

1 Title: Professional perspectives on barriers to accessing maternity care in England: a qualitative  
2 study

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1 Abstract

2 Background

3 Women living on low income in England are at an increased risk of experiencing stillbirth,  
4 neonatal death, preterm birth, low birth weight and maternal mortality. Women with poor  
5 access to financial, educational, and social and health resources engage less with health and  
6 care services throughout their pregnancy, due to social stressors, low health literacy, digital  
7 exclusion, lack of support, language barriers, transport difficulties, and stigma and judgement  
8 from healthcare professionals. Existing evidence documents the experiences of women facing  
9 socioeconomic disadvantage, little is known about how healthcare professionals understand  
10 and respond to these barriers. The aim of this qualitative study was to explore professionals'  
11 perceptions of the barriers pregnant women living on low income face when accessing  
12 maternity care.

13 Methods

14 Data were collected through one-to-one semi-structured interviews with professionals (i.e.,  
15 midwives, health visitors, VCSE practitioner) working in the NHS, local authority or Voluntary,  
16 Community and Social Enterprise (VCSE) organisations in the North East of England. Purposive  
17 snowballing sampling was used to recruit participants. Anonymised interview data was  
18 thematically analysed and incorporated Ecological Systems Theory (EST).

19 Results

20 Seventeen participants were interviewed (NHS maternity services n=6; local authority n=3 and  
21 VCSE n=8). Data highlighted three interlinked levels of barriers that professionals perceived  
22 pregnant women living on low income experience accessing maternity care: structural,  
23 interactional and individual. Structural barriers included digital exclusion, language-related  
24 difficulties and service delivery challenges related to staffing shortages. Interactional barriers  
25 included limited social networks, lack of partner involvement, and experiences of racism and  
26 discrimination. Lastly, individual level challenges included cost of travel and other pregnancy-  
27 related costs, fear of professionals and unfamiliarity with services.

28 Conclusions

29 Findings from this study present professionals' perspectives of the different challenges  
30 pregnant women living on low income face when accessing maternity care. These include  
31 language and communication, a lack of social support network, the cost and time of travel and  
32 the fear of professionals and unfamiliarity of service. Recommendations to improve access to  
33 maternity services include the implementation of recycled smart phones, the use of digital  
34 translation apps within appointments and the use of pre-paid travel vouchers.

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36 Key words: poverty; barriers; access; professionals; maternity.

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## 1 **Background**

2 Women living on low income and those from disadvantaged backgrounds experience higher  
3 rates of stillbirth, neonatal death, preterm birth, low birth weight, and maternal mortality  
4 compared to those from higher socioeconomic groups (1–5). They also often face multiple,  
5 overlapping barriers to accessing maternity care. These include social stressors (6–9), low  
6 health literacy (10,11), limited digital access (12,13), lack of social and partner support (14–19),  
7 language and communication barriers (20,21), transport difficulties (22–24) and fear of stigma  
8 or judgement from healthcare providers (25). Such barriers result in lower engagement with  
9 antenatal care, reduced continuity of care, and poorer experiences of care, with women  
10 frequently reporting inadequate communication, feeling disrespected, or not being heard  
11 (1,26,27). These challenges are compounded by the intersection of poverty with other social  
12 identities such as ethnicity, age, migration status, sexuality, and gender identity (26), which  
13 further amplify disparities in outcomes and experiences (2,3,28).

14 While existing evidence documents the experiences of women facing socioeconomic  
15 disadvantage, little is known about how healthcare professionals understand and respond to  
16 these barriers. Limited research (29–31) has identified the impact poverty, social exclusion and  
17 structural inequality has on women's ability to engage with services from the perspective of  
18 healthcare professionals. Research has shown that time pressures, staff shortages, and rigid  
19 service models can restrict professionals' ability to provide continuity of care and build trusting  
20 relationships with women from disadvantaged backgrounds (31,32).

21 Recent UK policy initiatives, including the NHS Long Term Plan (33), the Women's Health  
22 Strategy for England (28), and the Maternity Disparities Taskforce (34), reflect growing  
23 recognition of these inequalities. Together, these policies aim to improve access, quality, and  
24 safety for women from minoritised and racialised ethnicities and low-income groups, and to  
25 promote equitable, personalised maternity care. However, despite such commitments,  
26 implementation has been inconsistent (35), and disparities remain deeply embedded.  
27 Alongside this, the digital transformation of UK NHS services, through initiatives such as the  
28 Personalised Care Plan (36) and the NHS England 10 Year Health Plan: Fit for Future policy (37),  
29 has introduced both opportunities and challenges, with concerns that digital exclusion may  
30 further disadvantage women living in poverty.

31 The Poverty Proofing© approach, developed by the North East England charity Children North  
32 East (CNE), provides a model for examining the structural and organisational factors that enable  
33 inequalities in maternity care. Starting in schools, initial work in this area focused on 'Poverty

1 Proofing the School Day' and was designed to identify and remove exclusionary practices  
2 affecting children from low-income families (38). An evaluation of this approach have shown  
3 improvements in attendance, attainment, and inclusion (38). Adaptons to the approach in  
4 healthcare settings have identified a range of barriers experienced by children, young people,  
5 and families living on low income (39,40), highlighting its potential to inform system-level  
6 change within maternity care.

7 This study was informed by the Poverty Proofing© approach, whereby we worked with CNE to  
8 consider known structural and organisational factors through their work in schools and other  
9 health settings which enabled us to explore local context in more depth. The study aimed to  
10 explore professionals' perceptions of the barriers pregnant women living on low income face in  
11 accessing maternity care. Understanding these barriers from the perspective of professionals is  
12 essential for developing strategies to enhance the accessibility and quality of maternity care.

## 13 Methods

### 14 Context

15 Newcastle upon Tyne is ranked 36<sup>th</sup> most income-deprived of all 316 local authorities in  
16 England, with 17.8% of the population income deprived in 2019 (41). There are 175  
17 neighbourhoods in Newcastle upon Tyne, and 76 were among the 20% most income-deprived in  
18 England, while only 34 were in the 20% least income-deprived in England (41). Newcastle upon  
19 Tyne has a large white ethnic population (80%), with ethnic minorities such as Asian and Asian  
20 British (11.4%), Black and Black British (3.3%), Mixed or Multiple ethnic groups (2.3%) and any  
21 Other ethnic group (3.1%) represented (42). Newcastle upon Tyne consists of many religions  
22 including Muslim (9%), Hindu (1.4%) and Christian (41.3%) (43). Newcastle upon Tyne NHS  
23 Foundation Trust (NuTH) consists of the Royal Victoria Infirmary (RVI), a tertiary teaching  
24 hospital with over 8,000 annual births (44).

25 This was a qualitative study, and participants were recruited for one-off semi-structured  
26 interviews (either face-to-face or via telephone/online). Seventeen professionals (NHS, local  
27 authority and Voluntary, Community and Social Enterprise (VCSE)) were recruited from NuTH  
28 maternity services, local authorities and VCSE organisations located in Newcastle upon Tyne as  
29 maternity care often takes place outside of the NHS. Purposeful and snowballing sampling (45)  
30 were used following the eligibility criteria as outlined below.

31 Participants were purposively sampled to provide maximum variation based on the following  
32 criteria:

1       1. Role: Healthcare professionals or professionals working within local authority or VCSE  
2       organisations

3       2. Involvement: Provides care for pregnant women and postnatal women

4       3. Geographical location: working within Newcastle upon Tyne

5       Participants were identified from utilising existing contacts of the research team and partners,  
6       snowball sampling and poster displays within the maternity unit waiting room in the trust and  
7       through VCSE organisations.

8       Participants who expressed interest in taking part were given a participant information sheet  
9       and a consent form. Written consent was obtained before commencing the interview.

10      Interviews lasted between 35 and 60 minutes using a bespoke topic guide (Supp file 01),  
11      informed by existing literature, input from the research team, public members and utilising the  
12      six-stages of the Poverty Proofing© approach, with input from Poverty Proofing practitioners,  
13      shaping questions to be inclusive of the barriers that stem from poverty and low income. Broad  
14      interview topics included: professionals' roles, their views of the barriers that pregnant women  
15      living on low income face when accessing maternity care, and factors that enable good access  
16      to maternity services.

17      Interviews were conducted face-to-face, telephone or via MS Teams by KBT and recorded using  
18      a Dictaphone. Recorded interviews were transcribed verbatim by a University approved external  
19      transcription company. Data collection stopped when data saturation was reached.

## 20      Theoretical framework and data analysis

21      Interview data were anonymised by KBT before being imported into NVivo 15 (46). An inductive  
22      reflexive thematic analysis using Braun and Clarke's (47,48) six-stage analytical process was  
23      undertaken (Stage 1 – familiarisation; Stage 2 – generating initial codes; Stage 3 – searching for  
24      themes; Stage 4- reviewing potential themes; Stage 5 – defining and naming themes; Stage 6 –  
25      producing the report). Data analysis was undertaken by KBT, KS and DL with input from the  
26      research team through regular meetings.

27      The themes of our findings were informed by Bronfenbrenner's ecological systems theory (EST)  
28      (49,50). EST consists of five distinct but inter-related levels of enquiry that explain how  
29      individual, organisational and policy level factors influence individuals across their life course  
30      (51). Frequently applied in public health research (51–54), the EST is often adapted to fit distinct  
31      research contexts. The EST was adopted inductively during stage 4 of the analysis after review of  
32      the initial round of coding revealed multi-level interconnected concepts in the data to allow for

1 enhanced interpretation. This led us to adopt a three-tiered level of analysis which spanned: a)  
2 the structural level, which is related to factors that are rooted in broad societal or health  
3 policy/immigration policy influences on the experiences of pregnant women; b) the  
4 interactional level, which is focused on factors that are linked with interactions/relationships (of  
5 pregnant women) with individuals within the systems with which they engage (such as with  
6 family/hospitals/GP clinics etc), and c) the individual level, associated with personal  
7 characteristics and circumstances of pregnant women (such as the existence of complex  
8 needs, fear of professionals, personally experienced challenges related to low income etc.).  
9 Implementing EST allowed for exploration of dynamic interplay between structural, interactional  
10 and individual barriers, while explaining how influences at different levels reinforce one another  
11 and shape healthcare professionals' perceptions of access to maternity care.

## 12 **Reflexivity Statement**

13 KBT is a physiotherapist and public health researcher trained in qualitative methods, with a keen  
14 interest in access to healthcare services. KBT's professional background and commitment to  
15 health equity informed their interest in exploring the barriers to antenatal care. Having  
16 previously conducted research with healthcare and VCSE professionals, KBT relied on  
17 developing links and connections with local key stakeholders to facilitate introductions. KBT  
18 was aware that their position as an academic outside of the study landscape could influence  
19 participants' responses. To mitigate this, KBT ensured analysis was conducted by three  
20 members of the research team, with input from the wider research team, and sought validation  
21 of preliminary findings via workshops with key stakeholders and public partners. These steps  
22 ensured that KBT's interpretations were grounded in participants' perspectives.

## 23 **Public Involvement**

24 Nine public members were involved in the study, providing input into the funding application,  
25 assisting in the developing of study materials, recruitment methods and provided input into the  
26 language used in study documents e.g. the preference for the term 'living on low oncome' rather  
27 than poverty to describe our sample. The public members reflected the communities of interest  
28 and consisted of women who were pregnant or recently delivered, who lived on low-income and  
29 experienced maternity care in the North East of England. Once preliminary themes were  
30 developed, four workshops were conducted with members of the research team and six public  
31 members (who had recently delivered and were living on low income) and 29 key stakeholders  
32 (i.e., healthcare professionals, VCSE representatives and local authority representatives)

1 including three members of the Poverty Proofing team at CNE who inputted into the naming and  
2 refining of themes and shaping the policy recommendations seen within the discussion section.

### 3 **Ethics approval**

4 Ethical approval for this study was obtained from the Proportionate Review Sub-committee of  
5 the London - Surrey Research Ethics Committee (24/PR/0820).

## 6 **Results**

7 Interview data were collected from 17 one-to-one interviews with professionals working in an  
8 NuTH maternity unit, local authority or VCSE organisations located in the North East of England.  
9 Table 1 shows demographic data including age, gender, ethnicity, work setting and length of  
10 time working with pregnant women.

11 Table 1. Participant demographic data

<b>Demographic</b>	<b>N=17 (%)</b>
<b>Age (years)</b>	
18-24	2 (11.7)
25-34	2 (11.7)
35-44	8 (47.0)
45-54	4 (23.5)
55+	1 (5.8)
<b>Gender</b>	
Female	16 (94.1)
Male	1 (5.8)
<b>Ethnicity</b>	
White British	15 (88.2)
Asian	2 (11.6)
<b>Work Setting</b>	
NHS	6 (35.2)
Local Authority	3 (17.6)
VCSE organisation	8 (47.0)
<b>Length of time working with pregnant women (years)</b>	
1-2	4 (23.5)
3-5	3 (17.6)
6-9	4 (23.5)
10+	6 (25.2)

12

13 Participants described their perspectives on several barriers that pregnant women living on low  
14 income experience when attempting to access maternity care. These have been grouped into  
15 three overarching themes aligned with EST: 1. Structural factors; 2. Interactional factors, and 3.  
16 Individual factors. Illustrative quotes are given below and participants are coded with  
17 participant number and profession.

## Theme 1: Structural factors

This theme relates to broader societal and policy factors that influence the experiences of pregnant women, for example health, employment or immigration policies, societal attitudes and prejudices towards certain groups defined by protected characteristics, institutional policies within healthcare providers etc.

*Digital exclusion and IT*

7 Participants reported that pregnant women living on low income often do not have a  
8 smartphone, mobile data, internet access or the financial ability to purchase credit. This led to  
9 barriers in accessing BadgerNet notes – an electronic patient records system used by some  
10 NHS trusts during perinatal care that comes in the form of an app on smartphones or similar  
11 mobile devices. It was reported that when women did not have access to BadgerNet notes this  
12 resulted in women not knowing about appointment timings, or how to book, manage or  
13 rearrange appointments.

14       *'That, of course, is the other big health inequality that we now struggle with because, now that*  
15       *we are supposedly paper-light and everything is on BadgerNet, which is absolutely marvellous*  
16       *for the vast majority of people, that can be a huge barrier because some people have a*  
17       *smartphone, but they haven't got any data on it. Or, if they haven't got a smartphone, they've just*  
18       *got a block which, obviously, they can't read their BadgerNet notes on. People do lose their*  
19       *phones quite a lot. That happens quite a lot.'* – Midwife (019)

## Language

21 Language was reported to be a barrier to accessing maternity care particularly for those who  
22 were migrants to the UK and for whom English is not a first language. While translation services  
23 were used participants reported that often information was lost in translation, hired services at  
24 times came across as unprofessional and were difficult to engage with at the correct  
25 appointment time.

32 Participants reported that some women did not want to work with translators as they were  
33 fearful of a lack of confidentiality and professionalism. The use of overcomplicated language

1 and medical jargon resulted in many pregnant women asking VCSE practitioners to explain  
2 medical letters.

3 *'I think, yeah, the translation they find difficult. I've had a few women say that if they had a  
4 different set that was in plain English with less acronyms and just better words for things... Like I  
5 remember one saying, "Uterus?" She was like, "If they'd put womb I would've known.'" – VCSE  
6 practitioner (011)*

7 ***Service delivery – funding and understaffing***

8 Staffing pressures were reported as a barrier for pregnant women to accessing antenatal care.  
9 Although healthcare professionals wanted to provide the best possible care, they often felt  
10 rushed during necessary clinical procedures, owing to staff shortages.

11 *'I think staff shortage when providing healthcare is a big issue. I've been speaking to health  
12 visiting teams and midwifery teams where there are staff shortages, and that obviously puts a  
13 strain on themselves, where they're trying to provide the best possible care, but it also might  
14 mean that it affects mums getting the right support, at the right time.' – VCSE practitioner (010)*

15 Participants reported that while support workers were invaluable in providing assistance to  
16 pregnant women during appointments, funding cuts impacted their availability. Participants  
17 also reported that due to changes in working during the COVID-19 pandemic, working  
18 relationships and networks changed, and many had not returned to pre-COVID working  
19 conditions, resulting in a lack of awareness of other services and professionals.

20 *'I think it became a bit trickier after COVID because people didn't know each other so well.  
21 We'd, sort of, lost some of those links and contacts a bit. And especially for newer staff, they  
22 didn't really have them, so it was harder to work out who people could signpost to or whatever.' –  
23 Health visitor (014)*

24 **Theme 2: Interactional factors**

25 This theme focuses on the relationships of pregnant women with individuals within the systems  
26 that they engage, for example their social networks, families, staff at the hospital and GP clinics,  
27 their employer.

28 ***Social support network***

29 Participants reported that pregnant women who lacked social support from friends and family  
30 often found it difficult to attend appointments. Often partners were unable to attend  
31 appointments, due to challenges associated with arranging childcare for older children.

7 Participants highlighted that for those pregnant women unable to bring their older children to  
8 appointments, and especially those who were single parents, adequate social support was  
9 crucial. Some community services explained that they were flexible in allowing a pregnant  
10 woman to bring her older children to appointments to ensure that she was able to attend her  
11 antenatal care.

12       'Yeah, because a lot of them are the, like, refugees or asylum seekers and don't really have any  
13       family here, so don't really have anyone. It's just, like, them and their partners, so it is just them,  
14       so they wouldn't have anyone else. So, for whatever reason if she had to go into hospital or  
15       something, like, she wouldn't have anyone to watch the kids.' – Midwife (021)

## 16 *Involvement and engagement of fathers/partners*

17 While having fathers and partners involved in maternity care was seen as an enabler, specific  
18 barriers preventing their involvement were identified. Working fathers often missed  
19 appointments scheduled during work hours, prompting their partners to request appointments  
20 outside of working hours.

21 'People will often say, "I'd love my partner to come, but they're not going to be able to get time off  
22 work," or, "It's more difficult," or, "They work away," or, "They work shifts." Or there's a whole host  
23 of reasons that then come into play there, but again what we will do there is, if they can, again  
24 we can offer the letter to employer for a partner.' – VCSE social worker (006)

25 Additionally, participants reported that fathers from different cultures and religious beliefs often  
26 felt uncomfortable in maternity and antenatal spaces, as they considered these spaces to be  
27 for women only and hence not seen as a space for fathers to attend.

1 *Service delivery – racism and discrimination*  
2 Racism and discrimination were reported as a barrier to pregnant women accessing maternity  
3 care. Participants reported that pregnant women from minoritised and racialised ethnicities  
4 often feel that their needs were unmet due to discrimination based on their race or faith.

5 ‘*So, depending on where you’re living, and what your surroundings are, you might be concerned*  
6 *that your needs won’t be taken into account, in terms of the way that you live your life on a day-*  
7 *to-day basis, whether that’s to do with your faith, or other issues, that could be a concern.*’ –  
8

VCSE practitioner (010)

9 Participants identified that they lacked training in Equality, Diversity and Inclusion (EDI), to  
10 ensure that they were able to provide adequate care to those from all ethnicities, and noted that  
11 stigma, judgement and staff attitudes were a barrier to women accessing care, due to feelings  
12 of being judged for who they are.

13 ‘*So, if you’ve experienced judgement or discrimination, or you haven’t been helped in the way*  
14 *that you were wanting to, that can stop you from accessing further support, and during*  
15 *pregnancy, it’s a very vulnerable time, so that’s another barrier, I would say*’ – VCSE practitioner  
16

(010)

### 17 **Theme 3: Individual factors**

18 This theme relates to barriers and factors stemming from the personal characteristics and  
19 circumstances of the pregnant women, for example their background, existence of complex  
20 mental health needs, feelings of anxiety or fear of professionals, personally experienced  
21 challenges related to budgeting and low income.

#### 22 *Travel related*

23 Several transport specific barriers impacting pregnant women who live on low income from  
24 accessing maternity care were identified by participants. The public transport system was  
25 reported to be complicated or disjointed and often difficult to navigate by women who may be  
26 new to the area.

27 ‘*If they don’t live close by and they don’t have access to a lift or something, they’re either not*  
28 *confident enough to use public transport or they don’t know the area well enough to be able to*  
29 *rely on public transport. A lot of them certainly don’t have the money to pay for taxis or anything*  
30 *like that, so quite often it is a barrier, getting them into our groups – just, yeah, financially getting*  
31 *to the groups.*’ – VCSE practitioner (012)

1 The costs associated with travel were also reported as a key challenge. The fare costs were  
2 reported to be high for people living on low income, especially when attending with a partner  
3 which doubles the cost. In Newcastle upon Tyne, the lack of a uniform fare across modes of  
4 transport (i.e., bus/tram), required multiple tickets increasing overall costs.

5 *'And it's costly. I mean I know it's capped. But even that- If somebody is going to the hospital,  
6 even when it's capped at £2, that's four quid for one person. If you've got financial concerns  
7 that's a lot of money. If there are two of you going, where do you find that eight quid from? Plus  
8 when you get there you might need a drink or whatever. There's other stuff. Or you might have  
9 taken time off work.'* – VCSE practitioner (009)

10 ***Hidden costs***

11 Other associated costs which were not as prominent as the costs of travel but impacted access  
12 to antenatal care were also identified by participants included the cost of vitamins and simple  
13 medications (i.e., paracetamol or heartburn medication) that GPs would not prescribe, the cost  
14 of paid antenatal classes that would take place outside of working hours, as opposed to the free  
15 NHS classes that were arranged for during the working day, the cost of attending a larger  
16 number of hospital appointments, and finally, the cost of purchasing equipment for the baby  
17 (i.e., crib, pram, clothing, formula etc.).

18 *'I think it's just this assumption that, "Well-" Because the NHS is, obviously, free to access. And  
19 that's phenomenal. But I think there is this assumption that, "Well, be grateful. And we can get  
20 you these appointments, and that's great." But no consideration, necessarily, of, "Well, for some  
21 people actually being able to access that is almost impossible.'* – VCSE practitioner (009)

22 ***Fear of professionals and unfamiliarity with service***

23 Participants also reported the perception that there was a fear of professionals and lack of  
24 familiarity with maternity services that prevented some pregnant women from accessing care. It  
25 was reported that often pregnant women felt anxious about attending a new appointment or  
26 group, not fully understanding what it was for, or who would be delivering it.

27 *'I think it's just basic lack of knowledge, lack of trust. If they thought they were going to go there  
28 and they were going to see their community midwife, who they've already seen before, it might  
29 be different but, even then, you don't always see the same community midwife now. It's just  
30 another woman in a similar uniform. I can't imagine what it's like. These people are doing this  
31 stuff, you don't know who they are or what they are.'* – VCSE practitioner (011)

1 Participants reported that women often felt judged on their parenting ability owing to perceived  
2 social class and the questions they asked.

3 ‘*Maybe fear of the unknown. “What do I do? Should I ask these questions? If I ask these  
4 questions, is somebody going to think that I’m not going to be able to take care of the child?” So  
5 not knowing what support is available, and how that person will be supported.*’ – VCSE  
6 practitioner (010)

7 For women who had recently migrated to the UK, an additional barrier in the form of  
8 unfamiliarity with the process of navigating a healthcare system of which they had limited  
9 knowledge and the role of specific professionals within it was also reported.

10 ‘*Sometimes women struggle, I think, to trust. I think there are issues around trusting. The  
11 healthcare’s different from in their country, if they’ve had a bad experience before, if they’re just  
12 not used to accessing different professional services, and all of a sudden, they have to.*’ – Health  
13 Visitor (014)

14 *Prevalence of complex needs*

15 Living with multiple complex needs was reported as a barrier to pregnant women accessing  
16 maternity care. For example, professionals reported that pregnant women experiencing  
17 domestic violence often missed appointments with phone access controlled by their partners.

18 ‘*Yeah, I think there is. I think there are ones that are being controlled and so don’t come, and  
19 then there are ones who are in those sorts of controlling relationships that they come, but the  
20 partner takes over the appointment. That can be quite tricky.*’ – Midwife (019)

21 Similarly, those who had experiences of drug and alcohol use were reported to need greater  
22 input into their care to facilitate their attendance in antenatal appointments. Professionals  
23 noted that for those with complex needs, additional training in trauma-informed care would be  
24 beneficial.

25 ‘*I don’t know, the chaos in some households and then you’ve got things... you’ve got addiction,  
26 you’ve got ADHD, domestic abuse, homelessness.*’ – VCSE team manager (013)

27 Housing was often cited as a key cost as there was a rise in pregnant women requiring housing  
28 assistance owing to poor housing conditions, homelessness or overcrowding. It was reported  
29 that women often disengaged with services due to the emotional and cognitive toll of having  
30 poor and inadequate living conditions.

1 'Housing is a big one. We've definitely seen an increase in housing issues in the past year. I think  
2 the current situation with housing in [CITY] is definitely having an impact.' – Midwife (018)

3 Additional quotes that informed policy recommendations can be found in Supp File 02.

## 4 Discussion

5 The findings from this study present professionals' perspectives of the different challenges  
6 pregnant women living on low income face when accessing maternity care. Three levels of  
7 barriers, informed by EST, across the structural, interactional and individual levels, were  
8 identified through thematic analysis of the interview data, collectively hinder access to  
9 maternity care.

10 Structural barriers included digital exclusion and language related challenges. With a growing  
11 demand to go 'paper-free' there has been an increase in the use of digital technologies within  
12 healthcare (36,37), such as BadgerNet notes. Our study shows that professionals are aware  
13 that the use of these digital technologies can be exclusionary and difficult to navigate for those  
14 who do not have access to smart phones, data or WiFi. This confirms previous systematic  
15 review findings (12,13) which confirmed large disparities in digital access and digital literacy  
16 that resulted in a reduction in accessibility of services, and called for the reduction of digital  
17 inequalities. Language was another structural barrier identified, with participants reporting  
18 challenges in communicating with women for whom English was not their first language, with  
19 concerns over the quality and accessibility of interpretation services. These findings  
20 corroborate previous research (21), that found that it was often difficult to access interpreters  
21 when needed and that the quality of the interpretation was sometimes questionable.

22 Two factors that drove interactional level barriers were related to limited social networks and  
23 non-involvement of fathers/partners. Corroborating previous research (14–16), participants  
24 reported that pregnant women who had a limited social support network of friends and family  
25 often engaged less with maternity care, frequently citing a lack of childcare and feelings of  
26 isolation, especially among those new to the country. Limited involvement of fathers owing to  
27 their inability to get time off work to attend appointments during work hours, or cultural barriers  
28 which consider maternity care to be exclusively for women, were also identified as a barrier.  
29 These barriers also align with previous studies that have highlighted similar issues in effectively  
30 engaging with fathers (17–19). It is important to note that racism and discrimination was  
31 acknowledged as a barrier to accessing care, in our majority white sample. It was identified that  
32 their own lack of EDI training, stigma and judgement of ethnic minority women acted as a  
33 barrier to providing safe and supportive care. An area that they identified could be strengthened.

1 Lastly, individual level barriers were related to travel costs and unfamiliarity with maternity  
2 services. Travel-related challenges were a major barrier that was cited by most of the study  
3 participants. Consistent with previous research (22,23), the public transport system was  
4 reported as costly, complicated, unreliable, and difficult to navigate, especially for women new  
5 to the area. Another barrier specific to individual circumstances is the unfamiliarity with  
6 services and fear of professionals which often caused anxiety among pregnant women when  
7 attending new appointments. They also feared being judged due to their socioeconomic  
8 circumstances or for asking questions, worrying that professionals would perceive them as  
9 unable to care for their baby. This unfamiliarity with the healthcare system was exacerbated for  
10 women from a migrant background, who lacked a point of reference for navigating the NHS due  
11 to the differences with their home country's healthcare system (1,24).

12 These barriers did not operate in isolation but intersected across the levels. Professionals  
13 reported that for many women living on low income, individual barriers like travel difficulties and  
14 an unfamiliarity of services were intensified by interactional challenges like limited social  
15 support or discriminatory practice, while also being shaped by structural barriers including  
16 digital exclusion and language. These interacting barriers create disadvantage for pregnant  
17 women living on low income, resulting in poor access to care and professionals' capacity to  
18 provide equitable care.

## 19 **Policy Recommendations**

20 Our study findings could inform policy recommendations on reducing the barriers to accessing  
21 maternity care for women living on low income and build on recommendations made in a recent  
22 umbrella review of interventions (55). We recommend providing recycled smart phones and pre-  
23 paid Sim cards to those who require digital access, the use of translators in all appointments  
24 while reviewing the professionalism of these services and starting to include translation apps to  
25 support appointments. We recommend implementing free travel on public transport for women  
26 and their partners on days of appointments, using pre-paid travel vouchers, and providing  
27 appointments outside of normal clinic hours to support engagement from partners who are  
28 unable to get time off work. Finally, we recommend that professionals delivering care to  
29 pregnant women are provided EDI, cultural sensitiveness and trauma informed training to  
30 further support women and families. While workplaces develop detailed referral pathways to  
31 local VCSE organisations and policies to enable effective use of translators and additional care  
32 pathways for those with complex needs. These policy recommendations stem from the  
33 interview data and refined within the four workshops that were delivered with public members  
34 and key stakeholders. The Poverty Proofing© approach informed data interpretation, with key

1 stakeholders from CNE present at the workshops to help shape with recommendation  
2 development.

### 3 **Strengths and Limitations**

4 This is the first qualitative study exploring professionals' experiences of the barriers to  
5 accessing maternity care for women living on low income. Participants were professionals  
6 working in the healthcare, local authority or VCSE sectors and provide valuable perspectives  
7 into the experiences and challenges pregnant women living on low income experience when  
8 accessing maternity care. As this study reflects the perspectives of majority White professionals  
9 rather than women living on low-income, this will shape how the barriers are understood and  
10 interpreted. Our data analysis process was rigorous and involved our data being analysed by  
11 three researchers with input from the rest of the research team through data meetings before  
12 four stakeholder and PPI workshops were undertaken to confirm themes. A wide range of VCSE  
13 organisations were identified, in which professionals were recruited from, allowing for different  
14 perspectives to be shared. Finally, using EST enhanced interpretation by allowing examination  
15 of the dynamic between individual, service level and structural barriers, and facilitated a deeper  
16 understanding of how these interplay and shape access to maternity care, thereby  
17 strengthening the depth of our analysis.

18 Recruitment was focused within the North East of England, which is a limitation. The area  
19 covered by these organisations is urban, and therefore the perspectives of those who work in  
20 rural or coastal areas were not captured in this study. Other geographical areas may have  
21 additional policies and services for supporting women living on low income not present in our  
22 study's location which may benefit those living on low income.

### 23 **Conclusion**

24 This study provides vital insight and professional perspectives into the barriers and challenges  
25 that pregnant woman living on low-income experience when accessing maternity care. Our  
26 interview data identified several structural, interactional and individual barriers to accessing  
27 care, including difficulties with digital technologies, costs of travel, language, a fear and  
28 unfamiliarity of services and professionals and a lack of social support, showing that  
29 professionals are aware of these barriers and the impact they have on woman engaging with  
30 services. Our findings can inform actionable service and policy recommendations to assist in  
31 overcoming of these barriers to care. Finally, considering the NHS England 10 Year Health Plan:  
32 Fit for Future, additional research needs to explore the impact digital technologies in maternity

1 healthcare play on women accessing maternity care, and evaluating any interventions that aim  
2 to reduce barriers to accessing care for women living on low income.

### 3 **Declarations**

#### 4 Ethical approval and consent to participate

5 Ethical approval for this study was obtained from the UK Health Research Authority  
6 Proportionate Review Sub-committee of the London - Surrey Research Ethics Committee  
7 (24/PR/0820). This study adhered to the Declaration of Helsinki Ethical Principles for Medical  
8 Research involving Human Participants. Written, informed consent was sought from all  
9 participants prior to the participation of the study. Participants were provided an opportunity to  
10 ask questions prior to providing consent.

#### 11 Consent for publication

12 Not applicable

#### 13 Availability of data and materials

14 The datasets generated and analysed during the current study are not publicly available due to  
15 the sensitivity of the topics discussed within the data but are available from the corresponding  
16 author on reasonable request.

#### 17 Competing interests

18 None to declare

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#### 26 Authors' contributions

27 JR and MRJA developed initial project idea, with input from AA, HB, OE, DG, NH and RK. JR,  
28 MRJA, wrote the funding bid with input from AA, HB, OE, DG, NH and RK. KBT, JR, and MRJA led  
29 on protocol development and NHS ethics application with input from all named authors. KBT  
30 collected the interview data. KBT, KS and DL analysed the data, with input from JR, MRJA, AA,  
31 HB, OE, DG, NH and RK. KBT developed the manuscript draft. All authors commented on the  
32 manuscript and gave final approval for its submission.

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