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## A developmental evaluation to enhance stakeholder engagement in a wide-scale interactive dissemination project using quality improvement data: study protocol

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| Complete List of Authors: | Laycock, Alison; Charles Darwin University, Menzies School of Health Research<br>Bailie, Jodie; The University of Sydney, University Centre for Rural Health<br>Matthews, Veronica; Charles Darwin University, Menzies School of Health Research<br>Cunningham, Frances; Charles Darwin University, Menzies School of Health Research<br>Harvey, Gillian; University of Adelaide, Adelaide Nursing School; The University of Manchester, Alliance Manchester Business School<br>Percival, Nikki; University of Technology Sydney, The Australian Centre for Public and Population Health Research<br>Bailie, Ross; The University of Sydney, University Centre for Rural Health |
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3   **A developmental evaluation to enhance stakeholder engagement in**

4   **a wide-scale interactive dissemination project using quality**

5   **improvement data: study protocol**

4   Alison Laycock[1], Jodie Bailie[2], Veronica Matthews[1], Frances Cunningham[1], Gillian Harvey[3], Nikki

5   Percival[4], Ross Bailie[2]

6   [1] Menzies School of Health Research, Charles Darwin University, Casuarina, NT, Australia

7   [2] University Centre for Rural Health, the University of Sydney, Lismore, NSW, Australia

8   [3] Adelaide Nursing School, The University of Adelaide, Adelaide, SA Australia; Alliance Manchester

9   Business School, The University of Manchester, Manchester, United Kingdom

10  [4] The Australian Centre for Public and Population Health Research, University of Technology Sydney,

11  Sydney, NSW, Australia

12

13  Corresponding author: Alison Laycock, Alison.laycock@menzies.edu.au

14  Menzies School of Health Research, Charles Darwin University

15  PO Box 41096

16  Casuarina NT 0811

17  Australia

18  Ph: +61 419 824341

19  Fax: +61 8 8946 8464

20  Alison Laycock, Email: alison.laycock@menzies.edu.au

21  Jodie Bailie, Email: jodie.bailie@sydney.edu.au

22  Veronica Matthews, Email: veronica.matthews@menzies.edu.au

23  Frances Cunningham, Email: frances.cunningham@menzies.edu.au

24  Gillian Harvey, Email: Gillian.Harvey@adelaide.edu.au

25  Nikki Percival, Email: Nikki.percival@uts.edu.au

26  Ross Bailie, Email: ross.bailie@sydney.edu.au

27

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# ABSTRACT

**INTRODUCTION:**

Bringing together continuous quality improvement (CQI) data from multiple health services offers

opportunities to identify common improvement priorities, and to develop interventions at various

system levels to achieve large-scale improvement in care. An important principle of CQI is

practitioner participation in interpreting data and planning evidence-based change. This study will

contribute knowledge about engaging diverse stakeholders in collaborative and theoretically-

informed processes to identify and address priority evidence-practice gaps in care delivery. This

paper describes a developmental evaluation to support and refine a novel interactive dissemination

strategy using aggregated CQI data from Aboriginal and Torres Strait Islander primary healthcare

centres in Australia. The strategy aims to effect multi-level system improvement in Aboriginal and

Torres Strait Islander primary healthcare.

**METHODS AND ANALYSIS:** Data will be gathered using document analysis, online surveys, interviews

with participants, and iterative analytical processes with the research team. These methods will

enable real-time feedback to guide refinements to the design, reports, tools and processes as the

interactive dissemination strategy is implemented. Qualitative data from interviews and surveys will

be analysed and interpreted to provide in-depth understanding of factors that influence engagement

and stakeholder perspectives about use of the aggregated data and generated improvement

strategies. Sources of data will be triangulated to build up a comprehensive, contextualised

perspective and integrated understanding of the strategy development, implementation and

findings.

**ETHICS AND DISSEMINATION:**

The Human Research Ethics Committee (HREC) of the Northern Territory Department of Health and

Menzies School of Health Research (Project 2015-2329), the Central Australian HREC (Project 15-

288), and the Charles Darwin University HREC (Project H15030) approved the study. Dissemination

will include articles in peer-reviewed journals, policy and research briefs. Results will be presented at

conferences and quality improvement network meetings. Researchers, clinicians, policy-makers and

managers developing evidence-based system and policy interventions should benefit from this

research.

## STRENGTHS AND LIMITATIONS OF THIS STUDY

- Each iteration of the dissemination strategy provides an opportunity to evaluate and refine

  the design, processes and reports in response to researcher, participant and data collection

  needs.

- Use of mixed methods and inclusion of perspectives of the research team and diverse

  healthcare stakeholders enhances validity and provides comprehensive data.

- The dissemination strategy encourages stakeholders to send reports and surveys to others,

  limiting ability to measure the reach or response rates of the dissemination strategy.

- The evaluator is a team member and evaluates the research team's work. Potential lack of

  objectivity is offset by continuing opportunities for reflexivity, sense-making and timely

  adaptations within the project.

## INTRODUCTION

**Background**

Improving the implementation of evidence-based healthcare is a complex enterprise. It involves the

production, translation and use of knowledge by researchers, policy-makers, service providers and

consumers. Using evidence to improve the quality of primary health care (PHC) services for

78    Aboriginal and Torres Strait Islander people (Australia's Indigenous nations) is critically important in

79    Australia, where Indigenous people experience an unacceptable burden of ill health, shorter life

80    expectancy and poorer access to PHC services compared with the general population.[1, 2]

81    A number of health centre teams that serve Indigenous communities use continuous quality

82    improvement (CQI) tools and processes to make evidence-based improvements in the care they

83    deliver. CQI is inherently participatory; it generates and uses data and iterative processes to plan

84    interventions, typically at the team or health centre level. It applies strategies that are known to be

85    effective in knowledge translation, such as audit and feedback and goal setting.[3-5]

86    Improvement interventions have a higher probability of success when system changes are

87    implemented concurrently at several levels – individual care processes, group or team work, the

88    organization, and the larger system and policy environment.[6, 7] Despite developments in CQI

89    theory and practice, there is a gap in the literature about how to engage stakeholders in wide-scale

90    CQI processes to address improvement barriers and inform the development of system

91    strengthening strategies. There is also a need for knowledge about how different knowledge

92    translation strategies influence outcomes.[8]

93    Bringing together CQI data from multiple PHC centres provides scope to use CQI in a different way. It

94    offers opportunities to engage diverse stakeholders in identifying common priorities for improving

95    care and interventions that target change at various levels of the health system. This paper describes

96    the study protocol for the use of developmental evaluation (DE) to evaluate and strengthen a novel

97    theory-informed wide-scale interactive dissemination strategy engaging diverse stakeholders

98    involved in Australian Indigenous healthcare. This strategy uses aggregated CQI data from 175 PHC

99    centres serving Indigenous people, for the purpose of informing improvement interventions at

100   different levels of the health system.

101   **The study context - Australian Indigenous primary health care and quality improvement**

102 Despite universal coverage for healthcare services through Medicare and specific funding for

103 Indigenous PHC services, there is a significant and persistent disparity between the health and life

104 expectancy of Indigenous and non-Indigenous Australians.[2, 9] The disparity is well documented. It

105 relates to a history of colonisation and disempowerment, ongoing racial, social, educational and

106 economic inequalities and lack of access to culturally safe service provision.[1, 10] Indigenous people

107 access PHC through Indigenous community-controlled health services and government-operated

108 PHC centres specifically established to meet the needs of Aboriginal and Torres Strait Islander

109 people, and through private general practices. PHC delivery settings are geographically diverse and

110 vary in population density, governance arrangements and resource provision.

111 Reducing healthcare disparities requires CQI and system strengthening approaches that address the

112 complexities of the PHC delivery environment and draw on data about clinical care and utilisation of

113 services.[7, 11] In Indigenous PHC, this calls for approaches that incorporate the needs and values of

114 Indigenous communities,[12] make optimal use of health service performance data and utilise the

115 professional and contextual knowledge of those working in the sector.[5, 13] It involves policy

116 change and improvement interventions at various system levels.[6, 14]

117 **Developmental evaluation**

118 Developmental evaluation (DE) is gaining recognition as a useful approach for implementation

119 research.[15, 16] Evolving from utilisation-focused evaluation[17] and drawing on tools and methods

120 from a variety of disciplines, DE can be used to address complex health system issues that require

121 engagement of multiple stakeholders in both the research and change processes.[18]

122 DE is typically embedded in the project context and involves continuous feedback to inform

123 innovators, often with the evaluator positioned within a project or program team. It is well suited to

124 adapting projects or interventions implemented under complex conditions, or emergent situations in

125 which multiple influences make it difficult to predict what will happen as a project or strategy

126    progresses.[19, 20] DE has been used, for example, to support change through team dialogue, to

127    innovate health and recreation programs in Indigenous communities, to develop principles and

128    collaborative processes between agencies working to address difficult social and economic issues,

129    and to engage communities of practice in complex systems change.[21] Challenges in DE include

130    managing uncertainty and ambiguity, the volume of data and maintaining a results focus.[22]

131    **Aims of the developmental evaluation (DE) study**

132    The aim of the DE study is to evaluate and enhance a novel interactive dissemination strategy

133    designed to engage PHC stakeholders in Indigenous PHC in wide-scale processes to interpret and use

134    aggregated CQI data.

135    The objectives of the study are to:

136    • Develop and refine the design, reports, processes and resources used in the interactive

137    dissemination strategy

138    • Explore the barriers and facilitators to stakeholder engagement in the interactive

139    dissemination strategy

140    • Identify the actual or intended use of the aggregated CQI data and co-produced knowledge

141    by different stakeholders, and factors influencing use

142    • Examine and assess whether the interactive dissemination strategy (known as the ESP

143    project) has achieved its aims.

144    **The 'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for**

145    **Improvement in Primary Health Care (ESP)' project – an opportunity for learning and innovation**

146    **through DE**

147    Described in a separate paper, the interactive dissemination project, titled 'Engaging Stakeholders in

148    Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care

149    (ESP)',[23] aims to engage stakeholders with aggregated data and promote wide-scale

150 improvements in quality of care by applying a system-wide approach to CQI.[24] The ESP project

151 utilises a comprehensive CQI dataset collected for the Audit and Best Practice for Chronic Disease

152 (ABCD) National Research Partnership (2010 – 2014).[4, 25]

153 Over more than a decade, PHC centres participating in the Partnership used evidence-based best-

154 practice clinical record audit and system assessment tools to assess and reflect on system

155 performance, interpreting the data to identify improvement priorities and develop strategies

156 appropriate to their service population and delivery context.[5] Available ABCD CQI tools cover

157 various aspects of PHC (e.g., chronic illness, preventive, child and maternal care).

158 In addition to their routine use of these CQI tools as part of their Plan-Do-Study-Act CQI processes,

159 175 PHC centres involved in the Partnership voluntarily provided service-level de-identified CQI data

160 for analysis. These audit data, based on almost 60,000 audits of patient records and 492 systems

161 assessments, provide a unique opportunity to utilise aggregated health centre performance data for

162 wide-scale system improvement and population health benefit, and to explore innovative ways to

163 engage healthcare stakeholders with evidence.

164 Aiming to support understanding and use of these data through an interactive exchange between

165 healthcare researchers and stakeholders, the ESP project draws on explicit and practical knowledge,

166 and different types of expertise, to identify improvement strategies aligned with implementation

167 settings.[23, 26, 27]

168 The ESP project design is adapted from systematic methods that aim to link interventions to

169 modifiable barriers to address evidence-practice gaps.[28] Four phases of online report distribution

170 and feedback will involve stakeholders in data interpretation and knowledge-co-production, as

171 follows:

172     1. *Phase One:  identification of priority evidence-practice gaps*. Stakeholders receive a report of

173         aggregated cross-sectional CQI data and complete an online survey.

174    2.  *Phase Two: Identification of barriers and enablers to addressing gaps in care identified in*

175        *Phase 1.* Stakeholders receive a report of trend data relevant to the identified priority

176        evidence-practice gaps. They complete an online survey about influences on individual

177        behaviours, health centre and wider systems.  The survey questions are based on the

178        theoretical domains framework[29, 30] and on other models identifying barriers to the

179        effective functioning of health centre and higher level systems.[31-33]

180    3.  *Phase 3: Identification of strategies for improvement.* Provided with findings from phases 1

181        and 2, and an evidence summary about CQI implementation, stakeholders are asked to

182        suggest strategies likely to be effective in addressing modifiable barriers and strengthening

183        enablers.

184    4.  In the final phase, respondents are asked to review the draft final report and provide

185        feedback on the overall findings in the specific clinical care area.

186    Separate processes will be implemented using audit data collected for child health, chronic illness

187    care, preventive, maternal, mental health and rheumatic heart disease care. The rationale for the

188    ESP project is that involving diverse stakeholders in a phased approach of using aggregated CQI data

189    should stimulate discussion and information sharing, and enhance ownership of the development of

190    interventions to address system gaps. The collaboratively produced findings are intended as a

191    resource for planning implementation interventions that fit materially, historically and culturally

192    with organisational and local contexts.[34]

193    **METHODS AND ANALYSIS**

194    Using a case study approach[35, 36] the DE will examine and enhance the methods through which

195    the dissemination of aggregated health centre performance data and knowledge co-production are

196    enacted in the ESP project. It seeks to effect changes and develop understanding as the

197    dissemination project and concurrent evaluation proceed through iterative phases of

198    implementation.

199    **Systematically applying developmental evaluation within the ESP project**

200    The DE is designed to align with the aim and design of the ESP project, which will provide

201    opportunities to collect feedback from survey respondents, to identify interview participants and to

202    engage the research team in DE processes.

203    Figure 1 illustrates how DE is systematically applied within the ESP project.

204    *[INSERT FIGURE 1]*

205    DE processes: The evaluator (AL) is embedded within the research team in order to support the

206    reflective and iterative nature and the co-creation principle of DE,[21] and to facilitate real-time

207    responses to project conditions and issues as they emerge. The team will discuss and interpret

208    stakeholder feedback, and use reflective critical thinking to identify and clarify issues relevant to

209    implementing the ESP project. Through these processes, decision making for ongoing project

210    implementation will be shared amongst team members and informed by data. Insights will be

211    developed about stakeholder and team needs and capacity to engage in the collaborative processes

212    of the strategy.

213    Iterative cycles: These processes will be applied to iterative cycles of reflection through which

214    actions will be agreed, refinements tested, results observed and feedback gathered. The systematic

215    approach will assist in managing the high volume of data and maintaining focus.  It will lead to

216    increased understanding of what works well or poorly to illicit findings and engage project

217    participants and the research team in collaborative processes. Strategy design, processes, tools and

218    reports are expected to be continuously modified to support the presentation of data to inform wide

219    scale improvement. Team knowledge and skills in relation to implementing interactive dissemination

220    in the context of Indigenous healthcare will be strengthened through the continuous cycle of

221 learning and development, as the phases of the dissemination strategy are repeated using sets of

222 aggregated CQI data in different areas of clinical care.

223 Implementation context: The DE study is being conducted within the wider context for CQI research

224 in Australian Indigenous PHC, where CQI is used within many health centres. There is a positive

225 policy environment for CQI and a history of researcher-service provider partnerships for CQI

226 development.

227 **Data collection and analysis methods**

228 The sources of data used in this DE study include documentation, quantitative and qualitative

229 surveys and participant interviews. A further source of evidence is participant-observation[36] - the

230 actions taken by the research team following their review of evidence and experiences during

231 project implementation. These are appropriate sources for research in which theory is nascent and

232 research questions are exploratory.[37]

233     *1.  Document analysis*

234 Administrative project records will provide a source of information about the context, scope, early

235 stages of ESP project development, distribution of reports and ongoing implementation. Data

236 sources will include meeting minutes and recorded interactions between research team members,

237 and between team members and other stakeholders. These documents will be used to identify and

238 clarify key issues, dates, events and tasks, and to track key decisions and developments in the

239 design, processes, reports and other resources.

240     *2.  Survey data*

241 Online surveys designed to collect data leading to the generation of wide-scale CQI strategies (as

242 part of the ESP project) incorporate evaluative questions. The questions will ask respondents to rate,

243 on a Likert scale, the accessibility, content, usefulness and useability of information in the reports,

244    and the extent to which the reports promote workplace discussion about care quality. These data

245    will be analysed using simple descriptive statistics. Respondents will also be invited to provide free

246    text responses suggesting ways in which the team can improve the surveys and reports, and support

247    data interpretation. Free text responses will be integrated and analysed with other qualitative data.

248    (Explicit survey items are at Supplementary files 1 - 4).

249    As key change decisions are made, the research team will modify the surveys to seek feedback about

250    the ESP project modifications. For example, additional questions seeking comments about newly

251    developed resources, design innovations or changed report formats will be included.

252    Records of online survey data, (collected as part of the interactive dissemination project), will

253    provide important evaluation data about who is engaging with project processes across Australian

254    jurisdictions. It will enable the team and evaluator to track stakeholder engagement through each

255    phase and cycle for each clinical care area, including the number of responses to each survey,

256    whether responses submitted are from individuals or groups and how this impacts on responses.

257    Respondent information requested in the surveys includes professional role, scope and location

258    (national, Australian jurisdiction), work setting or population group served (e.g. urban, rural, remote

259    populations), type of organisation represented (e.g., community controlled health centre,

260    government health service) and group size (as relevant). This information will enable the purposive

261    sampling of interviewees.

262    **3.  Semi-structured interviews**

263    Semi-structured interviews will be conducted to provide detailed information and feedback for the

264    DE. They will be used to explore themes that emerge in the survey data and to probe factors and

265    perspectives relating to participant engagement, use of aggregated data and findings, and how to

266    improve the project processes and presentation of information.

267    A single Australian jurisdiction will be the focus of qualitative interviews, purposively selected

268    because of its long history of CQI and CQI research in Indigenous PHC. Participating health centres

269    have contributed a significant proportion of the aggregated CQI data used in the ESP project. Further

270    interviews will also be conducted with participants who have cross jurisdiction (national) roles.

271    Potential interviewees will be identified from respondent information collected through the surveys

272    - contact details are provided voluntarily by online survey respondents. Interview participants will be

273    purposively sampled from project participants to represent different professional roles, organisation

274    types and work settings, and participation in different ESP project cycles.

275    Twenty-five to 30 interviews are expected to provide representative data for effective comparison

276    between groups and settings. The aim will be to conduct sufficient interviews to build a convincing

277    analytical narrative based on richness and detail and to achieve 'information power' in identifying

278    themes in the data.[38] The evaluator (AL) will conduct all interviews.

279    Interview transcripts will be de-identified and entered into NVivo, a computer assisted qualitative

280    data analysis program to assist with coding for analysis. The evaluator will generate a priori codes

281    derived from the literature and based on a widely used conceptual framework for knowledge

282    translation[39] and the DE research questions, ahead of identifying emergent codes to discover

283    themes, categories and patterns in the data, to explore the relationships between them and to build

284    theories through an inductive process.[40] Coding will be checked by a research colleague to ensure

285    coding reliability and consistency.

286    The aim of the analysis of interview data is to provide information for two purposes. Firstly, the

287    preliminary results will be reported and discussed with research team members to help inform the

288    developmental evaluation process. Together with other information, such as survey findings, the

289    interview data will influence real-time changes to ESP project processes, tools and reports as the

290    interactive dissemination project is implemented.

291  The second purpose is for interpretation and reflection to gain deep insight and develop

292  understanding relevant to the DE research questions. This includes understanding of the factors

293  influencing stakeholder engagement in the interactive dissemination project, ways to support

294  participation, and the extent to which being involved influences participants' implementation

295  decisions. It includes insights into use of the CQI data and use of project findings about consensus

296  priority evidence-practice gaps, barriers, enablers and strategies for improving care quality.

297      ***4.  Reflective processes with the research team***

298  As illustrated in Figure 1, the research team's learning and actions will be guided by a facilitated

299  process of reflection and analysis, drawing on stakeholder feedback and the team's experiences.

300  This processes will enable the team to identify emerging issues and to innovate, test and refine the

301  elements of the interactive dissemination strategy. It will be based on the questions:  What? (What

302  happened?)  So what? (What do the results mean or imply? How did we influence the results?)

303  Now what? (How do we respond? What should we do differently?).[41] An example of how these

304  questions are applied is shown in Table 1.

305  ***[INSERT TABLE 1]***

306  *Table 1: Reflective evaluation questions*

| What (What happened?) | So what? (What does it mean?) | Now what? (What to do differently?) |
|---|---|---|
| How many survey responses did we receive? | Do we need to promote and/or distribute reports in other ways - and target particular people? | Based on the explicit and experiential evidence, should we be making further changes to enhance the: |
| Whose responses did we capture? | Do we need to clarify, adjust, add or delete survey questions to illicit robust data and encourage engagement? | - quality of data collected<br>- processes<br>- presentation of reports |
| What was the quality of data | | What is the supporting |

| | | |
|---|---|---|
| collected through this survey? | | evidence for a particular direction or modification? |
| | Do we consider modifying the next phase, or the ESP process we use for the next dataset? | |
| What feedback did survey respondents and interviewees provide about: | | How should we prioritise these changes (e.g. considering resources needed, time involved, alignment with theory)? |
| - the relevance, format and use of the report/ information?<br>- the survey?<br>- supporting resources? | Do we need to present or explain the data differently to enhance understanding? | |
| What were team members' experiences of recent implementation processes? | Do we need to modify report formats and content to make them more accessible to those targeted? | What is the plan of action for making changes? |
| What worked well/not so well for you in terms of refinements and modifications made? | Does the literature about presenting research to different user groups match respondent feedback? | How will these changes impact on the project and others involved (e.g. clinical leaders and report co-authors involved in ESP data analysis)? |
| | How does feedback and observation connect with what we know from our experience of engaging healthcare stakeholders in CQI? | |

307

308

309  The process used with and by the team will thereby reflect a quality improvement process (plan-do-

310  study-act cycle). Repeating these processes or cycles in different areas of PHC will offer

311  opportunities to continuously gather data, to learn from each cycle of stakeholder engagement and

312  feedback and to apply learning to improve the implementation of subsequent activities within the

313  interactive dissemination study project (Figure 1). Documenting the processes, team perceptions

314   and change decisions will enable consideration of the contribution of DE in strengthening

315   implementation of the ESP project.

316   ***Integration of data collection and analysis***

317   Analysis of each data collection source needs to be understood on its own terms. However, a

318   triangulated approach to data collection and analysis can build on the strengths of any single

319   approach to answer the research question and achieve useful outcomes[40, 42] and support

320   validation and cross-checking of findings. Taking a pragmatic approach, multiple sources of data will

321   be collected, analysed and integrated[43] to support interpretation and understanding of the needs

322   and perceptions of stakeholder groups that are key to: wide-scale improvement of PHC quality; their

323   capacity to engage with the data; capacity to contribute to the CQI 'conversation' and knowledge

324   sharing processes, and; intentions in relation to use of aggregated data and uptake of project

325   findings.

326   In the initial stage of the study, ESP project survey responses will help to inform the development of

327   the exploratory questions used in the semi-structured interviews for the DE. Survey responses will

328   assist in informing the evaluation processes through the dissemination cycles for reporting each area

329   of clinical care. Thereafter, the collection of qualitative and quantitative data will occur concurrently.

330   Semi-structured interviews will be timed to capture the input of participants as they engage with

331   various ESP datasets and surveys, and the ESP project findings (e.g., for maternal health, mental

332   health). Reflective team processes and analysis of project documents for the purpose of informing

333   change decisions will be ongoing.

334   The continuous data collection, analysis and synthesis processes using different data sources will

335   provide the team with opportunities to apply what is learned, generate new avenues of enquiry and

336   ideas, and test changes made within the ESP project. Bringing together and interpreting the different

337   types of data will help build a comprehensive picture of ESP project development and a

338  contextualised and integrated understanding of the findings and evaluation outcomes of the ESP

339  project.

340  Overall, these data collection and analysis processes are expected to identify key issues and

341  principles to inform future interactive dissemination efforts and wide-scale CQI in the context of

342  Indigenous PHC, and to contribute knowledge that can be transferred to other healthcare contexts

343  and disciplines.

344  Table 2 outlines how the different data sources will be analysed, integrated and used to address the

345  DE objectives.

346  *[INSERT TABLE 2]*

347  *Table 2: Data sources and their use to address the developmental evaluation objectives*

| DE objective | Data source | Analysis and use of data to address DE objective |
|---|---|---|
| Develop and refine the design, reports, processes and resources used in the interactive dissemination strategy | Document analysis | Identification of implementation strengths, issues and need for refinements<br><br>Tracking of actions, issues, decisions, key events, changes |
| | Survey data | Analysis of quantitative and qualitative feedback about reports, processes, resources, design |
| | Semi-structured interviews | Identification of emerging data patterns, commonalities and ideas for project improvement |
| | Reflective processes and discussion amongst research team members to integrate, interpret and use different types of data to determine ESP refinement needs and make ongoing implementation decisions | |

| Explore the barriers and facilitators to stakeholder engagement in the interactive dissemination strategy | Semi-structured interviews  Qualitative survey data | Coding and analysis of data to develop assertions, propositions, generalisations about factors influencing stakeholder engagement. Interpretation to develop understanding |
|---|---|---|
| | Preliminary findings contribute to team discussions about ESP refinement and implementation. | |
| Identify actual or intended use of the aggregated CQI data and co-produced knowledge by different stakeholders, and factors influencing use | Semi-structured interviews | Coding and analysis of data to develop assertions, propositions, generalisations about stakeholder use of aggregated CQI data and ESP findings. Interpretation to gain insights |
| Examine and assess whether the interactive dissemination strategy (the ESP project) has achieved its aims | All | Synthesis of all data types and findings to identify key DE findings and outcomes |

348

## ETHICS AND DISSEMINATION

350 **Ethics**

351 The study has been approved by the Human Research Ethics Committee of the Northern Territory

352 Department of Health and Menzies School of Health Research (Project No. 2015-2329), the Central

353 Australian Human Research Ethics Committee (Project No. 15-288), and the Charles Darwin

354 University Human Research Ethics Committee (Project No. H15030) from March 2015 to 31 May

355 2017.

356 **Dissemination**

357     Dissemination will be done by submitting articles to peer-reviewed journals, by thesis and other

358     publications such as research briefs. Results will be presented at relevant conferences and other

359     forums including quality improvement research network meetings.

360     **DISCUSSION**

361     The study seeks to support, develop and evaluate an interactive dissemination strategy (the ESP

362     project), involving stakeholders in Indigenous PHC in the novel use of aggregated CQI data to identify

363     priority evidence -practice gaps, barriers, enablers, and strategies in different areas of clinical care.

364     The characteristics of DE, particularly its capacity to support emergence and adaptation in complex

365     settings, make it suitable for this purpose. The collection and analysis of DE data through iterative

366     cycles of stakeholder feedback and team reflection will provide information and opportunities for

367     the continual refinement of research report presentation, and the adjustment of tools and processes

368     for capturing participant knowledge. The analysis and interpretation of interview data will provide

369     insights about ways to engage stakeholders in wide-scale CQI, and build greater understanding of

370     the implementation context, use of data and ESP project findings, and implications for system

371     improvement.

372     Recent knowledge translation literature indicates gaps in knowledge about how different knowledge

373     translation strategies influence outcomes, and about the relationship between their underlying logic

374     or theory and beneficial outcomes.[8, 44] There is also need for detailed reporting and evaluation of

375     such research.[8, 45] This study can help to address these gaps. The DE is being applied within a

376     project that has adapted a theory-based design linking the development of interventions with

377     modifiable barriers, enablers and identified improvement priorities.[23, 28] In addition to studying

378     the application of theory in the ESP project, the DE offers scope to test, identify and document those

379     elements essential to achieving the intended dissemination outcomes.

380   The ESP project acknowledges the importance of the sharing of tacit knowledge amongst

381   practitioners for addressing the 'know-do gap'.[46] Consistent with approaches advocated in recent

382   literature,[47, 48] it adopts a strategy that integrates knowledge production, translation and use

383   across disciplines.[49] It is being implemented with modest resources, utilising online methods of

384   report distribution and feedback, and relying on stakeholder 'buy-in' to enhance report distribution

385   and facilitate engagement. There is potential for the DE study to provide useful lessons about the

386   strengths and limitations of such an approach. The study will also contribute knowledge about the

387   conditions and factors that influence stakeholder engagement in wide-scale data interpretation and

388   knowledge co-production using CQI data, and the use of this evidence by various PHC stakeholders

389   and in differing contexts.

390   Finally, the DE study is supporting and evaluating a novel interactive dissemination strategy

391   implemented in the Australian Indigenous healthcare context, in which there is an urgent need to

392   ensure that knowledge from research impacts on driving healthcare improvements. The DE will

393   support the co-production and dissemination of knowledge by stakeholders working in this sector,

394   based on recent national-level CQI data from Australia Indigenous PHC centres – knowledge that can

395   be used to implement improvements at practitioner, team, health centre and higher system levels.

396   The lessons learnt about the potential for using aggregated CQI data for this purpose are expected

397   to be applicable to other healthcare contexts. Researchers, clinicians, policy-makers and managers

398   developing evidence-based system and policy interventions should benefit from this research. The

399   study will also help to address the current gap in the scientific literature about applying

400   developmental evaluation.

401

402   **List of Abbreviations**

403   ABCD    Audit and Best Practice for Chronic Disease

404 CQI     continuous quality improvement

405 DE      developmental evaluation

406 ESP     *Engaging Stakeholders in Identifying Priority Evidence-practice Gaps and Strategies for*

407 *Improvement in Primary Health Care*

408 PHC     primary health care

409

## Figure 1 Legend

411 CQI = continuous quality improvement

412 DE = developmental evaluation

413 ESP = Engaging Stakeholders in Identifying Priority Evidence-practice Gaps and Strategies

414 for Improvement in Primary Health Care

415 PHC = primary health care

416 *Adapted from Togni, Askew et al. 2016*

417

## Authors' contributions

419 AL planned the protocol, and wrote the manuscript with contributions and vital support from JB,

420 VM, FC, GH, NP and RB. All authors read and approved the final version of the manuscript.

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## 437    **Competing interests**

438    The authors declare that they have no competing interests.

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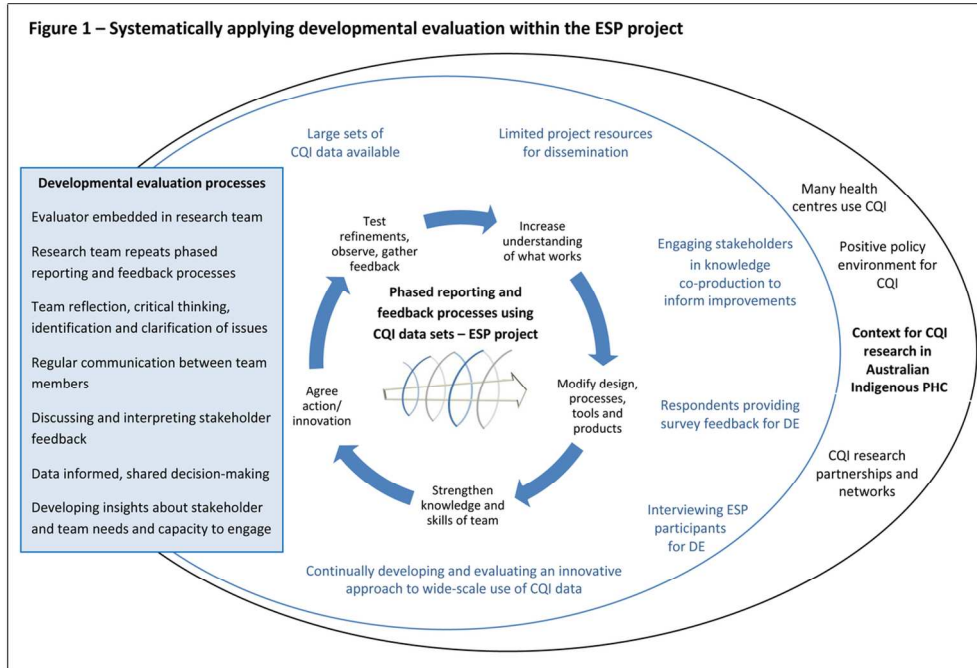503    Domains Framework. *Implement Sci*. 2012;7:38-.

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549

550    **Supplementary Files**

551    **Supplementary file 1 – Explicit survey items for DE Phase 1 ESP**

552 **Supplementary file 2 – Explicit survey items for DE Phase 2 ESP**

553 **Supplementary file 3 – Explicit survey items for DE Phase 3 ESP**

554 **Supplementary file 4 – Explicit survey items for DE Draft Final ESP Report**

555

Figure 1 – Systematically applying developmental evaluation within the ESP project

CQI = continuous quality improvement;
DE = developmental evaluation;
ESP = Engaging Stakeholders in Identifying Priority Evidence-practice Gaps and Strategies for Improvement
in Primary Health Care;
PHC = primary health care

Adapted from Togni, Askew et al. 2016

116x77mm (300 x 300 DPI)

# PHASE 1 SURVEY

*'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP)' Project*

**Specific survey questions relating to presentation of information and project processes**

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**Example: ESP process for Child Health**

---

**Feedback on how information was presented**

Questions relate to three specific parts of the report:
1. The introduction (first 2 pages)
2. The summary of priorities (page 34)
3. The body of the report and presentation of data in tables

**Introduction of the report (pgs 1-2)**

1. How well did this introduction to the report explain:
   - What you would find in the report?  [very well, well, not very well, poorly]
   - The purpose of the project (including this survey)? [very well, well, not very well, poorly]
   - Why you might want to take part in the project? [very well, well, not very well, poorly]
   - What you would be required to do? [very well, well, not very well, poorly]
   - Future phases of the project?  [very well, well, not very well, poorly]

2. How could the introduction of the report be improved? [Free text response]

**Summary of priorities from national data (pgs 3-4)**

3. How well did this summary of suggested priorities:
   - Present information in a way that was easy to read? [very well, well, not very well, poorly]
   - Present information in a way that was easy to use? [very well, well, not very well, poorly]
   - Capture the implications of the data contained in the body of the report? [very well, well, not very well, poorly]

4. How could the summary of priorities (pgs 3-4) be improved? [Free text response]

**Body of the report**

The body of the report presents data about each indicator of the quality of health care being provided for Aboriginal and Torres Strait Islander children and relevance to best practice guidelines.

5. How well does the body of the report:
   - Present information in a way that is easy to read? [very well, well, not very well, poorly]

— Present information in a way that is easy to use? [very well, well, not very well, poorly]
— Clearly explain the data about each indicator of the quality of health care provided? [very well, well, not very well, poorly]
— Clearly explain the implications of these data in terms of best practice guidelines? [very well, well, not very well, poorly]
— Give you confidence in the accuracy of the information presented? [very well, well, not very well, poorly]

6. How could the body of the report be improved? [Free text response]

7. Overall, how well does the whole report:
— Present information in a way that is easy for you to read? [very well, well, not very well, poorly]
— Present information in a way that is easy for you to use? [very well, well, not very well, poorly]
— Provide information that is useful to you? [very well, well, not very well, poorly]
— Provide information that you would not otherwise have had access to? [very well, well, not very well, poorly]
— Provide information that is credible? [very well, well, not very well, poorly]
— Encourage discussion about ways of improving child health care (generally)? [very well, well, not very well, poorly]
— Encourage discussion about improving specific aspects of child health care? [very well, well, not very well, poorly]
— Encourage action to make improvements in specific aspects of child health care? [very well, well, not very well, poorly]

8. Any other comments? [Free text response]

# PHASE 2 SURVEY

*'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP)' Project*

**Specific survey questions relating to presentation of information and project processes**

---

**Example: ESP process for Child Health**

---

We are seeking feedback on how information was presented in the report on 'Trends over Time in Key Indicators of Priority Evidence-Practice Gaps in Child Health'

Your feedback will help us improve future reports.

1. Overall, how well does the report:
   — Present information in a way that is easy for you to read and understand? [very well, well, not very well, poorly]
   — Present information in a way that is easy for you to use? [very well, well, not very well, poorly]
   — Provide information that is useful to you? [very well, well, not very well, poorly]
   — Encourage discussion about the barriers and enablers for addressing the priority evidence-practice gaps for child health? [very well, well, not very well, poorly]

2. Do you have suggestions about how to improve the presentation and usefulness of the refined report, or how it could be changed to encourage discussion? [Free text response]

3. Do you have any comments or suggestions about how to improve future ESP Project surveys? [Free text response]

# PHASE 3 SURVEY

*'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP)' Project*

**Specific survey questions relating to presentation of information and project processes**

---

**Example: ESP process for Child Health**

---

**Feedback on the report**

1. Overall, how well does the report:
   — Present information in a way that is relevant and useful to you? [very well, well, not very well, poorly]
   — Present information in a way that is easy for you to read and understand? [very well, well, not very well, poorly]
   — Present information that is easy to use?  [very well, well, not very well, poorly]
   — Provide information that you would not otherwise have had access to? [very well, well, not very well, poorly]
   — Encourage discussion about the barriers, enablers and strategies for closing the priority evidence-practice gaps for child health? [very well, well, not very well, poorly]

2. Any other comments? [Free text response]

**Feedback on the evidence brief**

Overall, how well does the evidence brief:

   — Present evidence that is relevant and useful to you? [poorly, not very well, well, very well]
   — Present evidence that is credible? poorly, not very well, well, very well]
   — Present information in a way that is easy for you to read and understand? [poorly, not very well, well, very well]
   — Present information in a way that is easy for you to use? [poorly, not very well, well, very well]
   — Encourage discussion about barriers, enablers and strategies for closing the priority evidence-practice gaps for child health? [poorly, not very well, well, very well]

3. To what extent does the evidence brief:

   — Provide information that is new to you? [not at all, not much, somewhat, quite a bit, a great deal]
   — Increase your understanding of the evidence about what works in making improvements in the quality of Aboriginal and Torres Strait Islander primary health care? [not at all, not much, somewhat, quite a bit, a great deal]

— Increase your confidence in taking action to bring about improvements in the quality of Aboriginal and Torres Strait Islander primary health care? [not at all, not much, somewhat, quite a bit, a great deal]

— Change how you will approach making improvements in the quality of Aboriginal and Torres Strait Islander primary health care? [not at all, not much, somewhat, quite a bit, a great deal, N/A]

4. How do you rate the evidence brief in terms of its:

— Content? [Very poor, poor, okay, good, very good]
— Language? [Very poor, poor, okay, good, very good]
— Presentation? [Very poor, poor, okay, good, very good]

5. Do you have suggestions about how to improve the content, language, presentation, and/or usefulness of the evidence brief, or how it could be changed to encourage discussion? [Free text response]

**Feedback on this survey**

6. Do you have any comments or suggestions about how to improve future ESP Project surveys? [Free text response]

## SURVEY – DRAFT FINAL ESP REPORT


*'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP)' Project*

**Specific survey questions relating to presentation of information and project processes**


**Example: ESP process for Child Health**


**Feedback on presentation**

1. We are interested in your views on presentation of information and content of this report. How well does the presentation of information and content of the report meet your needs? [very well, well, not very well, poorly]

2. If your response to the above question was 'poorly' or 'not well', please provide suggestions for how the presentation could be improved. [Free Text].


**Feedback on the ESP Project processes**

We have used a phased approach to encourage engagement with data by key stakeholders, and to identify strategies to address priority evidence-practice gaps. Your feedback on the Child Health ESP Project processes will help us refine ESP processes for other areas of care.


3. Has the process of cyclical engagement improved your understanding of the CQI data? Please comment on this. [Free Text]

4. Have you used the information provided through this process? If so, how? [Free Text]

5. To help us improve the ESP process, please provide comment on any stakeholder perceptions that may not have been reflected in the survey responses. [Free Text]

6. Please provide any further comments on this phased approach to engage with and use data to inform decision making. [Free Text]

7. Please provide suggestions for dissemination for the Final Child Health Report. [Free Text]

# BMJ Open

# A developmental evaluation to enhance stakeholder engagement in a wide-scale interactive project disseminating quality improvement data: study protocol for a mixed-methods study

SCHOLARONE™
Manuscripts

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3 **A developmental evaluation to enhance stakeholder engagement in**
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6 **a wide-scale interactive project disseminating quality improvement**
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9 **data: study protocol for a mixed-methods study**

4 Alison Laycock[1], Jodie Bailie[2], Veronica Matthews[2], Frances Cunningham[1], Gillian Harvey[3], Nikki

5 Percival[4], Ross Bailie[2]

6 [1] Menzies School of Health Research, Charles Darwin University, Casuarina, NT, Australia

7 [2] University Centre for Rural Health, the University of Sydney, Lismore, NSW, Australia

8 [3] Adelaide Nursing School, The University of Adelaide, Adelaide, SA Australia; Alliance Manchester

9 Business School, The University of Manchester, Manchester, United Kingdom

10 [4] The Australian Centre for Public and Population Health Research, University of Technology Sydney,

11 Sydney, NSW, Australia

12

13 Corresponding author: Alison Laycock, alison.laycock@menzies.edu.au

14 Menzies School of Health Research, Charles Darwin University

15 PO Box 41096

16 Casuarina NT 0811

17 Australia

18 Ph: +61 419 824341

19 Fax: +61 8 8946 8464

20 Alison Laycock, Email: alison.laycock@menzies.edu.au

21 Jodie Bailie, Email: jodie.bailie@sydney.edu.au

22 Veronica Matthews, Email: veronica.matthews@sydney.edu.au

23 Frances Cunningham, Email: frances.cunningham@menzies.edu.au

24 Gillian Harvey, Email: Gillian.Harvey@adelaide.edu.au

25 Nikki Percival, Email: Nikki.percival@uts.edu.au

26 Ross Bailie, Email: ross.bailie@sydney.edu.au

27

28 **Word count:** 3869 (+ Strengths and Limitations section = 108)

29 **Key words –** developmental evaluation, interactive dissemination, stakeholder engagement, primary

30 health care, indigenous, quality improvement

31    **ABSTRACT**

32    **INTRODUCTION:**

33    Bringing together continuous quality improvement (CQI) data from multiple health services offers

34    opportunities to identify common improvement priorities, and to develop interventions at various

35    system levels to achieve large-scale improvement in care. An important principle of CQI is

36    practitioner participation in interpreting data and planning evidence-based change. This study will

37    contribute knowledge about engaging diverse stakeholders in collaborative and theoretically-

38    informed processes to identify and address priority evidence-practice gaps in care delivery. This

39    paper describes a developmental evaluation to support and refine a novel interactive dissemination

40    project using aggregated CQI data from Aboriginal and Torres Strait Islander primary healthcare

41    centres in Australia. The project aims to effect multi-level system improvement in Aboriginal and

42    Torres Strait Islander primary healthcare.

43    **METHODS AND ANALYSIS:** Data will be gathered using document analysis, online surveys, interviews

44    with participants and iterative analytical processes with the research team. These methods will

45    enable real-time feedback to guide refinements to the design, reports, tools and processes as the

46    interactive dissemination project is implemented. Qualitative data from interviews and surveys will

47    be analysed and interpreted to provide in-depth understanding of factors that influence engagement

48    and stakeholder perspectives about use of the aggregated data and generated improvement

49    strategies. Sources of data will be triangulated to build up a comprehensive, contextualised

50    perspective and integrated understanding of the project's development, implementation and

51    findings.

52    **ETHICS AND DISSEMINATION:**

53    The Human Research Ethics Committee (HREC) of the Northern Territory Department of Health and

54    Menzies School of Health Research (Project 2015-2329), the Central Australian HREC (Project 15-

55    288), and the Charles Darwin University HREC (Project H15030) approved the study. Dissemination

56    will include articles in peer-reviewed journals, policy and research briefs. Results will be presented at

57    conferences and quality improvement network meetings. Researchers, clinicians, policy-makers and

58    managers developing evidence-based system and policy interventions should benefit from this

59    research.

60

61    **STRENGTHS AND LIMITATIONS OF THIS STUDY**

62    • Use of mixed methods and inclusion of perspectives of the research team and diverse

63      healthcare stakeholders enhances validity and provides comprehensive data.

64    • The developmental evaluation is being applied within an iterative dissemination project.

65      Each iteration provides opportunities to evaluate and refine implementation processes and

66      reports in response to researcher, participant and data collection needs.

67    • The dissemination approach encourages stakeholders to send reports and surveys to others,

68      limiting ability to measure the reach or response rates as part of the evaluation.

69    • The evaluator is a team member and evaluates the research team's work. Potential lack of

70      objectivity is offset by continuing opportunities for reflexivity, sense-making and timely

71      project adaptations.

72

73    **INTRODUCTION**

74    **Background**

75    Improving the implementation of evidence-based healthcare is a complex enterprise. It involves the

76    production, translation and use of knowledge by researchers, policy-makers, service providers and

77    consumers. Using evidence to improve the quality of primary health care (PHC) services for

78    Aboriginal and Torres Strait Islander people (Australia's Indigenous nations) is critically important in

79    Australia, where Indigenous people experience an unacceptable burden of ill health, shorter life

80    expectancy and poorer access to PHC services compared with the general population.[1, 2]

81    A number of health centre teams that serve Indigenous communities use continuous quality

82    improvement (CQI) tools and processes to make evidence-based improvements in the care they

83    deliver. CQI is inherently participatory; it generates and uses data and iterative processes to plan

84    interventions, typically at the team or health centre level. It applies strategies that are known to be

85    effective in knowledge translation, such as audit and feedback and goal setting.[3-5]

86    Improvement interventions have a higher probability of success when system changes are

87    implemented concurrently at several levels – individual care processes, group or team work, the

88    organization, and the larger system and policy environment.[6, 7] Despite developments in CQI

89    theory and practice, there is a gap in the literature about how to engage stakeholders in wide-scale

90    CQI processes to address improvement barriers and inform the development of system

91    strengthening strategies. There is also a need for knowledge about how different knowledge

92    translation strategies influence outcomes.[8]

93    Bringing together CQI data from multiple PHC centres provides scope to use CQI in a different way. It

94    offers opportunities to engage diverse stakeholders in identifying common priorities for improving

95    care and interventions that target change at various levels of the health system. This paper describes

96    the study protocol for the use of developmental evaluation (DE) to evaluate and strengthen a novel

97    theory-informed wide-scale interactive dissemination project engaging diverse stakeholders

98    involved in Australian Indigenous healthcare. Titled 'Engaging Stakeholders in Identifying Priority

99    Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP), the project

100   disseminates aggregated CQI data from 175 PHC centres serving Indigenous people, for the purpose

101   of informing improvement interventions at different levels of the health system. These centres

102    contributed their data to a research program under a partnership agreement. The relationship

103    between the research program, the ESP project and the DE is shown in Figure 1.

104    *[INSERT FIGURE 1]*

105    **The study context - Australian Indigenous primary health care and quality improvement**

106    Despite universal coverage for healthcare services through Medicare and specific funding for

107    Indigenous PHC services, there is a significant and persistent disparity between the health and life

108    expectancy of Indigenous and non-Indigenous Australians.[2, 9] The disparity is well documented. It

109    relates to a history of colonisation and disempowerment, ongoing racial, social, educational and

110    economic inequalities and lack of access to culturally safe service provision.[1, 10] Indigenous people

111    access PHC through Indigenous community-controlled health services and government-operated

112    PHC centres specifically established to meet the needs of Aboriginal and Torres Strait Islander

113    people, and through private general practices. PHC delivery settings are geographically diverse and

114    vary in population density, governance arrangements and resource provision.

115    Reducing healthcare disparities requires CQI and system strengthening approaches that address the

116    complexities of the PHC delivery environment and draw on data about clinical care and utilisation of

117    services.[7, 11] In Indigenous PHC, this calls for approaches that incorporate the needs and values of

118    Indigenous communities,[12] make optimal use of health service performance data and utilise the

119    professional and contextual knowledge of those working in the sector.[5, 13] It involves policy

120    change and improvement interventions at various system levels.[6, 14]

121    **Developmental evaluation**

122    Developmental evaluation (DE) is gaining recognition as a useful approach for implementation

123    research.[15, 16] Evolving from utilisation-focused evaluation[17] and drawing on tools and methods

124    from a variety of disciplines, DE can be used to address complex health system issues that require

125    engagement of multiple stakeholders in both the research and change processes.[18]

126    DE is typically embedded in the project context and involves continuous feedback to inform

127    innovators, often with the evaluator positioned within a project or program team. It is well suited to

128    adapting projects or interventions implemented under complex conditions, or emergent situations in

129    which multiple influences make it difficult to predict what will happen as a project or strategy

130    progresses.[19, 20] DE has been used, for example, to support change through team dialogue, to

131    innovate health and recreation programs in Indigenous communities, to develop principles and

132    collaborative processes between agencies working to address difficult social and economic issues,

133    and to engage communities of practice in complex systems change.[21] Challenges in DE include

134    managing uncertainty and ambiguity, the volume of data and maintaining a results focus.[22]

135    To our knowledge, DE has not previously been used in a project involving CQI or dissemination of

136    data, nor applied in order to 'study a study'. While this made methodology development

137    challenging, the available DE literature suggests that DE aligns well with a project that has

138    developmental purpose, is committed to engaging stakeholders with research evidence and to

139    contributing to the science of implementation. The benefits of having an 'embedded evaluator', such

140    as timely feedback, discussion and sense-making to inform adaptive decision-making,[15,21] were

141    influential in selecting a DE approach.

142    **Aims of the developmental evaluation (DE) study**

143    The aim of the DE study is to evaluate and enhance a novel interactive dissemination project

144    designed to engage PHC stakeholders in Indigenous PHC in wide-scale processes to interpret and use

145    aggregated CQI data.

146    The objectives of the DE study are to:

147    • Develop and refine the design, reports, processes and resources used in the interactive

148    dissemination project

149    • Explore the barriers and facilitators to stakeholder engagement in the interactive

150       dissemination project

151    • Identify the actual or intended use of the aggregated CQI data and co-produced knowledge

152       by different stakeholders, and factors influencing use

153    • Assess the overall effectiveness of the interactive dissemination processes used in the ESP

154       project

155    **The 'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for**

156    **Improvement in Primary Health Care (ESP)' project – an opportunity for learning and innovation**

157    **through DE**

158    Described in a separate paper, the 'Engaging Stakeholders in Identifying Priority Evidence-Practice

159    Gaps and Strategies for Improvement in Primary Health Care (ESP)' project,[23] aims to engage

160    stakeholders with aggregated data and promote wide-scale improvements in quality of care by

161    applying a system-wide approach to CQI.[24] The ESP project utilises a comprehensive CQI dataset

162    collected for the Audit and Best Practice for Chronic Disease (ABCD) National Research Partnership

163    (2010 – 2014).[4, 25]

164    Over more than a decade, PHC centres participating in the ABCD National Research Partnership

165    (Partnership) used evidence-based best-practice clinical record audit and system assessment tools to

166    assess and reflect on system performance, interpreting the data to identify improvement priorities

167    and develop strategies appropriate to their service population and delivery contexts.[5] Available

168    ABCD CQI tools cover various aspects of PHC (e.g., chronic illness, preventive and maternal care).

169    In addition to their routine use of these tools as part of their Plan-Do-Study-Act CQI processes, 175

170    PHC centres involved in the Partnership voluntarily provided service-level de-identified CQI data for

171    analysis. These audit data, based on almost 60,000 audits of patient records and 492 systems

172    assessments, provide a unique opportunity to utilise aggregated health centre performance data for

173  wide-scale system improvement and population health benefit, and to explore innovative ways to

174  engage healthcare stakeholders with evidence.

175  Aiming to support understanding and use of these data through an interactive exchange between

176  healthcare researchers and stakeholders, the ESP project draws on explicit and practical knowledge,

177  and different types of expertise, to identify improvement strategies aligned with implementation

178  settings.[23, 26, 27]

179  The ESP project design is adapted from systematic methods that aim to link interventions to

180  modifiable barriers to address evidence-practice gaps.[28] Four phases of online report distribution

181  and feedback will involve stakeholders in data interpretation and knowledge-co-production, as

182  follows:

1.  *Phase One:  Identification of priority evidence-practice gaps*. Stakeholders receive a report of

183

184  aggregated cross-sectional CQI data and complete an online survey.

185  2.  *Phase Two: Identification of barriers and enablers to addressing gaps in care identified in*

186  *Phase 1.* Stakeholders receive a report of trend data relevant to the identified priority

187  evidence-practice gaps. They complete an online survey about influences on individual

188  behaviours, health centre and wider systems.  The survey questions are based on the

189  theoretical domains framework[29, 30] and on other models identifying barriers to the

190  effective functioning of health centre and higher level systems.[31-33]

191  3.  *Phase 3: Identification of strategies for improvement.* Provided with findings from phases 1

192  and 2, and an evidence summary about CQI implementation, stakeholders are asked to

193  suggest strategies likely to be effective in addressing modifiable barriers and strengthening

194  enablers.

195  4.  In the final phase, respondents are asked to review the draft final report and provide

196  feedback on the overall findings in the specific clinical care area.

197   Separate processes will be implemented using audit data collected for child, maternal, preventive

198   and mental health, chronic illness and rheumatic heart disease care. The rationale for the ESP

199   project is that involving diverse stakeholders in a phased approach using aggregated CQI data should

200   stimulate discussion and information sharing, and enhance ownership of the development of

201   interventions to address system gaps. The collaboratively produced findings are intended as a

202   resource for planning implementation interventions that fit materially, historically and culturally

203   with organisational and local contexts.[34]

204   ## METHODS AND ANALYSIS

205   Using a case study approach[35, 36] the DE will examine and enhance the methods through which

206   the dissemination of aggregated data and knowledge co-production are enacted in the ESP project.

207   It seeks to effect changes and develop understanding as the dissemination project and concurrent

208   evaluation proceed through iterative phases of implementation.

209   **Systematically applying developmental evaluation within the ESP project**

210   The DE is designed to align with the aim and design of the ESP project, which will provide

211   opportunities to collect feedback from survey respondents, to identify interview participants and to

212   engage the research team in DE processes.

213   Figure 2 illustrates how DE is systematically applied within the ESP project.

214   *[INSERT FIGURE 2]*

215   DE processes: The evaluator (AL) is embedded within the research team to support the reflective

216   and iterative nature and the co-creation principle of DE,[21] and to facilitate real-time responses to

217   project conditions and issues as they emerge. The team will discuss and interpret stakeholder

218   feedback, and use reflective critical thinking to identify and clarify issues relevant to implementing

219   the ESP project. Through these processes, decision making for ongoing project implementation will

220   be shared amongst team members and informed by data. Insights will be developed about

221   stakeholder and team needs and capacity to engage in the collaborative processes of the ESP

222   project.

223   Iterative cycles: These processes will be applied to iterative cycles of reflection through which

224   actions will be agreed, refinements tested, results observed and feedback gathered. The systematic

225   approach will assist in managing the high volume of data and maintaining focus.  It will lead to

226   increased understanding of what works well or poorly to illicit findings and engage project

227   participants and the research team in collaborative processes. Project design, processes, tools and

228   reports are expected to be continuously modified to support the presentation of data to inform

229   wide-scale improvement. Team knowledge and skills in relation to implementing interactive

230   dissemination in the context of Indigenous healthcare will be strengthened through the continuous

231   cycle of learning and development, as phases of the dissemination project are repeated using sets of

232   aggregated CQI data in different areas of clinical care.

233   Implementation context: The DE study is being conducted within the wider context for CQI research

234   in Australian Indigenous PHC, where CQI is used within many health centres. There is a positive

235   policy environment for CQI and a history of researcher-service provider partnerships for CQI

236   development.

237   **Data collection and analysis methods**

238   The sources of data used in this DE study include documentation, quantitative and qualitative

239   surveys and participant interviews. A further source of evidence is participant-observation[36] - the

240   actions taken by the research team following their review of evidence and experiences during

241   project implementation. These are appropriate sources for research in which theory is nascent and

242   research questions are exploratory.[37]

243        1.   *Document analysis*

244    Administrative project records will provide information about the context, scope, early stages of ESP

245    project development, report distribution and ongoing implementation. Data sources will include

246    meeting minutes and recorded interactions between research team members, and between team

247    members and other stakeholders. These documents will be used to identify and clarify key issues,

248    dates, events and tasks, and to track key decisions and developments in the ESP design, processes,

249    reports and other resources.

250        *2.   Survey data*

251    Online surveys designed to collect data leading to the generation of wide-scale CQI strategies (as

252    part of the ESP project) incorporate evaluative questions. The questions will ask respondents to rate,

253    on a Likert scale, the accessibility, content, usefulness and useability of information in the reports,

254    and the extent to which the reports promote workplace discussion about care quality. These data

255    will be analysed using simple descriptive statistics. Respondents will also be invited to provide free

256    text responses suggesting ways in which the team can improve the surveys and reports, and support

257    data interpretation. Free text responses will be integrated and analysed with other qualitative data.

258    (Explicit survey items are at Supplementary files 1 - 4).

259    As key change decisions are made, the research team will modify the surveys to seek feedback about

260    the ESP project modifications. For example, additional questions seeking comments about newly

261    developed resources, design innovations or changed report formats will be included.

262    Survey data collected as part of the ESP will provide important evaluation data about who is

263    engaging with project processes across Australian jurisdictions. It will enable the team and evaluator

264    to track stakeholder engagement through each phase and cycle for each clinical care area, including

265    the number of responses to each survey, whether responses are from individuals or groups and how

266    this impacts on responses. Respondent information requested in the surveys includes professional

267    role, scope and location (national, Australian jurisdiction), work setting or population group served

268   (e.g. urban, rural, remote populations), type of organisation represented (e.g., community controlled

269   health centre, government health service) and group size (as relevant). This information will enable

270   the purposive sampling of interviewees.

271     *3.   Semi-structured interviews*

272   Semi-structured interviews will be conducted to provide detailed information and feedback for the

273   DE. They will be used to explore emergent themes in the survey data and to probe factors and

274   perspectives relating to participant engagement, use of aggregated data and findings, and how to

275   improve the project processes and presentation of information. (The interview guide is

276   Supplementary file 5.)

277   A single Australian jurisdiction will be the focus of qualitative interviews, purposively selected

278   because of its history of CQI and CQI research in Indigenous PHC. Participating health centres have

279   contributed a significant proportion of the aggregated CQI data used in the ESP project. Further

280   interviews will also be conducted with participants who have cross jurisdiction (national) roles.

281   Potential interviewees will be identified from respondent information collected through the surveys

282   - contact details are provided voluntarily by respondents. Interview participants will be purposively

283   sampled from project participants to represent different professional roles, organisation types and

284   work settings, and participation in different ESP project cycles.

285   Twenty-five to 30 interviews are expected to provide representative data for effective comparison

286   between groups and settings. The aim will be to conduct sufficient interviews to build a convincing

287   analytical narrative based on richness and detail and to achieve 'information power' in identifying

288   themes in the data.[38] The evaluator (AL) will conduct all interviews.

289   Interview transcripts will be de-identified and entered into NVivo, a computer assisted qualitative

290   data analysis program to assist with coding for analysis. The evaluator will generate a priori codes

291   derived from the literature and based on a widely used conceptual framework for knowledge

292   translation[39] and the DE research questions, ahead of identifying emergent codes to discover

293   themes, categories and patterns in the data, to explore the relationships between them and to build

294   theories through an inductive process.[40] Coding will be checked by a research colleague to ensure

295   coding reliability and consistency.

296   The aim of the analysis of interview data is to provide information for two purposes. Firstly, the

297   preliminary results will be reported and discussed with research team members to help inform the

298   developmental evaluation process. Together with other information, such as survey findings, the

299   interview data will influence real-time changes to ESP project processes, tools and reports as the

300   interactive dissemination project is implemented.

301   The second purpose is for interpretation and reflection to gain deep insight and develop

302   understanding relevant to the DE research questions. This includes understanding of the factors

303   influencing stakeholder engagement in the interactive dissemination project, ways to support

304   participation, and the extent to which being involved influences participants' implementation

305   decisions. It includes insights into use of the CQI data and use of project findings about consensus

306   priority evidence-practice gaps, barriers, enablers and strategies for improving care quality.

307           **4.   Reflective processes with the research team**

308   As illustrated in Figure 2, the research team's learning and actions will be guided by a facilitated

309   process of reflection and analysis, drawing on stakeholder feedback and the team's experiences.

310   This processes will enable the team to identify emerging issues and to innovate, test and refine the

311   elements of the interactive dissemination project. It will be based on the questions:  What? (What

312   happened?)  So what? (What do the results mean or imply? How did we influence the results?)

313   Now what? (How do we respond? What should we do differently?).[41] An example of how these

314   questions are applied is shown in Table 1.

315   *[INSERT TABLE 1]*

316     *Table 1: Reflective evaluation questions*

| What (What happened?) | So what? (What does it mean?) | Now what? (What to do differently?) |
|---|---|---|
| How many survey responses did we receive? | Do we need to promote and/or distribute reports in other ways and target particular people? | Based on the explicit and experiential evidence, should we be making further changes to enhance the: <br> - quality of data collected <br> - processes <br> - presentation of reports |
| Whose responses did we capture? | Do we need to clarify, adjust, add or delete survey questions to illicit robust data and encourage engagement? | |
| What was the quality of data collected through this survey? | | What is the supporting evidence for a particular direction or modification? |
| | Do we consider modifying the next phase, or the ESP process we use for the next dataset? | |
| What feedback did survey respondents and interviewees provide about: <br> - the relevance, format and use of the report? <br> - the survey? <br> - supporting resources? | Do we need to present or explain the data differently to enhance understanding? | How should we prioritise these changes (e.g. considering resources needed, time involved, alignment with theory)? |
| What were team members' experiences of recent implementation processes? | Do we need to modify report formats and content to make them more accessible to those targeted? | What is the plan of action for making changes? |
| What worked well/not so well for you in terms of refinements and modifications made? | Does the literature about presenting research to different user groups match respondent feedback? | How will these changes impact on the project and others involved (e.g. clinical leaders and report co-authors involved in ESP data analysis)? |
| | How does feedback and observation connect with what we know from our experience of engaging healthcare | |

| | stakeholders in CQI? | |
|---|---|---|

317  CQI - continuous quality improvement; ESP - Engaging Stakeholders in Identifying Priority
318  Evidence-practice Gaps and Strategies for Improvement in Primary Health Care
319

320  The processes will thereby reflect CQI processes (plan-do-study-act cycles). Repeating these cycles in

321  different areas of PHC will offer opportunities to continuously gather data, to learn from each cycle

322  of stakeholder engagement and feedback and to apply learning to improve the implementation of

323  subsequent activities within the ESP project (Figure 2). Documenting these processes, team

324  perceptions and change decisions will enable consideration of the contribution of DE in

325  strengthening project implementation.

326  ***Data integration and analysis***

327  Taking a pragmatic approach, multiple sources of data will be collected, analysed and integrated[42]

328  to address the objectives of the DE. Each data source will be individually analysed then triangulated

329  to support validation and cross-checking of findings.[43]  Table 2 outlines these processes.

330  In the initial stage of the study, ESP project survey responses will help to inform the development of

331  the exploratory questions used in the semi-structured interviews for the DE. Thereafter, the

332  collection of qualitative and quantitative data will occur concurrently.  Survey responses will

333  contribute evaluation data through the ESP project phases and dissemination cycles in each area of

334  clinical care. Semi-structured interviews will be timed to capture the input of participants engaging

335  with ESP reports and surveys (e.g., for maternal health, mental health).

336  The continuous data collection, analysis and synthesis processes using different data sources will

337  provide the team with opportunities to apply what is learned, generate new avenues of enquiry and

338  ideas, and test changes made within the ESP project.

339  Project documents and records will be used to construct a timeline reflecting key dates, events,

340  stakeholder feedback and participation, ideas, decisions and implementation of project refinements.

341    The timeline will track the project, enabling the team to draw causal hypotheses and informing

342    ongoing change decisions. Bringing together and interpreting the different types of data will help

343    build a comprehensive picture of ESP project development and a contextualised and integrated

344    understanding of the findings and evaluation outcomes of the ESP project.

345    Overall, these processes are expected to identify key issues and principles to inform future

346    interactive dissemination efforts and wide-scale CQI in the context of Indigenous PHC, and to

347    contribute knowledge that can be transferred to other healthcare contexts and disciplines.

348    *[INSERT TABLE 2]*

349    *Table 2: Data sources and their use to address the developmental evaluation objectives*

| DE objective | Data source | Analysis and use of data to address DE objective |
|---|---|---|
| Develop and refine the design, reports, processes and resources used in the interactive dissemination project | Document analysis | Identification of implementation strengths, issues and need for refinements<br><br>Tracking of actions, issues, decisions, key events, changes |
| | Survey data | Analysis of quantitative and qualitative feedback about reports, processes, resources, design |
| | Semi-structured interviews | Identification of emerging data patterns, commonalities and ideas for project improvement |
| | Reflective processes and discussion amongst research team members to integrate, interpret and use different types of data to determine ESP refinement needs and make ongoing implementation decisions | |
| Explore the barriers and facilitators to stakeholder engagement in the interactive | Semi-structured interviews | Coding and analysis of data to develop assertions, propositions, generalisations |

| dissemination project | Qualitative survey data | about factors influencing stakeholder engagement. Interpretation to develop understanding |
|---|---|---|
| | Preliminary findings contribute to team discussions about ESP refinement and implementation. | |
| Identify actual or intended use of the aggregated CQI data and co-produced knowledge by different stakeholders, and factors influencing use | Semi-structured interviews | Coding and analysis of data to develop assertions, propositions, generalisations about stakeholder use of aggregated CQI data and ESP findings. Interpretation to gain insights |
| Assess the overall effectiveness of the interactive dissemination processes used in the ESP project | All | Synthesis of all data types and findings to identify key DE findings and outcomes |

350  DE – developmental evaluation; ESP - Engaging Stakeholders in Identifying Priority
351  Evidence-practice Gaps and Strategies for Improvement in Primary Health Care
352

353  **ETHICS AND DISSEMINATION**


354  **Ethics**


355  The study has been approved by the Human Research Ethics Committee of the Northern Territory

356  Department of Health and Menzies School of Health Research (Project No. 2015-2329), the Central

357  Australian Human Research Ethics Committee (Project No. 15-288), and the Charles Darwin

358  University Human Research Ethics Committee (Project No. H15030) from March 2015 to 31 May

359  2018.


360  **Dissemination**


361  Dissemination will be done by submitting articles to peer-reviewed journals, by thesis and other

362  publications such as research briefs. Results will be presented at conferences and other forums

363  including quality improvement research network meetings.

**DISCUSSION**

The study seeks to support, develop and evaluate an interactive dissemination project (the ESP)

involving stakeholders in Indigenous PHC in the novel use of aggregated CQI data to identify priority

evidence-practice gaps, barriers, enablers, and strategies in different areas of clinical care.  The

characteristics of DE, particularly its capacity to support emergence and adaptation in complex

settings, make it suitable for this purpose. The collection and analysis of DE data through iterative

cycles of stakeholder feedback and team reflection will provide information and opportunities for

the continual refinement of research report presentation, and the adjustment of tools and processes

for capturing participant knowledge. The analysis and interpretation of interview data will provide

insights about ways to engage stakeholders in wide-scale CQI, and build greater understanding of

the implementation context, use of data and ESP project findings, and implications for system

improvement.

Recent knowledge translation literature indicates gaps in knowledge about how different knowledge

translation strategies influence outcomes, and about the relationship between their underlying logic

or theory and beneficial outcomes.[8, 44] There is also need for detailed reporting and evaluation of

such research.[8, 45] This study can help to address these gaps. The DE is being applied within a

project that has adapted a theory-based design linking the development of interventions with

modifiable barriers, enablers and identified improvement priorities.[23, 28] In addition to studying

the application of theory in the ESP project, the DE offers scope to test, identify and document those

elements essential to achieving the intended dissemination outcomes.

The ESP project acknowledges the importance of the sharing of tacit knowledge amongst

practitioners for addressing the 'know-do gap'.[46] Consistent with approaches advocated in recent

literature,[47, 48] it adopts a strategy that integrates knowledge production, translation and use

across disciplines.[49] It is being implemented with modest resources, utilising online methods of

report distribution and feedback, and relying on stakeholder 'buy-in' to enhance report distribution

389    and facilitate engagement. There is potential for the DE study to provide useful lessons about the

390    strengths and limitations of such an approach. The study will also contribute knowledge about the

391    conditions and factors that influence stakeholder engagement in wide-scale data interpretation and

392    knowledge co-production using CQI data, and the use of this evidence by various PHC stakeholders

393    and in differing contexts.

394    Finally, the DE study is supporting and evaluating a novel interactive dissemination project

395    implemented in the Australian Indigenous healthcare context, in which there is an urgent need to

396    ensure that knowledge from research impacts on driving healthcare improvements. The DE will

397    support the co-production and dissemination of knowledge by stakeholders working in this sector,

398    based on recent national-level CQI data from Australia Indigenous PHC centres – knowledge that can

399    be used to implement improvements at practitioner, team, health centre and higher system levels.

400    The lessons learnt about the potential for using aggregated CQI data for this purpose are expected

401    to be applicable to other healthcare contexts. Researchers, clinicians, policy-makers and managers

402    developing evidence-based system and policy interventions should benefit from this research. The

403    study will also help to address the current gap in the scientific literature about applying

404    developmental evaluation.

405

## List of Abbreviations

407    ABCD    Audit and Best Practice for Chronic Disease

408    CQI     continuous quality improvement

409    DE      developmental evaluation

410    ESP     *Engaging Stakeholders in Identifying Priority Evidence-practice Gaps and Strategies for*

411    *Improvement in Primary Health Care*

412    PHC      primary health care

413

414    **Figure 1 Legend**

415    ABCD - Audit and Best Practice for Chronic Disease

416    CQI - continuous quality improvement

417    ESP - Engaging Stakeholders in Identifying Priority Evidence-practice Gaps and Strategies for

418    Improvement in Primary Health Care

419    PHC - primary health care

420

421    **Figure 2 Legend**

422    CQI - continuous quality improvement

423    DE - developmental evaluation

424    ESP - Engaging Stakeholders in Identifying Priority Evidence-practice Gaps and Strategies for

425    Improvement in Primary Health Care

426    PHC - primary health care

427    *Adapted from Togni, Askew et al. 2016*

428

429    **Authors' contributions**

430    AL developed the protocol and manuscript drafts. All authors reviewed drafts and contributed to

431    manuscript development. RB leads the ESP project and supervised the protocol design and writing

432    process. JB and VM contributed to the ESP project design and will provide data for the

433   developmental evaluation study. FC, GH and NP contributed to the methodology and provided

434   advice during protocol development. All authors read and approved the final manuscript.

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## Competing interests

452   The authors declare that they have no competing interests.

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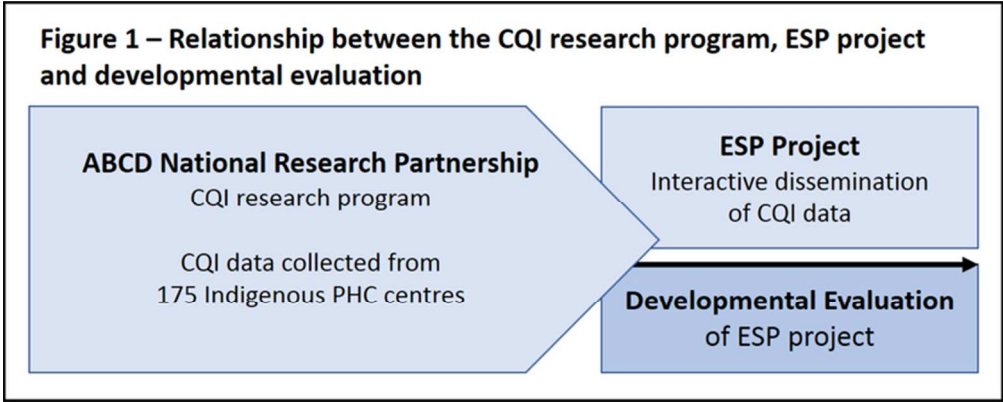503    primary health care. *Front Public Health*. 2016;4.

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## Supplementary Files

565 **Supplementary file 1 – Explicit survey items for DE Phase 1 ESP**
566 **Supplementary file 2 – Explicit survey items for DE Phase 2 ESP**
567 **Supplementary file 3 – Explicit survey items for DE Phase 3 ESP**
568 **Supplementary file 4 – Explicit survey items for DE Draft Final ESP Report**
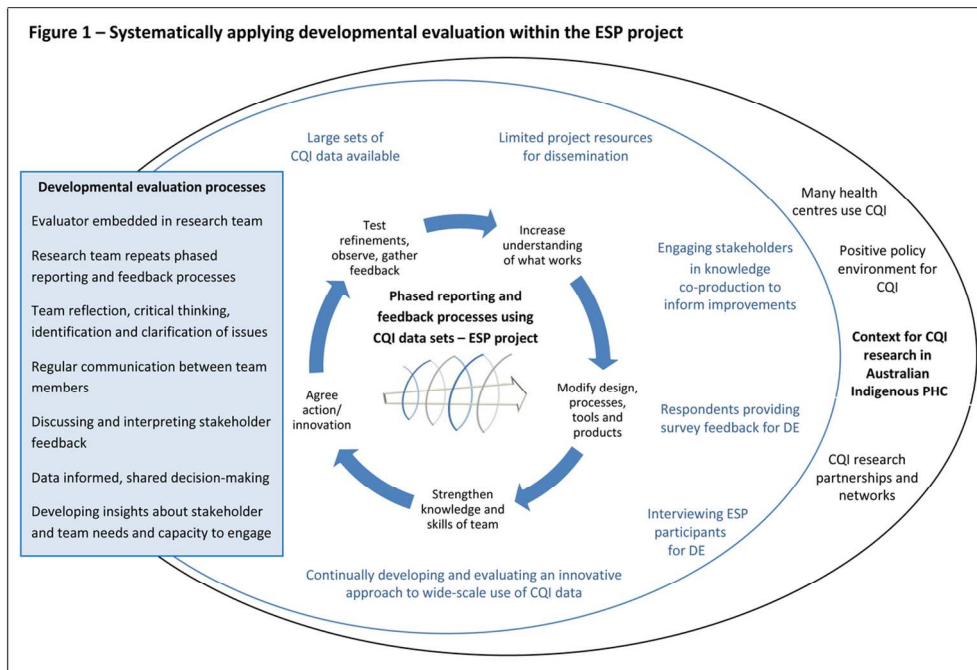569 **Supplementary file 5 – Interview Guide - ESP DE**
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Figure 1 – Relationship between the CQI research program, ESP project and developmental evaluation

**ABCD National Research Partnership**
CQI research program

CQI data collected from
175 Indigenous PHC centres

**ESP Project**
Interactive dissemination
of CQI data

**Developmental Evaluation**
of ESP project

ABCD - Audit and Best Practice for Chronic Disease
CQI - continuous quality improvement
ESP - Engaging Stakeholders in Identifying Priority Evidence-practice Gaps and Strategies for Improvement
in Primary Health Care
PHC - primary health care

69x28mm (300 x 300 DPI)

Figure 1 – Systematically applying developmental evaluation within the ESP project

CQI - continuous quality improvement
DE - developmental evaluation
ESP - Engaging Stakeholders in Identifying Priority Evidence-practice Gaps and Strategies for Improvement
in Primary Health Care
PHC - primary health care
Adapted from Togni, Askew et al. 2016

116x77mm (300 x 300 DPI)

# PHASE 1 SURVEY

*'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP)' Project*

**Specific survey questions relating to presentation of information and project processes**

**Example: ESP process for Child Health**

**Feedback on how information was presented**

Questions relate to three specific parts of the report:
1. The introduction (first 2 pages)
2. The summary of priorities (page 34)
3. The body of the report and presentation of data in tables

**Introduction of the report (pgs 1-2)**

1. How well did this introduction to the report explain:
   — What you would find in the report?  [very well, well, not very well, poorly]
   — The purpose of the project (including this survey)? [very well, well, not very well, poorly]
   — Why you might want to take part in the project? [very well, well, not very well, poorly]
   — What you would be required to do? [very well, well, not very well, poorly]
   — Future phases of the project?  [very well, well, not very well, poorly]

2. How could the introduction of the report be improved? [Free text response]

**Summary of priorities from national data (pgs 3-4)**

3. How well did this summary of suggested priorities:
   — Present information in a way that was easy to read? [very well, well, not very well, poorly]
   — Present information in a way that was easy to use? [very well, well, not very well, poorly]
   — Capture the implications of the data contained in the body of the report? [very well, well, not very well, poorly]

4. How could the summary of priorities (pgs 3-4) be improved? [Free text response]

**Body of the report**

The body of the report presents data about each indicator of the quality of health care being provided for Aboriginal and Torres Strait Islander children and relevance to best practice guidelines.

5. How well does the body of the report:
   — Present information in a way that is easy to read? [very well, well, not very well, poorly]

— Present information in a way that is easy to use? [very well, well, not very well, poorly]
— Clearly explain the data about each indicator of the quality of health care provided? [very well, well, not very well, poorly]
— Clearly explain the implications of these data in terms of best practice guidelines? [very well, well, not very well, poorly]
— Give you confidence in the accuracy of the information presented? [very well, well, not very well, poorly]

6.  How could the body of the report be improved? [Free text response]

7.  Overall, how well does the whole report:
— Present information in a way that is easy for you to read? [very well, well, not very well, poorly]
— Present information in a way that is easy for you to use? [very well, well, not very well, poorly]
— Provide information that is useful to you? [very well, well, not very well, poorly]
— Provide information that you would not otherwise have had access to? [very well, well, not very well, poorly]
— Provide information that is credible? [very well, well, not very well, poorly]
— Encourage discussion about ways of improving child health care (generally)? [very well, well, not very well, poorly]
— Encourage discussion about improving specific aspects of child health care? [very well, well, not very well, poorly]
— Encourage action to make improvements in specific aspects of child health care? [very well, well, not very well, poorly]

8.  Any other comments? [Free text response]

# PHASE 2 SURVEY

*'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP)' Project*

**Specific survey questions relating to presentation of information and project processes**

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**Example: ESP process for Child Health**

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We are seeking feedback on how information was presented in the report on 'Trends over Time in Key Indicators of Priority Evidence-Practice Gaps in Child Health'

Your feedback will help us improve future reports.

1. Overall, how well does the report:
   — Present information in a way that is easy for you to read and understand? [very well, well, not very well, poorly]
   — Present information in a way that is easy for you to use? [very well, well, not very well, poorly]
   — Provide information that is useful to you? [very well, well, not very well, poorly]
   — Encourage discussion about the barriers and enablers for addressing the priority evidence-practice gaps for child health? [very well, well, not very well, poorly]

2. Do you have suggestions about how to improve the presentation and usefulness of the refined report, or how it could be changed to encourage discussion? [Free text response]

3. Do you have any comments or suggestions about how to improve future ESP Project surveys? [Free text response]

# PHASE 3 SURVEY

## *'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP)' Project*

**Specific survey questions relating to presentation of information and project processes**

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**Example: ESP process for Child Health**

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**Feedback on the report**

1. Overall, how well does the report:
   — Present information in a way that is relevant and useful to you? [very well, well, not very well, poorly]
   — Present information in a way that is easy for you to read and understand? [very well, well, not very well, poorly]
   — Present information that is easy to use? [very well, well, not very well, poorly]
   — Provide information that you would not otherwise have had access to? [very well, well, not very well, poorly]
   — Encourage discussion about the barriers, enablers and strategies for closing the priority evidence-practice gaps for child health? [very well, well, not very well, poorly]

2. Any other comments? [Free text response]

**Feedback on the evidence brief**

Overall, how well does the evidence brief:

   — Present evidence that is relevant and useful to you? [poorly, not very well, well, very well]
   — Present evidence that is credible? poorly, not very well, well, very well]
   — Present information in a way that is easy for you to read and understand? [poorly, not very well, well, very well]
   — Present information in a way that is easy for you to use? [poorly, not very well, well, very well]
   — Encourage discussion about barriers, enablers and strategies for closing the priority evidence-practice gaps for child health? [poorly, not very well, well, very well]

3. To what extent does the evidence brief:

   — Provide information that is new to you? [not at all, not much, somewhat, quite a bit, a great deal]
   — Increase your understanding of the evidence about what works in making improvements in the quality of Aboriginal and Torres Strait Islander primary health care? [not at all, not much, somewhat, quite a bit, a great deal]

— Increase your confidence in taking action to bring about improvements in the quality of Aboriginal and Torres Strait Islander primary health care? [not at all, not much, somewhat, quite a bit, a great deal]

— Change how you will approach making improvements in the quality of Aboriginal and Torres Strait Islander primary health care? [not at all, not much, somewhat, quite a bit, a great deal, N/A]

4. How do you rate the evidence brief in terms of its:

— Content? [Very poor, poor, okay, good, very good]
— Language? [Very poor, poor, okay, good, very good]
— Presentation? [Very poor, poor, okay, good, very good]

5. Do you have suggestions about how to improve the content, language, presentation, and/or usefulness of the evidence brief, or how it could be changed to encourage discussion? [Free text response]

**Feedback on this survey**

6. Do you have any comments or suggestions about how to improve future ESP Project surveys? [Free text response]

# SURVEY – DRAFT FINAL ESP REPORT

*'Engaging Stakeholders in Identifying Priority Evidence-Practice Gaps and Strategies for Improvement in Primary Health Care (ESP)' Project*

**Specific survey questions relating to presentation of information and project processes**

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**Example: ESP process for Child Health**

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**Feedback on presentation**

1.  We are interested in your views on presentation of information and content of this report. How well does the presentation of information and content of the report meet your needs? [very well, well, not very well, poorly]

2.  If your response to the above question was 'poorly' or 'not well', please provide suggestions for how the presentation could be improved. [Free Text].

**Feedback on the ESP Project processes**

We have used a phased approach to encourage engagement with data by key stakeholders, and to identify strategies to address priority evidence-practice gaps. Your feedback on the Child Health ESP Project processes will help us refine ESP processes for other areas of care.

3.  Has the process of cyclical engagement improved your understanding of the CQI data? Please comment on this. [Free Text]

4.  Have you used the information provided through this process? If so, how? [Free Text]

5.  To help us improve the ESP process, please provide comment on any stakeholder perceptions that may not have been reflected in the survey responses. [Free Text]

6.  Please provide any further comments on this phased approach to engage with and use data to inform decision making. [Free Text]

7.  Please provide suggestions for dissemination for the Final Child Health Report. [Free Text]

**Interview Guide - Developmental Evaluation of ESP Project**

**1. Professional background and role**

1.1 Would you mind summarising your professional background and qualifications please?

1.2 Can you tell me about your current role?

**2. Involvement in continuous quality improvement and the ESP project**

2.1 Can you please summarise your experience or involvement in using continuous quality improvement?

2.2 How have you been involved with the ESP project to date? (areas of care, ESP phases)

2.3 How did you first became aware of the project?

2.4 What were your reasons for participating?

**3. ESP project methods and processes**

3.1 What you do think about the methods used by the ESP project to involve people in interpreting the data? (e.g. How do you find the project processes? Could the distribution or surveys be improved? If not, what aspects worked well for you? If so, how?)

3.2 Are there factors that helped you to access the reports or participate in the project? Can you tell me how that worked?

3.3 Have there been barriers to participating? If so, what are they?

**4. Discussing and interpreting the data**

4.1 Have you discussed the ESP data or findings with others? Please describe (Facilitated group or informal discussion? Did you use project resources - were they helpful? What would have been helpful? Can you recall outcomes or highlights of the discussion?)

4.2 How important is it to be familiar with wide-scale CQI data about evidence-practice gaps, and to have opportunity for input?

4.3 What would be your advice for us, to encourage people to do these surveys and have input (about priority gaps, barriers and strategies for improvement)?

**5. How evidence is presented in project reports**

5.1 In terms of the evidence presented in the reports, does it match what you know and experience through your work?

5.2 Do you have feedback about the way the reports or data are presented?

5.3 How could we improve the presentation of information, or the structure of the reports, to make them more useful to you?

**6. Use of data and findings**

1.

6.1 How useful is the aggregated CQI data in your practice? Can you provide examples of how you have used it?

6.2 Have you used the project findings? If so, how?

6.3 Have the reports influenced decisions or intentions? Please describe

**7. Participation in similar projects or processes**

7.1 Have you been involved in other processes or projects that have served a similar purpose to the ESP? If yes, can you tell me about them? (Have ESP processes and data been more/less useful - in what way?)

**8. Impact of the ESP project**

8.1 Would you like to comment on any other impact of the ESP project – impact to date or impact that you anticipate?

**9. Other comments and suggestions**

9.1 Do you have further feedback about the project, or suggestions for the ESP team?