# australasian cochrane centre

# **Training Report**

to the Department of Health and Ageing 2008



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### **Executive Summary**

Meeting the training and support needs of Cochrane review authors in Australasia continues to be a priority for the Australasian Cochrane Centre. Training highlights in 2008 include:

- Five Protocol and five Analysis workshops conducted in four Australian cities attended by over 100 participants
- Two Introduction to New Handbook Methods & RevMan 5 workshops
- One RevMan 5 workshop conducted as a Pre-Symposium event
- One Review Completion and Update Program conducted in Melbourne
- A technical support service offered for advanced review authors
- More than 90% of those attending Protocol workshops stated they were highly satisfied with the content and presentation of the material
- More than 95% of those attending Analysis workshops rated the overall content as extremely useful
- 30% of 2006 workshop participants and nearly 25% of 2007 participants have published a protocol or review in *The Cochrane Library*.

### Introduction

The Cochrane Collaboration continues to grow worldwide, and Australasian review authors are widely recognised as active and productive contributors. There are now over 2000 authors contributing to the Cochrane Collaboration from countries supported by the ACC, of which nearly 1500 reside in Australia.

The Australasian Cochrane Centre's training program continues to develop in response to the needs of contributors in the region and in collaboration with local Cochrane entities. Our training program is comprised of:

- Core training for new and existing review authors;
- Advanced workshops for experienced review authors;
- Self-directed learning materials for new review authors;
- Telephone and email support for review authors;
- Ongoing updating and development of review author training materials; and
- Special events.

The following report provides a summary of the training and support activities conducted in 2008 and the schedule of events for 2009.

# Overview of Review Author Training and Support

The Australasian Cochrane Centre provided training and support for Australasian review authors in the form of four types of core workshops in 2008:

- Developing a protocol for a systematic review;
- Introduction to analysis;
- Introduction to New Cochrane Handbook Methods & RevMan 5;
- Review completion and update program.

We also provided support for a workshop on Assessing Complex Interventions in Cochrane Systematic Reviews conducted by the Australian satellite of the Cochrane Effective Practice and Organisation of Care Group. Additional support was offered to review authors in the region via email, telephone and through a technical support service called the Cochrane Advanced Review author Support (CARS) program.

These activities were designed to provide training and support for review authors with differing levels of systematic review expertise and who were at different stages of protocol or review completion and updating.

### 2. Demand for Training Workshops

During 2008, 15 workshops were conducted in various Australian cities, including Adelaide, Hobart, Melbourne, and Sydney (Table 1). The majority of these were Developing a Protocol for Systematic Review and Introduction to Analysis workshops targeted at new review authors, and were attended by over 100 people.

We conducted two Introduction to New Cochrane Handbook Methods & RevMan 5 workshops, designed to inform registered review authors about the changes in systematic review methodology contained in the Handbook. In Hobart, we offered a RevMan 5 workshop to delegates attending the Symposium for Australasian Review Authors. This workshop was also a training event for staff of the Australasian Cochrane entities, allowing them to provide support to their own authors.

We conducted a very successful (and over-subscribed) Review Completion and Update Program in Melbourne in November. These programs are designed to provide dedicated time and individual support to review authors to complete their reviews or review updates.

The Centre also contributed to a special workshop on Assessing Complex Interventions in Cochrane Systematic Reviews conducted in Melbourne in August (led by the Australian Satellite of the Cochrane Effective Practice and Organisation of Care Group, and contributed to by the Cochrane Consumers and Communication Group and the Cochrane Public Health Group).

Table 1 Workshop and participant characteristics in 2008

Workshop type	Number conducted	Location, date	Number of participants
Developing a Protocol for a Systematic Review	5	Hobart - May Melbourne - June Sydney - July Adelaide - September Sydney - December	109*
Introduction to Analysis	5	Hobart - May Melbourne - June Sydney - July Adelaide - September Sydney - December	107*
Introduction to New Cochrane Handbook Methods & RevMan 5	2	Melbourne - June Sydney - July	19
RevMan 5	1	Hobart - May	10
Assessing Complex Interventions in Cochrane Systematic Reviews	1	Melbourne - November	21
Review Completion and Update Program	1	Melbourne - November	13

<sup>\*</sup> most participants attended both workshops

The Centre also provided administrative and technical support to our Branches. The New Zealand Branch conducted two Protocol and Analysis workshops in 2008 plus two RevMan 5 refresher workshops for existing authors.

#### New Zealand

Workshop type	Number conducted	Location, date	Number of participants
Developing a Protocol	2	Auckland - February Christchurch - August	27
Introduction to Analysis	2	Auckland - February Christchurch - August	31
RevMan 5 training for existing Authors	2	Auckland – July Christchurch – August	24

In April 2008, we taught on a Protocol and Analysis workshop held by the Singapore Branch that included several updated presentations and tutorials prepared by the Centre. Later in the year we conducted a one-day workshop for review authors on new methods and RevMan 5 in Khon Kaen, Thailand and assisted the Thai Cochrane Network with a two-day review completion workshop.

Coinciding with the final SEA-ORCHID Project meeting in Penang, Malaysia in December, we conducted a one-day Cochrane workshop for Malaysian authors and a regional train-the-trainers event. The trainers workshop was conducted by Miranda Cumpston and Steve McDonald and was attended by Cochrane trainers from Indonesia, Malaysia, the Philippines, Singapore and Thailand. The purpose of this workshop was to ensure that learnings and new methods identified at the Cochrane training meeting in Cambridge earlier in the year were communicated to trainers from across the South East Asian region.

### 3. Demand for Other Support Activities

#### 3.1 Cochrane Advanced Review author Support (CARS)

During 2008, the Cochrane Advanced Review author Support (CARS) Program continued to be offered to experienced authors in the region. This support service was available to authors with at least one published review in *The Cochrane Library* who were limited by time or resources to facilitate timely updates of their review(s). The program provides technical support (e.g. retrieving articles, entering data) for up to 10 hours per review author to assist with updating.

Since no applications were received for CARS in 2008, a decision was made to retire the program in 2009 and replace it with additional Review Completion and Update Programs in response to increased demand for this type of support.

#### 3.2 Training and Support Enquiries

From January to December 2008, 109 enquiries about training and support were received and responded to by staff at the Australasian Cochrane Centre. These enquiries varied from simple requests about opportunities for training and support, to more complex queries concerning review authors' individual protocols or reviews and communicating with Cochrane entities about the review process.

In addition to responding to individual queries, training staff continued to promote the use of the Cochrane Collaboration's online resources designed to assist those undertaking systematic reviews. These resources included the *Cochrane Handbook for Systematic Reviews of Interventions*, updated September 2008, and the Open Learning Materials available at <a href="http://www.cochrane.org">http://www.cochrane.org</a>.

Throughout 2008, the opportunities for training and support provided by the Australasian Cochrane Centre were advertised on the Cochrane Collaboration website (<a href="http://www.cochrane.org">http://www.cochrane.org</a>), our website (<a href="http://www.cochrane.org.au/">http://www.cochrane.org.au/</a>) and via AusInfo, an electronic newsletter emailed to members, contributors and supporters of the Cochrane Collaboration in Australasia and South East Asia.

### 4. Evaluation and Feedback

Participants attending core training events were asked to complete an evaluation form at the conclusion of the workshop to provide feedback on the quality and content of training. The content of the evaluation and participant response rate are summarised in Table 2.

Eighty six percent of participants attending Developing a Protocol for a Systematic Review and 90% of participants attending Introduction to Analysis workshops returned an evaluation form with feedback. Over 80% of participants attending the Introduction to New Cochrane Handbook Methods & RevMan 5 and 60% of those who attended the Review Completion and Update Program provided feedback on their learning experiences. A summary of participant feedback for each type of workshop is outlined below.

Table 2 Content of workshop evaluation

Workshop type	Evaluation content	Response rate*
Developing a Protocol for a Systematic Review	<ul> <li>Identify pre-workshop personal learning objectives</li> <li>Rate pre-workshop level of competence in systematic review methodology</li> <li>Rate level of satisfaction with workshop content, presentations, small group discussions, opportunity to ask questions, handout materials, location and organisation features</li> <li>Rate the adequacy of the workshop to meet specific learning objectives</li> <li>Qualitative comments</li> </ul>	86%
Introduction to Analysis	<ul> <li>Rate previous experience of conducting systematic reviews</li> <li>Rate usefulness of workshop including individual sessions</li> <li>Qualitative comments</li> </ul>	93%
Introduction to New Cochrane Handbook Methods & RevMan 5	Rate level of satisfaction with workshop content, presentations, small group discussions, opportunity to ask questions, handout materials, location and organisation features	89%
Review Completion and Update Program	<ul> <li>Identify the positive and negative features of the program</li> <li>Identify areas for improvement</li> </ul>	60%

<sup>\*</sup> For participants attending workshops conducted by ACC in Australia only

#### 4.1 Feedback for Developing a Protocol for Systematic Review Workshops

Sixty five percent of participants reported having little or no skills or knowledge in systematic review methodology prior to attending the workshop (Figure 1). The majority of participants reported being satisfied or highly satisfied with the workshop content and delivery (indicated by a score  $\geq$  4 on a 1-5 rating scale) (Table 3). Over 95% of participants reported having their learning needs adequately or well met by the workshops (indicated by a score  $\geq$  2 a 1-3 on rating scale) (Table 4).

Most qualitative comments were favourable, with participants conveying they enjoyed the presentation style of our facilitators and described them as being approachable, competent and experienced. Participants also commented on the value of the small group discussions and the benefits of an interactive atmosphere. The opportunity to ask questions and the appropriate responses given by facilitators to questions from audience members with differing levels of knowledge and experience was also positively highlighted. Some participants identified the amount of information covered, insufficient time and the limited opportunities for hands-on searching of electronic literature databases as areas that could be improved in future workshops.

Figure 1 Participants' rating of their pre-workshop competence in systematic review methodology

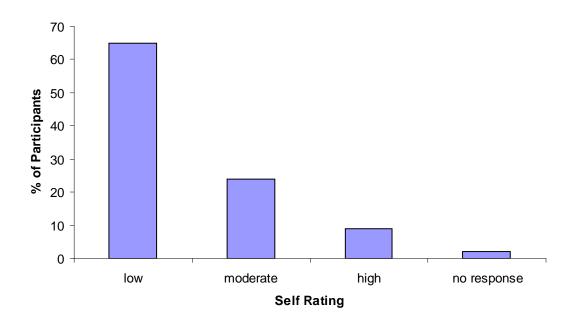


Table 3 Participants' rating of their satisfaction with workshop content and delivery

Rating*	Content	Presentation	Small group discussion	Opportunity to ask questions	Handout materials	Location & organisation	Overall
1-2	2%	1%	1%	1%	1%	3%	0%
3	4%	6%	5%	8%	2%	7%	6%
4-5	94%	93%	94%	91%	97%	90%	93%
NR	0%	0%	0%	0%	0%	0%	1%

Feedback from workshops conducted in Australia only

Table 4 Participants' rating of the workshop in meeting their learning objectives

Rating*	Understand purpose of writing a protocol	Understand process for registering & completing a protocol	Construct a well formulated question	Understand principles of developing a thorough search strategy	Identify & assess possible sources of bias in clinical trials
1	0%	0%	0%	1%	0%
2	5%	6%	5%	14%	2%
3	93%	92%	93%	83%	96%
NR	2%	2%	2%	2%	2%

Feedback from workshops conducted in Australia only; NR = no response to this item in evaluation form \* 1 = learning objective not adequately met, 2 = adequately met, 3 = well met

<sup>\* 1 =</sup> highly dissatisfied, 5 = highly satisfied, NR = No Response

#### 4.2 Feedback for Introduction to Analysis Workshops

Over 90% of participants reported having little or no experience in conducting systematic reviews prior to attending the workshops (indicated by a score  $\leq$  3 on a 1-5 rating scale) (Figure 2). Over 95% of participants rated the workshops as very helpful overall (indicated by a score  $\geq$ 4 on a 1-5 rating scale - Table 5). The usefulness of individual sessions was also rated highly by participants (Table 5).

Qualitative comments from participants suggested they valued the clear presentations along with the precise and simple explanations of complex concepts. The participants also commented on the use of practical exercises along with encouragement to ask questions and the hands-on sessions using Review Manager as being helpful and positive features of the workshop. Some participants identified the amount of information covered within the allocated time and insufficient time with the computer exercises for Review Manager as areas that could be improved in future workshops.

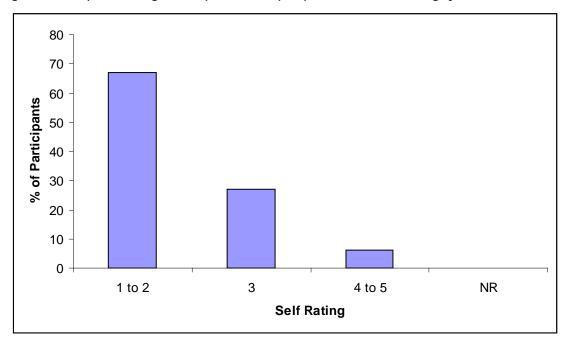


Figure 2 Participants' rating of their pre-workshop experience in conducting systematic reviews

(1=wondering how to start, 10=completed several reviews, NR= no response)

Table 5 Participants' rating of the usefulness of workshops and individual sessions

Sessions	Rating*			
	1-2	3	4-5	NR
Overall workshop	1%	2%	97%	0%
Binary data	2%	6%	92%	0%
Continuous data	2%	10%	88%	0%
Meta-analysis	2%	4%	94%	0%
Common errors & challenging data	1%	16%	83%	0%
Heterogeneity	2%	16%	82%	0%
RevMan 5	4%	11%	85%	0%

Feedback from workshops conducted in Australia only; NR = no response to this item in evaluation form \* 1 = outstandingly unhelpful, 5 = outstandingly helpful

#### 4.3 Feedback for Review Completion and Update Program

All positive feedback from participants related to having dedicated time to work on their reviews; the availability of expert and constructive advice; and the encouragement and support received from Australasian Cochrane Centre staff. The informative and flexible nature of the program, which included information sessions and small group discussions on topics nominated by participants in a supported environment, was favoured well. The participants also highlighted that the opportunity to interact and learn from other review authors in a well-organised workshop was rewarding. Areas we improved within the program was the limited access to printers and the internet by placing participants in offices with printer and internet access.

Table 6 summarises the review topic areas addressed by participants attending the 2008 Review Completion and Update Program.

#### Table 6 Review topics of participants in the Review Completion and Update Program

Review title	Cochrane review group
Chiropractic interventions for low-back pain	Back Group
Clinical pathways: effects on professional practice, patient outcomes, length of stay and hospital costs	Effective Practice and Organisation of Care Group
Fresh frozen plasma for cardiovascular surgery	Heart Group
Adrenaline and vasopressin for cardiac arrest	Heart Group
Drug treatments for giant cell arthritis	Musculoskeletal Group
Drug treatments for polymyalgia rheumatica	Musculoskeletal Group
Corticosteroid injections for shoulder pain (update)	Musculoskeletal Group
Non-steroidal anti-inflammatory drugs (NSAIDs) for shoulder pain (update)	Musculoskeletal Group
Interventions for promoting smoking cessation during pregnancy (update)	Pregnancy and Childbirth Group
Protease modulating dressings for treating diabetic foot ulcers	Wounds Group
Silver based wound dressings and topical agents for treating diabetic foot ulcers (update)	Wounds Group
Local and systemic treatments for acute oedema after burn injury	Wounds Group

### 5. Output

The output of workshop participants has continued to grow over the past few years. A quarter of participants attending a Protocol or Analysis workshop in 2007 have published a protocol or review in *The Cochrane Library*. For workshop attendees in 2006 and 2005, around 30% have now published a protocol or review in the Library, and for 2004 the proportion is close to 40% (Table 7). Over 90% of participants attending the Review Completion Program since 2004 have published a protocol or review in *The Cochrane Library*.

Table 7 Output of participants attending Protocol and Analysis workshops (data extracted from Archie)

	Year first attended workshop				
	2004	2005	2006	2007	2008
Participants with at least 1 review	30%	20%	17%	10%	8%
Participants with no reviews but at least 1 protocol	9%	10%	13%	14%	19%
Participants with no reviews or protocols but at least 1 registered title	2%	0%	5%	6%	11%

Output relates to participants attending training in Australia only

## Contribution to Regional and International Training and Support Activities

The Australasian Cochrane Centre contributed to regional and international training and support activities by:

- Organising and facilitating various training workshops with colleagues in the region including Singapore, Thailand, New Zealand and Malaysia;
- Organising a regional train-the-trainers event to disseminate new methods to trainers in Indonesia, Malaysis, Philippines, Singapore and Thailand;
- Organising and hosting the Symposium for Australasian Review Authors conducted in Hobart in May;
- Organising a meeting in Cambridge, UK of Centre trainers and Cochrane Collaboration methodologists to receive training in new methods and discuss future training needs and strategies;
- Co-convening a Cochrane Training Working Group that was formally established at the 16<sup>th</sup> Cochrane Colloquium, Freiburg;
- Contributing to the workshop and scientific committees for the 16<sup>th</sup> Cochrane Colloquium, Freiburg;
- Facilitating a workshop for developing a fictitious review for training purposes at the 16<sup>th</sup> Cochrane Colloquium, Freiburg; and
- Providing training materials for other Cochrane training events and meetings.

#### **Program for Review Author Training and** 7. Support in 2009

A teleconference was conducted in December 2008 between staff at the Australasian Cochrane Centre and staff from Australasian-based entities. The purpose of the teleconference was to review the training and support provided in 2008 and to plan activities and a timetable for 2009. A summary of the training events that arose from the teleconference and subsequent planning are outlined in Table 8.

In 2009, a diverse training and support program will continue to be offered to new and experienced review authors including core review author training workshops (such as Developing a Protocol for a Systematic Review, Introduction to Analysis and Review Completion and Update Program) and special workshops (such as Systematic Reviews of Diagnostic Test Accuracy and Complex Interventions in Cochrane Reviews).

The training staff will continue to update the training and support materials to ensure they are aligned with methodological advancements and to respond to feedback of participants within Australasia. Importantly, as co-convenors of the Cochrane Training Working Group, the training team will be involved in establishing standardised training materials and resources for the Collaboration and will contribute to projects aimed at providing review author training beyond face-to-face workshops.

The training and support staff at the Australasian Cochrane Centre will continue to provide administrative and technical support to Cochrane entities in the region, maintain support services used in 2008 and evaluate and respond to the needs of Australasian Cochrane review authors.

Table 8 Plan for training events in 2009

Workshop type	Target audience	Number	City, date
Developing a Protocol for a Systematic Review	New review authors	6	Melbourne – March Brisbane – May Sydney – June Perth - July Adelaide - August Sydney – December
Introduction to Analysis	New review authors	6	Melbourne – March Brisbane – May Sydney – June Perth - July Adelaide - August Sydney – December
Review Completion and Update Program	New or existing review authors completing or updating their review(s)	6	Melbourne - March (5 days) Darwin - April (1 day) Brisbane - May (3 days) Perth - July (3 days) Adelaide - August (1 day) Melbourne - November (5 days)
Complex Interventions in Cochrane reviews	Existing review authors	1	Melbourne - August
Systematic Reviews of Diagnostic Test Accuracy	New or existing authors interested in DTA reviews	1	Melbourne - March

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