# Annual report 2022

## **Cochrane Sweden**



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#### Introduction

#### **Background**

Even though Sweden is well-known for its high-quality scientific studies in most fields of medicine, Sweden did not gain its own Cochrane entity until May 2017. The lack of "Cochrane Sweden" might have negatively impacted on the number of Cochrane reviews produced by Swedish authors. The discrepancy in Sweden between the low number of Cochrane reviews and the high number of randomised clinical trials was described in an article in 2011 (Gøtzsche PC, Tendal B, Clarke M. Review production in The Cochrane Collaboration – where is it happening and why? Cochrane Methods. Cochrane DB Syst Rev 2011 Suppl 1:16-9).

A lower rating of Cochrane activities and, more generally, any kind of systematic review has long been observed in the Swedish academic world. For example, in some Swedish universities, the application to become associate professor does not allow inclusion of systematic reviews in the list of publications that are to be considered; PhD students are not oftenly encouraged to prepare systematic reviews for their thesis and PhDs very rarely include systematic reviews. Some of the major national funders do not fund systematic reviews, but only basic research and primary studies; and teaching on using and preparing systematic reviews is not normally provided to students of medicine.

Alongside the limited academic recognition of systematic reviews in Sweden, there is and has been a strong move for evidence based medicine at all levels of Swedish health care management. For many decades, Sweden has a deeply rooted tradition for using national systematic reviews from the Swedish Council on Technology Assessment in Health Care (SBU) as a basis for the decision and priorities on new methods. Further, there is a national HTA Network coordinated by SBU with strong impact on national, regional and local health care guidelines. Also, the Swedish National Board for Health and Welfare (Socialstyrelsen) has a continuous process in developing evidence based national guidelines in a wide variety of medical conditions and areas.

#### **Launch of Cochrane Sweden**

Cochrane Sweden was launched as an associate centre to the Nordic Cochrane Centre in May 2017 in Lund, where the centre is located. Cochrane Sweden, which became a full Centre in 2020, is supported by Skåne University Hospital, Region Skåne and Lund University; since 2020, also by Region Västra Götaland.

Cochrane Sweden has two main priorities:

- To introduce review authors and other contributors to Cochrane methods, and support Swedish authors to prepare, publish and maintain their Cochrane reviews
- To advocate for evidence-informed practice in Sweden, particularly through promoting access to Cochrane content and facilitating the use of Cochrane reviews to inform decision making

Cochrane Sweden's strategic plan was approved in April 2017 and encompasses the goals of the Cochrane "Strategy to 2020", i.e.

• Goal 1: Producing evidence

- Goal 2: Making our evidence accessible
- Goal 3: Advocating for evidence
- Goal 4: Building an effective and sustainable organisation

#### **Activities at Cochrane Sweden**

#### Research

The research activity is mainly focused on the production of systematic reviews. Since September 2018, Minna Johanson (Cochrane Sweden Fellow) has been part of the staff; however since December 2019 she is Director of Cochrane Sustainable Health Care, which is a Field supported by Cochrane Sweden and Cochrane Denmark, until 2022. In January 2020, Martin Ringsten joined as a Project Coordinator at Cochrane Sweden and Katarina Persson as administrative support.

More than 30 Cochrane reviews have been published between 2015 and 2022, and more than 15 protocols and reviews are under preparation.

The most common research area is neonatology, focusing mainly on respiratory and neurological morbidities in the newborn. The other topics include rheumatology, Covid-19, pain, epilepsy, skin cancer.

In addition, staff at Cochrane Sweden have published a number of systematic reviews in pediatric Journals.

### **Cochrane workshops**

Interest and participation in our Cochrane workshops have been excellent.

Following Cochrane Sweden's launch in May 2017, the most relevant courses and workshops have been organised with the qualified support of Karsten Jørgensen Cochrane Denmark, and, from 2018, of Minna Johansson, Director of Cochrane Sustainable Health Care and Claire Glenton, Director of Cochrane Norway.

Here is a list of the training events held during 2022:

- April: 40-hour online workshop, in collaboration with Cochrane South Africa
- May: 40-hour PhD student course on Cochrane methodology for systematic reviews, attended by more than 20 people
- June: online webinar for USA gynecologists, attended by more than 50 people
- October: two-day workshop on meta-analysis, attended by more than 20 people
- November: 40-hour PhD student course on Cochrane methodology for systematic reviews, attended by more than 20 people

#### Other initiatives related to training and education

In February 2018, a fruitful collaboration has been established with Martin Garwicz (who coordinates students' training towards Scientific Scholarship at the Medical Degree Programme) and Maria Björklund (Lund University Library), as reported in press releases in English (<a href="http://www.cochrane.org/news/new-learning-opportunities-evidence-based-health-care-medical-students-sweden-0">http://www.cochrane.org/news/new-learning-opportunities-evidence-based-health-care-medical-students-sweden-0</a>) and Swedish (<a href="https://www.med.lu.se/nyheter/180221\_cochrane">https://www.med.lu.se/nyheter/180221\_cochrane</a>).

The initiative consists of providing training in Cochrane methodology to medical students at Lund University. The training and the assessment of the students include the use of the "Cochrane Interactive Learning" (CIL) platform. The CIL modules match the learning objectives of Scientific Scholarship for each semester. Lund University is the first institution in the world to provide unlimited access, free at point-of-use to CIL. Also, thanks to this initiative, more medical students, in particular at Lund University, are now aware of the possibility to develop research projects on Cochrane evidence. Following these positive experiences, Cochrane Sweden launched Cochrane International Mobility, which has become an official project of Cochrane.

An additional project consists of 40-hour PhD student courses where CIL usage is integrated with face to face training, in collaboration with Cochrane Denmark (two editions yearly).

Worldwide, one of the largest group of CIL users is at Lund University, thanks to the collaboration between the Faculty of Medicine and Cochrane Sweden.

Of note, promoting the use of CIL implies also increasing the numbers of Cochrane accounts. Numbers of new Swedish Cochrane accounts have consistently increased in the last years, especially through involvement of medical students. Since late 2020, staff and students at Lund University have free access to Covidence.

We conducted a survey among the Swedish Universities to assess to which extent systematic reviews are recognised as part of PhD theses and in the applications to become associate professor. The findings have been published on Läkartidningen

(http://lakartidningen.se/Opinion/Debatt/2019/01/Dags-att-hoja-statusen-for-systematiska-oversikter-i-Sverige/). The aim was to map the current situation at each Swedish University and to develop targeted initiatives to address this issue in a constructive way. Indeed, the academic recognition of systematic reviews has increased in the last years. Since 2022 Lund University accepts up to three systematic reviews included in a PhD.

#### **Cochrane Sweden in the media**

Since December 2019, Dina Muscat Meng works as Coordinator of Cochrane Sustainable Health Care and therefore not anymore officially part of the staff of Cochrane Sweden as Communications Consultant. Martin Ringsten is responsible of the monthly newsletter and updating the website, in collaboration with Katarina Persson.

Information about Cochrane Sweden has been reported in the national media also in 2022, e.g.,

- Article <u>Läkemedel i förebyggande syfte minskar risken för sjukhusvård vid RS-virus</u>, Örebronyheter, January 2022
- Article <u>Läkemedel i förebyggande syfte minskar risken för sjukhusvård</u>, Vetenskap & Hälsa, January 2022

- Article <u>Läkemedel i förebyggande syfte minskar risken för sjukhusvård vid RS-virus</u>, Skane University Hospital, January 2022
- Article <u>Cochrane: Antikroppar minskar allvarliga RS-infektioner hos barn</u>, Dagens Medicin, January 2022
- Article Endast 1 av 13 000 artiklar kunde inkluderas i översiktsstudie om smittspridning av covid-19, Lund University, May 2022
- Article <u>Så väger forskare samman resultat från många studier</u>, Vetenskap och Hälsa, May 2022

In 2019 we produced a video on our activities: https://www.youtube.com/watch?v=TqMtIoqw27I

In addition, the following channels have been frequently used with consistent results:

- Website <u>www.sweden.cochrane.org</u> where main activities are described, thanks to Martin Ringsten and Katarina Persson.
- Twitter account @CochraneSweden
- Official Linkedin page (<a href="https://www.linkedin.com/company/cochrane-sweden/">https://www.linkedin.com/company/cochrane-sweden/</a>)
- Instagram page <a href="https://www.instagram.com/cochrane-sweden/">https://www.instagram.com/cochrane-sweden/</a>.

Major articles about CS are listed on <a href="https://sweden.cochrane.org/about-us/cochrane-sweden-media">https://sweden.cochrane.org/about-us/cochrane-sweden-media</a>.

## **Cochrane reviews by Swedish authors**

We report here the reviews published by contact authors with a Swedish affiliation in Archie. Cochrane review production in Sweden is much lower than in Denmark, however significantly higher than a few years ago. To date, 35 full reviews have been published by contact authors with a current Swedish address. Six new review protocols and four new reviews (i.e. no updates) have been published during 2022.

The precise figures of Cochrane registered titles are not reported in this document. However, an increased activity has been observed in 2020, including titles in neonatology and new titles by participants in the Cochrane workshops held in Sweden in the last years.

## **Advisory Board for Cochrane Sweden**

We created an Advisory Board in 2020: <a href="https://sweden.cochrane.org/about-us/cochrane-sweden-advisory-board">https://sweden.cochrane.org/about-us/cochrane-sweden-advisory-board</a> The Advisory Board met up twice during 2022.

## **Acknowledgements**

The staff at Cochrane Sweden are grateful for the support from Karsten Jørgensen and Claire Glenton, Cochrane Denmark and Cochrane Norway, respectively.

Also, we acknowledge Stefan Jovinge at Skåne University Hospital for his wise guidance.

## **Publications by staff at Cochrane Sweden**

#### New or updated Cochrane reviews

- 1. Dariya V, MorescoL, **Bruschettini M**, Brion LP. <u>Cuffed versus uncuffed endotracheal tubes for neonates</u>. Cochrane Database of Systematic Reviews. 2022, Issue 1. Art. No.: CD013736
- 2. **Bruschettini M**, Hassan KO, Romantsik O, Banzi R, Calevo MG, Moresco L. <u>Interventions for the management of transient tachypnoea of the newborn an overview of systematic reviews</u>. Cochrane Database of Systematic Reviews. 2022, Issue 2. Art. No.: CD013563
- 3. Pizarro AB, Persad E, Durao S, Nussbaumer-Streit B, Garritty C, Engela-Volker JS, McElvenny D, Rhodes S, Stocking K, Fletcher T, Van Tongeren M, Martin C, Noertjojo K, Sampson O, Jørgensen KJ, **Bruschettini M**. Workplace interventions to reduce exposure to SARS-CoV-2 infection outside of healthcare settings. Cochrane Database of Systematic Reviews 2022, Issue 5. Art. No.: CD015112. DOI: 10.1002/14651858.CD015112.pub2
- 4. Bäcke P, **Bruschettini M**, Sibrecht G, Thernström Blomqvist Y, Olsson E. <u>Pharmacological interventions for pain and sedation management in infants undergoing therapeutic hypothermia</u>. Cochrane Database of Systematic Reviews 2022, Issue 11. Art. No.: CD015023. DOI: 10.1002/14651858.CD015023.pub2
- 5. **Bruschettini** M, Brattström P, Russo C, Onland W, Davis PG, Soll R. <u>Caffeine dosing regimens in preterm infants with or at risk for apnea of prematurity</u>. Full review accepted for publication [Commissioned to Cochrane Sweden and Cochrane Neonatal by the WHO, for the preparation of an international guideline]
- 6. Romantsik O, Moreira A, Thébaud B, Ådén U, Ley D, **Bruschettini M**. Stem cell-based interventions for the prevention and treatment of intraventricular haemorrhage and encephalopathy of prematurity in preterm infants. Full review accepted for publication (update of review published in 2019)

#### New protocols

- 1. Evans S, Berg M, **Bruschettini M**, Soll R. <u>Doxapram for the prevention and treatment of apnea in preterm infants</u>. Cochrane Database of Systematic Reviews 2022, Issue 3. Art. No.: CD014145
- 2. **Bruschettini M**, Olsson E, Persad E, Garratt A, Soll R. <u>Clinical rating scales for assessing pain in newborn infants</u>. Cochrane Database of Systematic Reviews 2022, Issue 3. Art. No.: MR000064
- 3. **Ringsten M**, Kredo T, Hohlfeld A, **Bruschettini M**. <u>Diclofenac for acute postoperative pain in children</u>. Cochrane Database of Systematic Reviews 2022, Issue 4. Art. No.: CD015087
- 4. Persad E, Pizarro AB, Alarcon-Ruiz C, **Bruschettini M**. Non-opioid analgesics for procedural pain in neonates. Cochrane Database of Systematic Reviews 2022, Issue 7. Art. No.: CD015179 [part of the Gerber Foundation Grant to Cochrane Neonatal, for the preparation of systematic reviews on neonatal pain]
- 5. Pessano S, Kredo T, **Bruschettini M**, Gloeck NR. <u>Ibuprofen for acute postoperative pain in children</u>. Cochrane Database of Systematic Reviews 2022, Issue 9. Art. No.: CD015432
- 6. Pessano S, Romantsik O, Olsson E, Hedayati E, **Bruschettini M**. <u>Pharmacological</u> interventions for the management of pain and discomfort during lumbar puncture in newborn infants. Cochrane Database of Systematic Reviews 2022, Issue 12. Art. No.: CD015594

#### Journal articles and reports

- Lehnerer V, Roidl A, Romantsik O, Guzman R, Wellmann S, Bruschettini
   M. Mesenchymal stem cell therapy in perinatal arterial ischemic stroke: systematic review of preclinical studies. Pediatric Research, 2022 July 29. doi: 10.1038/s41390-022-02208-3
- 2. Bruckner T, Rodgers F, **Styrmisdóttir** L, Keestra S. <u>Adoption of World Health</u>
  <u>Organization Best Practices in Clinical Trial Transparency Among European Medical</u>
  <u>Research Funder Policies</u>. JAMA Netw Open. 2022 Aug 1;5(8):e2222378
- 3. **Bruschettini M**, Moreira A; Pizarro AB; Mustafa S; Romantsik O. <u>The effects of caffeine following hypoxic-ischemic encephalopathy: a systematic review of animal studies</u>. Brain Research 2022.1790:147990
- 4. Romantsik O, Ross-Munro E, Grönlund S, Holmqvist B, Brinte A, Gerdtsson E, Vallius S, **Bruschettini M**, Wang X, Fleiss B, Ley D. <u>Severe intraventricular hemorrhage causes long-lasting structural damage in a preterm rabbit pup model</u>. Pediatric Research, 2022 May 3. doi: 10.1038/s41390-022-02075-y

- 5. Moreira A, Benvenuto D, Fox-Good C, Alayli Y, Evans M, Jonsson B, Hakansson S, Harper N, Kim J, Norman M, **Bruschettini M**. <u>Development and Validation of a Mortality Prediction Model in Extremely Low Gestational Age Neonates</u> (Neonatology, 2022 May 20:1-10. doi: 10.1159/000524729
- 6. Bäcke P, **Bruschettini M**, Thernström Blomqvist, Olsson E. IPSNUT <u>Interventions for the management of Pain and Sedation in Newborns undergoing Therapeutic hypothermia for hypoxic-ischemic encephalopathy: protocol of a systematic review</u>. Systematic Reviews, 2022;11:101
- 7. Bäcke P, **Bruschettini M**, Thernström Blomqvist, Sibrecht G, Olsson E. <u>Interventions for the management of pain and sedation in newborns undergoing therapeutic hypothermia for hypoxic-ischemic encephalopathy: a systematic review</u>. Pediatric Drugs, 2023 Jan;25(1):27-41. doi: 10.1007/s40272-022-00546-7
- 8. Sibrecht G, Borys F, Campone C, Bellini C, Davis P, **Bruschettini M**. Cooling strategies for therapeutic hypothermia during neonatal transport of infants with hypoxic ischemic encephalopathy: a systematic review. Acta Paediatrica, 2022 Dec 17. doi: 10.1111/apa.16632