A systematic review of the effectiveness of nurse-led clinics on service delivery and clinical outcomes in adults with chronic ear, nose and throat complaints.

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Table of Contents

List of tables and figures ......................................................................................... 5
Abstract .................................................................................................................. 6
Student declaration .................................................................................................. 9
List of Abbreviations .............................................................................................. 10
Chapter 1  Introduction .......................................................................................... 11
  1.1 Introduction to this thesis ................................................................................ 11
  1.2 The structure of this thesis ............................................................................ 11
  1.3 Situating this review ..................................................................................... 12
  1.4 An introduction to systematic reviews .......................................................... 13
  1.5 Quantitative evidence of effectiveness and cost effectiveness .................... 20
  1.6 Challenges of undertaking a comprehensive systematic review ................ 21
Chapter 2  Background ......................................................................................... 23
  2.1 Introduction to nurse led clinics .................................................................... 23
  2.2 Emergence of nurse led clinics .................................................................... 24
  2.3 Nurse led clinics in ENT .............................................................................. 26
Chapter 3  Systematic review protocol ................................................................. 29
  3.1 The systematic review protocol .................................................................... 29
  3.2 Background ................................................................................................... 29
  3.3 Objective ....................................................................................................... 34
  3.4 Criteria for considering studies for this review - Inclusion criteria ............... 34
  3.5 Search strategy ............................................................................................ 36
  3.7 Method of the review ................................................................................... 37
Chapter 4  Results ................................................................................................. 40
  4.1 Study identification results ........................................................................... 40
  4.2 Methodological quality assessment of studies .............................................. 43
  4.2 Findings from Individual Included Studies ................................................... 50
4.3 Synthesis of review findings.................................................................52

Chapter 5 Discussion..................................................................................62
  5.1 Service delivery outcomes ..................................................................62
  5.2 Clinical and healthcare outcomes .......................................................63
  5.3 Financial outcomes ............................................................................64
  5.10 Methodological issues in research ......................................................64
  5.11 Limitations of this study ..................................................................65

Chapter 6 Conclusions and Recommendations ........................................66
  6.1 Conclusions .......................................................................................66
  6.2 Recommendations for Practice ..........................................................66
  6.3 Recommendations for further research .................................................68

Acknowledgements .....................................................................................70

References ..................................................................................................71

Appendix I: Logic grid of initial search terms ............................................73
Appendix II: Example Search String (PubMed) .........................................74
Appendix III: Studies not selected for retrieval .........................................75
Appendix IV: Characteristics of included studies .......................................77
Appendix V: JBI Critical Appraisal and Data Extraction Instruments ..........80
Appendix VI: Joanna Briggs Institute Grades of Recommendation ............87
List of tables and figures

Table 1  Stages in undertaking a Systematic review ................................................................. 17
Figure 1 PRISMA Flowchart detailing study identification and selection.................................. 42
Table 2  Critical appraisal of quantitative studies ..................................................................... 45
Table 3  Critical appraisal of the cost effectiveness study.......................................................... 49
Table 4  Patient satisfaction ....................................................................................................... 55
Table 5  Waiting Times ............................................................................................................. 57
Table 6  Clinical and healthcare outcomes .............................................................................. Error! Bookmark not defined.
Table 7  Financial Outcomes ................................................................................................... 60
Abstract

**Background** Ear, nose and throat complaints are very common and can cause disruption to patients’ lives. Many conditions are of a chronic nature and are not currently managed in a timely manner by general practitioners in the community. This may be due to a lack of specialised knowledge, necessary diagnostic equipment, or a lack of time for lengthy patient education about management of their condition. A nurse-led model of care may be an effective alternative.

**Objectives** To examine the effectiveness of nurse-led clinics on adults with chronic ear, nose and throat complaints.

**Inclusion Criteria**

**Participants** Adult patients, aged 18 and older, attending ear, nose and throat clinics, regardless of complaint.

**Interventions** Nurse–led care in general practice and acute care in which the nurse was identified as taking a lead role in the care of the patients with chronic ear, nose and throat complaints.

**Comparator** General practitioner-led care, or ear, nose and throat consultant- led care, sometimes described as “standard care”.

**Outcomes** Service delivery outcomes- specifically patient satisfaction, waiting times, patient education booking queues, clinical and health outcomes, specifically, treatment times, treatment duration, course of treatment, self-treatment rates, change in presentation to clinic episodes, re-infection rates, prevention and cure, representation of patients to clinic for same complaint, levels of pain and
discomfort and financial outcomes, specifically differences in costing, nurse-led clinic versus medical-led clinic.

**Studies** Any relevant quantitative studies published in English between 1980-2013 were considered.

**Search Strategy** A standardised three-step search strategy aimed to find both published and unpublished studies. Databases searched included PubMed, CINAHL, Cochrane Library (CENTRAL), Scopus, Embase, MedNar and ProQuest Theses and Dissertations.

**Methodological quality** Assessed by two reviewers prior to inclusion in the review using standardised critical appraisal instruments from the Joanna Briggs Institute.

**Data Synthesis** Due to the methodological heterogeneity of the included studies, no statistical pooling was possible and all results are presented narratively.

**Results** The search identified 13,536 titles, of which 20 potentially relevant articles were retrieved. Of these 20, 17 were excluded following full-text review leaving three studies that were assessed for methodological quality and included in the review. Service delivery outcomes: Patient satisfaction was equal or higher and waiting times were shorter in nurse led clinics. Clinical and health outcomes: Lower pain/discomfort levels were demonstrated in nurse led clinics but other clinical/health outcomes were not addressed. Financial outcomes: Nurse-led clinics were cost effective when compared with medical-led clinics.

**Conclusions** While all studies reported evidence of effectiveness of nurse-led clinics on service delivery and clinical outcomes in adults with chronic ear, nose and throat complaints, most of the data was self-reported and many of the outcomes of interest were not considered. The lack of experimental trials means that the level of evidence is low and further research is needed.

**Implications for Practice** Nurse-led ear, nose and throat clinics should be considered in the
management of adult patients with ear, nose and throat complaints, particularly those of a chronic nature which could be effectively managed by specialist nurses.

**Implications for research** Currently the overall level of evidence discovered regarding nurse-led ear, nose and throat clinics is low and further more thorough comprehensive studies are required to address all of the proposed outcomes. There is little to no evidence on a number of key outcomes and therefore more research is needed on the effect of nurse-led clinics to address these outcomes.

**Keywords** Nurse, nursing, nurse specialist, nurse practitioner, advanced nursing, ear, nose, throat, patient, satisfaction, cost, effectiveness, service, adult, chronic, acute
Student declaration

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Signed:

Caroline Whiteford

Dated: / /2015
## List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACTUARI</td>
<td>Analysis of Cost, Technology and Utilization Assessment and Review Instrument</td>
</tr>
<tr>
<td>APRN</td>
<td>Advance Practice Registered Nurse</td>
</tr>
<tr>
<td>CI</td>
<td>Confidence interval</td>
</tr>
<tr>
<td>CReMS</td>
<td>Comprehensive Review Management System</td>
</tr>
<tr>
<td>CNM</td>
<td>Certified Nurse Midwife</td>
</tr>
<tr>
<td>CNP</td>
<td>Certified Nurse Practitioner</td>
</tr>
<tr>
<td>CNS</td>
<td>Clinical Nurse Specialist</td>
</tr>
<tr>
<td>CRNA</td>
<td>Certified Registered Nurse Anaesthetist</td>
</tr>
<tr>
<td>ECN</td>
<td>Ear care Nurses</td>
</tr>
<tr>
<td>ENT</td>
<td>Ear, Nose and Throat</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>HSQ-12</td>
<td>Health Related Quality Of Life Score</td>
</tr>
<tr>
<td>MASTARI</td>
<td>Meta Analysis of Statistics Assessment and Review Instrument</td>
</tr>
<tr>
<td>MeSH</td>
<td>Medical subject headings</td>
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<tr>
<td>NLDC</td>
<td>Nurse Led Dizziness Clinic</td>
</tr>
<tr>
<td>NOTARI</td>
<td>JBI Narrative, Opinion and Text Assessment and Review Instrument</td>
</tr>
<tr>
<td>QARI</td>
<td>JBI Qualitative Assessment and Review Instrument</td>
</tr>
<tr>
<td>SUMARI</td>
<td>System for the Unified Management, Assessment and Review of information</td>
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