Once again, AROC has been very busy over the last few months, and we can’t believe it is already September, and spring is well and truly sprung!! We have AROC baby news and pictures … read on for more about our newest AROC team members …

We are also pleased to announce the arrival of the AROC 2009 Financial Year Benchmarking Reports. For those members for whom this is their first report, see the item later in this newsletter that describes how you can access your report. Also explained are some important changes in the way AROC manipulates the raw data to produce outcome benchmarks.

This newsletter provides you with an update on a number of AROC initiatives which have been demanding our attention lately such as, the reconditioning benchmarking workshop, the ambulatory dataset rollout, happenings in New Zealand, the AROC data dictionary, and so on …

However, a major achievement for AROC was the presentation of the inaugural New Zealand rehabilitation benchmarking data at the AFRM annual conference in Queenstown in New Zealand in late July … the inaugural NZ data presented in NZ … how’s that for appropriate!!! The setting was magical, the speakers at the conference very good, the food was great, the social events very social … and AROC was mentioned by many presenters, and AROC data had been used in many instances. AROC not only gave a plenary presenting the NZ data, but also presented 3 other papers. Frances presented the plenary and a paper on the AROC Brain Injury Outcome Targets. Monique presented a paper on Ambulatory Rehabilitation benchmarking and a paper on Outcomes in Cancer Rehabilitation.

Congratulations to all those New Zealand rehabilitation units that pulled out all stops to collect and submit their AROC data during the first half of the year … by the beginning of July we had available data describing some 1200 episodes of inpatient rehabilitation to analyse and present. The presentation of this data was extremely well received, with the 300 odd people present very interested, and lots of questions forthcoming during the course of the conference. Since the conference, pleasingly a number of other New Zealand rehabilitation units have made enquiries about joining AROC. At this rate AROC should be able to present the inaugural State of Rehabilitation in New Zealand report very soon !!!

Belles of the Ball, Monique and Frances
Results from Review of Impairment 2.13 - Other Non-traumatic brain dysfunction

Thank you for assisting us with the 2.13 impairment review. Our aim was to improve our reporting against these episodes by finding out exactly what type of conditions are being coded to the code 2.13.

Overall, we received additional information on 47% of all episodes coded 2.13 in 2008, so thanks again. Of that 35% (210/601) were correctly coded to impairment code 2.13. Their reported aetiological diagnoses were reviewed to establish whether further sub groupings existed. The majority of episodes were for surgical management of tumours (44%, 93/210 episodes), however we were unable to establish whether these were benign or malignant due to lack of information. The second largest sub grouping were infections (8%, 17/210), which included aetiologies of encephalitis, meningitis, vasculitis and neurofibromatosis. The third largest group were recorded as craniotomy (7% 14/210); however this is an intervention and not diagnosis so true aetiology remains unknown. This was followed closely by hydrocephalus (6% 13/210) and epilepsy (5% 10/210).

Of the 283 episodes reviewed, 73 episodes had been incorrectly assigned the code 2.13 - most commonly those that should have been coded to: 1.9 Other Stroke (16%, 12/73), 2.11 Non-traumatic subarachnoid haemorrhage (12%, 9/73), Missing and 2.22 Traumatic, closed injury (both 11%, 8/73).

After seeking further clinical input AROC suggests that impairment code 2.13, other non-traumatic brain injury, be further subdivided into

- 2.13 Tumours
- 2.14 Infections
- 2.15 Hydrocephalus
- 2.16 Other

Next steps:
- Circulation to all providers of non-traumatic brain dysfunction rehab for their review and input
- Consultation with the AROC SCAC
- Final proposed variation to impairment categories to be submitted to the next AROC impairment code review
- Inclusion of revised impairment categories in next Brain Injury Benchmarking Workshop

SNAPshot has been updated to reflect recent changes within the Health Fund sector

<table>
<thead>
<tr>
<th>Geelong Medical and Hospital Benefits Assoc Ltd (GMHBA)</th>
<th>GHM</th>
<th>AHS</th>
<th>New member of the AHS group - episodes to be included in the AHS extract for separations from 1st July 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manchester Unity Australia Ltd</td>
<td>MUI</td>
<td></td>
<td>No longer a member of the AHS - requires a separate extract for separations from 1 June 2009</td>
</tr>
</tbody>
</table>

Benchmarking News

AROC Benchmarking Workshops – Reconditioning Workshop Report

The growth in the Reconditioning impairment group has been significant over the last few years, and it is timely that AROC work with providers to better understand the cohort being coded to reconditioning, and to develop draft outcome targets to guide the provision of rehabilitation to this cohort.

The Reconditioning Benchmarking Workshop was held on 3 July 2009 at Caulfield Hospital in Melbourne. The level of interest was high, with over 70 representatives from reconditioning rehabilitation providers attending. Data from 11 represented facilities was discussed and analysed on the day.

Dr Cathy Sherrington provided a very interesting presentation to start the day “Update on the Evidence to Guide Reconditioning”.

The remainder of the morning session discussions centred on the different cohorts that exist within the AROC Reconditioning bucket. In Victoria, who have a well established GEM program, it is largely rehab patients being coded to reconditioning. However, in other states where GEM is either non-existent or not well established, it is clear that GEM-like patients as well as rehab patients are being coded to reconditioning. The group discussed how the GEM, rehab and in-between (not clearly GEM or rehab) cohorts were clinically different and then, with some difficulty but a lot of willingness, put forward a number of items that could be collected/measured to differentiate the cohorts. These are:

♦ Medically stable? Yes/ No
♦ Can patient actively participate in therapy from day 1? Yes/ No
♦ MMSE score
♦ Length of acute admission
♦ Two or more falls in the last year? (# to be confirmed from evidence based literature)
♦ Complex wound management required? Yes/ No
♦ Unintentional weight loss >10% in preceding 12 months? Yes/ No

The group agreed that if AROC developed a Reconditioning adjunct dataset module (in an Excel spreadsheet) and distributed it, they would begin collecting these additional data items, so that in 6 months or so, AROC can examine the data and see if these items do meaningfully differentiate the cohorts.

Since the workshop, Frances had come across the Rockwood Clinical Frailty Scale (during a presentation to the AFRM ASM in Queenstown). This tool appears to be an effective measure of frailty, and given the discussion during the workshop (especially that around cohorts with different levels of frailty) AROC has suggested (to a positive response from participants) that this tool might be a useful addition to the reconditioning adjunct dataset. The ability to segregate outcomes against frailty could be very interesting.

If you are a provider of reconditioning rehabilitation watch for a letter seeking your views on the draft targets – all providers of reconditioning rehabilitation will be consulted as part of the process of finalising the draft targets developed at the workshop.

For more information go to http://chsd.uow.edu.au/aroc/adjunct_modules.html
AROC Spring News

Spring has sprung at AROC and we are pleased to announce a number of deliveries.

♦ The **AROC Online Data Dictionary** has arrived!!! We would very much appreciate feedback on the usefulness of the dictionary, its ease of use, if there is any additional information we should include in the dictionary, and any other comments you might like to make. You can access the Dictionary from the AROC website [http://chsd.uow.edu.au/aroc](http://chsd.uow.edu.au/aroc)

♦ The **2009 financial year facility benchmarking reports** (inpatient) are now complete and available for download from AOS. Get your facility’s report today by going to the AROC website [http://chsd.uow.edu.au/aroc/](http://chsd.uow.edu.au/aroc/) and selecting Login to AOS Thankyou to everyone who spends an inordinate amount of time collecting and entering and then correcting this data to make these report possible.

♦ AROC **State of the Nation 2008** is coming very soon ……………watch this space.

♦ Lastly, Congratulations to Janet (and Mike) on the early and safe arrival of **Southerly Rose** and again to Tara (and Bernie and Sebastian) proud parents/brother of **Ashton Aubrey**, both beautiful additions to the AROC family!!

Ambulatory News

Implementation of the data collection has been progressing slowly.

Thank you to those sites that have begun submitting their data. At this stage we will be using this to draft some benchmarking report layouts and will be circulating these for comment. The impact of this benchmarking will be governed by making the reports as clinically relevant as possible, so your input at this time is valuable. Sites that have been collecting data but are yet to submit are encouraged to do so as soon as practicable to broaden the scope of analysis for these draft reports.

Refinement of the AOS for online data submission continues to be a priority for AROC, a number of unforeseen obstacles have hampered the system but it is hoped the current test site will be live shortly.

In the meantime continue to email your data extracts to aroc@uow.edu.au or to contact AROC for further information on the collection.
NOW AVAILABLE FOR DOWNLOAD!!
The AROC 2009 financial year benchmark reports for those facilities that submitted data to AROC for overnight admitted inpatient episodes of rehabilitation ending up to July 2009 are now available for download. To get a copy of your facility’s report go to the AROC website http://chsd.uow.edu.au/aroc and Login to AOS!!

Forgotten your Login? Password? Contact AROC on 02 4221 5282.

Changes to AROC benchmark reports:
Previously many of the length of stay (LOS) calculations in these reports excluded episodes with a LOS greater than 90 days. This filter has now been removed. From the 2009 financial year reports onwards episodes with a LOS greater than 90 days are now also included in all tables that summarise LOS.
Previously end of episode outcome measures such as LOS and FIM change only excluded episodes when there was a FIM discharge score of 18 or when the patient died. From the 2009 financial year reports onwards end of episode outcome measures will be based solely on episodes of rehabilitation that have been identified as “complete”.

NEW: Definition of a complete episode
An episode is considered “complete” for the purpose of calculating outcome statistics in benchmark reports 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.

FIM Credentialing Reports — Is your FIM credentialing status up to date??

Your facility’s AROC FIM credentialing report can be downloaded via AROC Online Services (AOS). Go to the AROC website http://chsd.uow.edu.au/aroc/ and Login to AOS. If you have forgotten your Login details (username/password) please contact AROC on 02 4221 5282.

This report will tell you who at your facility is credentialed and when their credentialing expires. Once you have checked your report, if you need any amendments to be made (if staff have left your facility and need to be deleted, someone is missing from the report or there is incorrect information on your report) please either email these to aroc@uow.edu.au or phone 02 4221 5282.

AROC in New Zealand

AROC were pleased to present the inaugural NZ rehabilitation benchmarking data at the AFRM/NZRA conference in Queenstown on July 22. We have been working closely with many units in the North and South Islands, and to be able to present data for twelve units was exciting and very well received.

We are pleased to offer a NZ rehabilitation networking forum for AROC members. This is to be held on Wed 28 Oct at 1300 (NZST). We hope to provide a forum for services to find out about AROC, the data set, collecting and submitting data, benchmarking and reporting. There will be an opportunity to ask questions and get in touch with other services. If you are an AROC member, have not received an agenda and are interested in joining the forum please contact me.

Services should now be collecting data and entering the data for the 1 July to 30 September 2009 quarter, due for submission 31st October 2009. If your service is planning on submitting data for the first time please consider sending a sample of your data earlier than the cut off so that we can assist with any local data issues before submission.

Many services in New Zealand are currently re-negotiating contracts with ACC. ACC are encouraging membership of AROC and therefore many units are currently considering the benefits of AROC membership. As a result, the number of queries from rehabilitation services about AROC membership and FIM training in NZ has increased. If, as a current AROC member, you are approached about the National Benchmarking, please put them in touch with Julie de Clouet at juliedc@uow.edu.au or myself so I can assist with their questions.

Monique Berger mbberger@uow.edu.au
AROC Reports—Things to look out for in your data

After reviewing many facility reports for the 2009 financial year we found some common errors occurring in the data. We thought we would take this opportunity to draw your attention to these errors and suggest you check your facility's report to see if they are a problem for you. Definitions for all these items can be found on the AROC online data dictionary (http://chsd.uow.edu.au/aroc/aroc_dd/aroc_dd.html).

* Primary admission v subsequent admission
It is clear from the current reports that some facilities are confused by the item "First admission for this impairment". Some facilities are entering all episodes as readmissions because they have come from an acute hospital. This item relates to the patient's impairment not the hospital. This item attempts to differentiate the patient's primary admission for rehabilitation from subsequent admissions for rehabilitation for the same impairment. It does not take into account the patient's previous acute stay. It is important to accurately collect data about first admission for impairment as data relating to primary admissions and subsequent admissions has an impact on outcome benchmarks. It is expected that in future reports we may provide analyses separately for primary and subsequent admissions so it is really important to enter this item correctly.

* Onset of impairment (date of relevant acute admission and time since onset)
It is important to know the time between the injury/event and the admission to rehabilitation and in your benchmark reports onset is determined by two data items: 1. date of relevant acute admission and 2. time since onset or acute exacerbation of chronic condition. In your reports “date of relevant acute admission” is the primary answer to determining onset, with "time since onset or acute exacerbation of chronic condition" used if no date available. Only record the date if the current admission for rehabilitation care was preceded by a episode of acute care, in the previous three months, relevant to the current rehabilitation episode (eg. Elective ortho procedure, stroke, etc). If the date is recorded it should be the date of the acute admission/surgery and not the date of admission to the rehabilitation facility. It is important to complete either 'Date of relevant acute admission' OR 'Time since onset or acute exacerbation of chronic condition' to give an indication of onset.

* Suspension of rehab treatment
Suspension of rehabilitation treatment in your benchmark reports is a compilation of three data items: 1. total number of rehabilitation treatment suspension days during episode, 2. number of rehabilitation treatment suspension occurrences and 3. was the suspension of treatment unplanned? In reviewing the reports we found some facilities reported that every episode had a suspension of their rehab treatment (extremely unlikely), while some other facilities reported none (possible but not likely). Please review the definitions of these three items and ensure that you are completing these fields correctly.

* Co morbidities and complications
In reviewing the reports we found some facilities reported that every episode had a co morbidity which interfered with the process of their rehabilitation treatment (extremely unlikely), while some other facilities reported none. A similar pattern was found for complications. Please review the definitions of these three items and ensure that you are completing these fields correctly.

* Was the current impairment the result of trauma?
A yes or no is recorded for this item to determine whether the current impairment was the result of trauma, where trauma is damage inflicted on the body as the direct or indirect result of an external force, with or without disruption of structural continuity. In the 2009 financial year reports some facilities appear to have either not collected this item, or incorrectly entered it.

* Assessment only
A yes or no is recorded for this item to determine whether the patient was seen only for assessment and no rehabilitation treatment was provided (patient did not commence a rehabilitation program). In no rehab facility would every episode have "yes" for assessment only. Most facility's have no assessment only episodes, or only a very few. In the 2009 financial year reports some facilities have incorrectly entered every episode as assessment only. Where this has happened we have had to change those episodes at those facilities to not be assessment only in order to assign an AN-SNAP class and to determine casemix adjustment.
Data Submission — Data due dates

The table below indicates the data collection periods and data submission timelines associated with the AROC inpatient dataset.

2008/09 Benchmarking Reports are now available for download, please go to http://chsd.uow.edu.au./aroc/ and Login to AOS

<table>
<thead>
<tr>
<th>Episode ending up to</th>
<th>Submission month</th>
<th>Dataset Version</th>
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<tbody>
<tr>
<td>September 2009</td>
<td>end of October 2009</td>
<td>Version 3</td>
</tr>
<tr>
<td>December 2009</td>
<td>end of January 2009**</td>
<td>Version 3</td>
</tr>
<tr>
<td>March 2010</td>
<td>end of April 2010</td>
<td>Version 3</td>
</tr>
<tr>
<td>June 2010</td>
<td>end of July 2010**</td>
<td>Version 3</td>
</tr>
</tbody>
</table>

** AROC reports to be generated for your facility based on this data - please resubmit after corrections

AROC FIM Workshops— Workshops for 2009

AROC hosted workshops for this year are shown in the table below. If you would like to register interest in attending a workshop some time in the future please let us know and we will add you to our list.

<table>
<thead>
<tr>
<th>State</th>
<th>Open AROC Workshop</th>
<th>Facility Trainers Workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>20 November 2009</td>
<td>23 October 2009</td>
</tr>
<tr>
<td>QLD</td>
<td>25 September 2009</td>
<td></td>
</tr>
<tr>
<td>VIC</td>
<td>2 October 2009 (cancelled)</td>
<td></td>
</tr>
<tr>
<td>NZ</td>
<td>Auckland 6 November 2009</td>
<td>Rotorua 18 November 2009</td>
</tr>
<tr>
<td></td>
<td>Auckland Open 24 November 2009</td>
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</tr>
</tbody>
</table>

A gentle reminder – when you register interest in a workshop please give us the quickest way we can contact you and please respond, even if its to say you can’t attend. Also, it takes quite a lot of organising to put together a workshop, which is why we have a registration cut off date prior to the workshop. We do accept late entries where we can – but please understand it can cause a lot of inconvenience. Where possible please be timely in your requests.

AROC team

AROC National Manager: Frances Simmonds
AROC Clinical Director: Ass/Professor J E (Ben) Marosszéky
AROC Research Fellow: Janet Law
AROC Research Fellow: Monique Berger
AROC FIM Training Manager & Admin Support: Julie de Clouet

AROC Data Manager: Tara Stevermuer
AROC Associate Research Fellow: Jodie Tazelaar-Molinia