

University of Dundee

## Qualitative evaluation of an innovative midwifery continuity scheme

Symon, Andrew; Shinwell, Shona

*Published in:*  
Birth

*DOI:*  
[10.1111/birt.12512](https://doi.org/10.1111/birt.12512)

*Publication date:*  
2020

*Document Version*  
Peer reviewed version

[Link to publication in Discovery Research Portal](#)

*Citation for published version (APA):*

Symon, A., & Shinwell, S. (2020). Qualitative evaluation of an innovative midwifery continuity scheme: Lessons from using a quality care framework. *Birth*, 47(4), 378-388. <https://doi.org/10.1111/birt.12512>

### General rights

Copyright and moral rights for the publications made accessible in Discovery Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from Discovery Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain.
- You may freely distribute the URL identifying the publication in the public portal.

### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

## Qualitative evaluation of an innovative midwifery continuity scheme: lessons from using a quality care framework

Andrew Symon<sup>\*</sup>, Senior Lecturer, Mother and Infant Research Unit, School of Nursing and Health Sciences, University of Dundee, United Kingdom [a.g.symon@dundee.ac.uk](mailto:a.g.symon@dundee.ac.uk)

Shona Shinwell, Midwife, Maternity Services, Ninewells Hospital, NHS Tayside, Dundee, United Kingdom [shona.shinwell@nhs.net](mailto:shona.shinwell@nhs.net)

\* Corresponding author

### *Competing Interests*

The authors declare that they have no competing interests.

### *Funding*

This project was funded by the Tayside Academic Health Partnership, and by the secondment of a part-time midwife from NHS Tayside.

### *Authors' Contributions*

23 AS conceived of the study in discussion with the local Chief Midwife. AS and SS were  
24 instrumental in the study's development, including data collection, data analysis, writing and  
25 reviewing successive drafts of the paper and approving the final manuscript.

26

27 *Acknowledgements*

28 We would like to thank the following for arranging and facilitating this project:

29 Justine Craig, Lead Midwife for NHS Tayside for helping to conceive of the evaluation. The  
30 pregnant women and new mothers (and one partner), and the Angus scheme midwives (past and  
31 present), and other community midwives, for giving their time for interviews.

32

33 **Abstract**

34 **Introduction**

35 Innovative midwifery schemes must be robustly evaluated to establish whether they should be  
36 modified or can be replicated. Assessing quality of care can help to ascertain a scheme's  
37 acceptability and effectiveness. We used an established quality care framework as a benchmark in  
38 our qualitative evaluation of a combined continuity of carer and planned home birth scheme in  
39 Scotland.

40 **Methods**

41 Qualitative evaluation of stakeholder perceptions using the Quality Maternal and Newborn Care  
42 Framework was the basis for six focus groups and two one-to-one interviews with stakeholders  
43 (new mothers, partners, midwives). A thematic analytical approach was used.

44 **Results**

45 The qualitative evaluation found universal approval among participants. Flexible working patterns  
46 helped to nurture positive relationships, and information and support were highly valued. The  
47 principal themes—Organisation of Care/Work Culture; Information and Support; Relationships—  
48 were strongly inter-related. They shared several sub-themes, notably continuity of carer, flexible  
49 family-centred care, and the benefits of being at home. Flexibility and mutual respect helped  
50 women to express autonomy and develop agency. Women related their birth experiences to friends,  
51 family and colleagues, thereby helping to normalise home birth.

52 **Conclusions**

53 This qualitative evaluation of an innovative scheme used an established quality framework as a  
54 benchmark against which to assess stakeholder experiences. This approach helped to identify the  
55 critical co-dependence of factors involved in care delivery, which in turn helps to identify lessons

56 for others considering similar schemes. While our evaluation relates to one specific scheme,  
57 identifying the scheme's critical quality care aspects may assist others when planning similar  
58 schemes.

59

60 **Keywords**

61 Relationships

Quality care

Communication

62 Midwifery

Continuity of carer

63

64

65 **Introduction**

66 Continuity of midwifery carer is integral to United Kingdom (UK) maternity policy<sup>1,2</sup> and various  
67 continuity schemes are being implemented in different locations nationwide. Driven partly by  
68 pregnant women's desire to know their midwife, this development also reflects growing evidence  
69 of improved clinical and psychosocial outcomes, as well as cost effectiveness.<sup>3</sup> Innovative  
70 schemes must be formally evaluated to ensure they are fit for purpose. In an accompanying paper  
71 (this volume), we report how maternity care is provided in Angus, a county within NHS (National  
72 Health Service) Tayside, and the processes by which we evaluated the two principal clinical targets  
73 of an embedded continuity of carer and planned home birth care package. Initiated in 2016, the  
74 Angus Home Birth scheme ('the Angus scheme') targets were 80% continuity of carer with the  
75 primary midwife throughout pregnancy, labour and the postnatal period, and a 3% county-wide  
76 planned home birth rate.

77 It is increasingly accepted that subjective outcomes relevant to care quality should form part of  
78 any clinical evaluation.<sup>4</sup> In this paper, the second of two on the Angus Home Birth scheme, we  
79 report on our qualitative evaluation of new mothers' and midwives' perceptions of the scheme.  
80 We used a quality care approach based on the Quality Maternal and Newborn Care (QMNC)  
81 Framework<sup>5</sup> which has already proven effective in evaluating midwifery models of care.<sup>6,7</sup> This  
82 paper complements a process evaluation which assessed how well the scheme was meeting its  
83 clinical targets by elevating service users' and midwives' experiences of the scheme.

84

85 **The Angus scheme**

86 Three home birth midwives are co-located within a community midwifery team. The primary  
87 midwife provides, with one of two colleagues assisting when necessary, continuity of carer  
88 throughout pregnancy, labour and the postnatal period. A home birth is planned, with community  
89 colleagues assisting when required (Figure 1). All midwives refer to a tertiary unit when significant  
90 complications arise; a well-established ambulance service, including neonatal transfer facilities, is  
91 available. All facilities are provided by the taxpayer-funded NHS through NHS Tayside, one of 14  
92 regional health boards in Scotland. Evaluations of service require the careful appraisal of the  
93 perspectives and experiences of key stakeholders: the women, their partners, the Angus scheme  
94 and other community midwives.

95 **Figure 1**      **Care options for pregnant women in Angus**

96

97 **Methods**

98 Recruitment was purposive. All women who had entered the scheme with an estimated due date  
99 between October 2016 and March 2018 were invited to participate. To include the partners' voices,  
100 the women were asked, if appropriate, to extend the invitation to them. We conducted four focus  
101 groups with 16 women (n=2, 3, 3, 8). Two one-to-one interviews were conducted when only one  
102 person turned up to a planned focus group; this included the sole partner to attend. We conducted  
103 a double interview with two Angus scheme midwives, and a focus group with six other Angus  
104 community midwives. AS and SS shared facilitator and note-taker roles. The interview guides  
105 were derived from the Quality Maternal and Newborn Care (QMNC) Framework's extensive  
106 analysis and synthesis of the global literature on quality care.<sup>5</sup> This approach, including the  
107 interview schedule, has been reported elsewhere.<sup>6</sup> It involved a principal and supplementary  
108 question for each of the QMNC Framework's five components of care. Participants were asked if  
109 all necessary care had been received or provided ('Practice categories') and whether care had been  
110 accessible, of good quality, adequately resourced, and had involved continuity ('Organisation of  
111 care'). We asked whether care had been respectful and tailored to women's needs ('Values');  
112 whether normality and women's capabilities had been promoted ('Philosophy'); and whether care  
113 providers had demonstrated both knowledge and skills ('Care providers'). All interviews were  
114 audio-recorded and transcribed verbatim. Transcripts were analysed using Ritchie and Spencer's  
115 thematic analysis approach.<sup>8</sup> This involved both deductive analysis, using the QMNC  
116 Framework's constructs, and inductive analysis, incorporating new themes as they emerged  
117 through open coding.

118

119 **Results**

120 We identified five themes, each with several sub-themes (Table 1). Three principal themes—  
121 'Organisational Structure/Work Culture'; 'Information and Support'; 'Relationships'—had also  
122 been identified in a previous study.<sup>6</sup> To these we added 'Autonomy and Agency', which developed  
123 largely during pregnancy, and 'Pregnancy and Birth Reflections', which arose postnatally.  
124 'Autonomy' refers to the woman's right to determine what happens to her body; this deeply-

125 entrenched legal principle was discussed in an earlier analysis of women’s choices in UK maternity  
126 care.<sup>9</sup> ‘Agency’ refers to the means by which a woman asserts such autonomy.

127 While each theme had several sub-themes, the integrated nature of care in the Angus scheme was  
128 seen in the three principal themes’ inter-relatedness (Figure 2). The sub-theme ‘Benefits of being  
129 at home’, for example, was discussed in connection with all five themes by participants. These  
130 benefits included perceived improvements to the midwives’ work culture and to midwives’  
131 abilities to information-share, which helped collaborative relationships to develop. Benefits of  
132 being at home also included women developing agency—a central feature of postnatal reflections.

133 **Figure 2. Angus scheme qualitative evaluation: the inter-relationship of the five themes**

134  
135 For the midwives, providing domiciliary care was integral. It facilitated information-giving and  
136 support and helped relationships to develop. This, in turn, engendered women’s autonomy and  
137 agency. Postnatally, many mothers reflected on how being at home had enabled them to achieve  
138 positive experiences. They talked about their experiences with their family and friends, providing  
139 information and support for other women, including those not initially considering home birth. To  
140 minimise the chance of unintended identification, we have used pseudonyms throughout and given  
141 the woman’s parity but not her age (P0=Primiparous, P1=Para1, *etc.*). For the purposes of drawing  
142 out possible lessons for those considering implementing a similar scheme, we focus mainly on the  
143 three principal themes and their inter-relatedness.

144

145 **Organisational structure/Work culture**

146 The Angus scheme was conceptualised managerially around flexible working—a feature of the  
147 scheme that was described both by pregnant women and midwives as empowering. When asked  
148 how flexibility featured in working patterns, Fiona replied:

149 “... the women really love the fact that we will see them any time of the day. So,  
150 if they say ‘No, I really can’t see you until teatime,’ then we would make a point of  
151 just making our day different and going in and seeing them at that time.” (Fiona,  
152 midwife, FG3:99)

153 This flexible approach quickly became part of the work culture. Kate (midwife) noted that  
154 flexibility—an inherent element of women’s choice and control—was crucially dependent on



155 mutual respect. She characterised this as “partnership” working (FG3: 29), which involves  
156 listening to the woman and accepting her right to make decisions. This flexible, sensitive, family-  
157 centred care was one of the key sub-themes, linking as it did with the three principal themes (see  
158 Figure 2).

159 The themes’ co-dependence is evident: flexibility shaped work culture, but also contributed to  
160 relationship-building and information-sharing. A family-centred approach combined with  
161 flexibility generated positive relationships:

162 “Sophie (midwife) was really good fitting in my family life round about when she  
163 was coming in. ... Jessica (daughter) was three at the time and she was just fab with  
164 Jessica ... Jessica was full of questions, a million questions, and Sophie, she would  
165 just answer them without thinking anything of it.” (Nancy, P3; FG2:38)

166 The midwife’s positive response helped to create a trusting family-centred relationship. Providing  
167 care in the home also helped to encourage confidence and empowerment, as recognised by Nicole:

168 “Because we’re inviting the midwife into our home ... they are kind of more...  
169 respectful of your space and what you’re wanting to do.” (Nicole, P0; FG6:154)

170

## 171 Information and Support

172 Underpinning this flexible and collaborative organisation of care was the drive to ensure continuity  
173 of *carer*. Participants connected continuity to the need for effective communication between all  
174 parts of the care team. Kate, a midwife, noted (FG3: 74) how she and her colleagues made  
175 communication a priority, whether in person or by email. This included sharing information about  
176 home visits so that other midwives could come along and meet the woman and her family. Nicole  
177 said:

178 “I had met the other two midwives as well but having Sophie come every week just  
179 made me feel very confident” (FG6: 8).

180 The Angus scheme did not operate in isolation. Dr. White, a senior obstetrician, jointly oversees  
181 the scheme with the local Chief Midwife. Tanya noted how good communication between the  
182 home birth and hospital teams was needed:

183 “Dr. White was supportive of home birth, however ... she recommended that I don’t  
184 have a home birth on this occasion, but after every appointment I would speak to  
185 Sophie (midwife) about it, and she would then in turn speak to Dr White, and so I  
186 always felt like everyone was in loop.” (Tanya, P2; FG7:87)

187 The midwives’ approach to information-sharing with the women was part of their work culture  
188 and contributed to relationship-building. Grounded in continuity of carer, it generated trust during  
189 awkward conversations:

190 “Kate was my midwife, and I love her to bits. She just really makes you feel  
191 comfortable because if you’ve got any questions that you might have felt were a  
192 bit, I don’t know, silly or intimate or whatever, it felt comfortable ... because you  
193 knew the midwife and you didn’t have to keep re-explaining things to new  
194 people...” (Rebecca, P1; FG6:10)

195 Trust and effective information-sharing were essential when planning a home birth. This helped  
196 women know, for example, when to call the midwife. Mia explained that being aware of the  
197 midwives’ shift rotation meant she knew whom to call when she needed advice. This could be  
198 particularly important when more urgent issues arose. Hannah described how the feeling of being  
199 supported by a particular midwife had helped her to persevere with breastfeeding:

200 “... I would have stopped breast feeding ... she was like ‘We should be discharging  
201 you now, but I’m going to come back out and see you because I want to make sure  
202 that you’re, you’re definitely okay with this’. (Afterwards) I had text messages to  
203 say ‘Is everything okay? Do you need us?’ So, I felt really supported with that ...  
204 had I not had that I would have stopped breastfeeding.” (Hannah, P1; FG4:73)

205 Participants, both midwives and service users, described trust as much more likely to develop when  
206 relationships are based on mutual respect; this is a key feature of continuity models.<sup>10</sup>

207

208 Relationships

209 To gauge the scheme's replicability, we asked women what characteristics the midwives needed  
210 to provide high quality home birth care. Elaine felt valued, and contrasted the midwives' culture  
211 of working with her previous experiences:

212       “(They're) obviously really passionate about (home birth) ... they really made you  
213       feel safe, secure, valued... sometimes you just don't get that same vibe (in hospital),  
214       you know you're just another number in for your appointment: bloods, routine,  
215       everything, and away you go. ... (Angus scheme midwives) always took more time,  
216       took an interest ... you felt they genuinely were interested.” (Elaine, P1; FG2:26)

217 That experience of effective care was an important sub-theme. Kate (a midwife) talked about how  
218 seeing the woman in her own home helped a 'bond' to develop. Home visits are a planned  
219 organisational feature; over time they engender trust and good information-sharing which are both  
220 a cause and a product of positive relationships. Over and above the benefits of continuity of carer  
221 in a clinic, this feature improved the midwife's understanding of the woman's situation. Generating  
222 this level of trust and understanding requires openness within the care giver-family relationship.  
223 The sole male participant confirmed this:

224       “Yeah, I think it was a 50/50 thing, there was never anything like you were told or  
225       anything like that, it was always discussion...” (Douglas, FG8:121)

226 Amy commented on how it felt comfortable to have a known face at visits:

227       “Yeah to have a familiar face if you're a bit unsure about anything if you got to know  
228       them and yeah you did feel more reassured when you were speaking to them about  
229       things and it just felt more comfortable with them.” (Amy, P0; FG5: 22)

230 Trust also produced a sense of care and responsibility between midwives and women that  
231 participants described as being helpful, especially during difficult times as when transfer to  
232 hospital was required:

233       “‘It makes a huge difference to the women, because often you're leaving them there  
234       and they're going 'Please don't go' ... that feeling of almost being abandoned  
235       because something's changed, it must be horrendous.... And to be able to say to

236 them ‘Do you know what? I’m actually going to stay and care with you for longer.’  
237 This is such a weight off their mind...” (Kate, FG3:152)

238

### 239 Autonomy and Agency

240 A by-product of the care design was that the women’s sense of autonomy; a sense of being in  
241 control was augmented, particularly in relation to planning a homebirth. With regard to wanting  
242 to control the birthing environment, Nicole said:

243 “I think with something like birth, you know ... (in hospital) it can just spiral out  
244 of control and I just, I wanted to just not that have that fear ... on my mind, I just  
245 knew I wouldn’t be comfortable.” (Nicole, P0; unplanned postnatal transfer;  
246 FG6:131,133)

247 This feeling was shared by a partner:

248 “... you sometimes feel a bit like the spare part (in hospital), whereas in your own  
249 home if I just wanted to nip out, even just stupid things like going to the toilet, I  
250 didn’t have to consult the midwife...” (Douglas, FG8:23)

251 The midwives also discussed this sense of women’s autonomy in association with home birth:

252 “If you’re going into their home, they have control to an extent... (Fiona, FG3:49)

253 “And it’s a lot about their choice.” (Kate, FG3:50)

254 With care being delivered in the woman’s home, participants experienced the traditional  
255 hierarchical care-provider/care-receiver relationship as largely flattened.

256 “I loved the fact that they came to the house it made a big difference.....I don’t know;  
257 it just maybe a lot less, not stressful but it just I made it feel like you had ownership of  
258 your birth rather than it being some medical procedure. It was more like because it was  
259 in your familiar setting it was more about you, it was much more personal.” (Mia, P1;  
260 FG6: 16)

261 However, setting is not the only determinant of perceived autonomy and agency. Women are more  
262 likely to exert autonomy when cared for by midwives compared with doctors.<sup>11</sup> In the Angus

263 scheme, domiciliary care, midwifery care and continuity of carer co-exist, and this combination  
264 may be particularly impactful.

265 “I had Fiona and it was just great to have her at every appointment and yeah, she made me  
266 feel so comfortable right from the very start and yeah I wouldn’t have a birth any other way.”  
267 (Nicole, P0; FG6: 2)

268  
269

## 270 Birth reflections

271 Women indicated that they had reflected during pregnancy on their options, often involving their  
272 partner in the process.

273 “(I)... did the reading and I spoke to my husband about it and I said, ‘Well, there’s  
274 no harm in speaking to the team about it and just get a bit more information’. And  
275 it was after that initial meeting that I thought I actually want to do this (give birth  
276 at home)...” (Amy, P0; FG5: 112)

277 Douglas, the one partner we interviewed, was initially “dead against” home birth but eventually  
278 came around to his wife’s point of view. Similarly, Vivien (P2; FG4: 23) reported that her partner  
279 had taken “a little while to come ‘round to it”. Arlo’s partner had voiced safety concerns, but  
280 explained how this allowed them to discuss home birth practicalities.

281 All the mothers interviewed reflected postnatally on their experiences, which were  
282 overwhelmingly positive, even when transfer to hospital was required. Almost all reported that  
283 they had shared their birthing stories with family, friends and colleagues. Participants noted the  
284 role that hearing about someone else’s home birth experience can play in decision-making.  
285 Knowing someone else had given birth at home safely, opened up a set of options that may not  
286 have been part of the decision-making process otherwise. As such, we coded these sections of  
287 narratives as ‘Normalising home birth’:

288 “I have a friend who’s pregnant just now and, and she’s actually now planning a  
289 homebirth because I told her my story ....” (Hannah, P1; FG4:144)

290 This enthusiasm was shared by partners too:

291 “Douglas talks about it all the time, he thinks it’s the best thing ever now.” (Hannah,  
292 FG4:165)

293 Interviewer: “Because that’s how you spread the stories.”

294 “Yeah, we’ve had a few people, I’ve had a few people that have gone for homebirths  
295 after I’ve spoken to them...” (Vivien, P2; FG4:167)

296

## 297 **Discussion**

298 Stakeholder perceptions and experiences are key in determining whether a scheme is acceptable  
299 and appropriate. Our qualitative evaluation found many positives. Women appreciated negotiating  
300 and receiving flexible and family-focussed care in their own home. This helped communication  
301 with the midwives and encouraged positive relationships to develop. In turn this helped service  
302 users to feel supported and empowered, even when things had not gone according to plan. The  
303 midwives were committed to what was evidently a well-organised and adequately-resourced  
304 working pattern which was integrated with the wider provision of maternity care in Angus.

305 As Figure 1 indicates, the identified themes were inter-related, with several sub-themes shared  
306 between three or more of the themes. While the many sub-themes contributed significantly to the  
307 development of the five main themes, it is the interplay of the principal themes and sub-themes  
308 which is vital to understanding the Angus scheme’s success. For example, a conversation about  
309 continuity of carer might start in a discussion about the organisation of care; then evolve to  
310 illustrate how such continuity promoted good information-sharing and support, and then to  
311 describe how trusting relationships had developed.

312 An understanding of this interplay may benefit other systems planning similar continuity schemes,  
313 whether or not they include home birth. The three principal themes are inter-related—a set of  
314 interactions that we have modelled as a wheel (See Figure 1).

315

316 Organisational structure / Work culture

317 Core to the Angus scheme was its organisation; managerial and financial support were essential.  
318 Some midwives resist working in continuity models because of the anticipated disruption to family  
319 life from on call requirements.<sup>12</sup> Consequently, any new scheme is likely to be comprised of a self-  
320 selecting core of practitioners. Home birth and continuity of carer schemes may alter the dynamic  
321 of those working within and around them, so care must be taken to involve practitioner  
322 stakeholders in discussions about the practicalities of on call requirements to help prepare them  
323 for some inevitable disruption.

324 It helped in this instance, that midwifery practice is the norm in Angus; the scheme could draw  
325 upon a strong tradition of midwives liaising with women to generate interest and support for this  
326 particular organizational structure. The scheme built upon what had existed previously around  
327 involving women and their families in decision-making about birth setting, though prior to the  
328 scheme, home birth had been rare in this area.

329 The mothers' enthusiastic reports testified to the Angus scheme midwives' commitment to it.  
330 However, care must be taken that offering flexibility – for example over antenatal visit timing –  
331 does not lead to unsustainable working practices. In the early days of the scheme, the midwives  
332 sometimes worked on their days off to accommodate women's wishes. Over time, and with the  
333 growth of the team to three full-time midwives, they learned to manage this workload more  
334 effectively. Surprisingly, managing women's expectations of response times and availability,  
335 particularly around the home birth, was not considered an issue by participants. It appears that  
336 negotiating these boundaries was relatively straightforward, given the respectful and trusting  
337 relationships that developed in conjunction with continuity of carer.

338 While those choosing to work in a home birth scheme might be expected to show commitment to  
339 communication with service users and other midwives in their practice, working effectively with  
340 other colleagues, especially across disciplines, is also vital. Mothers and midwives referred to  
341 constructive communication with hospital-based staff. Ensuring effective communication requires  
342 careful planning and mutual respect. Transfer to a tertiary unit can be stressful, including women  
343 feeling they have 'lost their dream'<sup>13</sup> and community-based midwives feeling under-supported by  
344 unit staff.<sup>14</sup> Such problems can be off-set by proactive planning of transfer protocols by all relevant  
345 personnel.<sup>15</sup> In Angus, where the overseeing obstetrician strongly supports the scheme, a transfer  
346 protocol was included from the outset. The total transfer rate was 22.7% (or 15.3% when excluding

347 women who were ineligible, but who nevertheless requested a home birth (see accompanying  
348 paper, this volume).

349 The scheme's effective organisational set-up, based on continuity of carer, appeared to allow for  
350 other positive factors to emerge, such as effective and family-centred care. In turn this encouraged  
351 good information-sharing and women feeling well supported, which then helped trusting  
352 relationships to develop.

353

#### 354 Information and Support

355 Information-sharing and support between midwives and women were believed to be highly  
356 effective in this model. Effective information sharing and support underpinned and were products  
357 of the positive relationships and the positive work culture that developed. This demonstrates again  
358 the co-dependence of the themes we identified. While social support networks are vital to pregnant  
359 women,<sup>16</sup> the provision by health professionals of “relevant, appropriate and timely information”,  
360 as found in this evaluation, is also important.<sup>17</sup> This feature was helped by having continuity of  
361 carer, which in turn promoted tailored information-sharing. Having sufficient time for effective  
362 communication is essential,<sup>18</sup> not least because communication failures and negative experiences  
363 are strongly associated.<sup>19</sup>

364

#### 365 Relationships

366 The interplay of the common themes and sub-themes in this evaluation is crucial. Effective  
367 relationships spring from a positive working environment, which in this package includes  
368 continuity of carer; and in turn they reinforce that environment. Relationships arise partly as a  
369 result of providing support and effective information-sharing, but they also help to promote these  
370 factors. Good relationships entail trust, which critically, works both ways.<sup>20</sup> Trust helps to ensure  
371 that people know when to communicate. Having time to consider options, preferably with a trusted  
372 health professional, is essential,<sup>21</sup> as there is clear evidence that women from marginalised social  
373 groups are less involved in shared decision making.<sup>22</sup> The value of investing in practitioners who  
374 are good at establishing relationships on an equitable basis can hardly be over-stated. Ideally they  
375 would be skilled at reducing tension by conducting a respectful and open dialogue with the woman,  
376 enabling her to consider her options carefully.<sup>23</sup>



377 The location of care in the Angus scheme was also a critical factor. ‘The benefits of being at home’  
378 (*cf.* Murray-Davis et al<sup>24</sup>) were emphasised by mothers and midwives. Being at home helped  
379 mothers to feel at ease, which in turn promoted their autonomy and agency; and the midwives  
380 related how information-gathering and sharing were much better when seeing the woman in her  
381 own surroundings. The contrast with the hospital setting – which, as Kirkham long-ago noted, “is  
382 not designed to foster two-way communication in any depth”<sup>25</sup> - is stark.

383

#### 384 Strengths and limitations

385 We used a quality care framework approach for this evaluation, a method that has already been  
386 used successfully in different contexts.<sup>6,7</sup> We are confident that the very positive evaluation  
387 reflected the reality of the Angus scheme, and that this will be appealing to those considering  
388 implementing similar schemes elsewhere. However, it should be noted that the relatively low  
389 numbers in the scheme allowed for time and flexibility that will not be available everywhere. Other  
390 contextual factors may also limit the transferability of our findings. Scotland has a strong history  
391 of autonomous midwifery, particularly within community settings, offering a solid foundation for  
392 developing the scheme. Nevertheless, by describing the scheme’s critical features those in different  
393 situations may be helped to identify how these features can be nurtured in their own setting.

394 Angus has a range of deprivation (discussed in the accompanying paper, this volume), yet little  
395 ethnic diversity, and mothers in this evaluation were all married or had a partner. Our population  
396 sample, therefore, is reflective of larger and more diverse populations. An inherent positive bias  
397 in women and partners agreeing to participate is likely in any evaluation such as this.

398

#### 399 Conclusion

400 Any innovative scheme must be robustly evaluated. In addition to ensuring good clinical outcomes,  
401 a qualitative assessment of perceptions and experiences is crucial. We found the Lancet Series on  
402 Midwifery’s quality care framework to be a robust basis for exploring perceptions of care quality.  
403 The co-dependence of the principal themes in this analysis of a continuity of carer and planned  
404 home birth scheme reflects the complex interplay of organisational, individual and relational  
405 features. Integral to the scheme’s success was the midwives’ operational flexibility in managing  
406 their workload. The midwives’ evident commitment and skill helped to nurture trusting

407 relationships, which in turn, promoted effective communication, a factor strongly associated with  
408 improved outcomes. The Angus scheme is also embedded in a wider community-based service  
409 provision that includes access to tertiary services when required. Midwives seeing the women over  
410 time in their own surroundings helped the midwives to understand the women better, leading to  
411 better communication, better care and effective relationships, even when a transfer to a higher level  
412 of care was needed. Good relationships were also a mitigating factor when outcomes were not  
413 optimal.

414 In addition to the commitment of a core group of skilled midwives, such schemes require strong  
415 support from managers (including financial backing) and colleagues. We hope that demonstrating  
416 this scheme's clinical safety (accompanying paper) along with an analysis of the acceptability and  
417 experience of care among stakeholders will give confidence to other communities and systems  
418 considering implementing home birth with continuity of carer schemes.

419

420

421 References

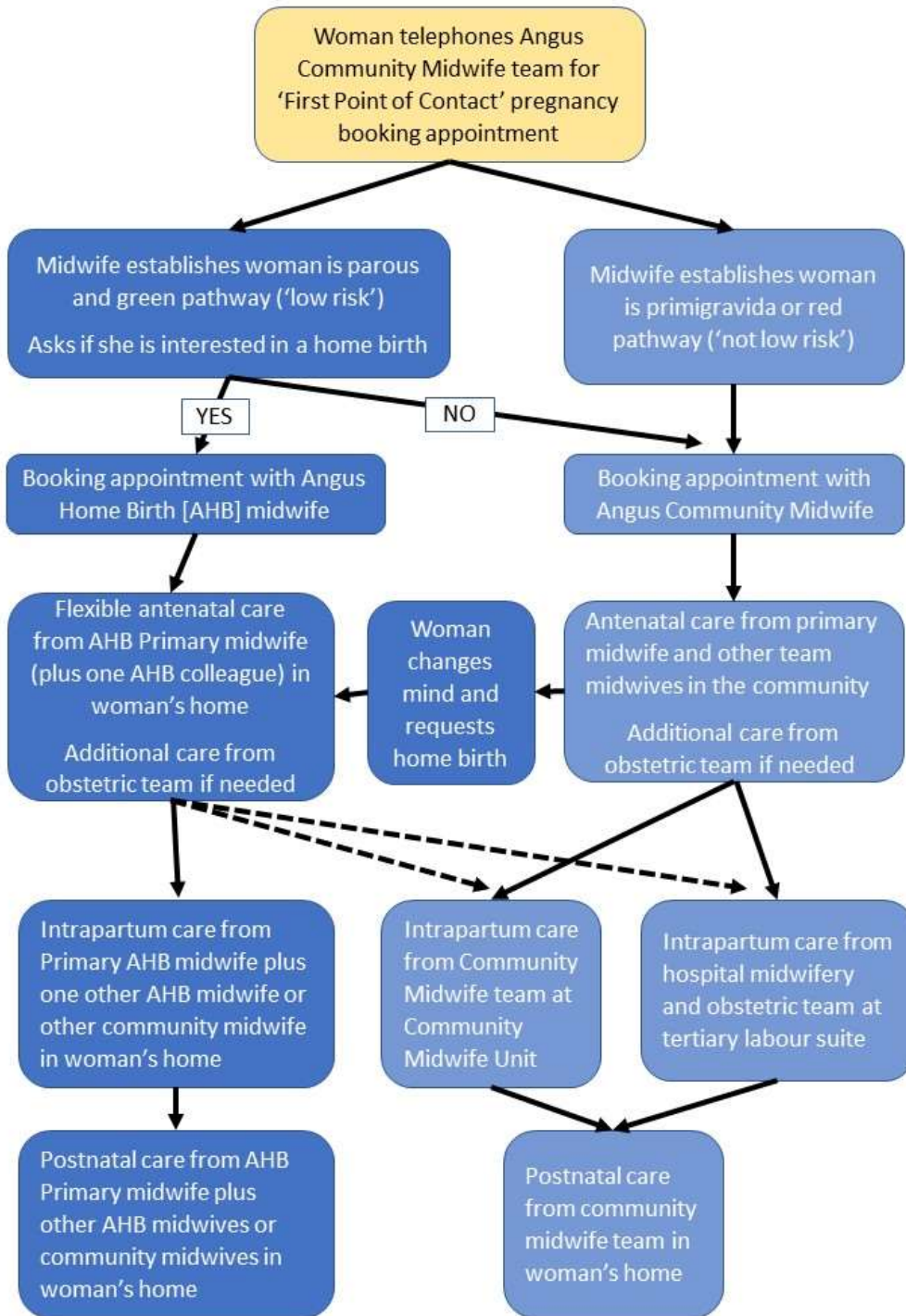
- 422 1. Cumberlege J. *Better Births: improving outcomes of maternity services in England*.  
423 London: TSO;2016.
- 424 2. Scottish Government. *The Best Start*. In. Edinburgh: Scottish Government; 2017.
- 425 3. Sandall J, Soltani H, Gates S, Shennan A, Devane D. Midwife-led continuity models versus  
426 other models of care for childbearing women. *Cochrane Database Syst Rev*.  
427 2016;4:CD004667.
- 428 4. Dickinson F, McCauley M, Smith H, van Den Broek N. Patient reported outcome measures  
429 for use in pregnancy and childbirth: a systematic review. *BMC pregnancy and childbirth*.  
430 2019;19(1):155.
- 431 5. Renfrew MJ, McFadden A, Bastos MH, et al. Midwifery and quality care: findings from a  
432 new evidence-informed framework for maternal and newborn care. *Lancet*.  
433 2014;384(9948):1129-1145.
- 434 6. Symon A, McFadden A, White M, Fraser K, Cummins A. Adapting the Quality Maternal  
435 and Newborn Care (QMNC) Framework to evaluate models of antenatal care: A pilot  
436 study. *PLoS ONE*. 2018;13(8):e0200640.
- 437 7. Cummins A, Coddington R, Fox D, Symon A. Exploring Australian Midwifery-led  
438 Continuity of Care (MiLCCA) using an evidence based framework *Women and Birth*.  
439 2019.
- 440 8. Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In: Bryman A,  
441 Burgess RG, eds. *Analysing Qualitative Data*. London: Routledge; 1994:173-194.
- 442 9. Symon A, Winter C, Donnan PT, Kirkham M. Examining Autonomy's Boundaries: A  
443 Follow-up Review of Perinatal Mortality Cases in UK Independent Midwifery. *Birth*.  
444 2010;37(4):280-287.
- 445 10. Kennedy HP, Bisits A, Brodie P. Building collaborative relationships to support midwifery  
446 continuity of care. In: Homer C., Leap N., Brodie P, J S, eds. *Midwifery continuity of care*.  
447 2nd ed. Australia: Elsevier; 2019:93-114.
- 448 11. Vedam S, Stoll K, McRae DN, et al. Patient-led decision making: Measuring autonomy  
449 and respect in Canadian maternity care. *Patient Education and Counseling*.  
450 2019;102(3):586-594.
- 451 12. Taylor B, Cross-Sudworth F, Goodwin L, Kenyon S, Macarthur C. Midwives' perspectives  
452 of continuity based working in the UK: A cross-sectional survey. *Midwifery*. 2019;75:127-  
453 137.
- 454 13. Kuliukas LJ, Hauck YC, Lewis L, Duggan R. The woman, partner and midwife: An  
455 integration of three perspectives of labour when intrapartum transfer from a birth centre to  
456 a tertiary obstetric unit occurs. *Women and Birth*. 2017;30(2):e125-e131.
- 457 14. Kuliukas LJ, Lewis L, Hauck YL, Duggan R. Midwives' experiences of transfer in labour  
458 from a Western Australian birth centre to a tertiary maternity hospital. *Women and Birth*.  
459 2016;29(1):18-23.
- 460 15. Reszel J, Sidney D, Peterson WE, et al. The Integration of Ontario Birth Centers into  
461 Existing Maternal-Newborn Services: Health Care Provider Experiences. *Journal of*  
462 *Midwifery & Women's Health*. 2018;63(5):541-549.
- 463 16. Bäckström C, Larsson T, Wahlgren E, Golsäter M, Mårtensson LB, Thorstensson S. 'It  
464 makes you feel like you are not alone': Expectant first-time mothers' experiences of social  
465 support within the social network, when preparing for childbirth and parenting. *Sexual &*

- 466 *reproductive healthcare : official journal of the Swedish Association of Midwives.*  
467 2017;12:51.
- 468 17. Downe S, Finlayson K, Tunçalp Ö, Metin Gülmezoglu A. What matters to women: a  
469 systematic scoping review to identify the processes and outcomes of antenatal care  
470 provision that are important to healthy pregnant women. In. Vol 1232016:529-539.
- 471 18. Raine R, Cartwright M, Richens Y, Mahamed Z, Smith D. A Qualitative Study of Women's  
472 Experiences of Communication in Antenatal Care: Identifying Areas for Action. *Maternal*  
473 *and Child Health Journal.* 2010;14(4):590-599.
- 474 19. Mills TA, Ricklesford C, Heazell AEP, Cooke A, Lavender T. Marvellous to mediocre:  
475 findings of national survey of UK practice and provision of care in pregnancies after  
476 stillbirth or neonatal death. *BMC pregnancy and childbirth.* 2016;16(101):101.
- 477 20. Lewis M, Jones A, Hunter B. Women's Experience of Trust Within the Midwife–Mother  
478 Relationship. *International Journal of Childbirth.* 2019;7.
- 479 21. Elwyn G, Frosch D, Thomson R, et al. Shared Decision Making: A Model for Clinical  
480 Practice. *Journal of General Internal Medicine.* 2012;27(10):1361-1367.
- 481 22. Attanasio LB, Kozhimannil KB, Kjerulff KH. Factors influencing women's perceptions of  
482 shared decision making during labor and delivery: Results from a large-scale cohort study  
483 of first childbirth. *Patient Education and Counseling.* 2018;101(6):1130-1136.
- 484 23. Nieuwenhuijze MJ, Korstjens I, de Jonge A, de Vries R, Lagro-Janssen A. On speaking  
485 terms: a Delphi study on shared decision-making in maternity care. *BMC pregnancy and*  
486 *childbirth.* 2014;14(223):223.
- 487 24. Murray-Davis B, McNiven P, McDonald H, Malott A, Elarar L, Hutton E. Why home  
488 birth? A qualitative study exploring women's decision making about place of birth in two  
489 Canadian provinces. *Midwifery.* 2012;28(5):576-581.
- 490 25. Kirkham M. Communication in Midwifery. In: Alexander J LV, Roch S., ed. *Midwifery*  
491 *Practice. A research-based approach.* London: Palgrave; 1993:1-19.

492

493

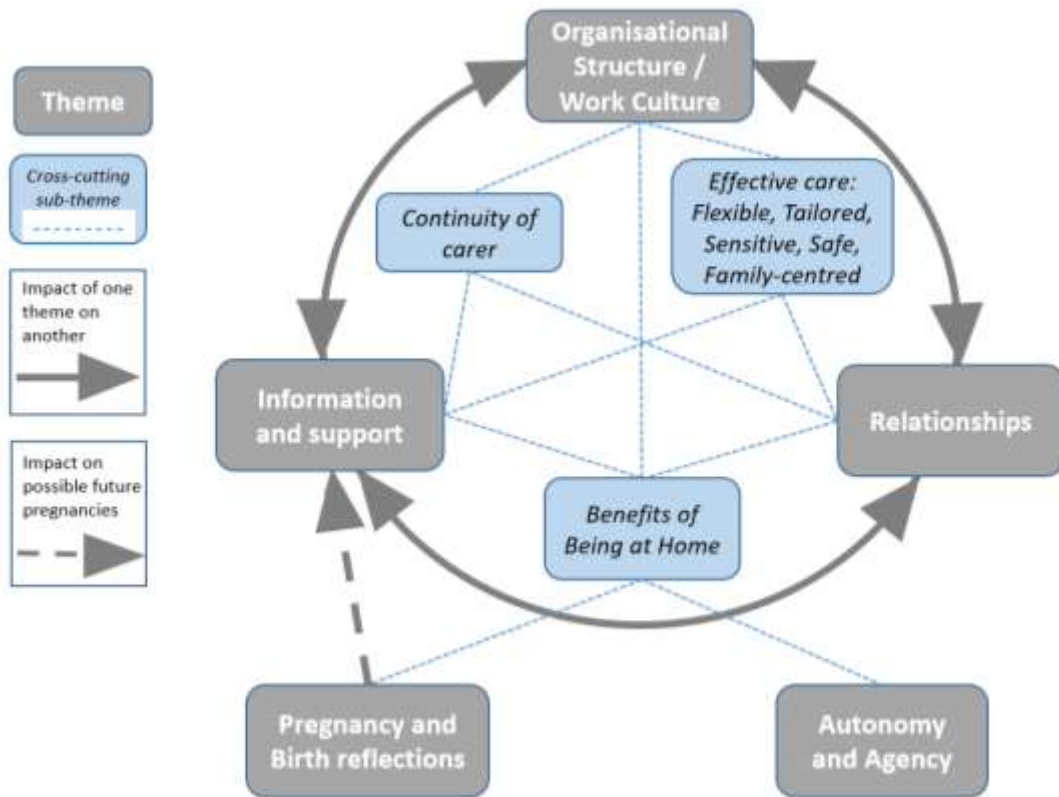
Figure 1. Care options for pregnant women in Angus



495

496

**Figure 2. Angus scheme qualitative evaluation: the inter-relationship of the five themes**



497

498

499