition of a complete episode can be found in the glossary at the end of this report

AROC report — Anywhere Hospital from July 2009 to June 2010
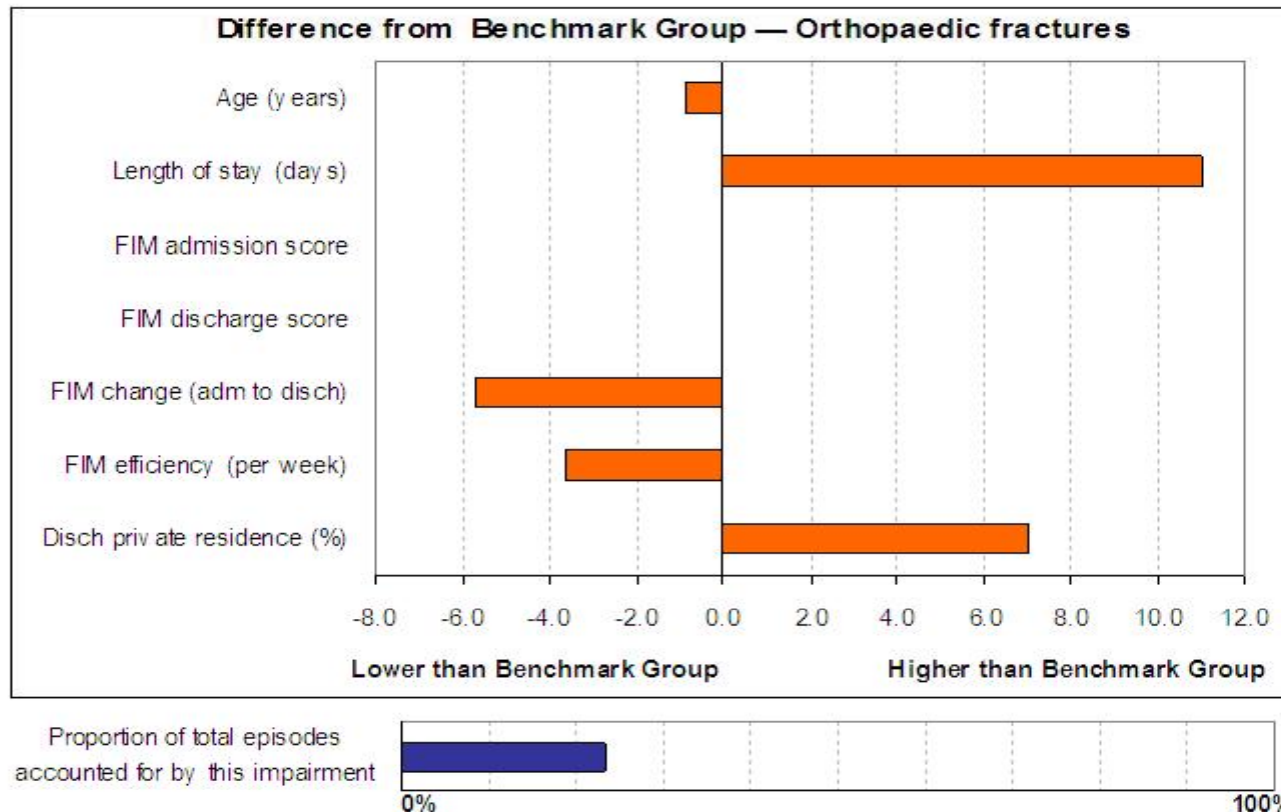
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At a glance…

- This is the quick reference for how you are doing overall.

Each facility report has detail about top three "buckets" of patients

Outcome measures — Orthopaedic fractures

Difference from Benchmark Group — Orthopaedic fractures

(horizontal bar chart with categories:)
- Age (years)
- Length of stay (days)
- FIM admission score
- FIM discharge score
- FIM change (adm to disch)
- FIM efficiency (per week)
- Disch private residence (%)

x-axis: -8.0 -6.0 -4.0 -2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0

Lower than Benchmark Group   Higher than Benchmark Group

Proportion of total episodes accounted for by this impairment
0%   100%

Impairment Specific Targets

#NOF targets

Target 1: Time Between Onset and Rehabilitation   % #NOF episodes to be admitted for rehabilitation within 7 days post surgery....

AN-SNAP class*	Target	Episodes	Your clients	Benchmark group	National
S2-227	80%	8	50.0%	59.6%	55.6%
S2-228	80%	2	50.0%	47.2%	46.1%
S2-229	80%	9	0.0%	61.4%	59.4%
S2-230	80%	0	N/A	50.9%	50.0%

Footnote: denominator is all episodes recording onset

Target 2: Length of Stay   Half of all completed #NOF episodes to achieve a length of stay of....

AN-SNAP class*	Target	Episodes	Your clients	Benchmark group	National
S2-227	14 days or less	7	14.3%	67.8%	67.4%
S2-228	18 days or less	2	0.0%	60.0%	59.7%
S2-229	21 days or less	9	0.0%	47.7%	48.1%
S2-230	19 days or less	0	N/A	60.9%	61.7%

Target 3: FIM Change   Half of all completed #NOF episodes to achieve a FIM change of....

AN-SNAP class*	Target	Episodes	Your clients	Benchmark group	National
S2-227	16 points or more	7	42.9%	34.1%	32.7%
S2-228	25 points or more	2	50.0%	33.8%	32.0%
S2-229	29 points or more	9	44.4%	50.0%	50.5%
S2-230	19 points or more	0	N/A	32.7%	32.1%

Target 4: Discharge Destination   %completed #NOF episodes to be discharged to accommodation that allows for same or greater independence....

AN-SNAP class*	Target	Episodes	Your clients	Benchmark group	National
S2-227	90%	7	57.1%	69.0%	70.5%
S2-228	75%	2	50.0%	67.7%	68.7%
S2-229	60%	9	66.7%	60.8%	61.4%
S2-230	45%	0	N/A	45.7%	46.8%

* The list of AN-SNAP v2 classes can be found in Appendix 2b at the end of this report

AROC website address: ahsri.uow.edu.au/aroc

Benchmarks by impairment

Length of stay and functional improvement of completed episodes of rehabilitation in Australia, by impairment and sector, AROC financial year 2010

Impairment group	Public Sector Benchmarks				Private Sector Benchmarks				National data benchmarks			
		Length of stay	FIM change	FIM gain		Length of stay	FIM change	FIM gain		Length of stay	FIM change	FIM gain
	No.	Mean (95%CI)	Mean (95%CI)	per week	No.	Mean (95%CI)	Mean (95%CI)	per week	No.	Mean (95%CI)	Mean (95%CI)	per week
Stroke	3,689	33.9 (33.0–34.9)	23.8 (23.3–24.4)	4.9	1,511	22.3 (21.5–23.1)	18.9 (18.2–19.5)	5.9	5,200	30.6 (29.8–31.3)	22.4 (21.9–22.9)	5.1
Brain	1,089	35.3 (32.7–37.9)	24.7 (23.4–25.9)	4.9	623	21.1 (19.5–22.8)	19.9 (18.7–21.2)	6.6	1,712	30.1 (28.3–31.9)	22.9 (22.0–23.9)	5.3
Neurological	1,034	24.6 (23.2–26.1)	18.3 (17.3–19.2)	5.2	1,123	16.3 (15.6–16.9)	13.1 (12.4–13.7)	5.6	2,157	20.3 (19.5–21.1)	15.6 (15.0–16.1)	5.4
Spinal cord	476	69.2 (62.8–75.7)	24.0 (22.3–25.6)	2.4	143	23.9 (19.9–27.8)	15.8 (13.9–17.8)	4.6	619	58.8 (53.5–64.0)	22.1 (20.7–23.5)	2.6
Amputee	689	40.3 (38.0–42.6)	16.0 (15.0–16.9)	2.8	140	31.0 (26.6–35.3)	15.3 (13.4–17.2)	3.5	829	38.7 (36.7–40.8)	15.9 (15.0–16.7)	2.9
Arthritis	88	22.3 (18.6–25.9)	17.9 (15.4–20.4)	5.6	538	12.3 (11.8–12.8)	11.9 (11.3–12.4)	6.7	626	13.7 (13.0–14.4)	12.7 (12.1–13.3)	6.5
Pain	655	18.8 (17.7–20.0)	15.3 (14.4–16.2)	5.7	2,057	14.7 (14.3–15.0)	12.8 (12.3–13.2)	6.1	2,712	15.7 (15.3–16.1)	13.4 (13.0–13.8)	6.0
Ortho - fractures	4,573	25.6 (25.1–26.1)	21.1 (20.7–21.5)	5.8	5,829	21.1 (20.7–21.4)	19.2 (18.9–19.5)	6.4	10,402	23.1 (22.8–23.4)	20.0 (19.8–20.3)	6.1
Ortho - replacements	2,485	16.8 (16.4–17.2)	19.3 (18.8–19.7)	8.0	13,669	11.9 (11.8–12.0)	15.6 (15.5–15.8)	9.2	16,154	12.6 (12.5–12.8)	16.2 (16.1–16.3)	9.0
Ortho - others	573	21.5 (20.2–22.9)	17.8 (16.8–18.8)	5.8	3,895	12.8 (12.6–13.1)	16.3 (16.0–16.6)	8.9	4,468	14.0 (13.6–14.3)	16.5 (16.2–16.8)	8.3
Cardiac	486	19.5 (17.9–21.1)	18.0 (16.9–19.2)	6.5	1,713	13.0 (12.7–13.3)	16.4 (16.0–16.9)	8.8	2,199	14.5 (14.0–14.9)	16.8 (16.4–17.2)	8.1
Pulmonary	380	19.8 (18.5–21.2)	18.0 (16.7–19.3)	6.4	829	13.5 (13.0–13.9)	15.3 (14.7–15.9)	8.0	1,209	15.5 (14.9–16.0)	16.1 (15.5–16.7)	7.3
Burns	43	29.5 (22.3–36.6)	22.9 (17.9–27.9)	5.4	5	17.6 (1.2–34.0)	13.2 (11.6–14.8)	5.3	48	28.3 (21.6–34.9)	21.9 (17.3–26.5)	5.4
Congenital deformity	11	52.5 (16.7–88.2)	20.3 (9.1–31.5)	2.7	3	n.a.	n.a.	n.a.	14	43.9 (14.7–73.2)	18.2 (9.2–27.2)	2.9
Other disabling imp.	361	21.7 (20.0–23.3)	18.3 (17.0–19.7)	5.9	185	19.1 (17.4–20.8)	12.5 (11.2–13.8)	4.6	546	20.8 (19.6–22.0)	16.4 (15.3–17.4)	5.5
Multiple trauma	132	46.7 (36.7–56.7)	31.3 (27.8–34.8)	4.7	384	41.4 (37.7–45.1)	35.8 (33.5–38.1)	6.0	516	42.8 (39.0–46.5)	34.6 (32.7–36.6)	5.7
Developmental disabilities	8	31.8 (0.4–63.1)	12.5 (2.0–23.0)	2.8	2	n.a.	n.a.	n.a.	10	27.3 (1.9–52.7)	11.8 (3.4–20.2)	3.0
Re-conditioning	4,479	22.4 (21.8–23.0)	18.6 (18.2–19.0)	5.8	8,456	15.7 (15.5–15.9)	15.4 (15.2–15.6)	6.8	12,935	18.0 (17.8–18.3)	16.5 (16.3–16.7)	6.4
Missing or excluded	4,405				3,688				8,093			
All episodes	25,656	26.8 (26.4–27.1)	20.4 (20.2–20.6)	5.3	44,793	15.4 (15.2–15.5)	16.3 (16.2–16.4)	7.4	70,449	19.2 (19.1–19.4)	17.7 (17.6–17.8)	6.4

NOTE: Where the number of completed episodes (separations) < 5 details are not given for reasons of privacy and accuracy.

Benchmarks by AN-SNAP class

Length of stay and functional improvement of completed episodes of rehabilitation in Australia, by AN-SNAP class and sector, AROC financial year 2010 (1/2)

AN-SNAP class	Public Sector Benchmarks				Private Sector Benchmarks				National data benchmarks			
		Length of stay	FIM change	FIM gain		Length of stay	FIM change	FIM gain		Length of stay	FIM change	FIM gain
	No.	Mean (95%CI)	Mean (95%CI)	per week	No.	Mean (95%CI)	Mean (95%CI)	per week	No.	Mean (95%CI)	Mean (95%CI)	per week
S2-201	44	18.8 (6.8–30.8)	11.7 (7.0–16.5)	4.4	51	9.5 (5.4–13.6)	9.4 (6.6–12.3)	7.0	95	13.7 (7.8–19.6)	10.5 (7.8–13.1)	5.3
S2-202	177	135.5 (115.5–155.5)	32.5 (26.7–38.3)	1.7	53	90.3 (72.6–108.1)	63.3 (52.3–74.3)	4.9	230	124.3 (108.4–140.3)	40.1 (34.6–45.7)	2.3
S2-203	167	52.9 (42.9–63.0)	24.1 (19.2–29.0)	3.2	50	31.1 (22.2–39.9)	39.7 (26.7–52.7)	8.9	217	48.2 (40.0–56.4)	27.5 (22.7–32.4)	4.0
S2-204	1,140	18.2 (17.4–19.1)	12.3 (11.8–12.8)	4.7	634	14.0 (13.4–14.6)	12.0 (11.4–12.5)	6.0	1,774	16.7 (16.1–17.3)	12.2 (11.8–12.6)	5.1
S2-205	159	32.1 (26.9–37.2)	16.9 (15.1–18.8)	3.7	50	19.8 (17.2–22.5)	16.5 (13.7–19.4)	5.8	209	29.0 (25.0–33.0)	16.8 (15.3–18.4)	4.1
S2-206	941	26.1 (25.1–27.2)	24.3 (23.5–25.1)	6.5	515	22.5 (21.5–23.6)	22.0 (21.1–23.0)	6.8	1,456	24.8 (24.1–25.6)	23.5 (22.9–24.1)	6.6
S2-207	97	30.0 (26.2–33.8)	26.7 (23.0–30.5)	6.2	20	24.8 (18.9–30.6)	25.6 (19.4–31.7)	7.2	117	29.2 (25.8–32.5)	26.5 (23.3–29.8)	6.4
S2-208	933	41.7 (39.7–43.6)	27.3 (25.9–28.8)	4.6	304	32.6 (30.1–35.0)	24.4 (22.3–26.5)	5.3	1,237	39.4 (37.7–41.0)	26.6 (25.4–27.8)	4.7
S2-209	950	55.8 (53.3–58.4)	37.4 (35.9–38.9)	4.7	138	41.6 (37.2–46.0)	29.7 (26.2–33.3)	5.0	1,088	54.0 (51.6–56.3)	36.4 (35.0–37.8)	4.7
S2-210	132	16.6 (14.1–19.2)	11.5 (9.9–13.1)	4.8	205	13.3 (12.1–14.6)	12.7 (11.6–13.8)	6.7	337	14.6 (13.3–15.9)	12.2 (11.3–13.1)	5.9
S2-211	289	18.8 (16.8–20.7)	12.8 (11.7–14.0)	4.8	182	16.3 (14.9–17.7)	16.8 (15.2–18.4)	7.2	471	17.8 (16.5–19.2)	14.3 (13.4–15.3)	5.6
S2-212	128	29.9 (23.8–36.0)	16.8 (14.7–19.0)	3.9	31	17.7 (15.1–20.4)	19.6 (15.1–24.0)	7.7	159	27.5 (22.5–32.5)	17.4 (15.4–19.3)	4.4
S2-213	176	32.8 (27.8–37.9)	24.3 (21.8–26.8)	5.2	33	24.8 (20.2–29.3)	23.8 (18.3–29.2)	6.7	209	31.4 (27.1–35.6)	24.2 (21.9–26.5)	5.4
S2-214	395	38.5 (35.0–42.1)	36.2 (33.9–38.5)	6.6	212	28.6 (25.0–32.2)	27.6 (25.3–30.0)	6.8	607	35.0 (32.4–37.6)	33.1 (31.4–34.9)	6.6
S2-215	96	78.6 (62.4–94.8)	44.3 (36.9–51.7)	3.9	23	36.1 (22.9–49.2)	26.7 (9.8–43.7)	5.2	119	70.3 (56.5–84.1)	40.9 (33.9–47.8)	4.1
S2-216	449	16.6 (15.1–18.1)	11.2 (10.5–11.9)	4.7	623	12.7 (12.2–13.3)	9.3 (8.7–9.9)	5.1	1,072	14.3 (13.6–15.0)	10.1 (9.6–10.5)	4.9
S2-217	315	22.1 (20.3–23.9)	20.0 (18.6–21.4)	6.3	333	18.4 (17.3–19.5)	17.6 (16.5–18.7)	6.7	648	20.1 (19.1–21.2)	18.8 (17.9–19.6)	6.5
S2-218	381	33.5 (30.7–36.3)	25.2 (23.0–27.3)	5.3	237	23.9 (21.3–26.4)	17.5 (15.4–19.6)	5.1	618	29.7 (27.7–31.7)	22.2 (20.6–23.8)	5.2
S2-219	26	31.8 (17.7–46.0)	26.5 (11.6–41.4)	5.8	10	19.0 (7.5–30.5)	13.1 (1.3–24.9)	4.8	36	26.9 (17.0–36.8)	21.3 (11.0–31.7)	5.6
S2-220	20	13.5 (9.8–17.2)	3.3 (1.9–4.8)	1.7	15	13.1 (9.7–16.6)	4.5 (2.6–6.4)	2.4	35	13.3 (10.8–15.9)	3.8 (2.7–5.0)	2.0
S2-221	224	33.2 (29.3–37.2)	17.7 (16.2–19.3)	3.7	105	20.1 (16.7–23.5)	17.0 (14.9–19.0)	5.9	329	28.5 (25.6–31.4)	17.5 (16.2–18.7)	4.3
S2-222	257	74.3 (65.5–83.1)	31.4 (28.6–34.3)	3.0	28	46.4 (29.6–63.1)	21.2 (14.9–27.5)	3.2	285	71.1 (63.0–79.2)	30.3 (27.6–32.9)	3.0
S2-223	78	103.3 (88.4–118.2)	33.8 (28.4–39.2)	2.3	5	33.8 (4.8–62.7)	6.5 (-6.2–19.2)	1.3	83	98.9 (84.3–113.6)	32.1 (26.7–37.5)	2.3

NOTE: Where the number of completed episodes (separations) < 5 details are not given for reasons of privacy and accuracy.
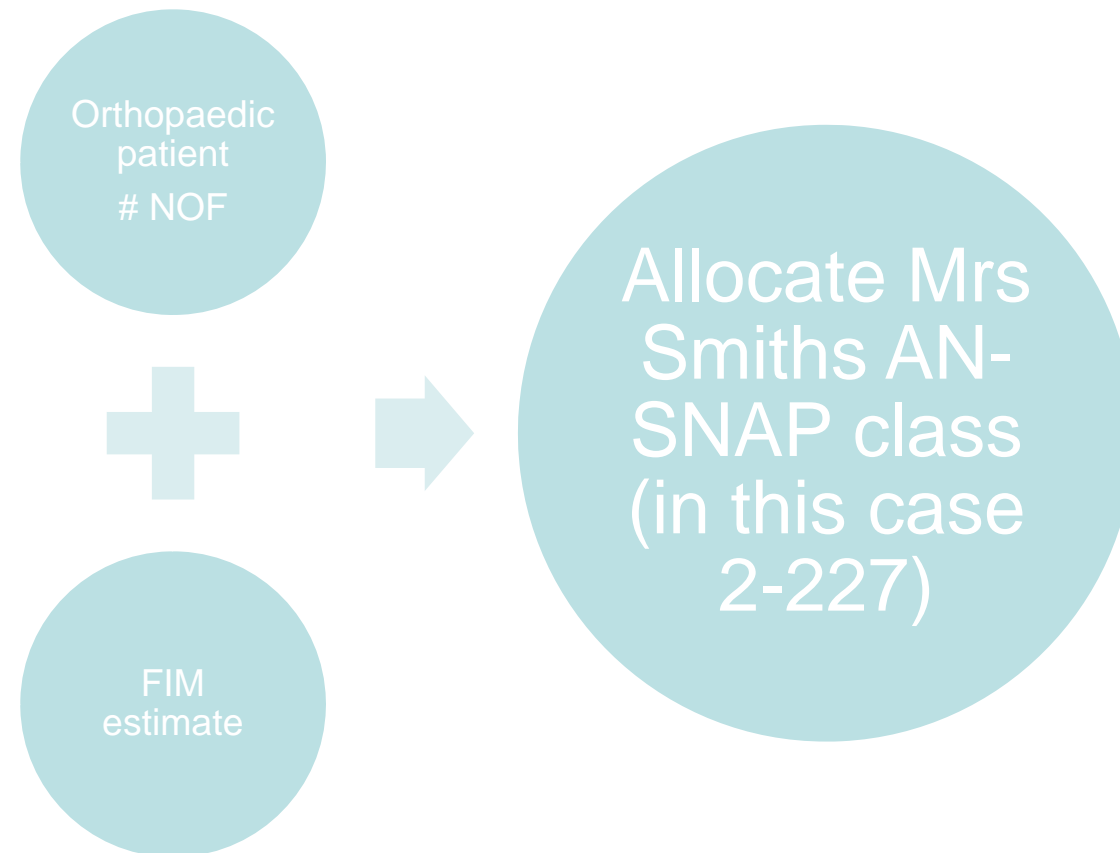
Benchmarks by AN-SNAP class

Length of stay and functional improvement of completed episodes of rehabilitation in Australia, by AN-SNAP class and sector, AROC financial year 2010 (2/2)

| AN-SNAP class | Public Sector Benchmarks | | | | | Private Sector Benchmarks | | | | | National data benchmarks | | | |
	No.	Length of stay Mean (95%CI)	FIM change Mean (95%CI)	FIM gain per week	No.	Length of stay Mean (95%CI)	FIM change Mean (95%CI)	FIM gain per week	No.	Length of stay Mean (95%CI)	FIM change Mean (95%CI)	FIM gain per week		
S2-224	198	26.7 (23.3–30.1)	5.6 (4.8–6.4)	1.5	36	28.2 (17.6–38.7)	5.8 (4.3–7.2)	1.4	234	26.9 (23.6–30.2)	5.6 (4.9–6.3)	1.5		
S2-225	660	45.1 (42.3–47.9)	19.5 (18.4–20.6)	3.0	141	31.8 (27.1–36.6)	18.4 (16.3–20.5)	4.0	801	42.8 (40.4–45.3)	19.3 (18.3–20.3)	3.2		
S2-226	728	18.8 (17.7–20.0)	15.3 (14.4–16.3)	5.7	2,212	14.7 (14.3–15.0)	12.6 (12.2–13.0)	6.0	2,940	15.7 (15.3–16.1)	13.3 (12.9–13.7)	5.9		
S2-227	1,761	19.2 (18.6–19.9)	14.0 (13.6–14.4)	5.1	3,138	16.8 (16.5–17.2)	14.3 (14.0–14.5)	5.9	4,899	17.7 (17.3–18.0)	14.2 (14.0–14.4)	5.6		
S2-228	1,388	25.4 (24.6–26.2)	22.4 (21.8–22.9)	6.2	1,722	22.5 (21.9–23.1)	22.2 (21.7–22.6)	6.9	3,110	23.8 (23.3–24.3)	22.3 (21.9–22.6)	6.5		
S2-229	1,623	32.0 (31.0–32.9)	27.6 (26.8–28.4)	6.0	1,342	29.7 (28.7–30.8)	27.9 (27.1–28.7)	6.6	2,965	31.0 (30.2–31.7)	27.8 (27.2–28.3)	6.3		
S2-230	434	31.4 (29.3–33.5)	24.3 (22.1–26.5)	5.4	183	24.9 (22.5–27.3)	18.7 (16.3–21.2)	5.3	617	29.4 (27.8–31.1)	22.6 (20.9–24.4)	5.4		
S2-231	444	11.4 (10.9–12.0)	7.2 (6.6–7.7)	4.4	4,590	10.0 (9.9–10.2)	8.2 (8.1–8.3)	5.7	5,034	10.2 (10.0–10.3)	8.1 (8.0–8.2)	5.6		
S2-232	1,749	15.9 (15.4–16.3)	19.6 (19.3–20.0)	8.7	8,913	12.4 (12.3–12.6)	18.6 (18.5–18.7)	10.5	10,662	13.0 (12.8–13.1)	18.8 (18.6–18.9)	10.1		
S2-233	463	26.4 (24.9–28.0)	30.5 (29.1–32.0)	8.1	557	19.6 (18.6–20.7)	32.3 (31.2–33.3)	11.5	1,020	22.7 (21.8–23.6)	31.5 (30.6–32.4)	9.7		
S2-234	187	15.6 (13.9–17.3)	8.8 (8.0–9.7)	4.0	1,870	10.4 (10.1–10.6)	10.2 (9.9–10.4)	6.9	2,057	10.8 (10.5–11.1)	10.1 (9.8–10.3)	6.5		
S2-235	231	19.3 (17.5–21.1)	17.6 (16.5–18.7)	6.4	1,777	13.6 (13.2–14.0)	20.1 (19.7–20.4)	10.3	2,008	14.2 (13.8–14.6)	19.8 (19.5–20.1)	9.7		
S2-236	232	29.8 (26.8–32.8)	27.4 (25.4–29.4)	6.4	444	21.4 (19.7–23.2)	28.8 (27.5–30.1)	9.4	676	24.1 (22.5–25.7)	28.4 (27.3–29.5)	8.2		
S2-237	563	19.5 (17.9–21.1)	18.0 (16.9–19.1)	6.5	1,876	13.0 (12.7–13.3)	16.4 (16.0–16.9)	8.8	2,439	14.5 (14.0–14.9)	16.8 (16.4–17.2)	8.1		
S2-238	32	19.6 (13.5–25.7)	10.4 (8.3–12.4)	3.7	76	13.6 (12.3–14.9)	10.3 (8.8–11.8)	5.3	108	15.3 (13.3–17.4)	10.3 (9.1–11.6)	4.7		
S2-239	119	28.6 (24.2–33.1)	24.8 (22.2–27.4)	6.1	199	29.2 (26.4–31.9)	26.8 (25.4–28.2)	6.4	318	29.0 (26.6–31.3)	26.1 (24.8–27.4)	6.3		
S2-240	51	50.7 (38.1–63.3)	47.2 (43.0–51.4)	6.5	105	57.1 (50.3–64.0)	48.3 (45.9–50.7)	5.9	156	55.4 (49.4–61.4)	48.0 (46.0–50.1)	6.1		
S2-241	15	94.9 (58.9–130.9)	46.2 (26.2–66.3)	3.4	28	78.5 (58.1–99.0)	76.4 (70.5–82.3)	6.8	43	83.0 (65.3–100.7)	68.2 (60.0–76.4)	5.8		
S2-242	1,365	15.8 (15.1–16.4)	9.7 (9.3–10.1)	4.3	4,462	12.4 (12.2–12.6)	9.9 (9.7–10.1)	5.6	5,827	13.2 (13.0–13.4)	9.9 (9.7–10.0)	5.2		
S2-243	2,208	19.9 (19.1–20.6)	18.1 (17.7–18.6)	6.4	4,336	15.8 (15.5–16.0)	17.7 (17.4–17.9)	7.8	6,544	17.1 (16.8–17.4)	17.8 (17.6–18.1)	7.3		
S2-244	2,489	26.8 (25.9–27.8)	23.6 (22.9–24.2)	6.1	2,107	21.0 (20.5–21.5)	21.6 (21.0–22.3)	7.2	4,596	24.1 (23.5–24.6)	22.6 (22.2–23.1)	6.6		
S2-245	333	35.9 (32.4–39.4)	25.8 (22.9–28.7)	5.0	138	28.4 (25.0–31.8)	21.4 (17.3–25.4)	5.3	471	33.7 (31.0–36.4)	24.5 (22.1–26.9)	5.1		
Missing or excluded	809				684				1,493					
All episodes	25,656	26.8 (26.4–27.1)	20.4 (20.2–20.6)	5.3	44,793	15.4 (15.2–15.5)	16.3 (16.2–16.4)	7.4	70,449	19.2 (19.1–19.4)	17.7 (17.6–17.8)	6.4		

How is this all clinically relevant?
A CASE STUDY - Mrs Smith is referred to rehab on the 1st of the month

Orthopaedic patient # NOF

FIM estimate

Allocate Mrs Smiths AN-SNAP class (in this case 2-227)

What do you do with all this information?

Initial Pre – admission visit

- You are able to discuss what rehab is with Mrs Smith and her husband.
- Mrs Smith tells you she was hoping that she might have a bit of a rest in rehab..
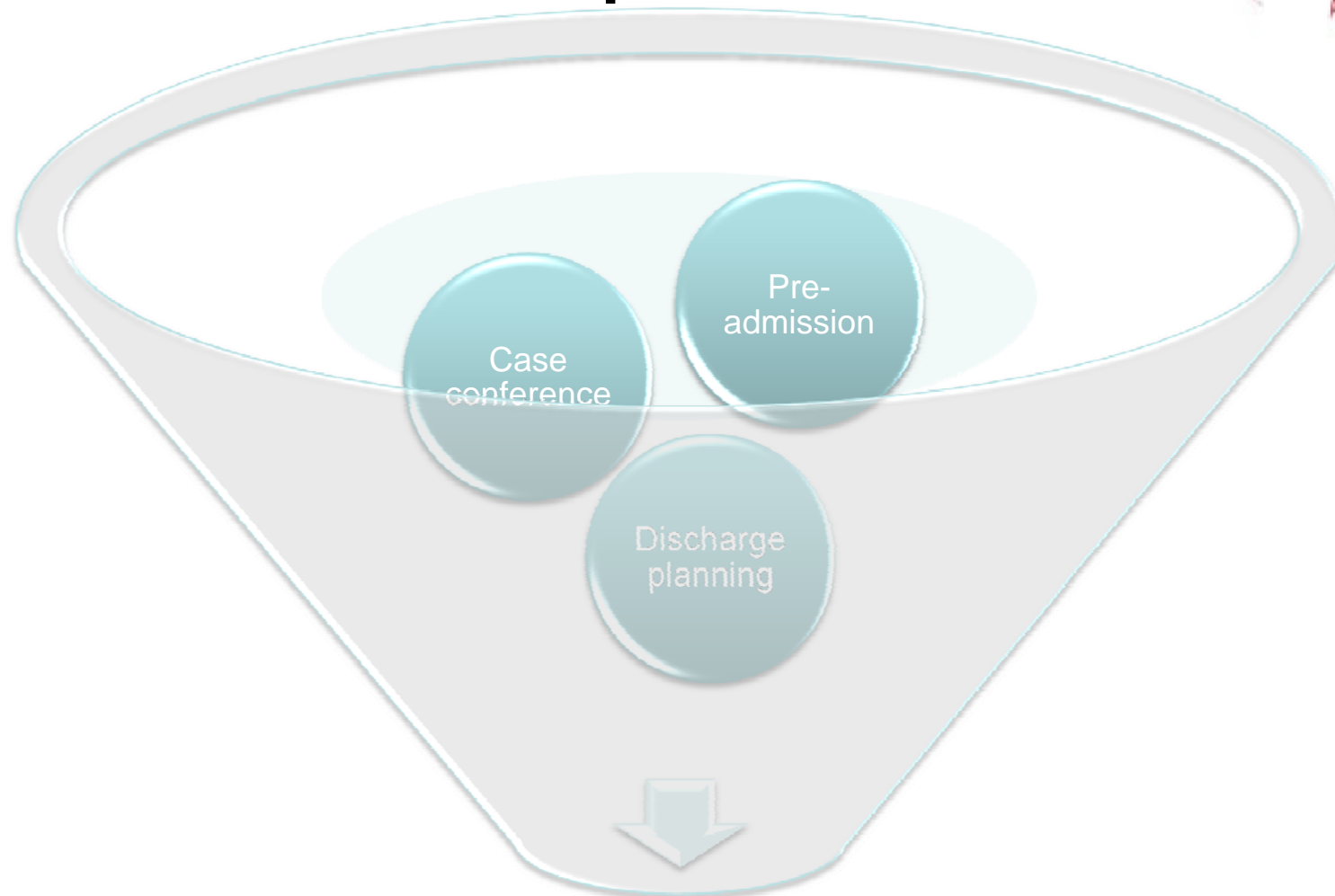
Acute Team liaison

- You commence discussions about readiness for transfer and are informed that the plan is for the Smiths daughter to come and stay and help for a few weeks after Mrs Smith comes home.

Pre-admission family meeting and (some very early) discharge planning

- Mr Smith tells you that his daughter doesn't come home until the end of the month....
- You are able to explain that you expect her to be in rehab 19 days based on the national data estimate and her discharge date would be the 20th.....

Using benchmarking data within the whole rehabilitation process…

aroc
Australasian Rehabilitation Outcomes Centre

Pre-admission

Case conference

Discharge planning

Rehabilitation Outcomes

Pre- admission

- Use impairment specific benchmark outcome targets data to set appropriate transfer dates from acute care

- Set realistic expectations of LOS with the patient before they arrive

- Plan D/C date with patient and significant other before admission

- "Mrs Smith I've just done a quick calculation using national statistics about people being treated for the same thing as you, and I estimate that you'll only need to be with us for about 19 days..."

Case Conference

- Use LOS benchmarks by AN-SNAP class to set an expected LOS

- "count down" til expected discharge date to keep discharge planning on the agenda and keep LOS from blowing out

Patient	Expected LOS	Actual LOS	Days remaining	Rehabilitation goals
Mrs Smith	19	15	4	

Make your documents work for you!

Anywhere Hospital
Multi-disciplinary Rehabilitation Plan

Place Patient ID sticker here

Name:
DOB:
Ward:

DATE : ____ / ____ / ____

Reason for Rehab (Impairment Code): ___ / ___ / ___

Date of admission: ___ / ___ / ___

Expected LOS: ___ / ___ / ___

Expected D/C date: ___ / ___ / ___

Goals key: A= achieved   O = ongoing
N = nil progress, new goal OR
not achieved at time of discharge

Date	Rehabilitation Issue (Activity limitation/ participation restriction)	Rehabilitation Goal	Intervention	By when? Person/s responsible

Leave Days: Y/N if Y ____/ ____/ ____ ; ____/ ____/ ____ ; ____/ ____/ ____ ; ____/ ____/ ____ ; ____/ ____/ ____ ;

Complications interfering in rehab program? Y/N if Y what for _____ _____

Co-morbidities interfering in rehab program,? Y/N if Y what for _____ _____

Suspensions in rehab program? Y/N if Y from ____/ ____/ ____ to ____/ ____/ ____

Family meetings

- Explain expected LOS, FIM and FIM change outcomes
- Especially useful when patients or their family have an expectation for large positive outcomes that may not be obtainable.
- Track progress with patient and family

"Your Mum has been working so hard with us in rehab for 42 days now. This is about the time that we would usually expect to have seen all the improvement we would see…but unfortunately mum has gained about half the benefit we would expect. The improvement stopped about two weeks ago…its time to start looking at our options…"

Goal setting

- Use FIM in every day team work
- Help to clarify in cases where one discipline is working with another discipline to increase the patients function and patient has variable performance:

"therapy FIM score vs. actual pt function FIM score on the ward"
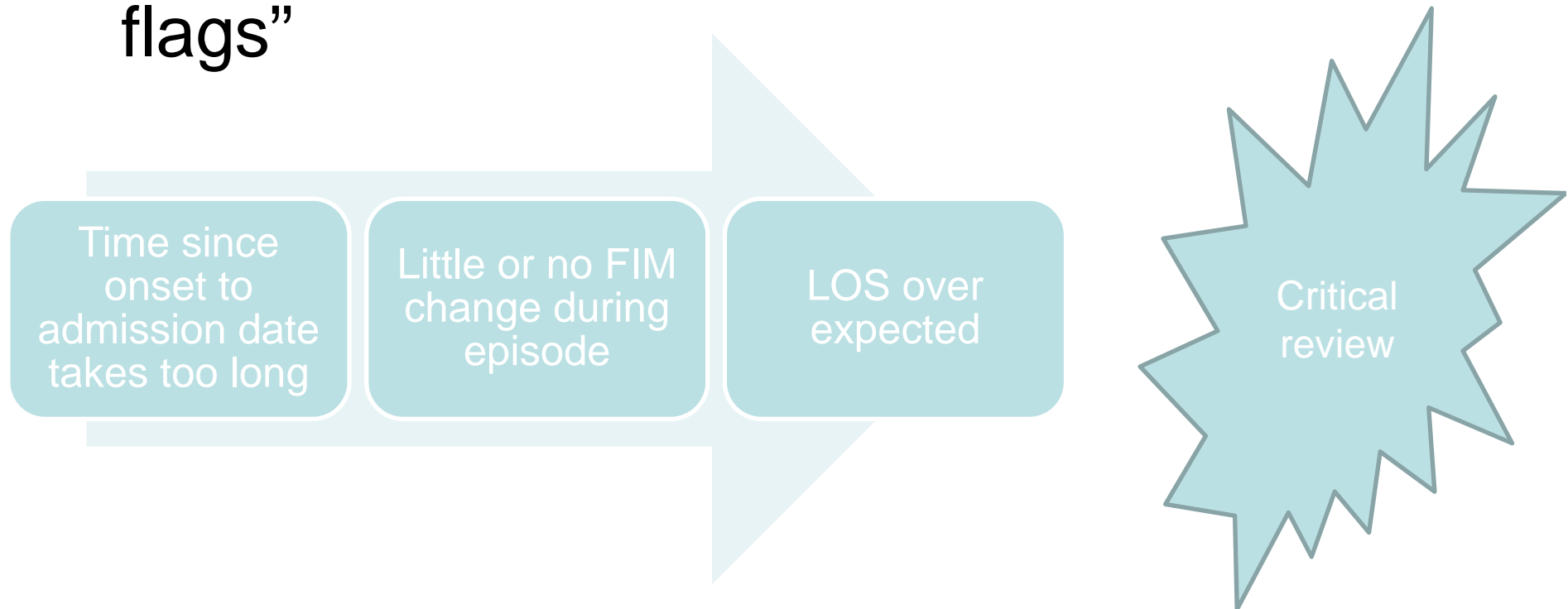
OR

"pts actual performance vs. capacity"

- Using FIM change benchmarks and the patients FIM change per week gives the team the ability to compare progress with expected progress to manage "Functional Plateau"

Discharge Planning

- Ability to discharge plan from Pre-admission or Day one of rehabilitation stay
- Increased awareness of expected LOS and planned / expected discharge date for team and patient
- Team has the ability to check efficiency by individual impairments

Post Discharge

- Create a system for "critical rehabilitation outcomes review" similar to an acute morbidity and mortality review, using AROC data to identify "red flags"

Time since onset to admission date takes too long

Little or no FIM change during episode

LOS over expected

Critical review

Strategic Service Planning

- Look for trends in the data
- Great way to highlight achievements of the team and also identify areas for improvement
- Helps to direct changes in service provision, staffing, equipment needs etc
- Ensures that you have solid evidence to help guide how you deliver what your community needs from you.

Don't be scared of sharing your report…

- Use the report to prove clinical improvements over time, sharing enhances this even further
- Use as part of funding negotiations
  - Demonstration of achievements to funders, often as part of the process of negotiating for future funding
  - For example
    - Your hospital may on the surface look as if it is not efficient because its ALOS for #NOF's is 2 days longer than the national average
  - However your AROC report demonstrates that:
    - twice as many SNAP class 226 patients as average,
    - significantly older than average
    - 85% of patients discharged home versus national average of 75%

AROC Contact Details

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