

RESEARCH GROUP: PERINATAL AND OBSTETRIC MEDICAL DEVICES: SOLUTIONS FOR EQUITY (PROMISE)

## GATHERING PERSPECTIVES (Work Package 2)

To understand the experiences and views of women and pregnant people regarding the medical devices they encounter during pregnancy and the neonatal period.

### WP2: Ethnic Minority Perspectives on Medical Devices

#### Test Methods:

Narrative semi-structured interviews with recently pregnant women and pregnant people focusing on their experiences of pregnancy and neonatal care with exploration of knowledge, awareness and experiences of medical tools and devices, including:

- existing devices encountered in pregnancy and neonatal pathways; o devices in development using AI
- the use of risk scores
- which devices / diagnostic outcomes are associated with greatest worry / anxiety / distress

#### Data collection:

Women will be identified through a range of community groups, social media recruitment and pregnancy and childbirth charities. Led by LH, with extensive experience of recruiting for studies exploring maternal inequalities, diverse recruitment will be essential and be supported by our PPI lead (KM), the PPI group and a range of community groups (including, but not limited to, Early Lives Equal Start (Oxford), Newham Nurture (east London), the Raham Project (Bedford) and Born in Bradford). Recruitment packs will distributed through a number of routes to ensure a wide, varied sample (see below) [23]. Interviews will be undertaken face to face, by telephone or Microsoft Teams, depending on participant preference. After taking consent a researcher (AY or LH) will start with a narrative open question followed by a series of semi-structured questions.

We will use open-ended and simplified questions to allow participants comfortably and explicitly provide appropriate responses to the questions being asked. The topic guide will be jointly developed iteratively drawing on our review of the literature, the initial findings from WP1a and WP1b and in discussion with our PPI group. We will use photographs of medical tools and devices collected in WP1a as interview prompts. Interviews will be audio-recorded, with consent, and transcribed for analysis.

Sample will include a broad range of 30 women purposively sampled from across the United Kingdom to include ethnic minority, socio- economic and geographic diversity, low-risk and high-risk pregnancies and experiences of baby loss [24]. Analysis: Interview transcripts will be

uploaded into a qualitative analysis software programme (NVIVO) for coding. We will use constant comparison to examine inductive and deductive codes and emerging themes. Themes and codes will be discussed and refined through consensus among the research team (including social scientists, clinicians and our PPI co-applicant KM) and the PPIE advisory group.

### **Analysis:**

Will be informed by recent research and theories relating to maternal inequalities and access to care [25-27]. Narrative summaries of the key themes will be written and used to inform WP4 and wider dissemination. Outputs: Detailed analysis of women's experiences of medical devices for academic publication and policy- focused report, to be co-produced in collaboration with our PPI panel.