

## Better Start Bradford Innovation Hub

# HAPPY

## End of Contract Report

### January 2021

*This is a report provided by the Better Start Bradford Innovation Hub (BSBIH) for the Better Start Bradford (BSB) and the HAPPY team. The document provides an overview of the HAPPY project, its performance and findings from the implementation evaluation for the project's contract period. The design of this evaluation is described in more detail in the Evaluation Plan Summary, which was approved by key stakeholders from the BSBIH and BSB in August 2018.*

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Approved by:

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Produced for Better Start Bradford

## Executive Summary

### Project Summary

HAPPY is a key intervention in the 'Eat, Live, Love' theme of Better Start Bradford. The project is a parenting and healthy lifestyle programme aimed at preventing childhood obesity. HAPPY was developed as a targeted programme and aimed to reduce childhood obesity risk by engaging an at-risk group - women with overweight and obesity - during and after pregnancy, by promoting healthy behaviours and addressing known risk factors. The programme model includes delivery of 12 group sessions (6 antenatal sessions and 6 postnatal) for women with a body mass index (BMI) of 25 or more and was designed to reduce the risk of childhood obesity through promotion of effective parenting and healthy lifestyles for families with young children.

### Plans for evaluation

HAPPY is a theory based and culturally adapted intervention. A feasibility randomised controlled trial (RCT) of HAPPY, conducted in Bradford between 2013 and 2014, demonstrated that HAPPY was a feasible and acceptable intervention to the participating women as well as programme facilitators. Although the feasibility trial was not sufficiently powered to detect a definitive effect on outcomes for participants, results after 12 months were promising and indicated reduced risk of infant obesity in the intervention group compared to the control group.

For this reason the Innovation Hub had identified this project as suitable for Implementation, 'Before and after', and Effectiveness evaluations (see BSBIH Framework for Monitoring and Evaluating BSB Projects for evaluation categories). The intention was for a Trial Within Cohorts (TWiCs) design to be used for the Effectiveness evaluation, comparing outcomes for a random selection of participating women and their babies enrolled in the Born in Bradford's Better Start (BiBBS) cohort with other eligible women and babies in the BiBBS cohort who did not take part in HAPPY.

However, early in the delivery of HAPPY it became evident that recruitment of women into the project was low and was unlikely to reach the level required for the effectiveness evaluation. Efforts were made to optimise recruitment but the necessary levels were not reached and plans for an effectiveness evaluation were paused.

### Changes to the model

Early in the third year of the HAPPY contract, a decision was made to make further adaptations to the programme.

At the start of the COVID-19 public health crisis measurement of women's height and weight (needed to calculate BMI) at booking into the Maternity service became less consistent, making it difficult to identify women who would be eligible for HAPPY. In addition, delivery of the universal antenatal offer usually provided through Family Hubs was paused. For these reasons the decision was made to broaden the eligibility for HAPPY so that it became a universal offer. It was also decided that only antenatal sessions would be delivered. This changed the model from 12 weeks of content across the antenatal and postnatal periods, to 6 weeks of content delivered in the antenatal period only.

These changes present significant challenges to future evaluation of HAPPY. This is because the Theory of Change which forms the basis of the project and describes how it will bring about the intended outcomes no longer aligns with the current model. 6 sessions delivered in the postnatal period are a key part of the project Logic Model. It remains unclear which key elements, if any, may have been lost with the shortening of the programme. This issue was discussed with Family Links and Born in Bradford, who have Intellectual Property of the programme, and Barnardos who deliver the project and there has been agreement that should delivery of the 6 week antenatal programme continue, every effort should be made to explore if and how the new model delivers against the original aims of the project. However, this is likely to take some time.



## Executive Summary

Recruitment for the HAPPY project began in April 2018 with the programme delivery starting in May 2018. This report covers an evaluation period of 2 years and 7 months from 1st April 2018 to 31st October 2020.

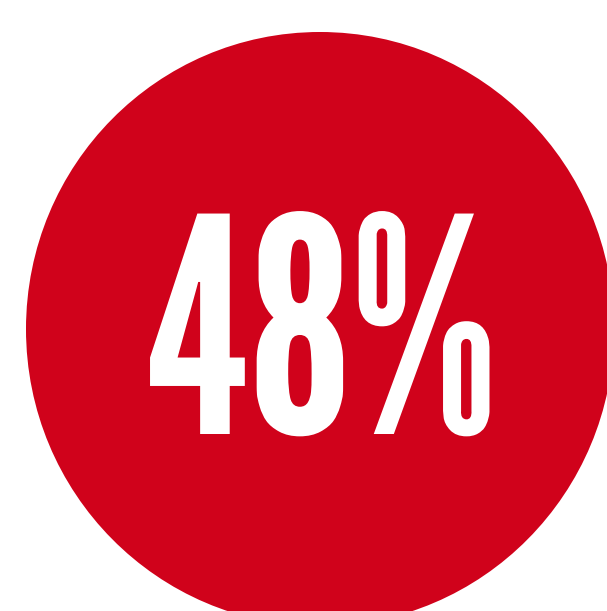
### Project performance

#### Data



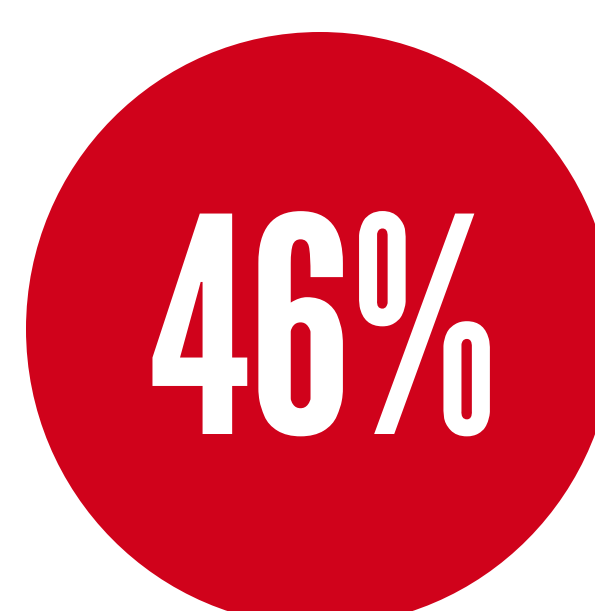
Data were made available in line with the timeline for this report. There were some issues around data quality and completeness which were identified during the preparation of the report. It is important for future evaluation to address this. For this reason, the rating for this project is **AMBER**.

#### Recruitment



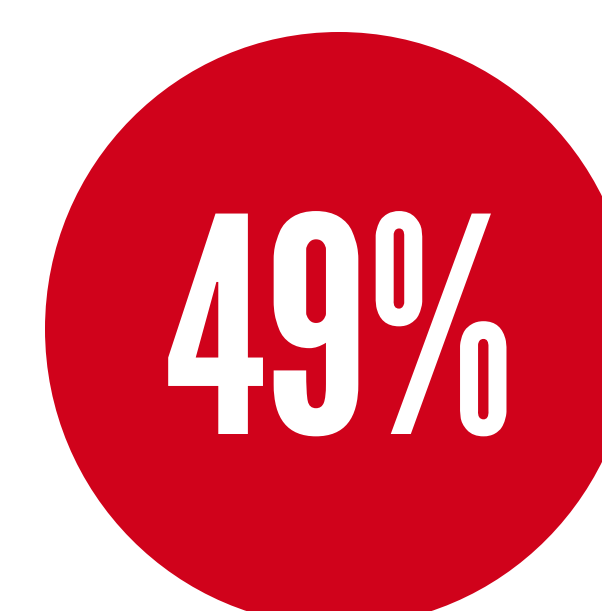
Recruitment targets related to the number of women enrolled onto the project. It was anticipated that 120 women would enrol each year, an overall target of 360 over the contract. This target was adjusted for the evaluation period and a pause in delivery of 1 month due to COVID-19 to 290. A total of 139 women were recorded as having enrolled onto a programme (48% of the target), placing the project in **RED**.

#### Completion



It was anticipated that 84 women would complete the HAPPY project each year. An overall target of 252 over the length of the contract. This was based on 70% of participating women completing a programme. This target was adjusted to account for the actual number of women who participated in a programme to 72. A total of 33 women completed a programme (46% of the target), placing the project in **RED**.

#### Implementation



It was anticipated that 12 HAPPY programmes would be delivered each year, each consisting of 12 sessions. An overall target of 432 sessions over the whole contract. Adjusting for change to the model part way through Year 3, the evaluation period, and the pause in delivery the target was amended to 312. A total of 154 sessions were recorded as delivered (49% of the target) placing the project in **RED**.

\*See Appendix (page 8) for progression criteria cut-offs

### Key findings

- Recruitment into the project has been lower than anticipated across the contract with low numbers of referrals. Less than 40% of those identified as eligible and initially contacted and offered HAPPY accept a referral which may suggest low acceptability of the project.
- Smaller proportions of White British and White Other women are being recruited than are seen in the eligible population.
- Low rates of recruitment into the project have meant programmes have been delivered with small group numbers. This has created a challenge in retaining those participants that do take part, and led to a high rate of programme cancellation (43% overall). More than half (56%) of planned postnatal programmes were cancelled due to low numbers.
- Completion of project satisfaction questionnaires has been relatively low but completion rates have improved with the introduction of an online version. Findings show those who have completed a questionnaire report high levels of satisfaction with the project.

#### Recommendation 1

Recommissioning of this project should be considered carefully. The original 12 week model of HAPPY has not been successfully implemented with consistently low levels of uptake and high numbers of cancelled programmes. Although uptake has improved slightly with the introduction of a new model, it remains lower than anticipated.

#### Recommendation 2

The adaptations made in developing the new model of the project mean that the project now requires a new Theory of Change and Logic Model. These will need to be tested in order to determine if and how the model delivers against the original aims of the project. This means the project is no longer effectiveness evaluation ready.

#### Recommendation 3

The increased obesity risk for children of women with overweight and obesity highlights a continuing need for early intervention. It is recommended that Better Start Bradford explore how the programme is currently meeting this need and how any future offer delivers against this need. The IH advises against developing new interventions.



# Project Performance

## Data



Data were made available in line with the timeline for this report. For the most part participant information was well complete, though some issues led to discrepancies between the summaries provided here, and information provided by the project team. An example of this was with consistency with which sessions are recorded as having been delivered or cancelled. The BSBIH will discuss all issues identified with the project team and believe most can be easily resolved, however at this time, the rating for this project is **AMBER**.

## Recruitment

Year 1   Year 2   Year 3



38%

of recruitment target met



50%

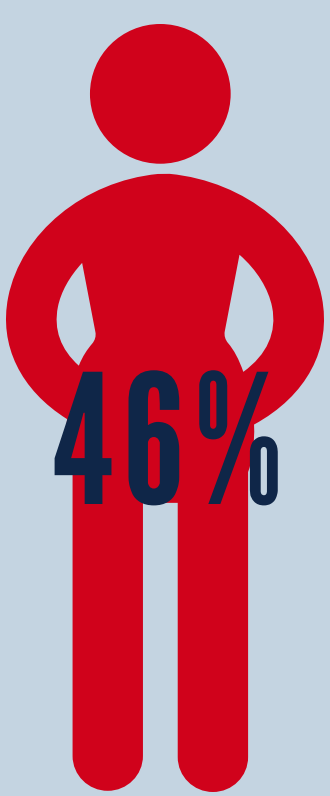


66%

The recruitment progression criteria for HAPPY related to enrolment onto the project. It was anticipated that 120 pregnant women would be enrolled onto a HAPPY programme each year (a total of 360 for the three year contract). Allowing for an evaluation period of 2 years and 7 months, and a month pause in delivery due to COVID-19 this was adjusted to 290 - 120 in Years 1 and 2, and 50 in Year 3.

In Year 1, 46 women enrolled onto a programme (38% of the target) placing the project in **RED**. In Year 2, 60 women enrolled onto a programme (50% of the target) placing them in **RED**. And in Year 3, 33 women enrolled onto a programme (66% of the target) placing them in **RED**. The project achieved 48% of the overall target having enrolled 139 women, placing them in **RED** for this progression criteria.

## Completion

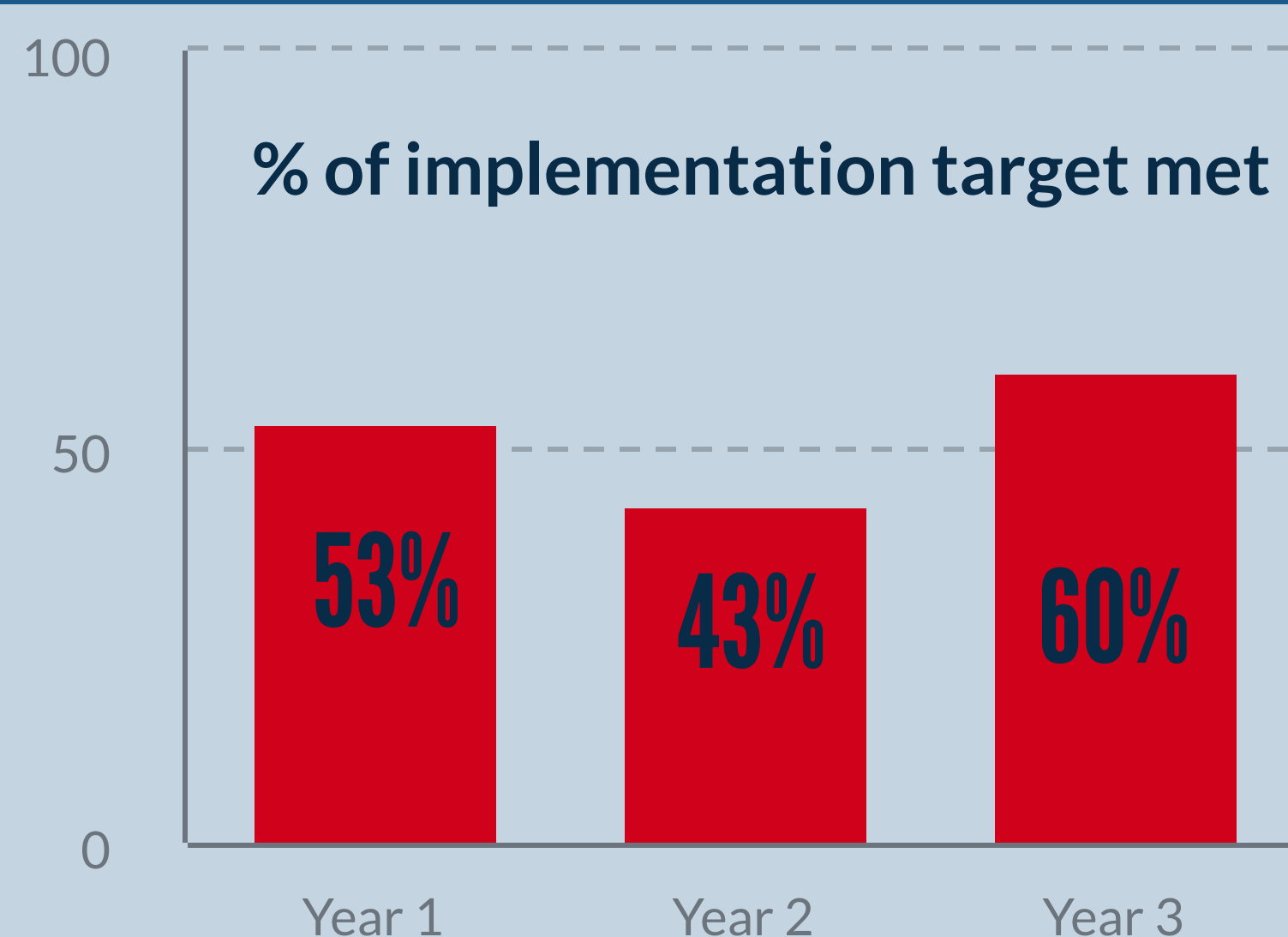


of completion target met

Completion of the targeted 12 week programme was defined as attending at least 8 of the 12 sessions. Completion of the 6 week universal programme was defined as attending at least 4 of the 6 sessions. It was anticipated that 84 participating women would go onto complete a programme each year based on 70% of anticipated participants completing. The length of the targeted programme meant it was not possible for women to participate and complete in the same year so rather than focus on annual targets this report focuses on the overall number of completers across the evaluation period. Furthermore, due to low levels of recruitment the target was adjusted to 72 so it related to the actual number of participating women (n = 102).

Data showed that a total of 33 women completed a programme, **46% of the overall target**, placing the project in **RED** overall. When this is broken down by programme model 20% of targeted participants completed a programme (which is **RED**), while 70% of universal participants completed a programme (which is **GREEN**).

## Implementation



It was anticipated that 12 HAPPY programmes would be delivered each year, each consisting of 12 sessions. An overall target of 432 sessions over the whole contract. Adjusting for change to the model part way through Year 3, the evaluation period, and the pause in delivery gave a target of 312. Annual targets were also adjusted to allow for the length of the targeted programme and delivery spanning multiple contract years (99 in Year 1, 150 in Year 2, and 63 in Year 3).

In Year 1, 52 sessions were recorded as delivered (53% of the target), in Year 2, 64 sessions were recorded as delivered (43% of the target), and in Year 3, 38 sessions were recorded as delivered (60% of the target) meaning the project was in **RED** each year. Overall the project met 49% of its target for Implementation, placing them in **RED** overall for this progression criteria.



# Recruitment

## Who was eligible for the project?

### Targeted 12 week programme

Pregnant women were eligible for the targeted HAPPY programme if:

- lived in the Better Start Bradford area
- they had overweight or obesity ( had a BMI of 25 or more) at the time of booking with Maternity Services.
- they were between 22 and 32 weeks gestation at the start date of a planned programme

### Universal 6 week programme

Pregnant women were eligible for the universal HAPPY programme if:

- lived in the Better Start Bradford area
- they were between 22 and 32 weeks gestation at the start date of a planned programme

Given the specific eligibility criteria for the project, the main referral pathway for women was via Perinatal Project Coordinators (PPCs) based within the hospital, who were able to identify eligible women and contact them to offer a referral to the project. Referrals could also come directly from midwives, other community settings, and from women themselves but self referrals were not introduced until November 2019.

Data collected by the PPCs showed that they identified around 33 eligible women each month. On average 80% of these women were contacted by the PPCs. Of those contacted an average of just over a third (36%) accepted the offer of a referral to the project (approximately 9 referrals a month).

Following adaptation of the project, eligibility criteria were reduced to make the programme universal. The PPCs remained the main source of referrals. Based on their data they identified around 40 eligible women each month. On average they were able to contact 80% of these women . The acceptance rate was also just over a third (36%) of contacted women (approximately 12 referrals a month).

The most commonly recorded reasons for declining a referral to HAPPY at the point of being contacted by the PPCs were:

- not being interested in the programme - some women specifically stated that because it was not their first pregnancy, they did not feel they needed the programme
- being too busy or not having time to attend - this was often due to other family commitments

## Referrals

The project recorded referrals for 318 unique women across the evaluation period. 154 in Year 1, 79 in Year 2, and 85 in Year 3.

263 (83%) of these referrals were contacted by the HAPPY team and offered the project. 108 in Year 1 (70% of referrals), 75 in Year 2 (95% of referrals), and 80 in Year 3 (94% of referrals).

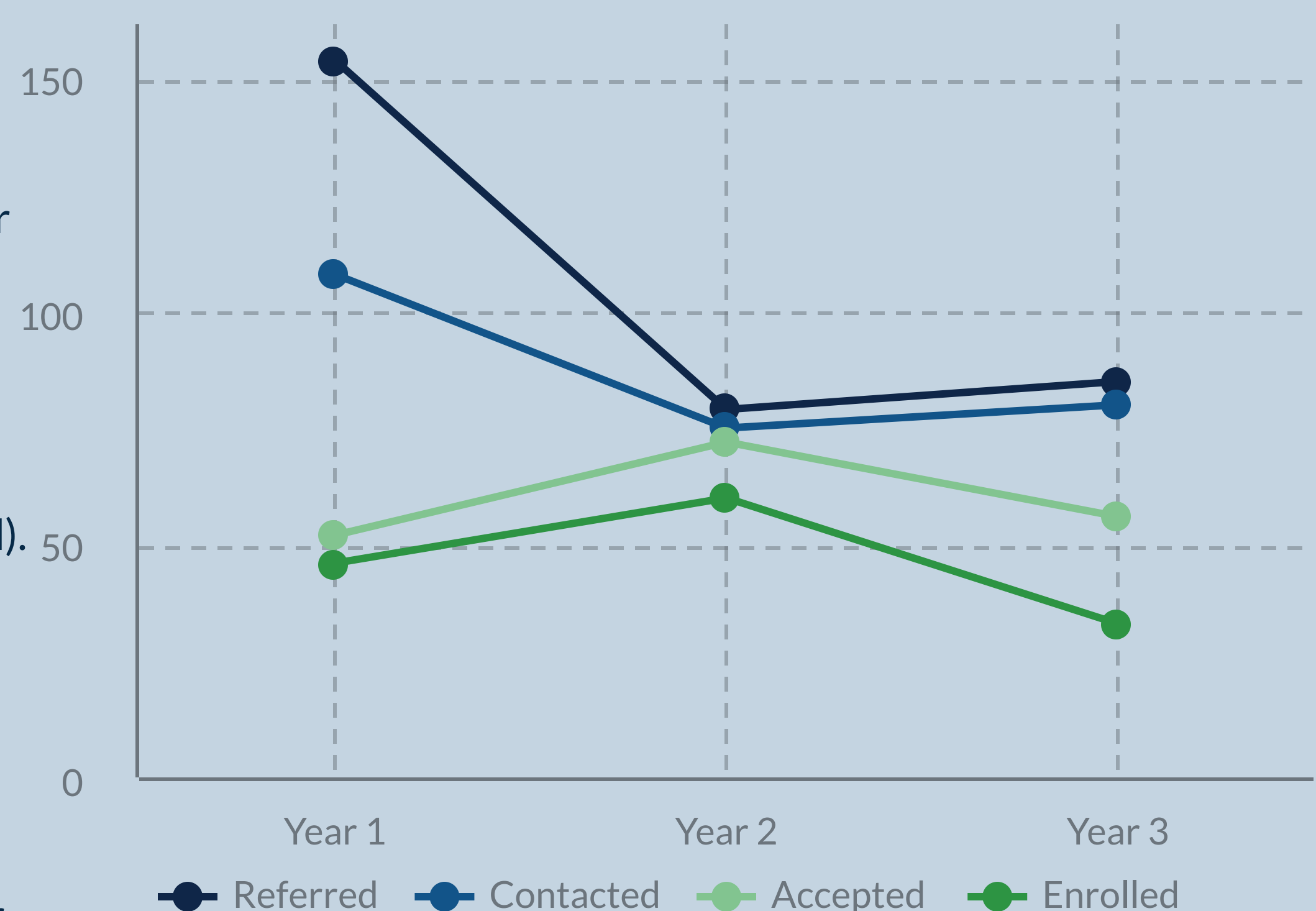
170 women accepted the offer of attending a programme at this first contact. 52 in Year 1 (45% of those contacted), 62 in Year 2 (83% of those contacted), and 56 in Year 3 (70% of those contacted).

These numbers suggest that while the overall number of referrals dropped between Year 1 and 2, the acceptance rate for the project significantly improved after the first year. It should be noted that Year 3 numbers do not reflect a full year and therefore may well meet or exceed those seen in Year 2 by the end of the contract year.

The most commonly recorded reasons women gave for not taking up the programme at the point of being contacted by the HAPPY team were:

- other competing time commitments, such as family or work commitments, or already being enrolled on an antenatal programme
- experiencing other barriers including language, ill health, religious observations, not wanting to travel to the venue

No. of women referred, contacted and enrolled per year





# Recruitment and Reach

## Changes to referral process

A possible explanation for the drop in referrals between Year 1 and 2 was a change in the referral process. At the beginning of Year 2, the PPCs began booking home visits with the HAPPY team for women requesting a referral. This change was made in response to a low proportion of referred women going on to enrol (21% in Year 1). It was thought that this may indicate that some women were saying yes to a referral to the project without an intention to participate. Booking home visits was felt to be a way of ensuring 'true' referrals. The above figure shows that a much higher proportion of referred women went on to enrol on the programme in Year 2.

These home visits are a key element of the Logic Model for HAPPY. The home visit made by the HAPPY team provides an opportunity for women to ask any questions they have about the project and start to develop a relationship with the HAPPY facilitators as well as to complete enrolment paperwork. With the introduction of the social restrictions due to COVID-19, these pre programme home visits were conducted virtually. A total of 130 women were recorded as having booked a home visit and 109 went on to receive one (85%).

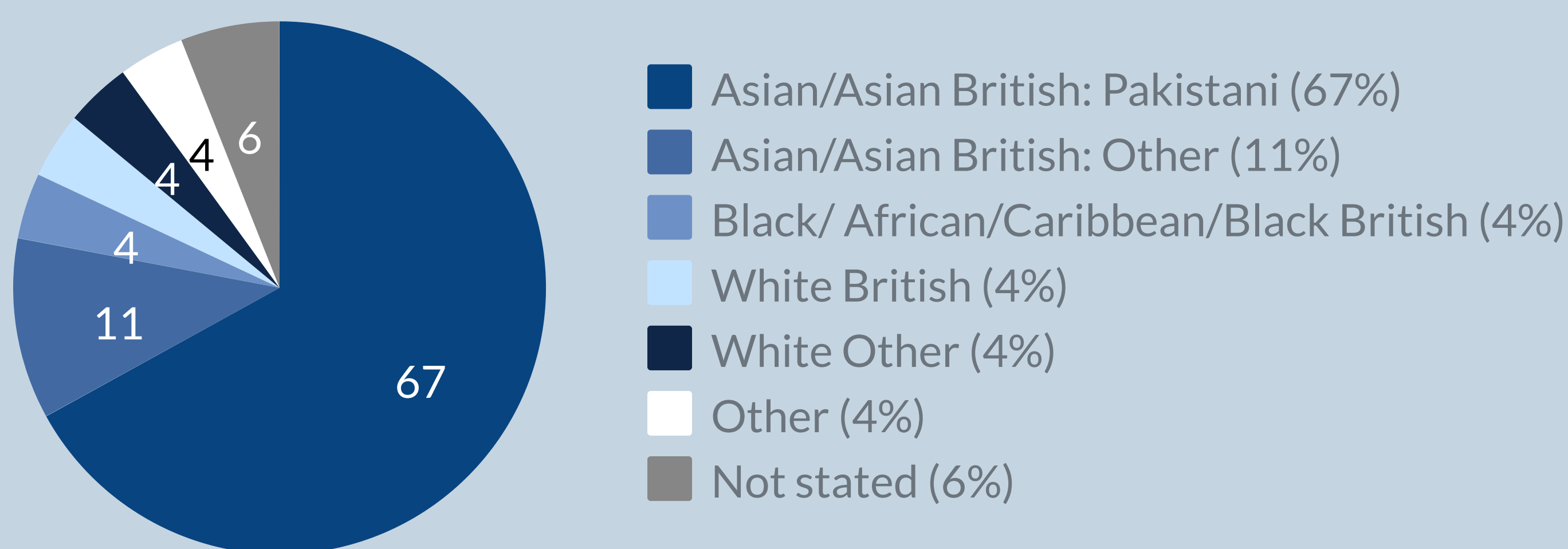
## Who enrolled on the project?

As stated on page 2 of the report, 139 women enrolled onto a HAPPY programme. Of these, 67% were Asian/Asian British: Pakistani and 11% Asian/Asian British: Other. 4% were White: Other and 4% were White: British. A further 4% were Black/ African/Caribbean/Black British.

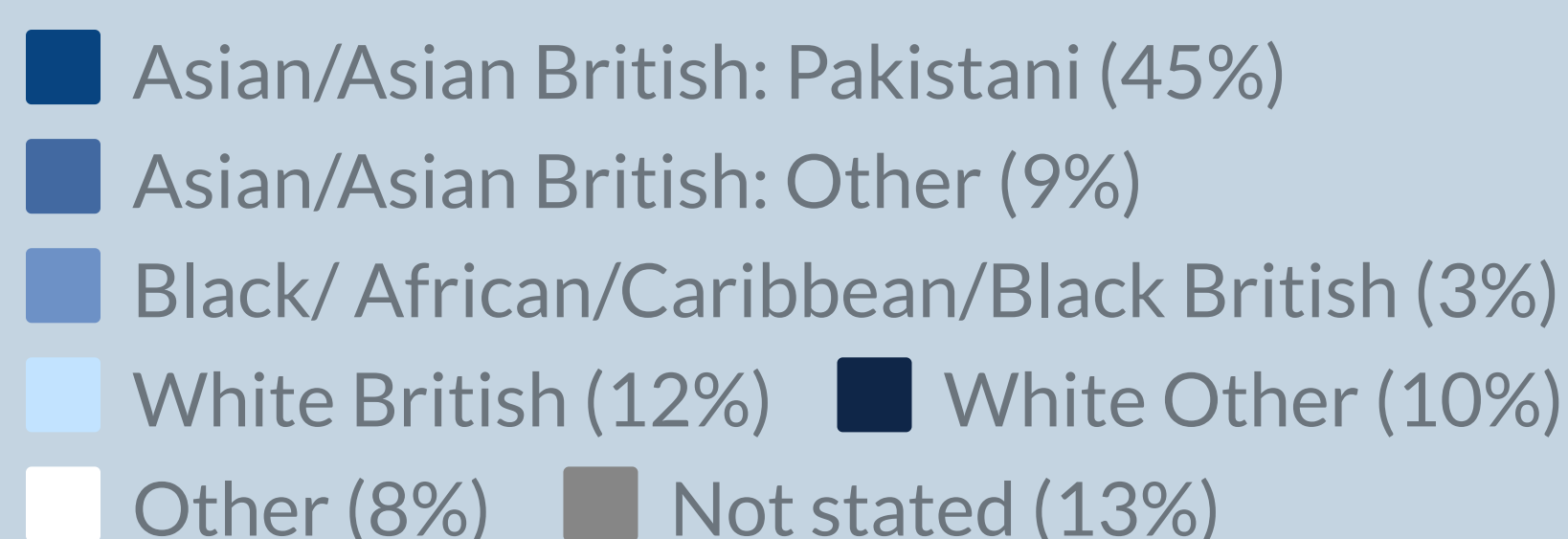
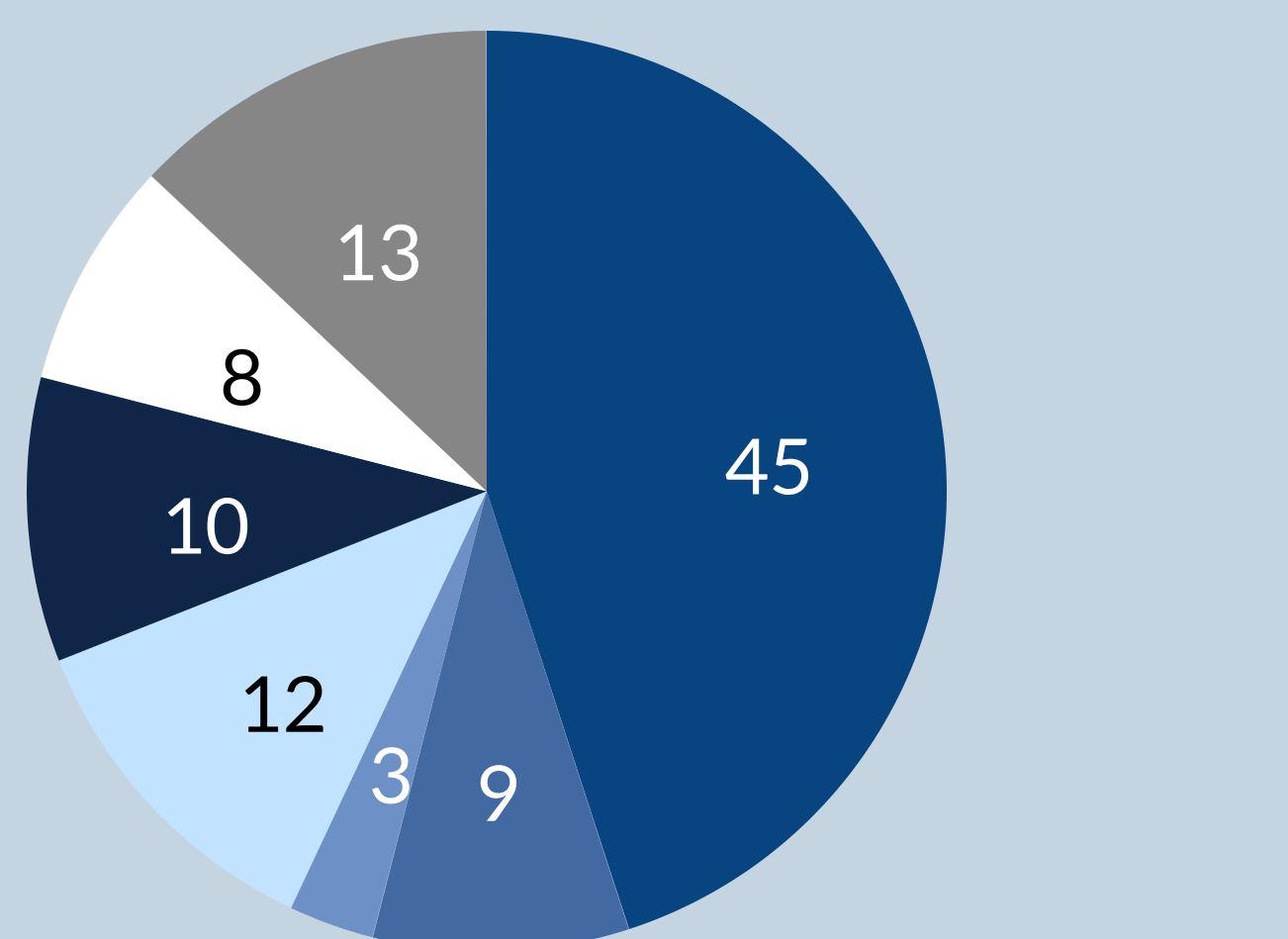
Due to the low numbers in other ethnic categories were grouped as other. This category includes mixed ethnicities and other.

The reach of the project was compared against the wider population of pregnant women living in the Better Start Bradford area (bottom left) and those within that population with a BMI of 25 or more (eligibility for the targeted programme, bottom right). This shows that project has reached a greater proportion of Asian/Asian British Pakistani and Black/ African/Caribbean/Black British women than we see in the wider population but reached a lower proportion of women of White British and White Other ethnicities.

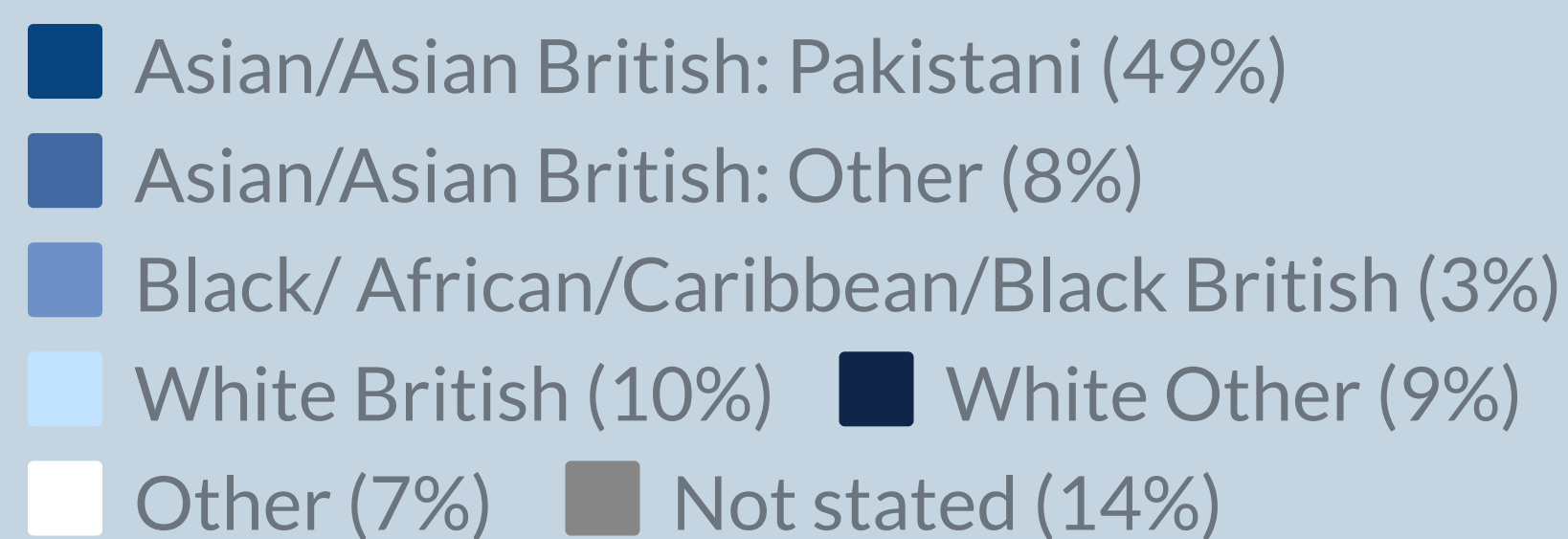
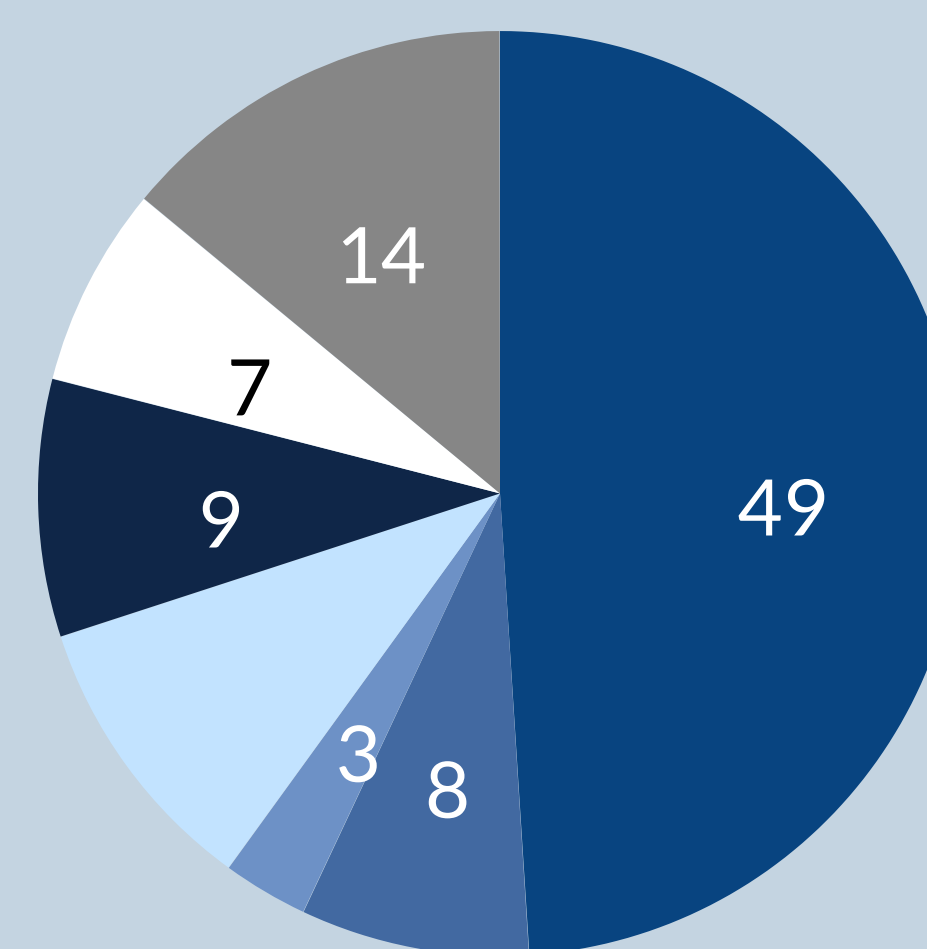
Ethnicity of pregnant women enrolled on the HAPPY project



Ethnicity of pregnant women in the BSB area 2018-2020



Ethnicity of pregnant women with a BMI 25+ in the BSB area 2018-2020



# Participation

## How many women took part in a programme?

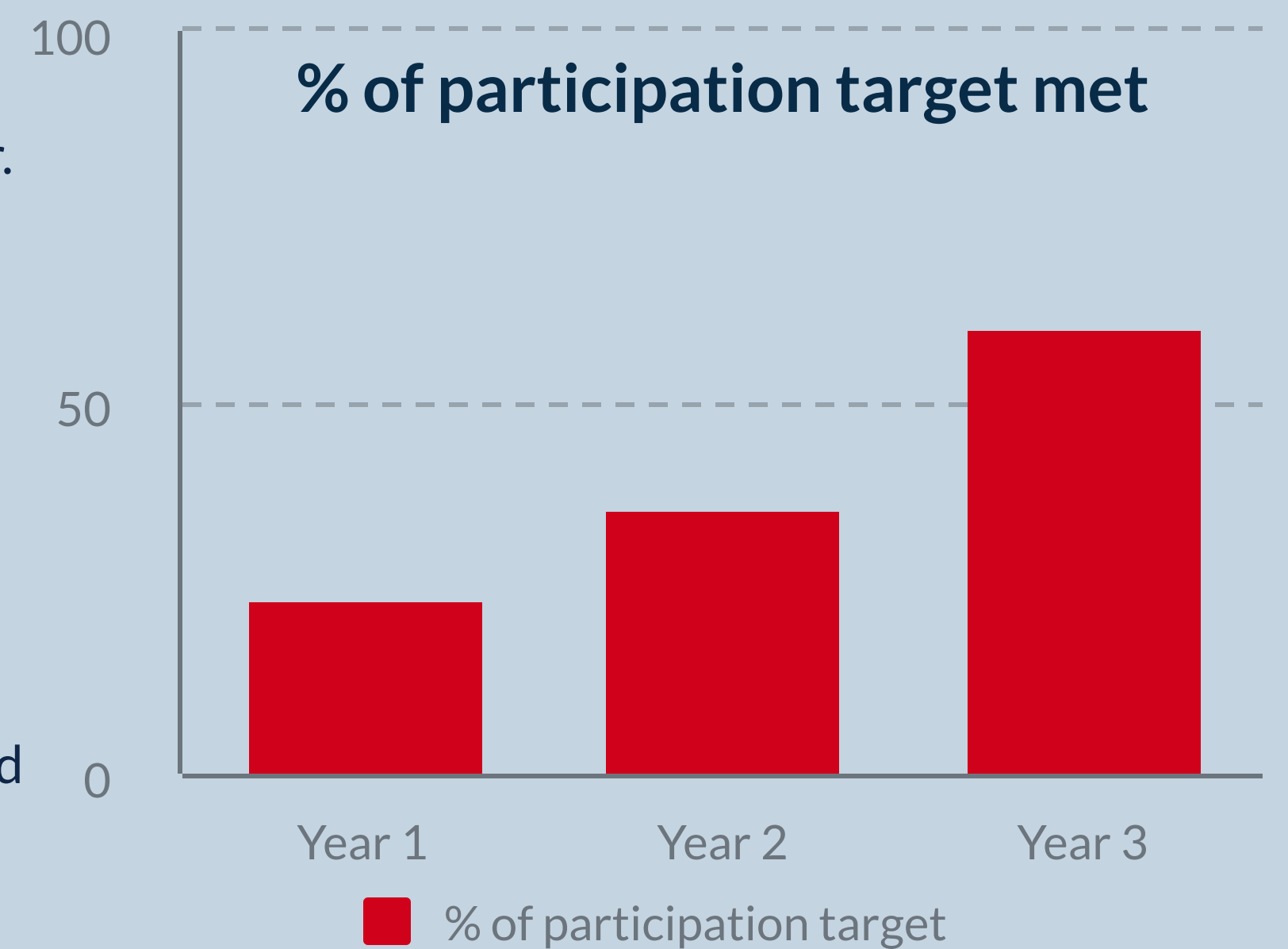
Participation was defined as attending at least one programme session.

It was anticipated that 120 women would participate in a programme each contract year. As previously stated, targets have been adjusted and the overall target for participation was 290 - 120 in Year 1, 120 in Year 2, and 50 in Year 3.

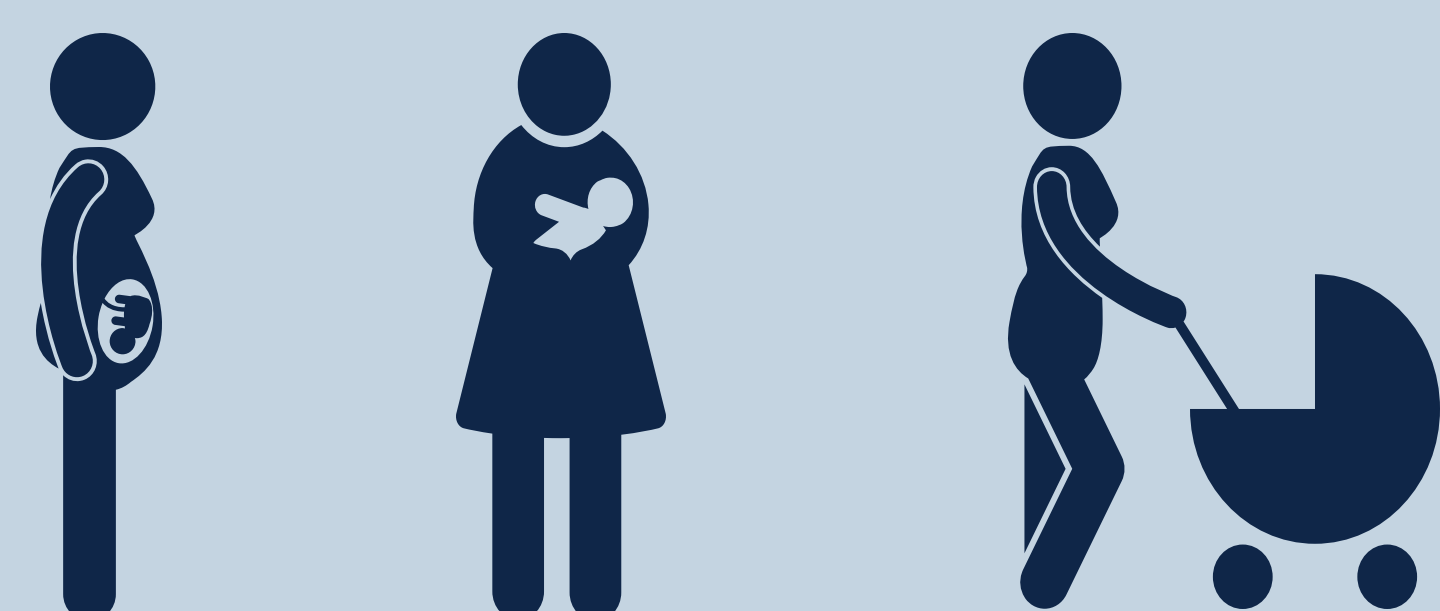
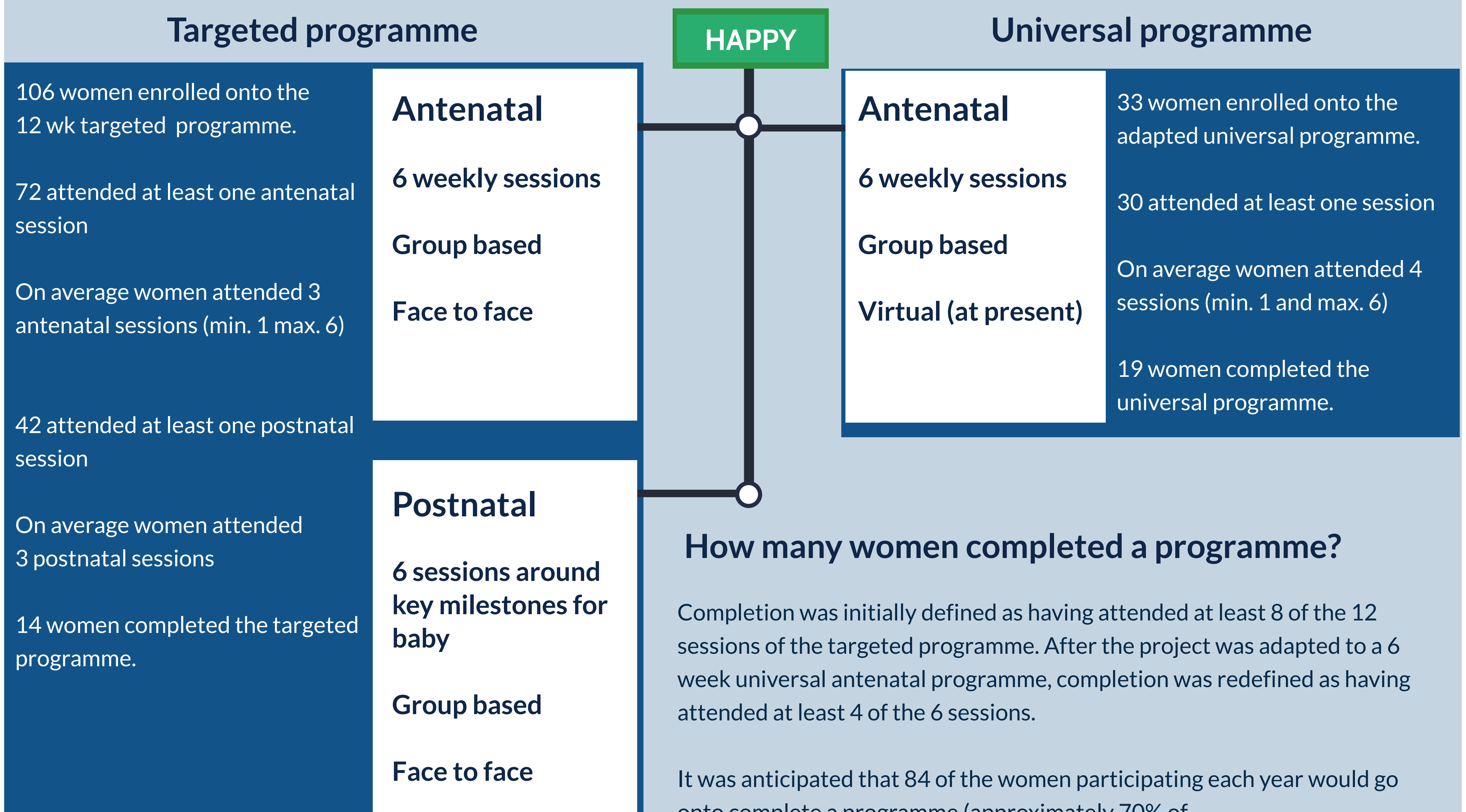
102 unique women were recorded as having participated in total (35% of the overall target). 29 in Year 1 (24% of the target), 43 in Year 2 (36% of the target) and 30 in Year 3 (60% of the target)\*.

Figures suggest participation has been low across the evaluation period but has increased year on year.

\*Calculated by determining the contract year a woman first attended a programme session.



## What did women's participation look like?





# Implementation

## Was HAPPY delivered as planned?

It was anticipated that the project would deliver 12 programmes each contract year - approximately one new programme starting each month. Given the length of the evaluation period and the pause in delivery the overall target for the report was adjusted to 29.

### Antenatal programmes:

All programmes should have included an antenatal element. 32 antenatal programmes were planned across the evaluation period. Data showed that 26 of these programmes had been delivered - meaning at least one session of the programme was recorded as having taken place - by the end of the evaluation period. The project therefore achieved 90% of the target for programme delivery.

10 of the 26 antenatal programmes were recorded as having been delivered in full (39%) which means all 6 sessions took place and were attended.

In Year 1, 8 of the 12 planned programmes were delivered (67% of anticipated) and 4 of these were delivered in full (33%). A total of 5 programmes were cancelled, 4 with no sessions recorded as having taken place, and 1 after 2 sessions of delivery.

In Year 2, 11 programmes were delivered (92% of anticipated) with 3 delivered in full. 6 programmes were cancelled, 1 with no sessions recorded as having taken place, and 5 with 3 or less sessions delivered.

In Year 3, 6 programmes were recorded as delivered (150% of anticipated) and 3 of these were delivered in full (50%). 1 programme was cancelled with no sessions delivered.

With the exception for 1 programme cancelled due to COVID-19 in Year 3, the 12 other antenatal programmes were cancelled because minimum attendance was not met. A total of 107 antenatal sessions were delivered (64% of anticipated).

### Postnatal programmes:

If all planned postnatal programmes had taken place, 25 would have been delivered by the end of the evaluation period, with 21 fully delivered in this time. 12 of these programmes did not take place as the preceding antenatal programmes had been cancelled. A further 2 were cancelled because minimum attendance was not met. In total 56% of planned postnatal programmes were cancelled. From November 2019, where minimum attendance was not met, postnatal programmes were delivered to women 1:1 to allow them the opportunity to complete the programme. From July 2020 the postnatal element of the programme was scrapped.

9 postnatal programmes were recorded as having been delivered with a further 2 delayed because of COVID-19. Of these 9, 7 were due to have finished before the end of the evaluation period with 2 still in progress. A total of 40 postnatal sessions were recorded as delivered (28% of anticipated). While postnatal programmes tended to be cancelled because minimum attendance was not met, sessions tended to be cancelled because participants did not attend for reasons including last minute family commitments, health issues, moving out of area, or becoming uncontactable.

### Whole programmes:

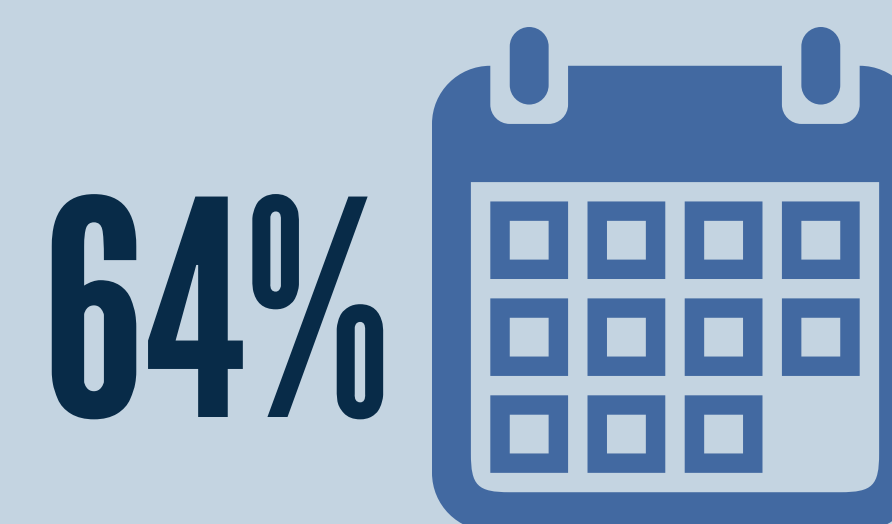
Of the targeted 12 week programmes, 1 was delivered in full (all 12 sessions). The average number of sessions delivered across all 23 programmes was 5. The average number of sessions delivered where both antenatal and postnatal elements took place was 9 (5 antenatal and 4 postnatal).

Of the universal 6 week programmes, 3 out of 5 were recorded as being delivered in full. The average number of sessions delivered was 5.

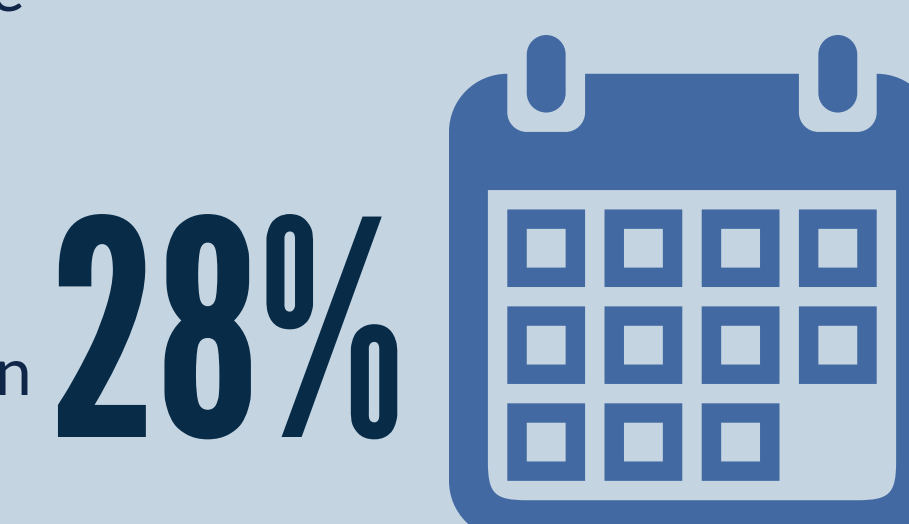


90%  
of anticipated programmes delivered\*

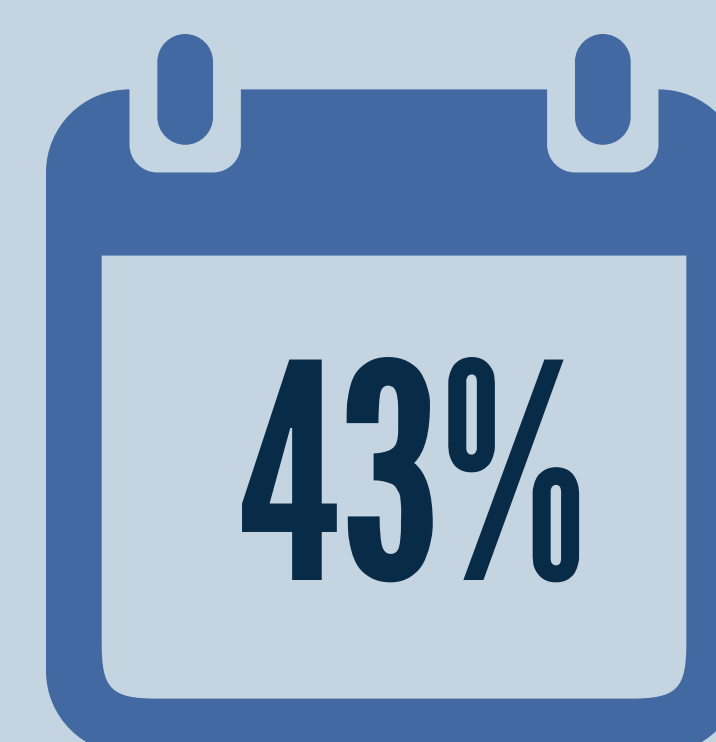
\*at least one session took place



64%  
of anticipated antenatal sessions delivered



28%  
of anticipated postnatal sessions delivered



43%  
of programmes were cancelled\*\*

\*\*before or after delivery had started



# Satisfaction

## What did parents/caregivers say about the support they received?



26 women completed and returned satisfaction questionnaires at the point when data was collated for this report. Scores of 4 or more in response to questions demonstrate satisfaction with the project. However, results should be interpreted with caution given the low number of respondents.

**100%** of respondents had a median score of 4 or more

**100%** of respondents agreed or strongly agreed that the project was helpful to them

**100%** of respondents agreed or strongly agreed that they were satisfied with the support they received

**100%** of respondents agreed or strongly agreed that the project gave them useful information

**100%** of respondents agreed or strongly agreed that the project was easy to access

**100%** of respondents agreed or strongly agreed that they would recommend the project to family or friends

**100%** of respondents were happy with the project overall

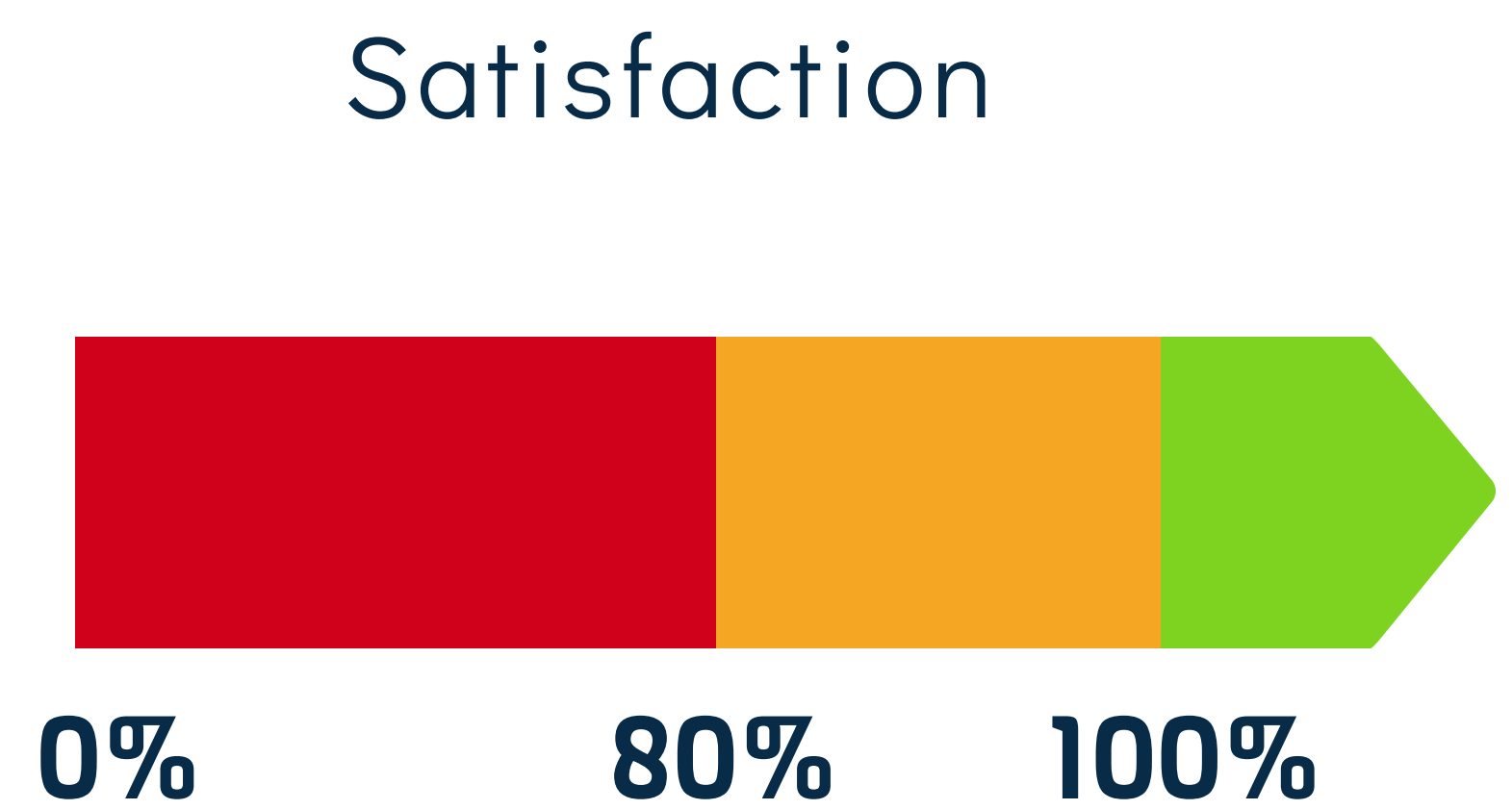
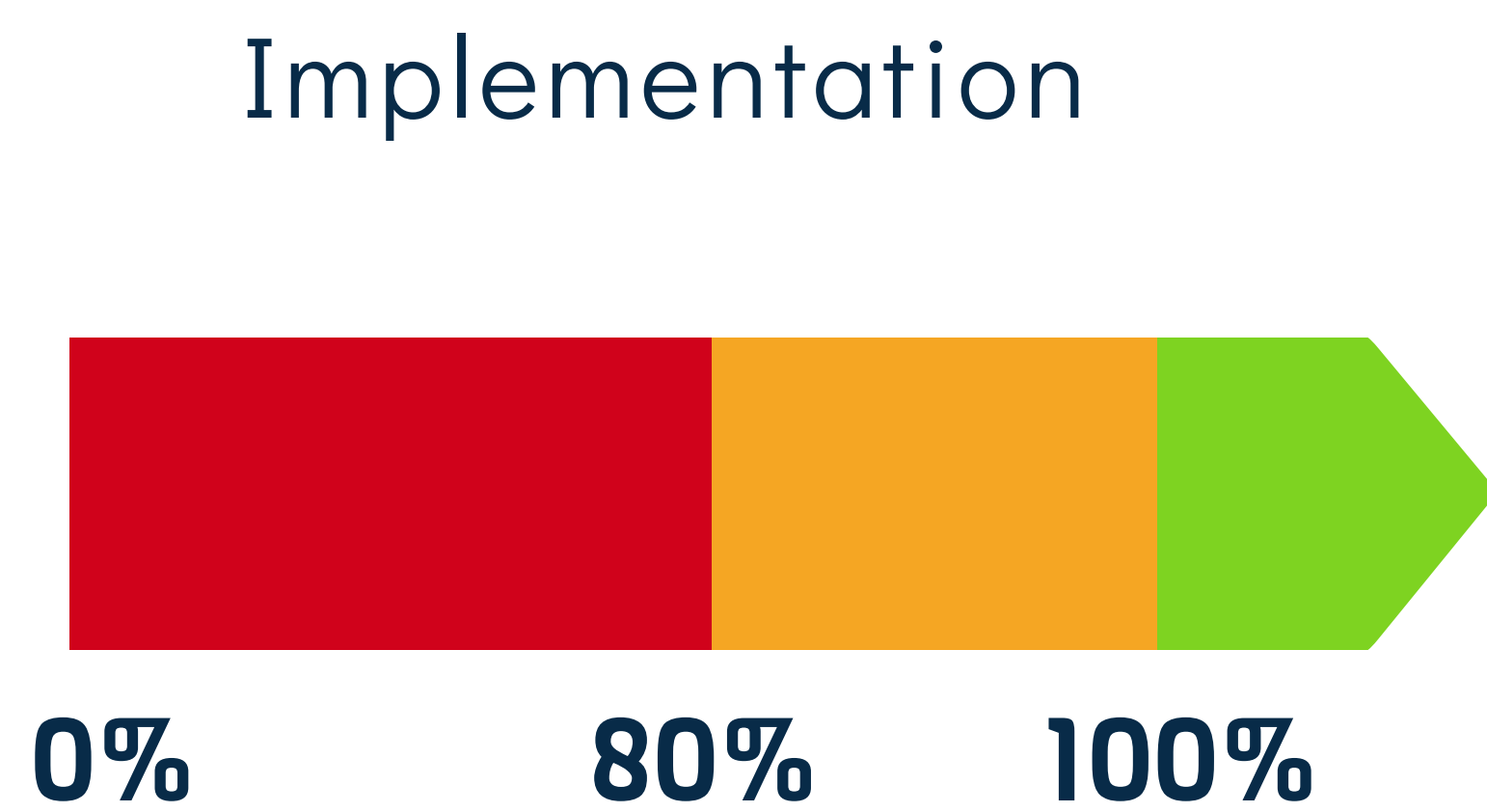
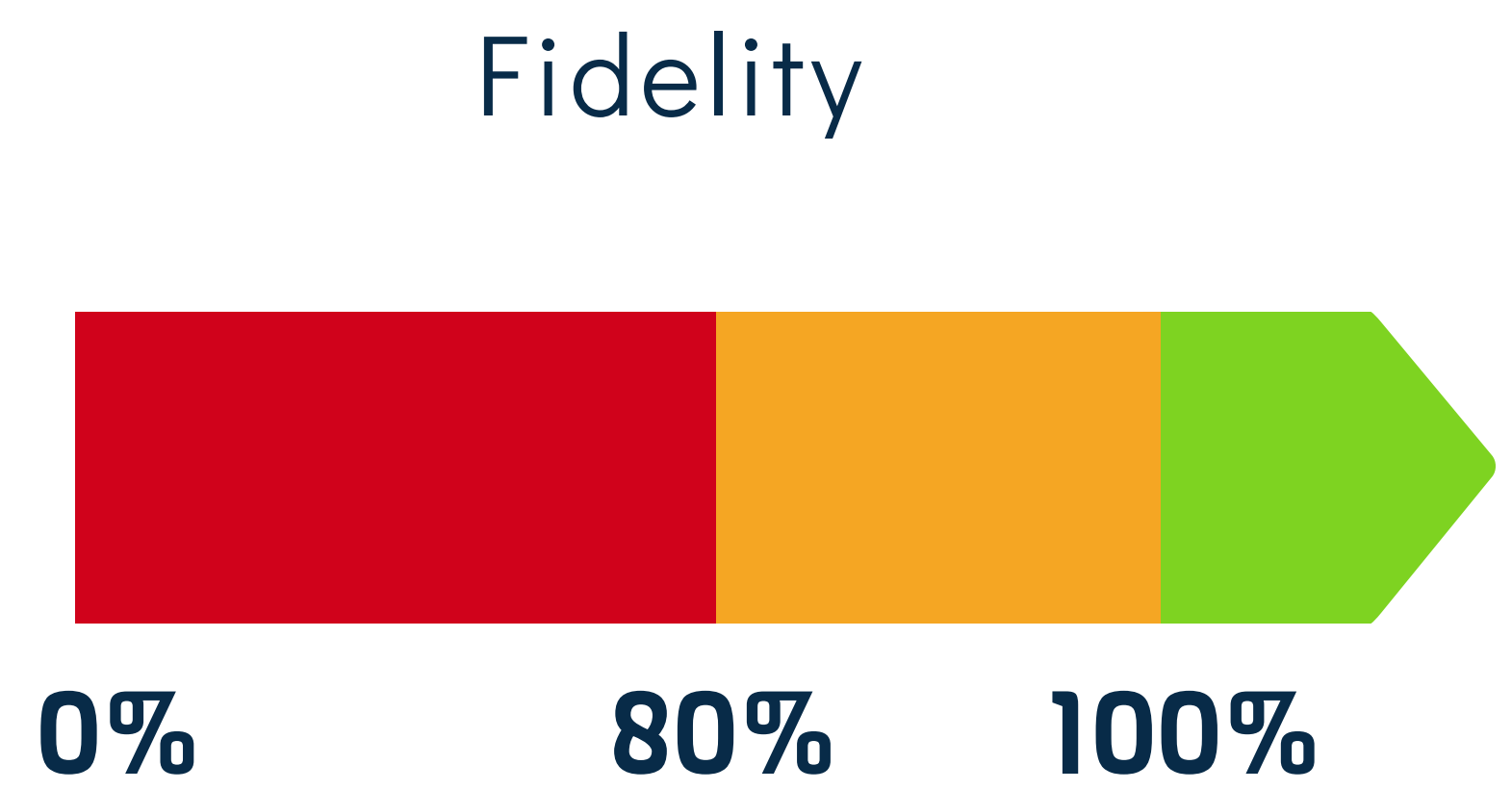
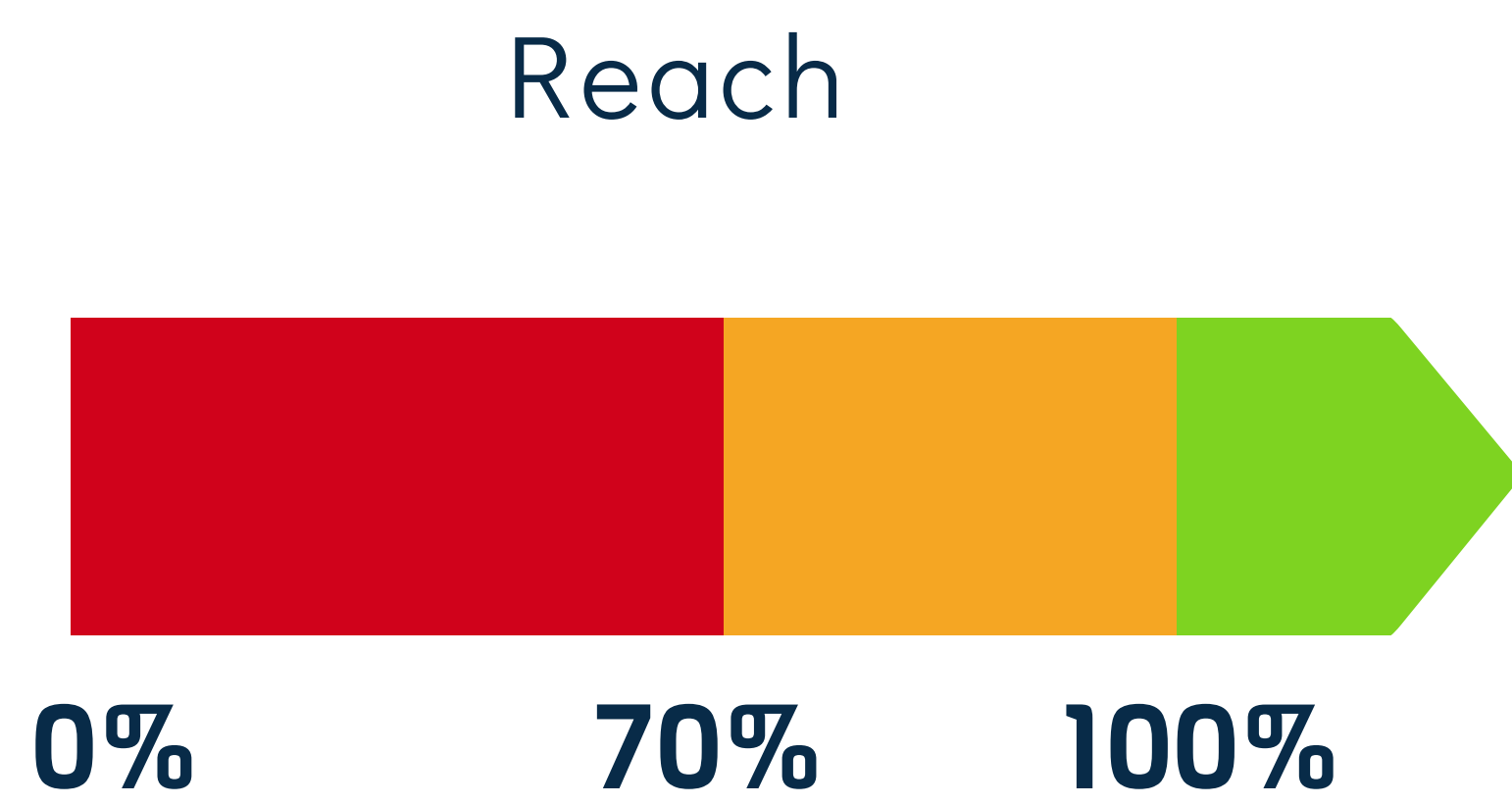
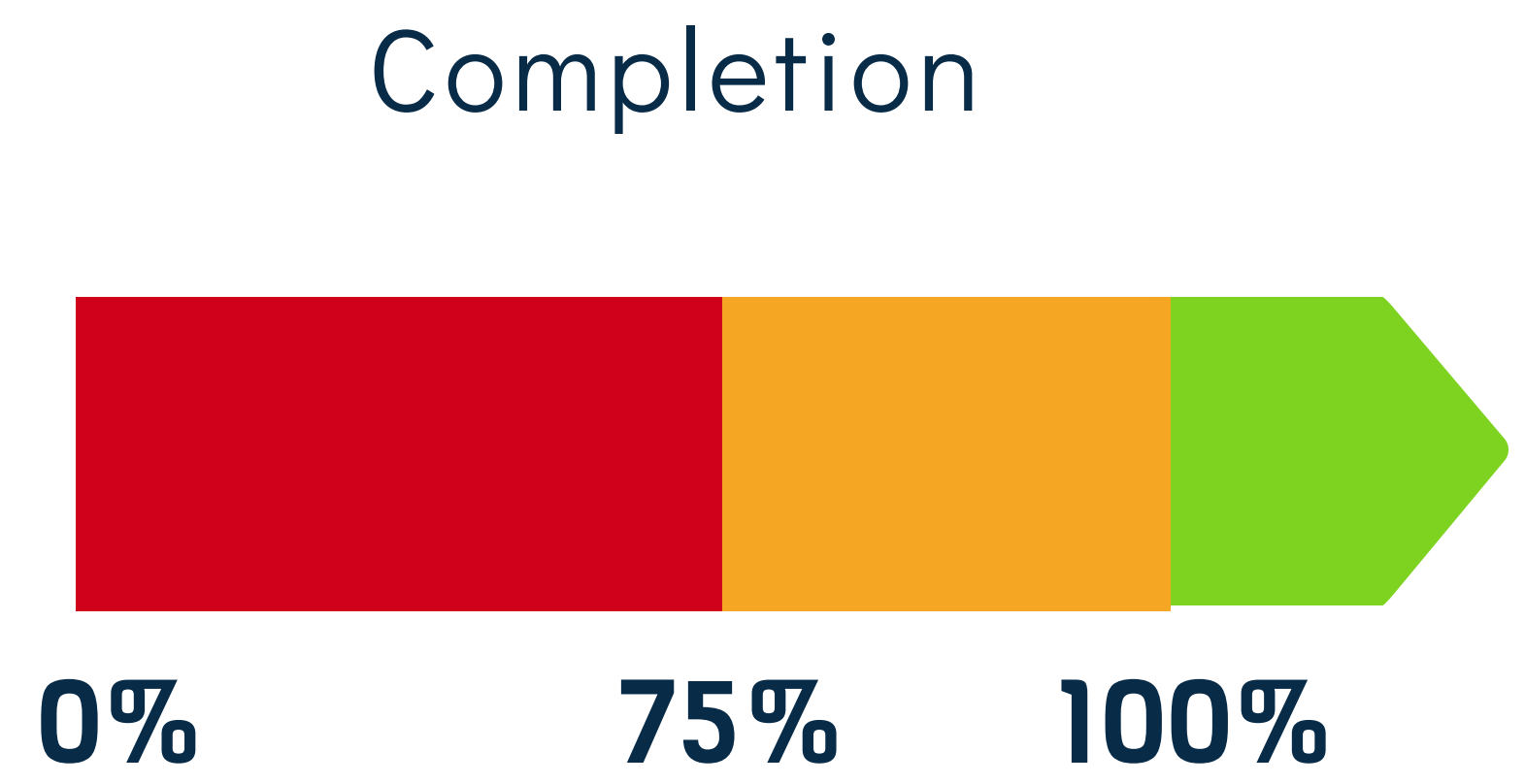
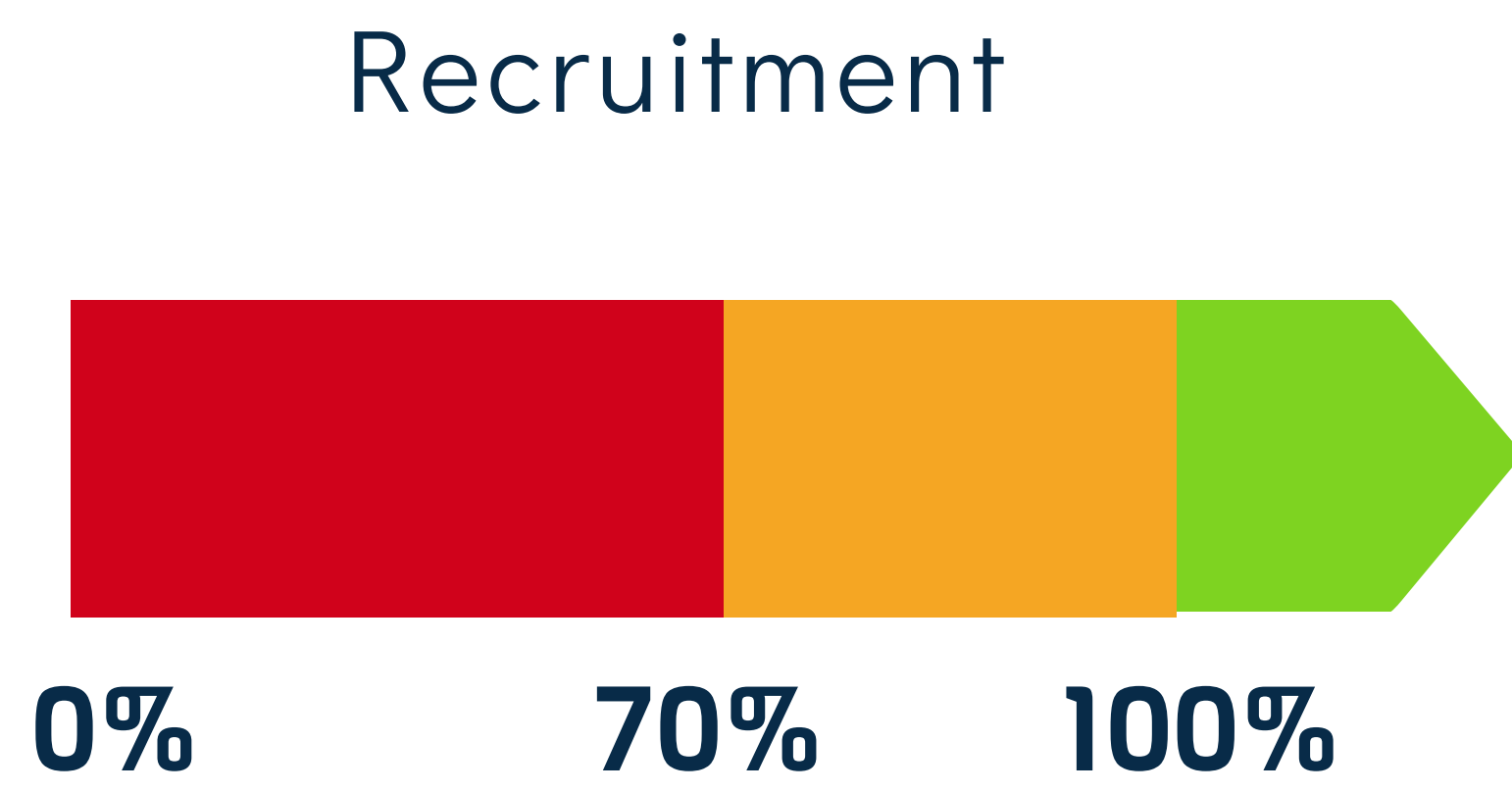
*"Such a wonderful course with lovely co-ordinators. Would highly recommend to others given the course contents."*

*"This session was very helpful and team was supporting. This should carry on. Got helpful information about my own health and baby as well."*

*"As it was my first time having a child, I think it would have been better to go through different types of deliveries, so we know what choices are out there and whats best for us. And also show different exercises to do during and after pregnancy."*



## Appendix - Progression Criteria Cutoffs



For more information on how progression criteria and associated cut-offs have been developed please see Bryant, et al., 2019 Use of progression criteria to support monitoring and commissioning decision making of public health services: lessons from Better Start Bradford. BMC Public Health