



THE NORDIC  
COCHRANE CENTRE

# Annual report

## 2012



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## Introduction

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Updated systematic reviews of clinical research are essential for rational decision making in health care and for guiding the planning of new research. The Cochrane Collaboration is a registered charity, founded in 1993. It's major product, The Cochrane Library, contains more than 5,000 regularly updated systematic reviews of interventions in health care.

It is a fundamental right that information that is important to the citizens is transparent and available. Few things are more important than having access to reliable information about the benefits and harms of interventions for preventing and treating diseases. Half of the world's population has free access to Cochrane reviews and the other half has free access to abstracts of Cochrane reviews. In the near future, everyone will have free access to all Cochrane reviews 12 months after they have been published or updated.

Cochrane reviews are indexed in PubMed. In 2011, the impact factor of Cochrane reviews was 5.9, which ranked in the top 10 of the 155 journals in the ISI category "Medicine, General & Internal."

The Cochrane Collaboration engages close to 30,000 people. Its organisational structure is described at <http://www.cochrane.org/>.

We report here the achievements of The Nordic Cochrane Centre for 2012 and the three review groups based in Denmark in relation to our Strategic Plan 2011-15. For general information about the centre, see <http://www.cochrane.dk/>.

The Nordic Cochrane Centre was established on 13 October 1993. There are branches of the Centre in Finland and Norway. The branches perform similar work as the Centre but have less formal obligations. The work of the Centre is evaluated by The Cochrane Collaboration Steering Group.

In addition to the centre and its branches, five Cochrane groups are based in the Nordic countries: The Hepato-Biliary Group (Denmark), The Colorectal Cancer Group (Denmark), The Anaesthesia Group (Denmark), The Occupational Health Group (Finland) and The Norwegian satellite of the Effective Practice and Organisation of Care Group (Norway).

The Nordic Cochrane Centre and the three groups based in Denmark are financed by the Danish Government. Other funders are listed in the Annual Reports (<http://www.cochrane.dk/>). We do not accept industry funding.

Citizens in Denmark, Iceland, Norway, Poland and Sweden, and almost all physicians in Finland, have free access to The Cochrane Library on the Internet, and The Cochrane Library is often consulted in these countries.

## Selected achievements in 2012

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The Nordic Cochrane Centre contributes substantially to The Cochrane Collaboration, particularly in research and IT development.

### Research

The Centre is strong in research. In the 5-year period from 2006 to 2010, we published 32 papers in "the big six": Lancet, BMJ, JAMA, Annals of Internal Medicine, PLoS Medicine and New England Journal of Medicine. Much of this research is of a methodological nature, which contributes to improving the quality and reliability of Cochrane reviews and of randomised trials.

We update Cochrane reviews performed by staff members and publish new reviews, focusing on issues of major importance for public health or for our national economies. In 2012, we published a Cochrane review of general health checks (CD009009) that included 16 randomised trials and 11,940 deaths. We found that general health checks did not reduce morbidity or mortality and cannot be recommended, as they have the potential for causing harm. Our review was the most cited Cochrane review in the media in 2012.

With colleagues in North America, we also published a very large Cochrane review that showed that sponsorship of drug and device studies by the manufacturing company leads to more favourable results and conclusions than sponsorship by other sources (MR000033). Our analyses suggested the existence of an industry bias that cannot be explained by standard "Risk of bias" assessments.

With colleagues in France, we published a very important review of trials that had used both a blind and a nonblind outcome assessor (BMJ 2012;344:e1119). The review showed that nonblind assessors exaggerated the effect by 36%, on average, measured as a ratio of odds ratios. Since many placebo controlled trials cannot be effectively blinded because of the side effects of the active drug, this results of this review mean that many of the treatments we use, and which have been approved by our drug regulators, in reality can be assumed to have no effect.

In 2012, we published a book describing flaws in studies and politics related to mammography screening, "Mammography screening: truth, lies and controversy." We also updated our leaflet about mammography screening and uploaded translations to additional languages, which volunteers in several countries had done for us, as they felt that also in their country, the official information on mammography screening is one-sided and not in accordance with the facts. Our leaflet currently exists in 18 languages, including the six official WHO languages, Arabic, Chinese (both traditional and simplified), English, French, Russian, and Spanish.

We conduct a series of PhD courses of relevance for production of Cochrane reviews and for dissemination of the principles for evidence-based medicine.

Selective reporting of favourable results is by far the biggest threat to evidence-based medicine and to the reliability of Cochrane reviews. Published reports of drug trials are not reliable, but generally exaggerate the benefits and downplay or omit the harms. The result of this is

unnecessary and harmful treatment of patients, and we therefore prioritise our work with opening up the unpublished data at drug agencies.

Our work led to a breakthrough with the European Medicines Agency in 2010 (BMJ 2011;342:d2686), and we currently collaborate with the agency, which has declared that, from January 2014, drug companies that seek marketing authorisation for new drugs or new uses of existing drugs will be required to submit also the raw data of their trials in statistical programmes facilitating independent analyses of the data. The agency aims at making these data available also for the public. It will lead to tremendous progress for public health, and much less harm caused by drugs, when independent researchers will have the opportunity to analyse the raw data by themselves.

Our case set an important precedent in 2010, as it has been possible since then to get access to full clinical study reports and the protocols for the trials. The study reports contain detailed narrative descriptions of the serious adverse effects, and we have found that these events have sometimes been miscoded by the companies so that the main text and the tables of the reports misleadingly downplay the harms.

We are also very active at the political level in the European Parliament and currently work on influencing the Commission's proposed revision of the Clinical Trials Directive so that detailed reports of all new drug trials become publicly available at the new EU Portal no later than 12 months after the trial was finished. We have published our reservations about the Commission's proposal (BMJ 2012;345:e8522).

We have expanded on our research collaboration with colleagues internationally, primarily with researchers in Canada, France, Norway, UK, and USA. We co-author guidelines setting standards for good reporting of research: CONSORT for trials, STROBE for observational studies, PRISMA for systematic reviews and SPIRIT for protocols (published in 2013).

The Nordic Cochrane Centre itself is also international. Currently, our staff represents eight different nations and three continents, Europe, Africa and Asia.

## **IT development**

One of the Nordic Cochrane Centre's core contributions to The Cochrane Collaboration is to produce two central software tools: RevMan and Archie – together known as the Information Management System or IMS. RevMan is the desktop application that gives Cochrane authors a user-friendly interface to write the complex structure of Cochrane reviews. Archie is the central web application where all Cochrane groups manage their members, reviews, documents and editorial workflows. Archie also handles the data delivery to the Collaboration's publisher and supports the Collaboration's monitoring responsibilities.

The IMS team currently consists of eight people working in different areas of software management, development, support and testing. We are continuously working on developing new versions of RevMan and Archie and are also responsible for the operation of the Archie servers, based in the UK.

RevMan 5.2 was released in September 2012. The focus of this version was to improve the structure and functionality of Diagnostic Test Accuracy reviews.

In 2012 we released three major versions of Archie (3.8 - 3.10), delivering more than one hundred new functions or improvements.

Cochrane reviews have readers all over the world, and one of the main projects in 2012 was to provide better support for translating abstracts and plain language summaries of Cochrane reviews. Archie is now used for managing and publishing over 3600 French translations with more languages, e.g. Chinese and Spanish, soon to follow.

Cochrane reviews are currently published in monthly issues, but in 2012 we have worked on the specifications for a new system that allows Cochrane reviews to be published online within hours of being approved for publication. The new system is expected to be released in June 2013.

## Dissemination

The results of our own research and those contained in Cochrane reviews are actively disseminated to the public, most often via journalists who contact us virtually every day. As another example, there are many articles in *Ugeskrift for Læger* (the Journal of the Danish Medical Association) every year that comment on Cochrane reviews from a Danish perspective.

## Review Groups in the Nordic region

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### Cochrane Hepato-Biliary Group

The group was registered on 29 March 1996 and is based in Copenhagen. Issue 12 of The Cochrane Library 2012 contained 151 reviews and 100 protocols. For further information, see The Cochrane Library or <http://ctu.rh.dk/chbg>.

### Cochrane Colorectal Cancer Group

The group was registered on 27 January 1998 and is based in Copenhagen. Issue 12 of The Cochrane Library 2012 contained 97 reviews and 67 protocols. For further information, see The Cochrane Library or <http://www.cccg.dk/>.

### Cochrane Anaesthesia Group

The Anaesthesia Group (CARG) was registered in February 2000 and is based in Copenhagen. Issue 12 of The Cochrane Library 2012 contained 85 reviews and 108 protocols. For further information, see The Cochrane Library or <http://www.carg.cochrane.org/>.

### Cochrane Occupational Safety and Health Group

The Occupational Safety and Health Group was registered in July 2010 and is based in Kuopio. Issue 12 of The Cochrane Library 2012 contained 6 reviews and 15 protocols. For further information, see The Cochrane Library or <http://www.ttl.fi/partner/cohf/Pages/default.aspx>.

## Norwegian Satellite of the Cochrane Effective Practice and Organisation of Care (EPOC) Group

The Norwegian EPOC Satellite was launched in Oslo in November 2006. The aim of the satellite is to support review authors in low- and middle-income countries and reviews relevant to such countries, as well as supporting EPOC review authors in the Nordic area. For further information, see The Cochrane Library.

## Nordic Cochrane reviews

In issue 12, 2012 of The Cochrane Library, 136 reviews and 66 protocols were listed with a Nordic contact address:

Country	Reviews	Protocols
DENMARK	71	34
NORWAY	29	14
FINLAND	26	11
SWEDEN	4	2
RUSSIA	4	0
POLAND	1	5
ARMENIA	1	0
<b>Total</b>	<b>136</b>	<b>66</b>

## Advisory Board for the Nordic Cochrane Centre

The Advisory Board for the Nordic Cochrane Centre provides advice and support about the strategic direction for activities within the Centre. In 2012, the members were:

Doug Altman, Professor of Statistics in Medicine, Oxford, UK  
 Gerd Antes, Director, German Cochrane Centre  
 Mike Clarke, former Director, UK Cochrane Centre  
 Fiona Godlee, Editor-in-Chief, BMJ  
 Niels Würgler Hansen, Head of Division, Danish Ministry of Health  
 Richard Horton, Editor-in-Chief, The Lancet  
 Sine Jensen, Senior Health Adviser, Danish Consumer Council  
 Cindy Mulrow, Editor, Annals of Internal Medicine  
 Maryann Napoli, Associate Director, Center for Medical Consumers, USA  
 Drummond Rennie, Editor, JAMA  
 David Tovey, Editor-in-Chief, The Cochrane Collaboration  
 Erick Turner, Department of Psychiatry, Oregon Health & Science University

## Acknowledgements

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The Cochrane Collaboration is registered as a charity and it is the responsibility of all contributors and entities to secure their own funding. The staff at The Nordic Cochrane Centre are grateful for the financial support received from our funders and the voluntary help received from many people and institutions since the Centre was founded in 1993 (see previous Annual Reports and Strategic Plans on <http://www.cochrane.dk/>). Currently, the funders for The Nordic Cochrane Centre are:

- The Cochrane Collaboration
- The Danish Government
- The Danish Medical Research Council
- Rigshospitalet
- Trygfonden
- University of Copenhagen

## Publications in 2012 by staff at The Nordic Cochrane Centre

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### *New or updated Cochrane reviews and protocols*

Krogsbøll LT, Jørgensen KJ, Grønhøj Larsen C, Gøtzsche PC. General health checks in adults for reducing morbidity and mortality from disease. Cochrane Database of Systematic Reviews. 2012;10:CD009009.

Lundh A, Sismondo S, Lexchin J, Busuioc OA, Bero L. Industry sponsorship and research outcome. Cochrane Database of Systematic Reviews. 2012;12:MR000033.

### *Journal articles, books*

Brorson S, Olsen BS, Frich LH, Jensen SL, Sørensen AK, Krogsgaard M et al. Surgeons agree more on treatment recommendations than on classification of proximal humeral fractures. BMC Musculoskeletal Disorders. 2012;13:114.

Brorson S, Rasmussen JV, Frich LH, Olsen BS, Hróbjartsson A. Benefits and harms of locking plate osteosynthesis in intraarticular (OTA Type C) fractures of the proximal humerus: A systematic review. Injury. 2012;43(7):999-1005.

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Jørgensen KJ, Gøtzsche PC. Dödligheten i bröstcancer minskar--men inte tack vare screening. Dags att slopa mammografiscreening. *Läkartidningen*. 2012;109(13):690-2.

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Jørgensen KJ. Is the tide turning against breast screening? *Breast Cancer Research (Online Edition)*. 2012;14(4):107.

Jørgensen KJ. The evidence that motivated an independent review of breast cancer. *CML Breast Cancer*. 2012;24:37-44.

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Moher D, Hopewell S, Schulz KF, Montori V, Gøtzsche PC, Devereaux PJ et al. CONSORT 2010 explanation and elaboration: updated guidelines for reporting parallel group randomised trials. *International Journal of Surgery*. 2012;10(1):28-55.

Nielsen M, Hansen EH, Gøtzsche PC. What is the difference between dependence and withdrawal reactions?: A comparison of benzodiazepines and selective serotonin re-uptake inhibitors. *Addiction*. 2012;107(5):900-8.

Savović J, Jones H, Altman D, Harris R, Jüni P, Pildal J et al. Influence of reported study design characteristics on intervention effect estimates from randomised controlled trials: combined analysis of meta-epidemiological studies. *Health Technology Assessment*. 2012;16(35):1-82.

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*Letters, book reviews, etc*

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