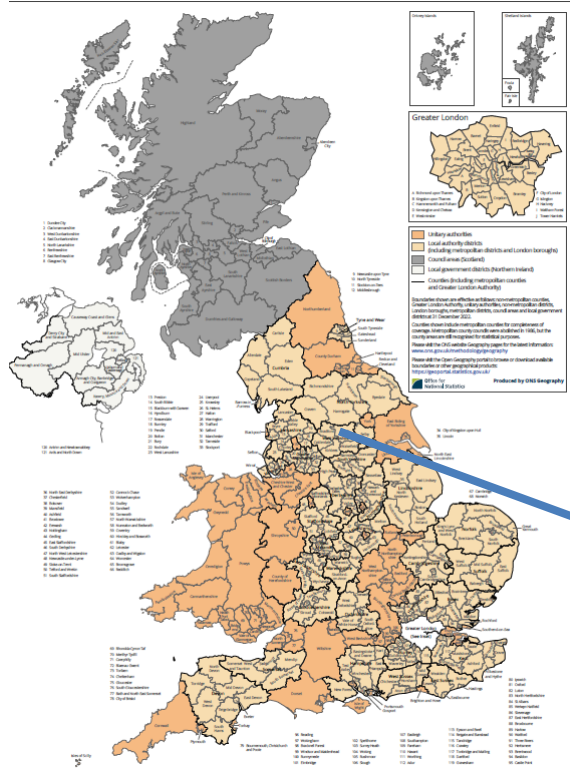


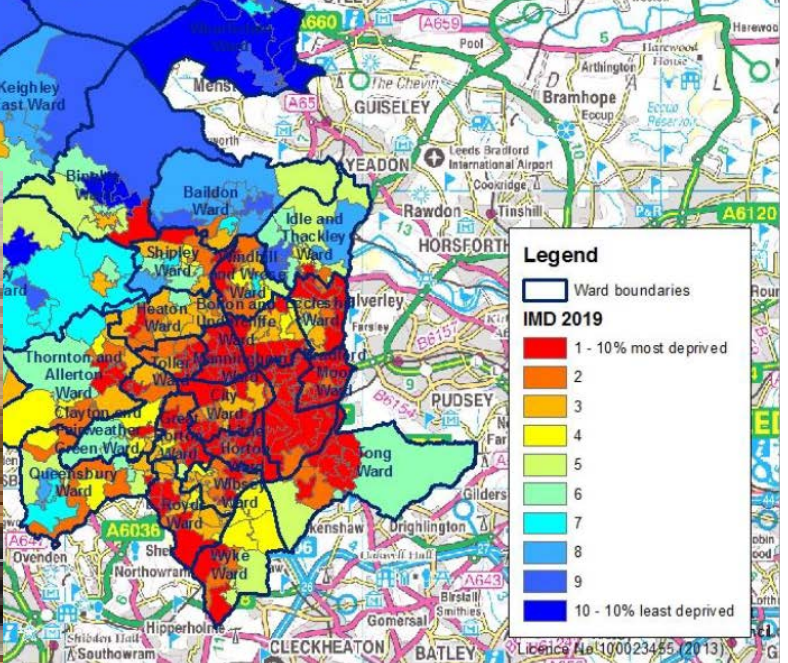


**Learning from the Experts:**  
*Taking a community-based approach to understand what works to reduce the impacts of poverty*

Dr Josie Dickerson [josie.Dickerson@bthft.nhs.uk](mailto:josie.Dickerson@bthft.nhs.uk)



On



# Born in Bradford – A Family of Cohort Studies

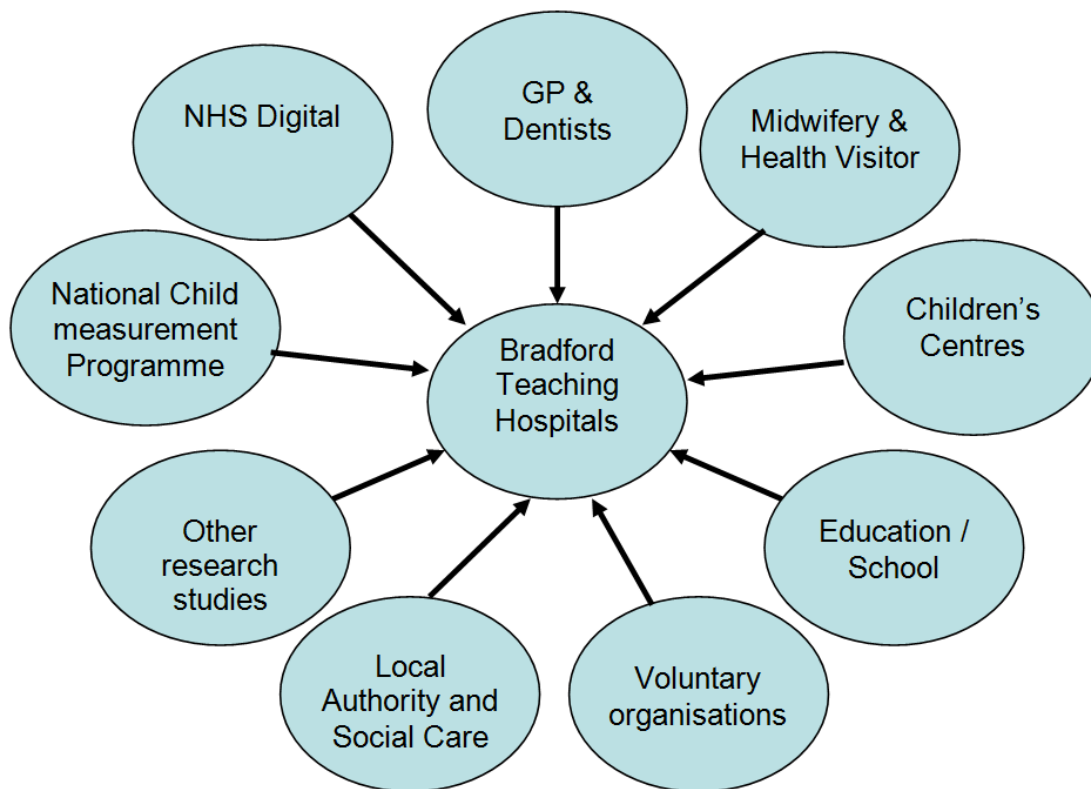
Born in Bradford is an internationally-recognised research programme which aims to find out what keeps families healthy and happy and to develop, implement and evaluate ambitious programmes within practice to improve population health.

[www.borninbradford.nhs.uk](http://www.borninbradford.nhs.uk)



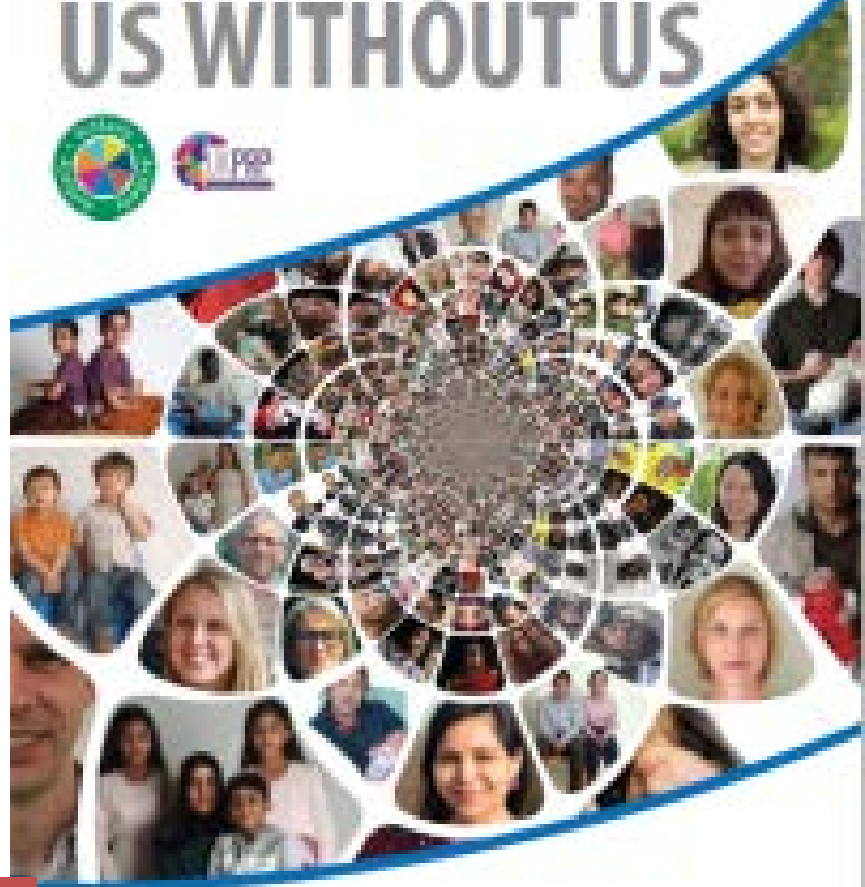
# Born in Bradford Data

- Routine data linkage
- In BiBBS this also includes intervention exposure
- Complemented by research data collection on social determinants of health

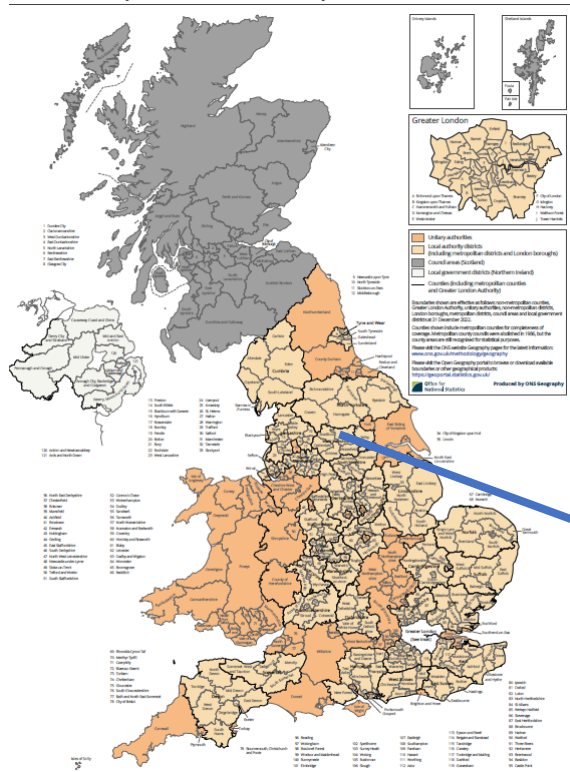




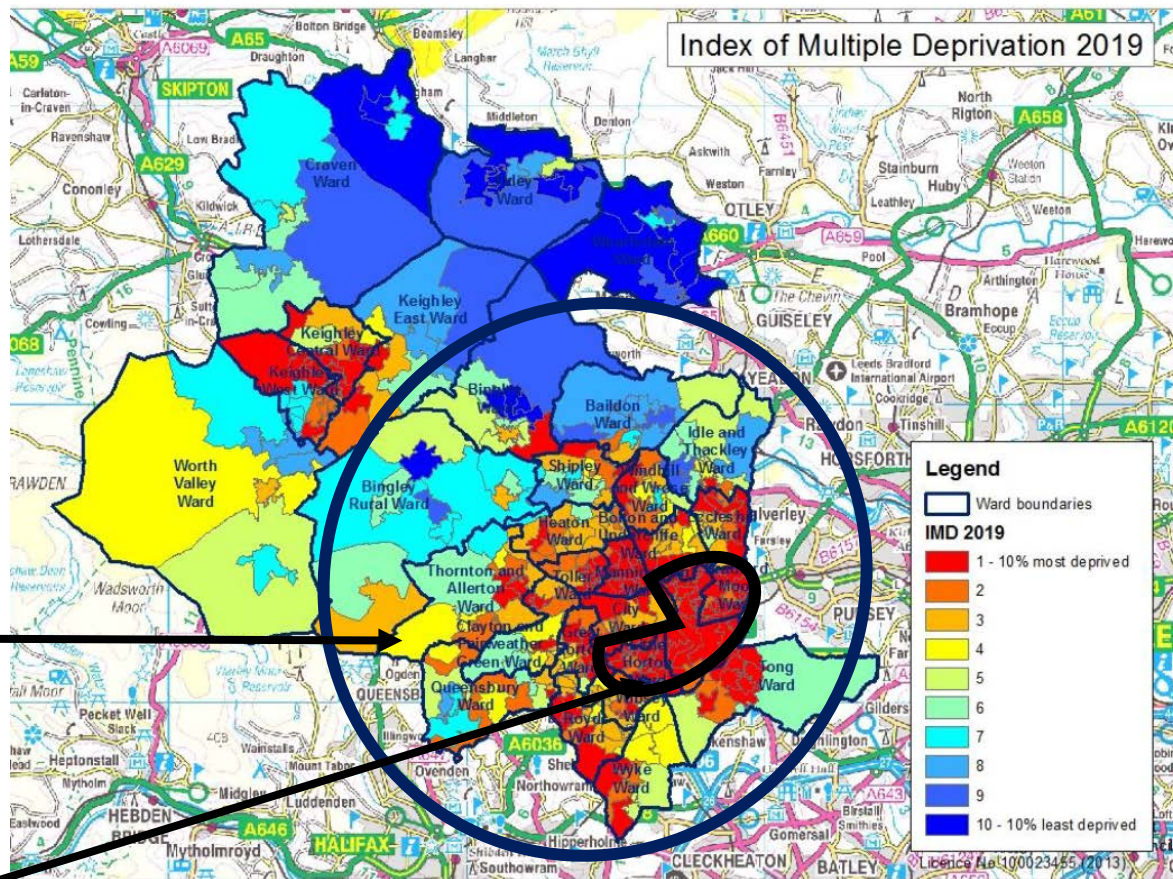
Co-production in ActEarly:   
**NOTHING ABOUT  
US WITHOUT US**



*People powered research*



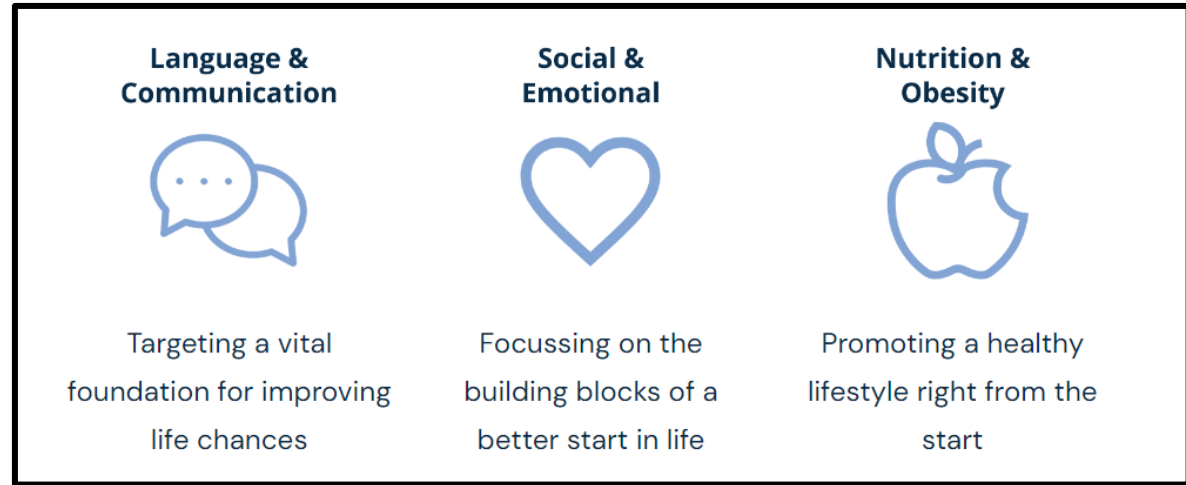
# Bradford – One city, world's apart





**Better Start**  
**BRADFORD**  
INVESTING IN THE FUTURES OF OUR CHILDREN

>20  
interventions



# Why these areas?



Oral Health  
(Mean no. dmft, age 5)



**3.6**    **1.98**    **0.94**

BSB    Bradford District    England



Breastfeeding initiation



**65%**    **64%**    **74%**

BSB    Bradford District    England



Good Level of Development



**63%**    **67%**    **72%**

BSB    Bradford District    England



Obesity



**28%**    **25%**    **20%**

BSB    Bradford District    England





# The world's first interventional cohort



2016-2024

~6000 MUMS AND BABIES

## AIM:

To provide efficient evaluation of multiple early years interventions delivered in practice in a population that are in most need of support

# Probably the world's most diverse cohort...

88%  
ethnic minority

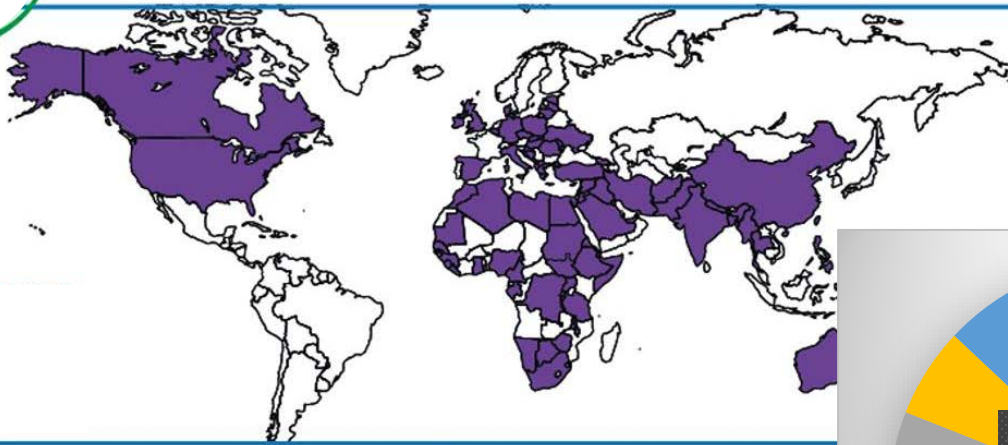
54%  
migrants

>90  
different countries  
of birth

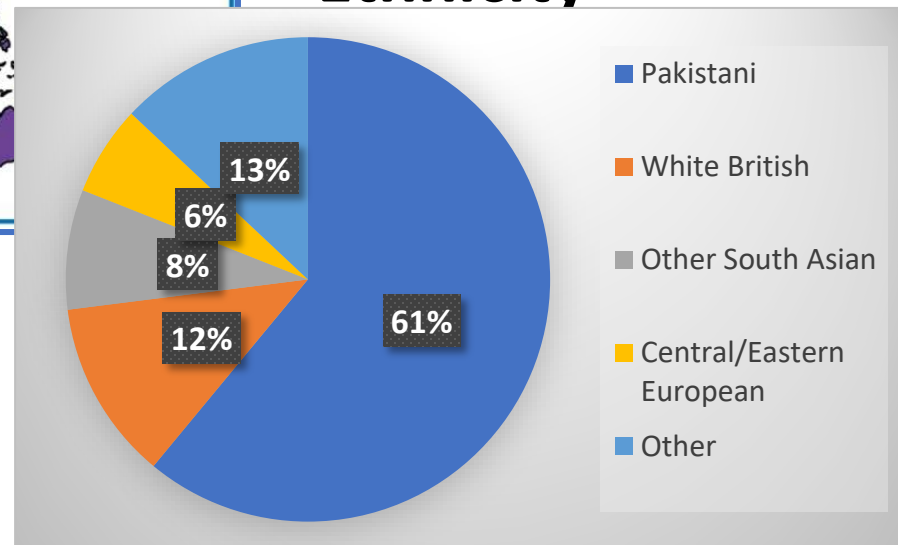
56  
different  
languages

33%  
Little/no  
English

What our BiBBS cohort looks like!



## Ethnicity



What does this  
rich data tell  
researchers  
about the  
community?



# Socioeconomic Circumstances

## Index of Multiple Deprivation:

84% live in the most deprived decile

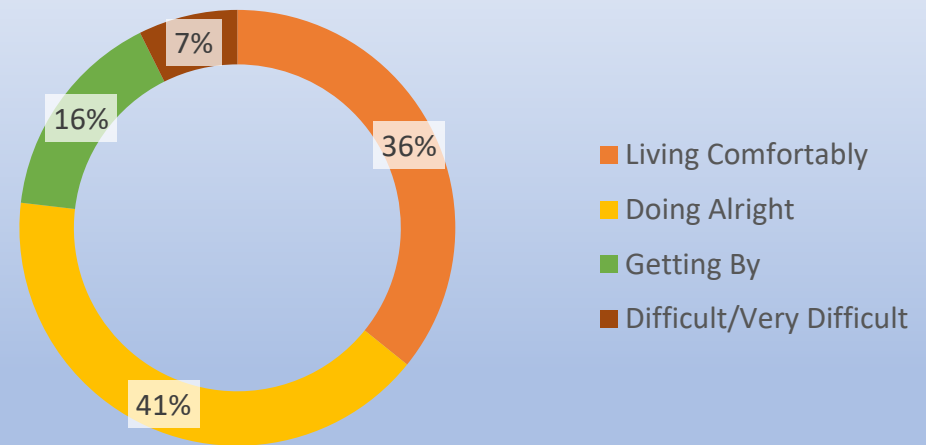
16% in 2<sup>nd</sup> most deprived

## Household Employment:

86% of partners

34% of mums

## How well would you say you are managing financially?





## Differing living circumstances & choice

Multi-generational and large families -

- Overcrowding
- Financial buffer
- Social support

# Vulnerabilities

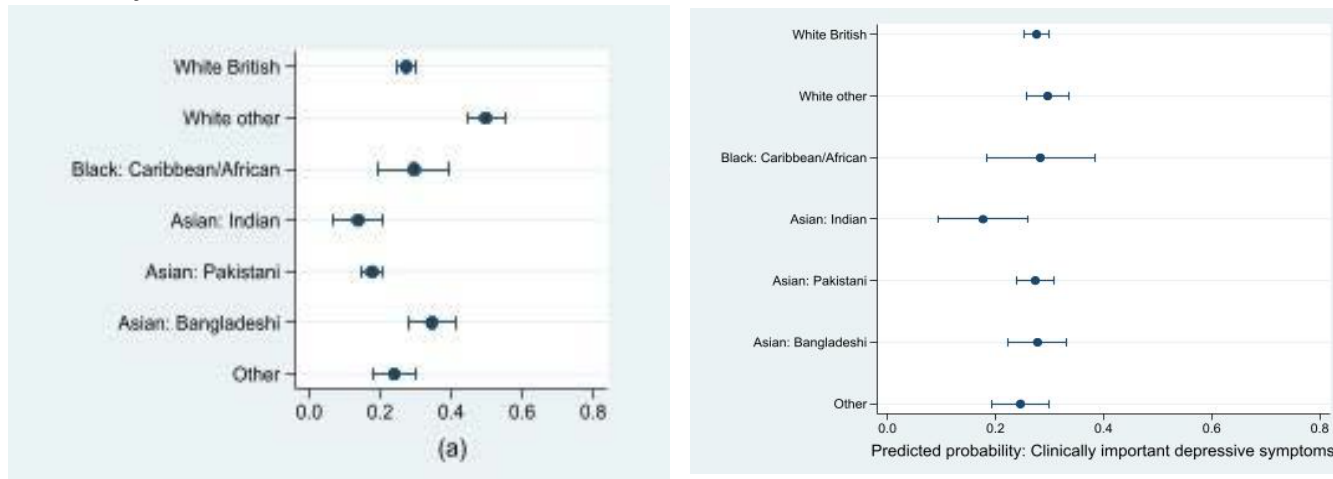
1 in 4 children are late talkers  
– less likely in large households

46% of mums report low mood  
(15% clinically relevant symptoms)  
– less likely in Pakistani heritage



# Variables associated with maternal depressive symptoms during Covid-19

*Odds ratios for clinically important depression by ethnicity a) unadjusted; b) adjusted*



**Significantly greater odds of depression for:**

**Loneliness, lack social support, financial insecurity, living in London**

Mclvor et al., The Impact of the Pandemic on Mental Health in Ethnically Diverse Mothers. 2022

# Protective Factors – “some good came out of it too”

*“there’s always light at the end of the tunnel and it’s all the knowledge that you’ve sort of accumulated about the deen and you know, why sometimes we can feel down and it’s normal to feel down but, you know, and you look at the lives of the Prophet Muhammad, peace be upon him and the other prophets and then you think, well actually, mine’s not so bad, so it kind of keeps you going.”*

Religious Beliefs & Practices

Social Cohesion

Living in Multi-Generational Households

*“big family, me and my sister-in-law all day when breakfast finish, clean everywhere, then all dinner time, then dinner time finish, oh evening teatime, this is thing too much normally for people but more people in house to help in my family.”*

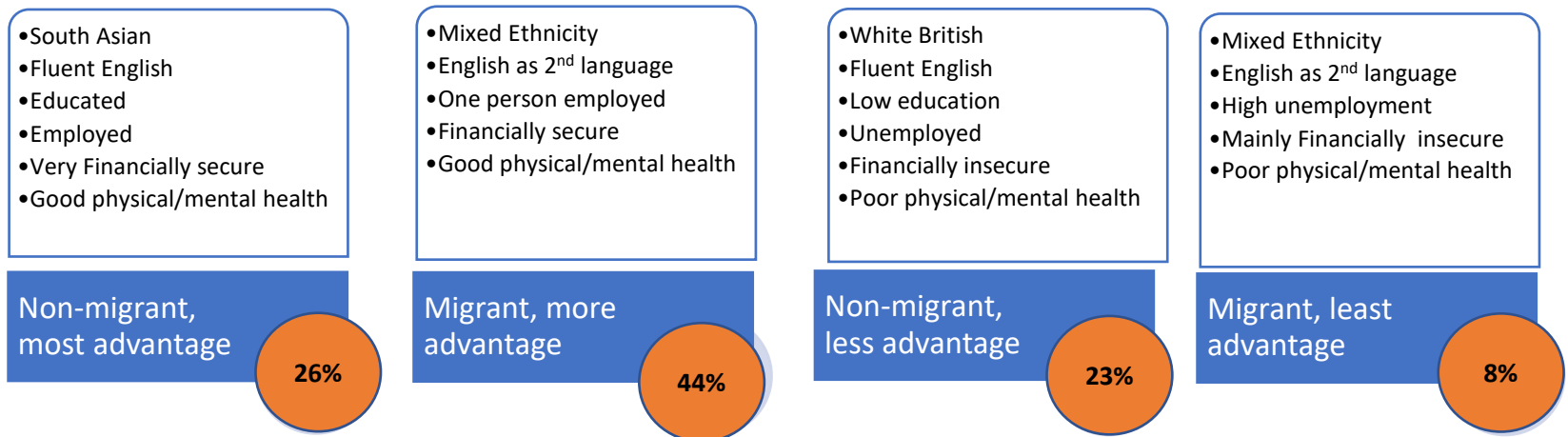
*“Our neighbours went shopping for us, they cooked for us. My next-door neighbour checking up on us. ...That was really reassuring at that time, and helped reduce my tension”*

*“Our neighbours are all Pakistani and I don’t have family here but neighbours are so supportive and helped me so much ... They fill the void I don’t have with my family not being here.”*



# Describing the main groups within BiBBS

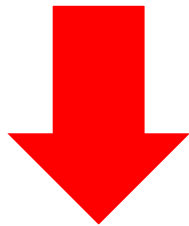
## Latent Class Analysis (probabilities summarised)



# Do these characteristics predict engagement with preventative interventions?

Yes and No....

Regression Analyses: LCA groups not associated with engagement, but....



CEE ethnicity

Little-no English language



Pakistani ethnicity

Socially isolated



# I-MAIHDA Regression Analysis:

Predicted probabilities of engaging in an intervention for 4 strata : social support, ethnicity, migrant status and spoken English ability

Average probability of being in the user group by strata  
 Strata: Ethnicity | Spoken English | Migrant status | Social support

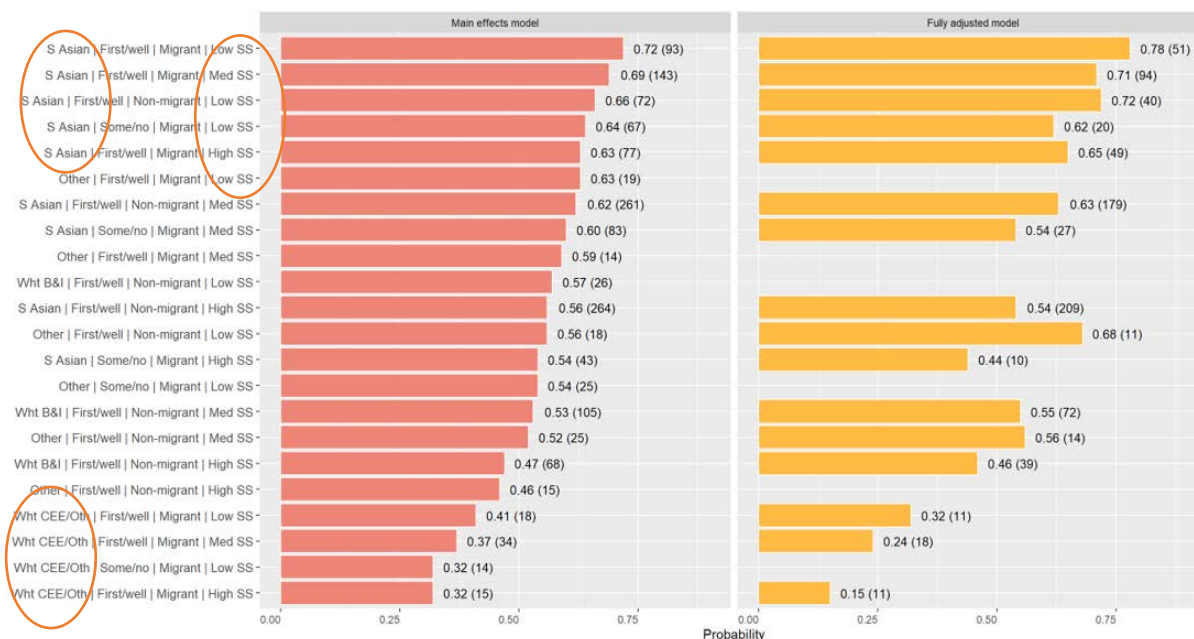




Figure 2: : Predicted probabilities of being in the user group by strata for MAIHDA 2, ordered by probability predicted by the main effects model.

# I-MAIHDA Results: Odds ratios and CIs

	MAIHDA 2 (four-variable strata)	
	OR (95% CI)	P value
<b>Null Model</b>		
Intercept	1.25 (0.98-1.54)	0.049*
<b>Strata main-effects model</b>		
Intercept	1.28 (0.97-1.71)	0.09
White B&I	0.70 (0.46-1.04)	0.09
White CEE/other	0.27 (0.16-0.44)	<0.001*
Other ethnicities	0.66 (0.42-0.98)	0.04*
Med social support	1.27 (0.94-1.75)	0.13
Low social support	1.49 (1.06-2.16)	0.03*
Migrant	1.35 (0.94-1.84)	0.09
Some-no spoken English	0.69 (0.49-1.02)	0.053
<b>Fully adjusted model</b>		
Intercept	1.07 (0.74-1.56)	0.74
White B&I	0.73 (0.46-1.16)	0.21
White CEE/other	0.12 (0.05-0.26)	<0.001*
Other ethnicities	0.80 (0.46-1.54)	0.50
Med social support	1.35 (0.93-2.01)	0.12
Low social support	1.96 (1.19-3.19)	0.01*
Some-no spoken English	0.43 (0.22-0.82)	0.01*
Migrant	1.50 (0.97-2.42)	0.07
One person employed	1.01 (0.74-1.36)	0.96
No-one employed	0.57 (0.32-1.07)	0.08
Clinically significant anxiety	1.23 (0.74-2.09)	0.44
Clinically significant depression	1.46 (0.94-2.40)	0.11
Fair-poor health	1.23 (0.89-1.72)	0.22
Some financial insecurity	1.31 (0.91-1.86)	0.14

The odds of engagement with interventions is significantly lower for mothers:  
 Of White Central/Eastern European ethnicity  
 With some/no English ability

The odds of engagement are higher for those with low levels of social support 

**Confirmed that these were additive effects, not interactive.**

# Qualitative insights – What are the key components to engagement in perinatal projects?

---

- Overlapping key themes from qualitative evaluations of 3 perinatal interventions: midwifery continuity of carer, Babysteps & breastfeeding peer support



# Key Components for Uptake

*...when you've got an interpreter you don't know if they're speaking with the same level of empathy and communication that you are trying to express to a woman, whereas you know that support worker who speaks her language is doing that...And I think it's a bit more relatable as well to a lot of women and gives them more of a voice and you know, we're working in an area with huge amounts of health inequalities and I think that's really important to break down that."*

Home visits

*I was really, really pleased that, you know, the lady came to our house. She was really thorough, she was really helpful ... So I was quite overwhelmed"*

Practitioners with community languages

*"I think being able to see somebody in their own home allows you a very unique opportunity to build a very supportive relationship and one of trust... you get that opportunity to see how, what their living circumstances are..."*

Having a choice – empowering families

*"They have to work with social services, it is mandatory, whereas with us as Baby Steps, they can choose whether they want to join the programme or not[...] I think there's a stigma around social services" (Practitioner)*

*"we had never had such in Nigeria, so it was more or less like I need to learn new things[...]"*

# Key Components for Completion

*She told me everything what was happening with my baby, what's going to happen in the next four weeks, what am I meant to be feeling and what it's not safe to be and if I have any worries to contact her and stuff. She kept telling me that and that reassured me that I know she'll be there to help me when something happens or if anything goes wrong, she'll be there.*

**Continuity and stability of staff = Strong therapeutic relationship, trust**

*"they knew what I was going through, so they were always there for me, trying to encourage me [...] they were very, very supportive."  
(Mother)*

**Person-centred, flexible delivery to address complex needs / cultural differences**

*"we ask about family traditions and how it was when you were growing up and thinking about, maybe will you carry traditions on? It gets them talking and because they're from the same culture they can share experiences"  
(Facilitator)*

**Perceived need & relevance of additional support**

*"With it being my first, I wanted to get as much information have, to look after her right. I didn't have any family, [...] Even if I had family who were here, I think would have still gone and done the Baby Steps"*

*Traditionally it's been midwifery then health visiting and this sort of two week gap between, which sometimes people can fall into... so that I think's really important, that we are there very early on and we bridge those two statutory services"*

# Conclusions



There are multiple differing, complex levels of advantage and disadvantage in the BiBBS community, that appear to be related to specific vulnerabilities / protection from them.

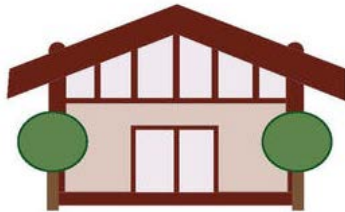
There are multiple, complex reasons for engaging in, and completing interventions

No surprise that one size does not fit all

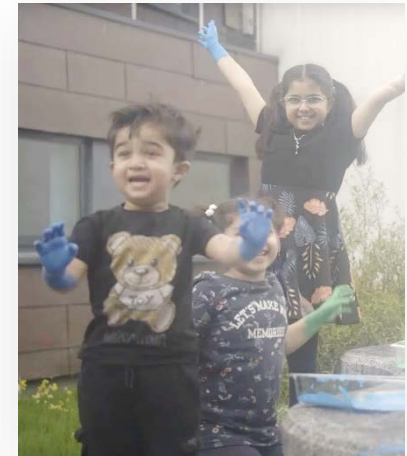
We need pathways through services that are flexible and complementary to meet family needs



# Adaptable pathways to improve equity?



# Stacks based on need?





Questions?