

1 **Title:** Implementation and evaluation of the Eat, Sleep, Console Model of Care for babies diagnosed with  
2 neonatal abstinence syndrome: A Scoping Review Protocol

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5 **Abstract**

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7 **Introduction:** Infants diagnosed with neonatal abstinence syndrome [NAS] or neonatal opioid  
8 withdrawal syndrome [NOWS] is a growing population in Canada. In most facilities, an outdated model  
9 of care is used to guide the care and assessment of babies diagnosed with NAS. Challenges with this  
10 outdated model have prompted the transition to a novel approach to care. Despite this promising  
11 intervention to improve patient and health system outcomes, little is known on how to effectively  
12 implement and evaluate the model in clinical practice.

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14 **Objectives:** We will conduct a scoping review to address the question, “How has the ESC model been  
15 implemented and evaluated in practice?”.

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17 **Methods:** We will follow the Joanna Briggs Institute Methodology for Scoping Reviews and Arksey and  
18 O’Malley’s scoping review framework. Reporting will follow the Preferred Reporting Items for  
19 Systematic Reviews and Meta-Analysis extension for scoping reviews. Published and unpublished  
20 literature will be included in the review. The following databases and grey literature will be searched:  
21 MEDLINE, Embase, CINAHL, PsycINFO, Google Scholar, and websites identified in a google website  
22 search. Two independent reviewers will screen, and extract data based on pre-determined eligibility  
23 criteria and data extraction tools. We will narratively describe quantitative data, along with completing  
24 an inductive thematic analysis of qualitative findings. Furthermore, we will conduct a directed content  
25 analysis of qualitative findings using the COM-B Model of Behaviour and RE-AIM (Reach, Effectiveness,  
26 Adoption, Implementation and Maintenance) Framework. We anticipate findings will be used to support  
27 future implementation and evaluation of the ESC model into clinical practice.

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## 31 Introduction

32 Rates of Neonatal Abstinence Syndrome [NAS] or Neonatal Opioid Withdrawal Syndrome  
33 [NOWS] is growing in Canada (Lacaze-Masmonteil & O’Flaherty, 2018). NAS is an umbrella term  
34 encompassing all infants experiencing signs of withdrawal, where NOWS is a more specific and inclusive  
35 term for infants experiencing withdrawal specific to opioid exposure in utero (Jansson & Patrick, 2019).  
36 This syndrome is diagnosed through characterized signs of withdrawal experienced by infants following  
37 birth. These signs including irritability, poor feeding, hypertonia, and tremors are highly dependent on  
38 many interrelated factors including maternal substance use, exposure length and gestational age  
39 (Anbalagan & Mendez, 2021; Dodds et al., 2019; Lacaze-Masmonteil & O’Flaherty, 2018). The care for  
40 this population goes beyond caring for an individual patient, as mothers/pregnant persons with  
41 substance use disorder are an integral part of the infant’s care. Mothers/pregnant persons with  
42 substance use disorder have complex health care needs, and continue to face stigma and discrimination  
43 in health care services (Stone, 2015). The incidence of NAS in Canada has nearly tripled from 2003-2014,  
44 demonstrating incidence rates of 1.8 to 5.4 per 1000 live births respectively (Filteau et al., 2018).  
45 Mothers/pregnant persons with substance use disorder often avoid prenatal care for fear of punishment  
46 and discrimination (Stone, 2015), therefore the exponential growth of the population has a potential to  
47 be even greater than demonstrated in recent studies.

48 The exponential growth of this population in the last ten years (Gomez-Pomar & Finnegan,  
49 2018; Lacaze-Masmonteil & O’Flaherty, 2018) has contributed to increased challenges within the  
50 already taxed health care system. Challenges include increased lengths of hospital stay and increased  
51 use of pharmacological management in treatment for infants diagnosed with NAS (Anbalagan &  
52 Mendez, 2021; Filteau et al., 2018; Wachman et al., 2018). Canada demonstrates a startling increase in  
53 health care costs with numbers nearly doubling between 2010-2014; specifically demonstrating total  
54 health care associated costs of \$15.7 to \$26.9 million, respectively (Filteau et al., 2018). Increased

55 length of hospital stay is a primary reason for high trends in health care associated costs, with an  
56 average length of hospital stay of 15 days for infants diagnosed with NAS (Filteau et al., 2018;  
57 Winkelman et al., 2018).

58 Current clinical practice guidelines demonstrate a clear knowledge gap in best-available  
59 evidence in the literature for the care of infants with NAS and their families (Anbalagan & Mendez,  
60 2021; Curran et al., 2020; Grossman, Osborn, et al., 2017; Holmes et al., 2016; Schiff & Grossman, 2019;  
61 Singh & Davis, 2021). In most facilities, an outdated model of care, the Finnegan Neonatal Abstinence  
62 Scoring Tool (FNAST), is used to guide the care and assessment of babies diagnosed with NAS.  
63 Challenges with the FNAST have been cited in the literature such as the subjectiveness, invasiveness,  
64 and length of the proposed assessment (Anbalagan & Mendez, 2021). Additionally, the lack of  
65 collaboration with families contributes to the stigma and discrimination traditionally felt by  
66 mothers/pregnant persons with substance use disorder (Cleveland & Bonugli, 2014).

67 The FNAST has contributed to increased hospital costs related to extended lengths of hospital  
68 stays and pharmacological treatment; which has ultimately encouraged the transition to an evidenced  
69 based model of care, titled the Eat, Sleep, Console (ESC) model (Grossman, Berkwitt, et al., 2017;  
70 Grossman et al., 2018). The ESC Model of care is a novel approach designed to address the challenges  
71 present with the FNAST (Grossman, Osborn, et al., 2017). This model of care was systematically  
72 developed through quality improvement studies; emphasizing a function-based evaluation which has  
73 been shown to decrease the length of hospital stay and improve care of infants diagnosed with NAS  
74 (Grossman, Berkwitt, et al., 2017; Grossman, Osborn, et al., 2017; Holmes et al., 2016).

75 Despite having a promising evidence-based intervention to improve patient and health system  
76 outcomes, large changes in health systems, like the ESC model, are often not sustained in practice due  
77 to poor implementation and evaluation planning (Nyström et al., 2014). Research shows that evidence-

78 based interventions are more likely to succeed when a theory-informed, systematic approach is used in  
 79 the implementation, and evaluation of interventions (Craig & Petticrew, 2013).

80 Currently, there has been no systematic exploration into the implementation and evaluation  
 81 methods used in integrating the ESC model into clinical practice. The effectiveness of an intervention,  
 82 such as the ESC model, is heavily dependent of the success of implementation strategies employed (  
 83 Proctor et al., 2010). Further, systematic evaluation of interventions are shown to improve intervention  
 84 outcomes (Limbani et al., 2019). As such, efforts are needed to understand how to systematically  
 85 implement and evaluate the ESC model in health care practice, improving the success of implementation  
 86 and sustainability of the model. The purpose of this scoping review is to map and characterize the  
 87 evidence related to the implementation and evaluation of the ESC model in health care practice.  
 88 Additional objectives include: (1) identify the barriers and facilitators to the implementation of the ESC  
 89 model into practice within the capability, opportunity, and motivation-behaviour (COM-B) (Michie et al.,  
 90 2011) and theoretical domains framework (TDF) (Cane et al., 2012); (2) identify reported outcomes  
 91 measures in these studies; and (3) identify evaluation methods of the ESC model in practice within the  
 92 reach, effectiveness, adoption, implementation, maintenance (RE-AIM) framework (Glasgow et al.,  
 93 2019).

94 This review is part of the foundation for a multi-phased project to systematically complete a  
 95 process evaluation of the ESC model in clinical practice. Findings from this scoping review will be used to  
 96 guide subsequent phases of the process evaluation. Furthermore, findings will contribute to  
 97 development of implementation and evaluation methods to be used in future clinical settings.

98 **Table 1.0 Operationalized Terms and Definitions**

Term	Definition
Neonatal Abstinence Syndrome [NAS]	Diagnosis for all infants experiencing symptoms of withdrawal from any substance exposed to them in utero

Neonatal Opioid Withdrawal Syndrome [NOWS]	Diagnosis specific and inclusive of all infants experiencing withdrawal specific to opioid exposure in utero
Implementation Strategy	“...methods or techniques used to enhance the adoption, implementation, and sustainability of a clinical program or practice (p.2).”(Proctor et al., 2013)
Evaluation Method	Methods or techniques “used to determine the success of the implementation and to guide efforts to maintain or sustain implementation success (p.275).”(Harrison & Graham, 2021)
Eat, Sleep, Console Model of Care	A novel care approach for infants diagnosed with neonatal abstinence syndrome created by Grossman and colleagues in 2017 (Grossman et al., 2018). Studies also containing the basic foundations of the ESC model will also be considered as often the ESC model has been implemented as part of a multi-modal approach (Schiff & Grossman, 2019). A. non-pharmacological interventions; B. collaboration amongst care members; C. and preservation of the mother/birth parent-infant-dyad
Outcome	“a planned, a priori assessment described in the study methods that is used to determine a change in status as a result of interventions, can be measured or assessed as a component of the study, and is not something of futuristic benefit.”(University of Waterloo, n.d.)

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## Methods

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We will conduct a scoping review guided by the Joanna Briggs Institute’s (JBI) scoping review

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methodology (Peters et al., 2015) and the Arksey and O’Malley scoping review framework (Arksey &

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O’Malley, 2005) , as demonstrated through the following five steps. For our reporting, we will use the

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Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) extension for scoping

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reviews (Tricco et al., 2018).

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### Stage 1: Identifying the Research Question

107           The aim of the scoping review is to map out and characterize the evidence related to the  
108 implementation and evaluation of the ESC model in health care practice. To achieve the outlined  
109 research objectives discussed above, we will address the following research questions:

110           1. How has the ESC model been implemented and evaluated in practice?

111               1.1 What strategies have been used to implement the ESC model of care into practice?

112               1.2 What are the reported barriers and facilitators to the implementation of the ESC model of  
113 care?

114               1.3 How is the reach, effectiveness, adoption, implementation, and maintenance evaluated in  
115 the implementation of the ESC model of care?

116               1.4 What are the reported measures and outcomes?

## 117 **Stage 2: Identifying Relevant Studies**

118           To ensure identification of relevant studies, we have outlined key inclusion criteria based on the  
119 mnemonic recommended by JBI for scoping reviews including the categories of participant, concept, and  
120 context.

### 121 ***Participants***

122           This review will consider all literature that includes implementation of the ESC model of care to  
123 care for infants diagnosed with neonatal abstinence syndrome and/or neonatal opioid withdrawal  
124 syndrome. Infants involved in the implementation/evaluation of the model must have a primary  
125 diagnosis of neonatal abstinence syndrome, as having additional comorbid conditions could potentially  
126 impact the outcomes of the implementation. For example, infants born prematurely before 37 weeks  
127 gestation could have potential complications influencing the implementation and evaluation outcomes  
128 of the ESC model of care. Literature involving implementation by all clinicians (eg. nurse practitioners,

129 physicians, registered nurses,) will be considered. There will be no exclusion criteria based on gender or  
130 years of experience of the clinicians.

### 131 **Concept**

132 This review will consider all literature that includes the ESC model of care, an assessment tool  
133 created by Grossman and colleagues in 2017 (Grossman et al., 2018). Literature containing the basic  
134 foundations of the ESC model will also be considered as often the ESC model has been implemented as  
135 part of a multi-modal approach (Schiff & Grossman, 2019). Basic elements of the ESC model of care are:  
136 non-pharmacological interventions, collaboration amongst care members, and preservation of the  
137 mother/birth parent-infant-dyad.

138 This review will consider all studies reporting on the implementation of the ESC model of care  
139 into practice. For the purpose of this review, implementation strategies are defined “ as methods or  
140 techniques used to enhance the adoption, implementation, and sustainability of a clinical program or  
141 practice” (Proctor et al., 2013, p.2). This review will also consider studies that have evaluated the ESC  
142 model of care in practice. For the purpose of this review evaluation methods are defined as any method  
143 or technique “...used to determine the success of the implementation and to guide efforts to maintain  
144 or sustain implementation success ”(Harrison & Graham, 2021, p.275).

### 145 **Context**

146 This study will review all literature that includes implementation and evaluation of the ESC  
147 model of care in all clinical settings where the mother/birth-parent-infant dyad is preserved. This  
148 includes settings where the mother/birth parent is not separated from the infant such as postpartum  
149 maternity settings, or neonatal intensive care units with couplet care. There are no exclusion criteria on  
150 geographical location of the studies. Please see table 2.0 for the summary of eligibility criteria.

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153 **Table 2.0 Eligibility Criteria**

	INCLUSION	EXCLUSION
POPULATION	Infants with primary diagnosis of neonatal abstinence syndrome and/or neonatal opioid withdrawal syndrome who are being cared for with the ESC model of care	Infants born before 37 weeks gestation and/or additional comorbidities i.e. congenital anomalies
TOPIC	Eat, Sleep, Console Model of Care – Novel care approach developed by Grossman and colleagues in 2017 <ul style="list-style-type: none"> <li>- Variations of this model if basic elements are included: non-pharmacological interventions, collaboration amongst care members, and preservation of the mother/birth parent-infant-dyad.</li> </ul>	Other care models for NAS/NOWS (i.e. Finnegan Neonatal Abstinence Scoring Tool)
SETTING	All clinical/hospital settings that mother/birth-parent-infant-dyad is preserved (i.e. postpartum floors, NICUs with couplet care)	Clinical settings where infants with NAS are separated from their mother/birth-parent
SOURCE	Primary research papers [including in press papers], theses, pre-prints, opinion	Books, abstracts, commentaries
TYPE OF STUDY	All study designs	N/A
LANGUAGE	English	Non-English language

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155 ***Search Strategy***

156 To locate relevant scholarly literature, we will consult a health science librarian to develop a  
157 comprehensive search strategy. The aim of the search strategy will be to identify peer reviewed  
158 published and unpublished primary studies, and reviews. We will only include studies reported in  
159 English. Furthermore, we will not have date limiters to allow for the exploration of trends in strategies



160 over time. We will employ JBI's three-step search strategy methodology to ensure systematic  
161 development of the proposed strategy (Peters et al., 2020). Step one; we will develop and conduct a  
162 preliminary search in Medline. This will enable us to analyze the text words used in the title and  
163 abstracts to further develop and redefine our full search strategy. Step two; after completing revisions  
164 and finalizing the proposed search strategy, Author 1 will adapt the strategy including modifications for  
165 database-specific headings, search fields and operators. Once modified, Author 1 will run the search in  
166 the selected databases for the review. This search strategy will be further evaluated by a second  
167 librarian through engagement in the Peer Review of Electronic Search Strategy guidelines (McGowan et  
168 al., 2016). An example of the proposed search strategy run through Medline (Ovid) is included in  
169 Appendix A. Step three will include exploration of the reference list for included sources to identify  
170 additional relevant articles.

### 171 ***Grey Literature***

172 To broaden the depth of the scoping review, we will complete a systematic grey literature  
173 search including grey literature databases ProQuest Theses and Dissertation Databases and Open Access  
174 Theses and Dissertations. Moreover, we will search grey literature resources identified in the Canadian  
175 Agency for Drugs and Technologies in Health grey literature checklist *Grey Matters: a practical tool for*  
176 *searching health-related grey literature* (Canadian Agency for Drugs and Technology in Health, 2020).  
177 Along with websites of research, academic and health system organizations. We will ensure reference  
178 chaining is conducted with all included articles.

179 Finally, we will engage in Godin's targeted google search methodology to search for grey  
180 literature (Godin et al., 2015). Godin's (2015) methodology involves engagement in two distinct steps.  
181 First, we will conduct ten unique google searches with designated key words reflective of inclusion  
182 criteria. Following this, we will review the first 100 results of each search and identify any relevant

183 websites. Next, we will hand-search relevant websites to locate relevant literature meeting inclusion  
184 criteria.

### 185 **Stage 3: Study Selection**

186         Once the proposed searches have been completed, we will collate all identified citations into  
187 Covidence (Veritas Health Innovation, 2016), and duplicates will be automatically removed from the  
188 screening process. Two independent reviewers will screen each title and abstract against the outlined  
189 inclusion and exclusion criteria. Following this, full-text articles will be retrieved and uploaded to  
190 Covidence (Veritas Health Innovation, 2016). Again, two independent reviewers will assess individual  
191 articles for eligibility criteria. Throughout this process, reasons for exclusion will be documented and  
192 included in the full review publication. Discussion or involvement of a third reviewer will be requested to  
193 resolve any discrepancies between reviewers. We will use the Preferred Reporting Items for Systematic  
194 Reviews and Meta-Analysis (PRISMA) extension for scoping reviews (Tricco et al., 2018) to report our  
195 process and findings.

### 196 ***Public and Patient Involvement***

197         Co-authors Author 4, Author 5, and Author 6 are all key knowledge users in the health system  
198 setting. Furthermore, they were most recently involved as clinicians in the implementation of the ESC  
199 model of care at a local tertiary care facility for Women and Newborn Health. Furthermore, co-author  
200 Author 8 is an implementation scientist and will provide expert insight into review questions and data  
201 analysis. There will be no patient or public engagement in the review, however findings will be shared  
202 with patients and health system leaders' part of the larger research team to further focus research  
203 questions and inform next steps.

### 204 **Stage 4: Charting the data**

205         Two independent reviewers will extract and chart data into a piloted data extraction tool. See  
206 appendix B for draft extraction tool to be used. The data extraction tool has been developed with the

207 research team and will be piloted with five studies: ensuring consistency in reporting. Modifications will  
208 be made as needed and will be disclosed in full review. The following information will be captured in the  
209 tool including (1) general characteristics (title, authors, country of origin, research design); (2)  
210 descriptions of clinical setting (i.e. postpartum maternity floor, couplet care NICU) and geographical  
211 location (i.e. rural and urban) ; (3) description and characteristics of implementation strategies for the  
212 ESC model of care; (4a) clinician reported barriers and facilitators for implementation (as  
213 operationalized in table 1.0); and/or (4b) patient reported barriers and facilitators to implementation;  
214 (6) description and characteristics of evaluation methods used (as operationalized in table 1.0); and (7)  
215 reported outcomes (as operationalized in table 1.0). Discussion and involvement of a third reviewer will  
216 address any identified discrepancies in reporting. Authors will be contacted in the case of missing  
217 information outlined in the data extraction tool.

218 This review will use frameworks and taxonomies to address the outlined research objectives and  
219 questions. A coding strategy will be piloted and modified as needed to ensure consistency amongst  
220 reviewers. First, the primary reviewer will code the entire data extracted, followed by a second reviewer  
221 completing a verification of the coded data. As data coding is an iterative process, throughout the  
222 coding sessions there is potential for alterations to the coding strategy used; modifications will be  
223 outlined in the full scoping review. Discussion or involvement of a third reviewer will resolve any  
224 discrepancies noted in the coding process.

### 225 ***Barriers and Facilitators in the Implementation of the ESC model of Care into Clinical Practice (1.1)***

226 We will use a directed content analysis (Hsieh & Shannon, 2005) guided the COM-B (Michie et  
227 al., 2011) and TDF frameworks (Cane et al., 2012) to explore clinician and patient reported barriers and  
228 facilitators in the implementation of the ESC model of care. Authors of this review have selected the  
229 COM-B and TDF frameworks specifically due to their ability to provide a comprehensive overview of the  
230 internal and external influences on behavior change at an individual level (clinician/patient)(Cane et al.,

231 2012; Michie et al., 2011). Furthermore, both frameworks have been cited in health care research as  
232 effective tools in exploring implementation to inform the development of implementation strategies  
233 and address challenges within existing implementation (Glowacki et al., 2019; Jabbour et al., 2018; Surr  
234 et al., 2020). In our proposed scoping review, we will extract narrative descriptions of barriers and  
235 facilitators to implementation. Narrative descriptions will be further coded into the domains of the  
236 COM-B and TDF frameworks. In doing this, coded barriers and facilitators will provide foundational  
237 knowledge to inform future research efforts in both exploring the implementation and in actively  
238 integrating the ESC model of care into clinical practice.

### 239 ***Implementation Strategies (1.2)***

240 We will explore and categorize implementation strategies using Waltz and colleagues' Expert  
241 Recommendations for Implementing Change (ERIC) taxonomy (Waltz et al., 2015). The ERIC taxonomy is  
242 comprised of 73 distinct knowledge translation methods with definitions. The taxonomy will allow  
243 reviewers to understand the operationalization of extracted implementation strategies. Specifically, this  
244 review will use the categorization and strategy ratings, noting importance and feasibility of the proposed  
245 strategies to extract data from included articles. We will use the nine broad categories of Waltz and  
246 Colleague's taxonomy to code the data extracted from this review including (1) Use of evaluative and  
247 iterative strategies; (2) Provide interactive assistance; (3) Adapt and tailor to context; (4) Develop  
248 stakeholder interrelationships; (5) Train and educate stakeholders; (6) Support clinicians; (7) Engage  
249 consumers; (8) Utilize financial strategies; and (9) Change infrastructure (Waltz et al., 2015).

### 250 ***The RE-AIM of Evaluation Methods used for the ESC model of Care into Clinical Practice (1.3)***

251 This review will explore evaluation methods used for the implementation of the ESC model into  
252 clinical practice with the lens of the Reach, Effectiveness, Adoption, Implementation, Maintenance [RE-  
253 AIM] framework (Glasgow et al., 2019). The RE-AIM framework allows for an analysis of interconnected  
254 factors on multiple levels including the individual, organizational and community levels (Glasgow et al.,

255 2019). Narrative descriptions of data extracted from the studies on evaluation methods used will be  
256 coded into the five categories of the RE-AIM framework. Coded methods used to evaluate the  
257 implementation of the model from the lens of the RE-AIM framework will serve as a foundation for the  
258 process evaluation planning of the larger multi-phased proposed project.

#### 259 ***Reported Outcomes (1.4)***

260 This review will explore outcomes cited for the implementation of the ESC model of Care into  
261 clinical practice. We will categorize evidence-based practice measures (Bick & Graham, 2010) into three  
262 categories; (1) patient; (2) health care provider; and (3) health system outcomes. To further characterize  
263 patient-level outcomes this review will consider (a) patient reported (i.e. signs of withdrawal) (Kingsley  
264 & Patel, 2017), (b) patient experience (i.e. satisfaction) (Kingsley & Patel, 2017), and (c) patient health  
265 outcomes (i.e. less pharmacological treatment needed due to a less severe withdrawal)(Bick & Graham,  
266 2010). Health care provider outcomes can be defined as (a) knowledge, (b) attitude (i.e. satisfaction),  
267 and (c) behavior changes (i.e. practice changes)(Bick & Graham, 2010). Finally, health system related  
268 outcomes could include changes in length of hospital stay or changes in hospital costs.

#### 269 **Stage 5: Collating, summarising, and reporting the results**

270 We will present findings in comprehensive tables based on outlined research objectives. We will  
271 create a diagram to showcase barriers and facilitators; along with a comprehensive diagram  
272 representing strategies used, reflective of the RE-AIM framework, to evaluate the ESC model of care  
273 (Aromataris & Munn, 2020). An inductive thematic analysis approach will be used to analyze and  
274 describe qualitative data (Braun & Clarke, 2006). Furthermore, we will provide descriptive numerical  
275 summaries where possible (i.e. frequency of cited barriers/facilitators and/or outcomes). Finally, we will  
276 provide a comprehensive narrative summary to accompany the above visual presentations and further  
277 support how research objectives were met.

#### 278 **Ethics and Dissemination**

279           This scoping review aims at providing a synthesis of publicly available literature, and therefore  
280 will not require ethical approval. The main goal of this proposed scoping review is to map out and  
281 characterize the available evidence on implementation strategies and evaluation methods used in  
282 integration of the ESC model into clinical practice. We anticipate findings will be used to support future  
283 implementation and evaluation of the ESC model into clinical practice. As such, we will disseminate  
284 findings in an open access peer reviewed journal publication, along with presenting findings at relevant  
285 conference presentations. This review is part of a multi-phase project conducting a process evaluation of  
286 the implementation and evaluation of the ESC model of care into clinical practice. Findings from this  
287 scoping review will provide foundational knowledge to inform the planning and development of semi-  
288 structured interview questions to elicit qualitative data collection on local barriers and facilitators of the  
289 implementation of ESC model into clinical practice. Furthermore, the analysis of evaluation methods to  
290 evaluate implementation of the model will be used to guide the comprehensive process evaluation  
291 founded on the RE-AIM framework.  
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## Appendix A

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## Example Search Strategy

	Medline (OVID) September 2022	Results
1	((implement* or integrat* or execut* or appl* or put* into practice or pilot or evaluat* or assess* or apprais* or response? or adopt or report* or overview or investigat* or test* or adhere or usage or follow or embed or uptake or measur* or indicator? or success* or enable* or operationalize or barrier or challeng* or facilitat* or limit* or support* or enable* or Obstacle? or impeded* or discourage* or encourage* or motivate* or incentive* or unsupportive or promot* or foster* or influen* or recommend* or forward* or advance* or strengthen* or boost* or hinder* or strateg*).ti,ab,kf. or evaluation study/ or program evaluation/ or implementation science/ or "use effectiveness"/ or pilots/ or "review"/ or exp "outcome and process assessment, health care"/ or exp program evaluation/ or exp quality indicators, health care/) and ("Eat, Sleep, Console" or "ESC Model").ti,ab,kf.	57
2	(implement* or integrat* or execut* or appl* or put* into practice or pilot or evaluat* or assess* or apprais* or response? or adopt or report* or overview or investigat* or test* or adhere or usage or follow or embed or uptake or measur* or indicator? or success* or enable* or operationalize or barrier or challeng* or facilitat* or limit* or support* or enable* or Obstacle? or impeded* or discourage* or encourage* or motivate* or incentive* or unsupportive or promot* or foster* or influen* or recommend* or forward* or advance* or strengthen* or boost* or hinder* or strateg*).ti,ab,kf. or evaluation study/ or program evaluation/ or implementation science/ or "use effectiveness"/ or pilots/ or "review"/ or exp "outcome and process assessment, health care"/ or exp program evaluation/ or exp quality indicators, health care/	22195082
3	(implement* or integrat* or execut* or appl* or put* into practice or pilot or evaluat* or assess* or apprais* or response? or adopt or report* or overview or investigat* or test* or adhere or usage or follow or embed or uptake or measur* or indicator? or success* or enable* or operationalize or barrier or challeng* or facilitat* or limit* or support* or enable* or obstacle? or impeded* or discourage* or encourage* or motivate* or incentive* or unsupportive or promot* or foster* or influen* or recommend* or forward* or advance* or strengthen* or boost* or hinder* or strateg*).ti,ab,kf.	21050987
4	("Eat, Sleep, Console" or "ESC Model").ti, ab,kf.	60

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437Appendix B  
Data Extraction Tool (Draft)

<b>General Paper Characteristics</b>
Title:
Year:
Author:
Country of Origin:
Research Design:
<b>Clinical Setting</b>
Description of clinical setting:
Geography:
<input type="radio"/> Urban <input type="radio"/> Rural <input type="radio"/> Mixture <input type="radio"/> Not Reported
<b>Implementation Strategies</b>
Description of Implementation Strategy:
<b>Reported Barriers and Facilitators (Clinician and Patient)</b>
Clinician Reported Barriers:
Clinician Reported Facilitators:
Patient Reported Barriers:
Patient Reported Facilitators:
<b>Evaluation Methods</b>
Description of evaluation method (s):
<b>Outcomes</b>
Patient Level Outcome(s):
Health Provider Level Outcome (s):
Health System Level Outcome (s):

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