Benchmarking Rehabilitation Outcomes in New Zealand: overall impact and selected service level case studies

New Zealand Rehabilitation Conference

10 September 2017
Jacquelin Capell\textsuperscript{(1)}, Sonja Veale\textsuperscript{(2)}, Denise Watene\textsuperscript{(3)}, Frances Simmonds\textsuperscript{(1)}

1. Australasian Rehabilitation Outcomes Centre, University of Wollongong, Australia
2. South Canterbury DHB, Timaru, NZ
3. Northland DHB, NZ
Outline

AROC: overview
AROC data: New Zealand
Service level case studies
Questions
Conclusion
AROC Overview

- national rehabilitation medicine clinical registry of Australia and New Zealand

- began as a joint initiative of the whole Australian rehabilitation sector (providers, payers, regulators and consumers) with support from key New Zealand providers

- established 1 July 2002 as a not-for-profit Centre

- the Australasian Faculty of Rehabilitation Medicine (AFRM) is the auspice body

- the Australian Health Services Research Institute (AHSRI) at the University of Wollongong is the data manager and responsible for AROC’s day to day operations
AROC Purpose

The purpose of AROC was established as, and continues to be:

- Develop a national benchmarking system to improve clinical rehabilitation outcomes for patients
- Produce information on the effectiveness of interventions through the systematic collection of outcomes information in both the inpatient and ambulatory settings
- Provide annual reports that summarise the Australasian data.
AROC coverage
280 rehabilitation inpatient services

About 136,000 episodes per annum
AROC outputs

- Bi-annual facility level reports (CY, FY)
- Dashboard
- Impairment Specific Reports
- AROC annual reports: separate reports for Australia and NZ, inpatient and ambulatory reports
- LOS and FIM change benchmarks (CY, FY; Australia and NZ; all impairments, BI, SCI)
AROC in New Zealand

AROC has been established in New Zealand:

- since 2008: inpatient services
- 2017: ambulatory and paediatric services

• Supported by ACC, AROC recruited all 39 inpatient rehabilitation units to participate in the NZ benchmarking initiative

• AROC and ACC co-host a series of Quality Forums annually during which individual services present examples of how understanding their AROC data has impacted their processes and outcomes
Growth in volume over time

- 2013: 9,000 episodes
- 2014: 11,000 episodes
- 2015: 12,000 episodes
- 2016: 12,000 episodes
- 2017: 12,000 episodes

Financial year
Distribution of impairments (FY17)
Distribution of impairments over time
Benchmarking rehabilitation outcomes in New Zealand

Overall impact
Inpatient rehabilitation indices over time

LOS
During this period LOS has declined just over a day:
- 2012/13: 22.2 days
- 2016/17: 20.8 days

Functional improvement
During this period the functional improvement achieved by units has been maintained:
- 2012/13: 18.2 FIM points
- 2016/17: 19.0 FIM points
Inpatient rehabilitation indices over time

Proportion of patients discharged to the community

- 2012/13: 97.1%
- 2016/17: 97.6%
Inpatient rehabilitation indices changes from 2012/13 to 2016/17

2013

Age (years) 77.2
Length of stay (days) 22.2
FIM admission score 75.3
FIM discharge score 93.5
FIM change (adm to disch) 18.2
FIM efficiency (per week) 5.7
Disch to community (%) 97.1

2013 (n = 9,338)
2017 (n = 12,141)
NZ Dashboard – CARMI

*All NZ facilities – Data from July 2016 – June 2017*
Onset to rehabilitation within one week over time
NZ Dashboard – Quadrant graph

*All NZ facilities – Data from July 2016 - June 2017
Using AROC data to inform practice and service provision: selected service level case studies
Case studies 1 and 2

• For further information on case studies 1 and 2, aroc@uow.edu.au
Conclusion

- As the AROC data collection has matured, in line with improved overall outcomes, the skills of services in understanding, interpreting and using their AROC data to underpin process change initiatives has grown significantly.
- Thanks to those services who contributed to this presentation.
- Thank you to all services for their continued support of AROC.
AROC Contact Details

Australasian Rehabilitation Outcomes Centre
Australian Health Services Research Institute
iC Enterprise 1, Innovation Campus
University of Wollongong NSW 2522
Phone: 02 4221 4411
Email: aroc@uow.edu.au
Web: aroc.org.au