

# spear

centre for sport, physical education  
& activity research



More people  
More active  
More often

## This Mum Moves Annual Report Client Draft



March 2021

# About *spear*

The Centre for Sport, Physical Education & Activity Research (*spear*) is located within the Faculty of Science, Engineering and Social Sciences at Canterbury Christ Church University. *spear* undertakes a range of evidence-led analyses, from critical commentaries and reflections on current policy and practice, to commissioned research, evaluation, and consultancy.

The Centre's research is funded by a range of national and international funders such as the International Olympic Committee, World Health Organisation, Terre des Hommes, Department of Health, Department for Education, Activity Alliance, Access Sport, Premiership Rugby, Chance to Shine, Mencap, Sport England and the Youth Sport Trust. Recent work has focused on physical activity, health and wellbeing in schools and communities.

Research conducted by *spear* helps guide and inform public policy by contributing to the wider evidence base used by policy makers, providing a rationale for government and commercial investment, and steering programme improvements that enhance the experience of practitioners and participants.

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This Mum Moves evaluation undertaken by *spear* and commissioned by ukactive. Report produced by *spear*.

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# Context

## About This Mum Moves

This Mum Moves is a National Lottery and Sport England funded project delivered by ukactive. The project endeavours to improve the physical and mental wellbeing of pregnant women and new mums by reducing the decline in physical activity levels during and after pregnancy. Following specially designed training, healthcare professionals are empowering pregnant women and new mums to stay active when life changes through delivery of clear and consistent advice based on current guidelines within routine pre and postnatal appointments.

Ukactive are working with NHS trusts in the geographical areas of Sheffield, Bexley, Sunderland, Cambridge and Plymouth to support the training of healthcare professionals using a cascade training model. In addition, the study is recruiting pregnant women and new mums from these areas to complete surveys detailing their physical activity perceptions and experiences during each trimester of their pregnancy and postpartum.

## About *spear's* evaluation

*spear* has been commissioned from October 2018 to March 2022 to conduct an independent evaluation of This Mum Moves. The aim of the evaluation is to appraise the programme delivery and capture the impact of This Mum Moves on key programme outcomes. This Annual Report examines the impact of This Mum Moves, and the experiences of pregnant women, new mums and healthcare professionals involved. It also summarises evaluation progress to date and work to be completed, with specific references to challenges and adaptations arising from the ongoing COVID-19 pandemic.

Data collection and analysis will continue throughout 2021 to inform a Final Report in February 2022. Data from online surveys, telephone interviews and site visits provide insight into the perceptions, attitudes and experiences of healthcare professionals, as well as physical activity and healthcare experiences of pregnant women and new mums. Suggested programme actions to support the development of This Mum Moves are also presented and the effect of the COVID-19 pandemic on the target recruitment and measurable data collection explored.

## This Mum Moves outcomes

### *...for pregnant women and new mums*

1. Maintaining or increasing physical preparation to give birth and aiding physical recovery post childbirth
2. Improved measures of mental wellbeing, individual development, social and community development and economic development throughout pregnancy and post childbirth
3. Increased awareness of guidelines for being active during pregnancy, and barriers and enablers to being active during pregnancy and post childbirth
4. Establishment of the point at which physical activity drops off

### *...for healthcare professionals*

1. Delivery of ambassador training for This Mum Moves ambassadors and cascade training for practitioners
2. Increased confidence, knowledge and skills surrounding physical activity guidelines and imbedding these in professional practice
3. Increased awareness and support of the government's physical wellbeing outcomes

## Evaluation questions

1. Has the programme empowered pregnant women and new mums to make informed physical activity choices throughout pregnancy and beyond?
2. Has the programme impacted on the physical activity levels and wellbeing of pregnant women and new mums?
3. Has the programme impacted on the confidence, skills and knowledge of healthcare professionals to deliver effective physical activity messages to pregnant women and new mums?
4. Has the programme affected awareness and support of the Chief Medical Officers' guidelines for physical activity among healthcare professionals?

## Evaluation progress & planning

	Progress to date	Work remaining
<b>Relationship management</b>	<p>Monthly telephone updates with ukactive</p> <p>Monthly updates to the CPMS system and NHS trusts with recruitment figures and details</p>	<p>Ongoing updates throughout the remainder of the project (now extended until February 2022)</p> <p>Data collection to continue until December 2021</p>
<b>Consent to Contact forms</b>	<p>Healthcare professionals complete an online form providing contact details of eligible women interested in participating in the study (survey completion)</p> <p>392 consent to contact forms completed by healthcare professionals across all 5 sites and processed by <i>spear</i></p>	<p>Ongoing receipt of consent to contact details by midwives and health visitors at all study sites</p> <p>New inputs checked twice weekly by <i>spear</i> and contacts provided with links to the appropriate survey followed by a reminder 2 weeks later</p>
<b>Pregnant women and new mums' surveys</b>	<p>4 surveys developed and hosted online and accessed via bespoke weblinks</p> <p>66 surveys completed at timepoint 1 (trimester 1) 40 surveys completed at timepoint 2 (trimester 2), 42 surveys completed at timepoint 3 (trimester 3), and 11 surveys completed at timepoint 4 (6 months postpartum)</p> <p>Data analysed to provide preliminary insights</p>	<p>Tracking and monitoring of participants to send surveys and reminders at the appropriate time of their pregnancy/postpartum at all study sites</p> <p>Data to be collated and analysed for Final Report February 2022</p>
<b>Healthcare professionals' surveys</b>	<p>4 surveys developed and hosted online and accessed via bespoke weblinks</p> <p>336 pre-training surveys, 226 post-training surveys, 18 3-month post and 17 6-month post surveys from ambassador training and health visitor cascade training included in this analysis</p>	<p>Tracking and monitoring of participants to send surveys and reminders at the appropriate time prior to or following their engagement in training</p>
<b>Case Studies</b>	<p>2 case studies completed based on the training experiences of healthcare professionals and imbedding this in practice</p> <p>2 case studies completed exploring the physical activity experiences of pregnant women and new mums (including the effects of COVID-19 and lockdown on physical activity)</p>	<p>Site visits were unable to take place, therefore telephone interviews were conducted to enrich insight data and collate case examples</p> <p>Analysis of data from site visits to develop case studies and inform Annual and Final Reports</p>
<b>Delivery of Reports</b>	<p>2020 Interim Report completed</p> <p>4 case studies completed</p> <p>2021 Annual Report completed</p>	<p>Analysis of final data</p> <p>Completion and delivery of case studies as developed</p> <p>Completion and delivery of Final Report to ukactive February 2022</p>

## Engagement

Programme delivery for This Mum Moves started in November 2019. In the months since, study activities, healthcare professionals' training and participant recruitment have been impeded by the COVID-19 pandemic. Necessary amendments have been made to ensure the programme can continue with the smallest possible impact on recruitment, which has resulted in an extension to the data collection period through to the end of 2021. Since the launch of ambassador training in Sheffield, and following a delay during spring/summer 2020, a further four geographical locations joined the study in autumn/winter 2020. Recruitment of both healthcare professionals and pregnant women is now ongoing in Sheffield, Bexley, Cambridge, Sunderland and Plymouth.

Face-to-face ambassador training sessions were delivered in 2019 to 20 healthcare professionals in Sheffield. Since then, a further 78 healthcare professionals have attended This Mum Moves ambassador training sessions hosted via online video conferencing software. Ambassadors then deliver cascade This Mum Moves training to their teams within their healthcare trusts. Pre and post-training, healthcare professionals complete surveys exploring their confidence, skills and knowledge relating to providing physical activity guidance for pregnant women and new mums. They are later invited to complete follow-up surveys after 3 and 6 months to assess sustained impact on their professional practice.

All sites are supporting recruitment of pregnant women and new mothers by completing consent to contact forms with eligible participants during routine prenatal appointments. Healthcare professionals who have received the training provide pregnant women with very brief advice, a This Mum Moves leaflet, and invite them to participate in the research. Pregnant women and new mums receive e-mail links from *spear* to the online survey that corresponds with their stage of pregnancy. Follow-up surveys are then sent out by *spear* at specified points during pregnancy and postpartum. The surveys explore the physical activity behaviours, experiences and attitudes of pregnant women and new mums.

Due to changes in healthcare provision, healthcare professionals have reported difficulties in recruiting pregnant women during the COVID-19 pandemic. Shorter appointment times cannot accommodate anything deemed 'non-essential' and in some cases, appointments have been moved to telephone or online format. This restricts healthcare professionals' capacity to engage in relaxed and informal conversations within which they can promote physical activity. In addition, answering questions and concerns relating to the pandemic has limited available time to discuss This Mum Moves.

### Value of This Mum Moves

"

*We have a great opportunity to give women information and resources on how they can keep active and the benefits during pregnancy and postnatally. We often establish a good rapport during early pregnancy and have a working relationship throughout and postnatally. In our area of community, we aim to provide continuity so women feel trust in our care and I feel they would definitely take this information on board.*

Midwife, Cambridgeshire

"

*We have ideal opportunities with pregnant women/new mums to help reinforce the importance of keeping fit throughout pregnancy and postpartum.*

Health Visitor, Bexley

"

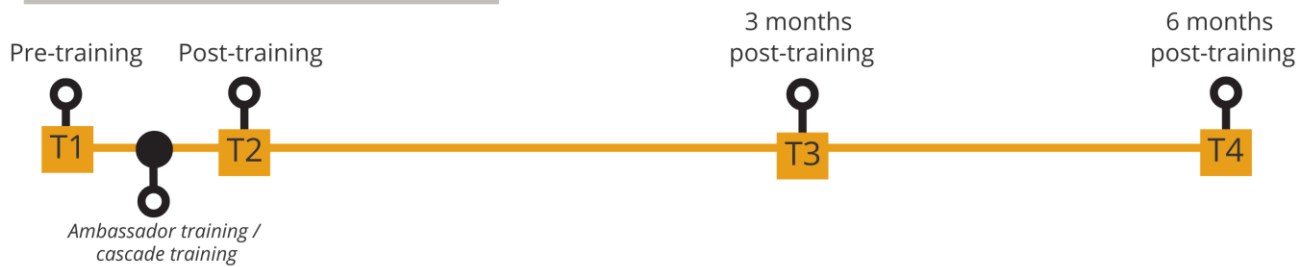
*As part of the booking process, we are required to discuss physical activity. It will be beneficial to have something more structured to help us do this.*

Midwife, Sunderland

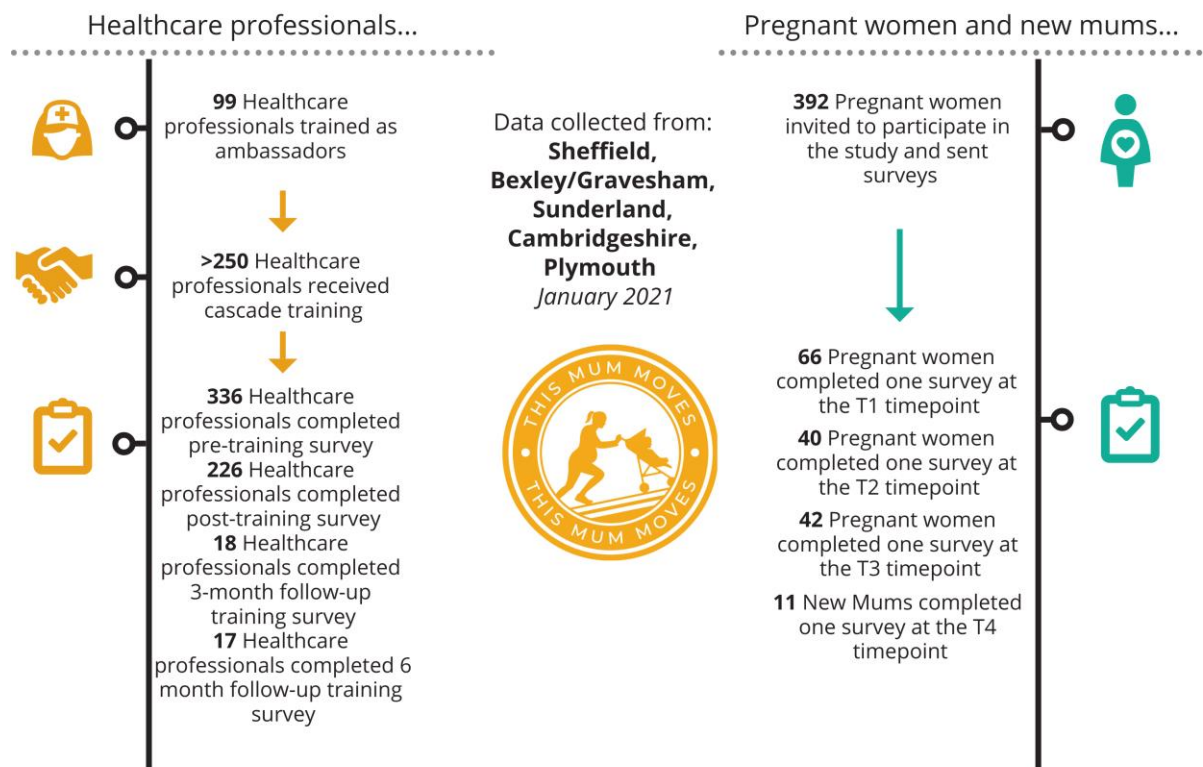
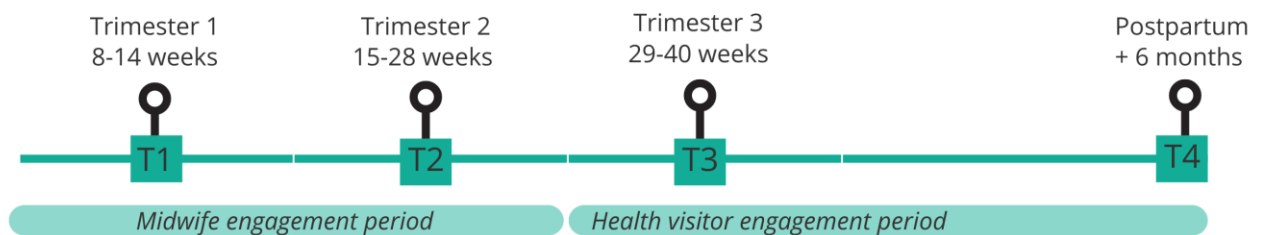
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Data from pre-training healthcare professionals survey

## Healthcare professionals' survey



## Pregnant women / New mums' survey



# Healthcare Professional Training

The 2020 This Mum Moves Interim report and two supporting case studies describe how This Mum Moves training is positively received by healthcare professionals. The training is acknowledged to fill a void in a subject area within which healthcare professionals have received limited or no previous formal education. Since these reports, This Mum Moves ambassador training has been received by a further 78 ambassadors, who have cumulatively delivered the cascade training to over 250 healthcare professionals. This report explores pre and post-training survey data to provide an update to some of the key findings presented in February 2020.

Since completing training, 3 or 6 month follow-up data has been collated from 35 healthcare professionals, providing early insight into the sustainability of training and its impact on professional practice, knowledge, skills, and confidence.

Prior to training, most healthcare professionals said their reason for engagement, although mandatory in some cases, was to improve their knowledge, learn more about the evidence based guidelines and enhance the support they offer pregnant women and new mums. Many acknowledged specific benefits to the health outcomes of pregnancy, birth experience and postnatal recovery. Some also expressed the importance of using their interactions with women as an opportunity to educate them about the benefits of physical activity, and that such behaviour could be modelled into parenthood with knock on health benefits for the next generation who may inherit active lifestyles.

*I like to keep fit and healthy in my personal life, and feel the benefits are amazing for physical and mental health. This is exceptionally important for women during pregnancy and postnatally as their body is changing to produce a baby. Exercise has so many benefits – if women are feeling empowered and healthy, there is research out there to say they may labour more efficiently and be more focussed. I want to help share and teach this information.* Midwife, Cambridgeshire

*It's important to educate where possible, the importance of exercise and being active. Our client group requires us to help change outcomes of their lives as well as that of their children.* Family Nurse, Cambridgeshire

*I want to obtain the knowledge and skills required to encourage mums to be active and therefore improve the health of mums and reduce health inequalities.* Health Visitor, Sunderland

*Why did you want to participate in this training?*

"

*To learn and gain information/knowledge about physical activity in pregnancy and what information we should be informing our mums to be/mums of.*

"

*To learn about something different and because I am aware of the high numbers of obese women we are looking after now.*

"

*To be able to better support the parents I work with.*

"

*To try and encourage postnatal mothers to be more proactive in their own physical recovery.*

"

*I am interested in the importance of physical activity on health and wellbeing for individuals and communities.*

"

*To update my knowledge, as more and more women are asking about what exercise is safe to do in pregnancy.*

"

Healthcare Professionals,  
Pre-training survey data

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## Updated Findings

### Demographic information

A total of 319 Healthcare professionals have completed the pre-training survey and 226 have completed the post-training survey.

Pre-training survey data comprises responses from all sites, and is made up of 43% midwives, 49% health visitors and 8% other. Those who reported their profession as 'other' identified themselves as nursery nurses, early years practitioners, family nurses, school nurses, research nurses or students.

The number of years of professional experience ranged from 0-50, with an average of 14.8 years; 21% of healthcare professionals had over 25 years of experience, while 44% had fewer than 10 years of experience. Within their career to date, 87% of healthcare professionals reported no previous formal education on physical activity in pregnancy and postpartum. Some healthcare professionals said they had gained any existing knowledge through their own self-directed reading and study days, or picked up some basic knowledge on the job. Most concurred they would feel more confident to engage in discussions with pregnant women and new mums if they were better informed.

Participants were asked about their own engagement with physical activity. Of those who completed the pre-training survey, 19% were inactive, reporting doing less than 30 minutes of physical activity per week; 48% were active, participating in 30-149 minutes per week, and; 33% were active, engaging in over 150 minutes of physical activity each week.

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### Perceptions of training

Training has been rolled out in all locations. It continues to be received positively in both online and face-to-face formats; 97% of participants said they would recommend the training they had undertaken to a colleague or friend. Healthcare professionals reported feeling more confident to bring up the topic of physical activity in their interactions with women, and that they were equipped with evidence based knowledge.

**97% of participants said they would recommend the training they had undertaken to a friend or colleague.**

Healthcare professionals praised the delivery of virtual training, despite the innate constraints of this environment in comparison to the preferable face-to-face alternative. A key area for improvement frequently reported was a desire for sessions to be longer as attendees wanted more time to engage in discussions and practice scenarios and examples.

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*How has the training you have received equipped you with the skills to deliver information on physical activity in pregnancy and/or postpartum?*

“

*I am more confident at delivering correct, up to date information.*

”

*More knowledge of physical activity that is safe/not safe in the childbearing period.*

”

*Overall, I feel more confident to bring up this subject.*

”

*It has helped me find a way to discuss the subject and given me the knowledge needed.*

”

*It has further motivated me to empower and encourage women in pregnancy and the postnatal period to exercise not only for their physical health but also their mental and sexual health as well.*

”

*Very informative, it's good to have more information on a subject I feel we do touch on, but I feel more equipped to talk in detail now.*

”

Healthcare Professionals, Post-training survey data

When asked what they learned in the training, healthcare professionals said they had become more mindful of the language they use, and should aim to discuss 'being active' or 'physical activity' rather than 'exercise'. The CMO recommendation of '150 minutes of activity per week' was frequently reported as a key take home message. Healthcare professionals reported learning that physical activity was not reserved for those who were already active, and that pregnant women and new mums should start gradually and gently at any time. Many trainees reported understanding a wide range of physiological health benefits induced by physical activity that they did not have prior awareness of.

Following training, some concerns remained about their ability to deliver what they had learned in certain scenarios, namely, when appointment time was limited; when faced with language barriers; or when asked specific activity related questions by very active women. In addition, some healthcare professionals wanted more education on pelvic floor exercises, abdominal muscles, and recovery from a caesarean section. However, 69% were 'highly confident' (22%) or 'confident' (47%) that they would be able to apply what they had learned within their job role, and 88% described themselves as 'highly committed' (37%) or 'committed' (51%) to use what they learned in training.

In addition to This Mum Moves training, an e-learning module entitled 'Pregnancy and the Postnatal Period: Being active' has also been released on the E-learning for Health platform hosted by the NHS. This is open to healthcare professionals and exercise practitioners nationwide. When asked prior to This Mum Moves training, 8% of healthcare professionals had completed the 'Pregnancy and Postnatal Period: Being Active' e-learning for health module. When asked the same question following the training, 39% of healthcare professionals had engaged in this module. This suggests an increased level of engagement in the topic area as a result of This Mum Moves training, encouraging participants to seek additional independent training on the subject in recognition of the value of the guidelines being taught.

The word cloud below highlights comments made by healthcare professionals about the training they received.

Very good    Just the right length and intensity

Excellent resources    Clear concise evidence

Concise and interesting

Easy to understand

No improvement needed    Good basic refresher

Delivered well

### Pre-training motivation, skills and confidence

"

*I feel a lack of training and information in this area has greatly impacted upon my knowledge and confidence.*

"

*I don't feel confident in the advice and am never sure where to signpost women to.*

"

*I'm so glad to have training on this as I don't think I ever had before. I know it's so important but I lack confidence on how best to advise women.*

"

*I am looking forward to being able to give the correct advice.*

"

Healthcare Professionals,  
Pre-training survey data

## Sustained impact of training: motivation, skills and confidence

Following training, healthcare professionals are sent follow-up surveys after 3 and 6 months to assess how the training impacts day to day professional practice. The 3 and 6 month follow-up surveys have been completed by a total of 35 healthcare professionals (18 at 3 months and 17 at 6 months). For the purpose of this report, all 35 responses have been combined to provide early insight into the sustained impact of the training and are referred to as 'follow-up' responses.<sup>1</sup>

Healthcare professionals are asked to report their skills, confidence and knowledge in relation to physical activity messages for pregnant women and new mums, as well as the extent to which they have the capacity to incorporate these conversations within their role. Between the pre and post-training surveys, there is a significant increase in how motivated healthcare professionals feel to deliver information about being physically active. Within cascade trainees, there is also a significant increase in perception of capacity to '*deliver guidance about physical activity alongside other responsibilities*', suggesting that the training makes talking about physical activity seem like a more manageable task for healthcare professionals.

When asked the same questions 3 or 6 months following training, there is a significant decrease in the perceived skills and knowledge of healthcare professionals, suggesting that since the training they feel less equipped than immediately after training, or that they had forgotten some of the content, shown in Figure 1.

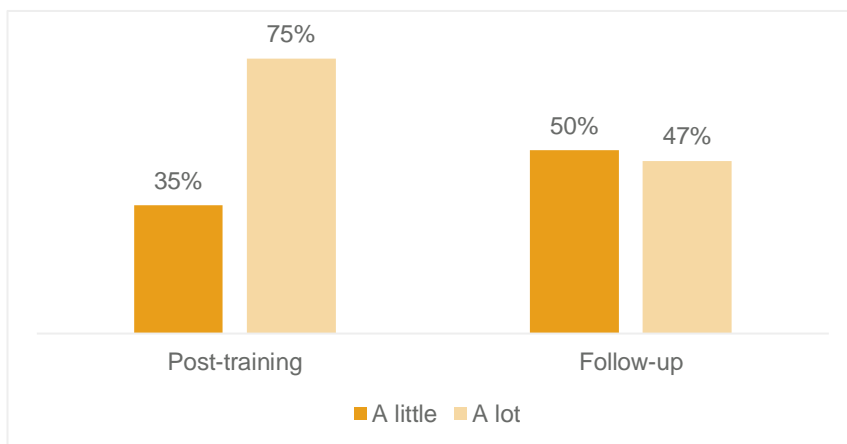


Figure 1. *To what extent do you now feel you have adequate skills and knowledge about physical activity in pregnant women and new mums?* Percentages of healthcare professionals who answered 'a little' or 'a lot' (post-training, n=226; follow-up, n=35).

### Further comments...

"

*I think this an important part of my role and the training will motivate me further.*

"

*In the past I have found it difficult to encourage women who were not very active to increase their activity. I am interested to see whether this becomes easier now that there is so much more in the media about the benefits of physical activity.*

"

*We need to revisit the content of this training and have regular refreshers and updates.*

"

Healthcare Professionals, Post-training survey data

<sup>1</sup> All graphs show percentage findings taken from the whole survey sample at each time point. Any reference to 'significant' findings applies to direct comparisons made between surveys completed by the same individuals at multiple timepoints to represent an accurate measure of change.

Healthcare professionals rate their confidence of specific elements of communication with pregnant women and new mums. Prior to training, only 3% of healthcare professionals were 'highly confident' in any form of communication, and up to 18% were 'not at all confident'. Following training, no healthcare professionals said they were 'not at all confident' in any of the communicative activities, and most healthcare professionals were 'confident' or 'highly confident'. A total of 45% were 'highly confident' at answering questions about physical activity from new mums, which increased from 1% prior to training.

There is no change in confidence in communication in the months following training. After 3 or 6 months, the majority of healthcare professionals reported they remain 'confident' or 'highly confident' to provide advice, start a conversation, deliver safety messages, and answer questions relating to physical activity for both pregnant women and new mums, demonstrating the significant increases in confidence elicited during the training are sustained.

## Sustained impact of training: knowledge and understanding

The CMO guidelines for physical activity in pregnancy and postpartum form the basis for training content. To gauge knowledge and learning through training, participants are asked if they are aware of the guidelines prior to training; 32% of healthcare professionals reported an awareness of the CMO guidelines for physical activity in pregnancy, and 30% were aware of the CMO guidelines for physical activity postpartum.

Following this, healthcare professionals are asked to rate knowledge of 9 specific statements from the guidelines for pregnancy, and 11 from the guidelines for postpartum. Between pre and post-training surveys, there is a significant increase in knowledge of all guidelines. Prior to training up to 35% of healthcare professionals said they did not know some of the guidelines, whereas following training over 96% 'agree' or 'strongly agree' with all guidelines. These findings show an even greater knowledge increase through training than the previous report findings. The previous report, based on 62 survey responses from Sheffield, measured improvement in knowledge of 7 of the 9 pregnancy guidelines and 10 of the 11 postpartum guidelines.

In the follow-up surveys, 94-100% of all healthcare professionals 'agree' or 'strongly agree' with all guidelines. There is no significant change between the post-training and follow-up, which demonstrates knowledge gained in training is sustained. In some areas, there were further improvements in knowledge 3 or 6 months following the training. Although this is a potentially important finding, it is worth recognising the relatively small sample in the follow-up to date. This finding will be explored in further detail in the final report in 2022, when more follow-up survey responses from more sites have been achieved.

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*How has the training you received equipped you to deliver information on physical activity in pregnancy and new mums?*

''

*It has made me aware that this should be part of the routine content of my visit.*

''

*I feel more confident in encouraging women to stay active at the same level if they are used to exercising. The training served as a reminder and gave me enthusiasm to promote increased physical activity to those who don't particularly think about it.*

''

*I now feel more confident to provide brief accurate information which suits all.*

''

*It has given me different ways of approaching the subject – for example, advising women to get out for regular walks.*

''

Healthcare Professionals,  
Follow-up survey data

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## Sustained impact of training: professional practice

Professional practice measures are taken in the pre-training survey, and then again in the 3 and 6 month follow-up surveys. They are not measured in the post-training survey, as this would not allow time for healthcare professionals to implement any changes in their practice.

Healthcare professionals are asked how frequently they talk or provide advice about physical activity to both pregnant women and new mums. Prior to training just 32% 'often' or 'always' had these conversations with pregnant women, and 37% 'often' or 'always' had these conversations with new mums. It is likely the reason for low engagement is related to the lack of confidence, knowledge and skills that healthcare professionals also reported at these time points. Overall, there is a significant increase in frequency of engagement in these conversations with pregnant women and new mums when healthcare professionals were surveyed at 3 or 6 months. However, when this finding was explored in relation to the type of training received, the increase is in cascade participants only. This suggests the small number of participants who reported high frequency of engagement at baseline were ambassadors, and that training has elicited a significant change in professional practice of those who received cascade training. This finding is a particular credit to ambassadors, as it reinforces that through training, they provided their trainees with adequate expertise and motivation to implement what they had learned in practice.

Although an increase in the frequency of physical activity conversations in practice is a positive finding, it is worth recognising that many follow-up survey respondents report having these conversations 'sometimes' in their contact with pregnant women (39%) or new mums (37%). It is unclear from survey responses if this is because they only have these conversations with some women, or if having already had conversations with a woman they feel it unnecessary to engage in these conversations in each interaction. Frequency of healthcare professional conversations with pregnant women is shown in Figure 2.

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*How has the training you received equipped you to deliver information on physical activity in pregnancy and new mums?*

''

*We are hoping that this issue will remain an area of focus for us and that more developments will come from it. The physical activity ambassadors have just started to meet as a group to discuss next steps.*

''

*I feel more confident in encouraging women to maintain their activity if they are used to exercising.*

''

*It gave me the enthusiasm to promote increased activity to those who don't particularly think of it.*

''

*I sometimes feel under pressure with the amount of information I need to share with a family in a short space of time, so this doesn't always get the time it deserves.*

''

Healthcare Professionals,  
Follow-up survey data

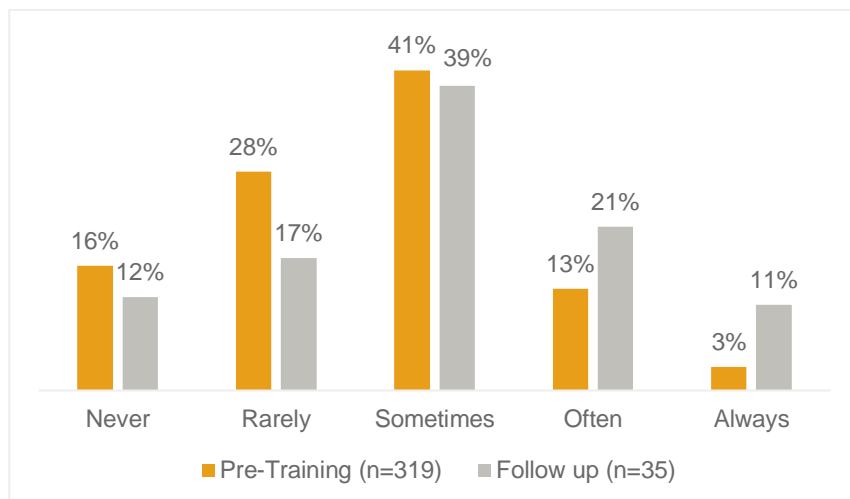


Figure 2. 'Do you currently talk about/ provide advice about being active to pregnant women?'. Percentages of healthcare professionals for each frequency (pre-training, n=319; follow-up, n=35).

Prior to training, 23% of healthcare professionals said they used online resources to find information about physical activity in pregnancy and postpartum. When asked what resources they used, most reported engaging with official public health guidelines from the NHS, Royal College of Gynaecology, or National Institute of Health Excellence. Many cited public health initiatives such as Start4Life, Change4Life, Active for Life and Healthy Start. Other responses referred to YouTube videos and tutorials and weight loss resources such as Slimming World and Weight Watchers.

As part of This Mum Moves training, healthcare professionals are made aware of the This Mum Moves website, which provides resources for both healthcare professionals and pregnant women/new mums. Overall, 95% of healthcare professionals said they were aware of the This Mum Moves website in the follow-up surveys and 50% said they had visited it. When asked about the types of advice they provide, 67% said they use online resources, suggesting they are continuing to use resources other than, or in addition to the This Mum Moves website. Healthcare professionals selected the types of advice that they provide from a list. Practice of all types of advice is higher in the follow-up training surveys.

When midwives and health visitors feel unable to assist pregnant women or new mums with their physical activity queries/concerns, 82% said they would refer them to an alternative exercise or healthcare professional. Most specified they would recommend a woman to visit her GP for a physiotherapy referral; others said they would consult with colleagues within their team, or refer to a gynaecology consultant. Figure 3 highlights prevalence of different types of guidance provided by healthcare professionals.

## Resources

"

*I don't really have any experience and get my information from the NHS website.*

"

*I have some information leaflets from the physiotherapists.*

"

*We use the infographics in the women's handheld notes.*

"

*I have just used general information on google from sources that look trustworthy.*

"

*The training definitely equipped me to deliver very brief advice to the women about physical activity. The leaflets are very useful to be able to share with the women.*

"

*The packs could include a laminated pictogram for us to be able to take to postnatal visits.*

"

Healthcare Professionals, Pre-training and Follow-up survey data

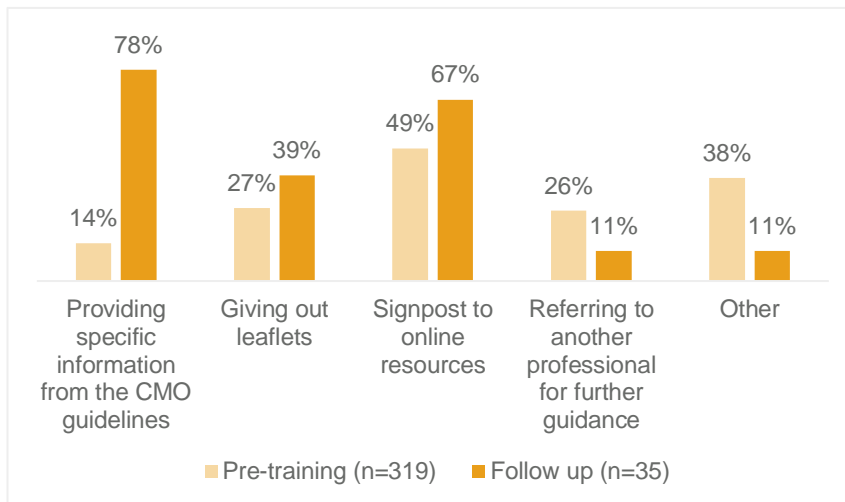


Figure 3. Percentages of healthcare professionals who reported providing each type of advice to pregnant women and new mums (pre-training, n=319; follow-up, n=35).

The aim of This Mum Moves is to empower pregnant women and new mums to be physically active. In this updated analysis, ambassadors continue to be more active than cascade trainees in the pre-training surveys, with 40% of ambassadors and 28% of cascade trainees reporting participating in more than 150 minutes of physical activity per week. At the follow-up time point, there is a significant increase in the physical activity levels of cascade trainees with 50% reporting participating in over 150 minutes of physical activity per week. This suggests engaging in the training and increasing knowledge of physical activity guidelines and health benefits has prompted healthcare professionals to adopt their own active lifestyle changes.

## Impact of COVID-19

In addition to delays in training roll out and study recruitment, and a move to virtual training, impacts of COVID-19 are a recurring theme in responses to open questions on the healthcare professionals' surveys. Restrictions to services that are considered 'non-urgent' has impacted greatly on the day-to-day professional practice of midwives, health visitors and other practitioners. Appointment times and frequency have been reduced in many cases. This has impacted healthcare professionals' ability to deliver physical activity guidance during their contacts, which has inevitably impacted upon their ability to recruit pregnant women to the study.

### The impact of COVID-19 on healthcare professionals

"

Essential care has been promised over routine antenatal advice. In my role, face-to-face contact has been reduced massively and recruiting women to the study doesn't feel essential. Having said that I am regularly encouraging women to stay active by walking and getting fresh air, in order to promote physical and mental health during lockdown.

"

Due to COVID, I have been unable to give much advice on being active and getting outside, as the main message has been to stay at home.

"

I do not get on with virtual training. The information was relayed as best as it could be but I found it too much time to be at a screen.

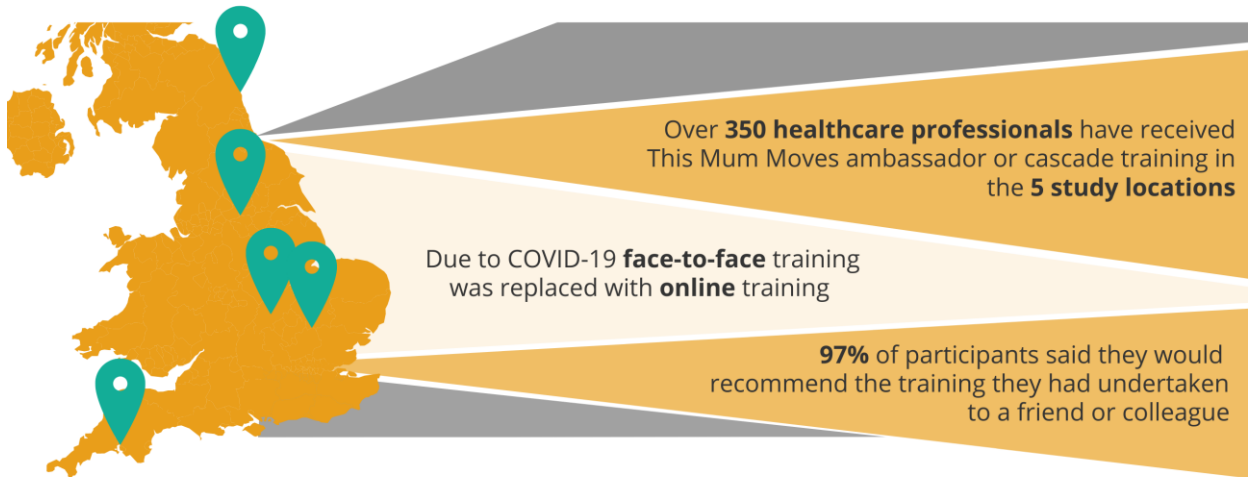
"

It was impossible to see the infographics on the Virtual Training, such a shame as they are an excellent resource.

"

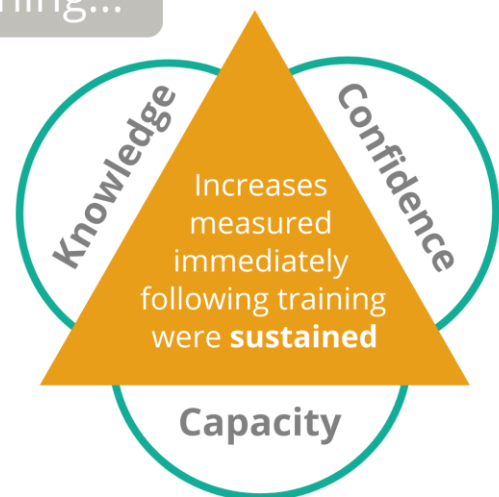
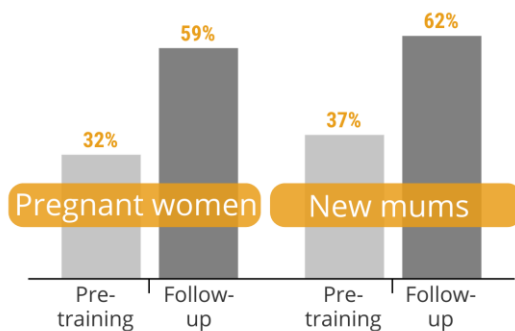
Healthcare Professionals, Follow-up survey data

## Healthcare Professionals Training - Sustainability



3 or 6 months following the training...

A greater percentage of healthcare professionals speak about being active 'often' or 'always' to pregnant women and new mums



**Healthcare professionals reported being more active in their own lives**

## Pregnant women and new mums

The key objective of This Mum Moves is to support women to be active during pregnancy and postpartum. Alongside providing very brief advice during routine antenatal appointments, healthcare professionals are inviting pregnant women to take part in a series of surveys. Designed to be answered during each trimester and postpartum, surveys aim to elicit better understanding of the physical activity behaviours of pregnant women and new mums, and to measure how engagement in being active changes throughout and following pregnancy.

Healthcare professionals may also guide pregnant women and new mums to the This Mum Moves website where they can explore further information about being active and find activities available in their area, or online workouts via the 'Baby Buddy' app.

Recruitment of pregnant women occurs during booking appointments with midwives (6-8 weeks gestation) and/or at antenatal health visitor appointments (36 weeks pregnancy). The COVID-19 pandemic has presented some unique challenges with recruitment; all study activities were halted during the 2020 spring lockdown and throughout the pandemic antenatal appointment format/frequency continue to be affected. Data collected from surveys and telephone interviews from pregnant women and new mums have been collated to provide some preliminary findings and insight into the reception of This Mum Moves. Recruitment of pregnant women and new mums will continue until November 2021.

### Demographic information

A total of 392 women provided their contact details to healthcare professionals and have been invited to complete This Mum Moves surveys. A total of 159 surveys have been completed by 114 independent participants; 66 at trimester 1; 40 at trimester 2; 42 at trimester 3 and 11 postpartum<sup>2</sup>.

Responses comprise participants from Sheffield (62%), Sunderland (36%), Cambridgeshire (1%) and Bexley, Gravesham and surrounding areas (1%). Women were aged between 18 and 44 years old, with an average age of 31. Over half (56%) reported this was their first pregnancy; of those who said they had been pregnant before this was between 4 months

#### Reasons for being active during pregnancy

"

*I thoroughly enjoyed exercise before pregnancy so I wanted to continue through pregnancy as it makes me feel more energetic. I also wanted to continue so I could make sure I didn't gain too much weight.*

"

*It is part of my lifestyle, it boosts my mood and makes me feel less stressed and anxious.*

"

*I love working out and the feeling it gives is important to me.*

"

*To help me sleep better, improve my mood, stop excess weight gain and also because I enjoy it once I get going.*

"

*To maintain a level of fitness, to keep weight down, to get me out of the house and to take the children out for fresh air.*

"

Pregnant Women, Survey data

<sup>2</sup> Due to the multiple recruitment timepoints and high levels of attrition between timepoints it is not possible to match participant responses between timepoints for analysis. All between timepoint comparisons refer to the whole sample at each time point.

and 12 years previously. Most women were educated to further education level or higher (87%) and were in either full or part time employment (83%).

## Insight

Across all timepoints, 88% of pregnant women and new mums either ‘agree’ or ‘strongly agree’ they can achieve the goals they set themselves. Overall, they report being satisfied with their life, feeling happy, feeling like the things they do are worthwhile, and not feeling anxious.

In the 12 months prior to their pregnancies, when all timepoints are combined, an average of 15% of respondents recalled being ‘inactive’ (less than 30 minutes physical activity per week), 51% were ‘fairly active’ (30-149 minutes per week) and 34% were ‘active’ (150 or more minutes per week), demonstrated in Figure 4.

Survey data collated to date suggests that participants in the third trimester are more active than in the first trimester. When examined separately, participants in the third trimester survey were significantly more active than those in trimester one with 56% of women classed as ‘active’ in this group. While this is a potentially interesting finding, it must be viewed with caution given the relatively small sample of responses at trimester three. Higher physical activity at this time could also be the result of recruitment bias; health visitor recruitment in the third trimester may be targeted to women who remain more active. Equally, it is possible inactive women recruited earlier in pregnancy did not proceed to complete later survey timepoints. Those who complete surveys at multiple timepoints are likely to be more active women who have a greater interest and motivation for the topic area. Women who are less active may not perceive their experiences relevant in a physical activity behaviours study. High physical activity levels at trimester three may therefore be reflective of attrition of inactive women resulting in a more active sample at this timepoint.

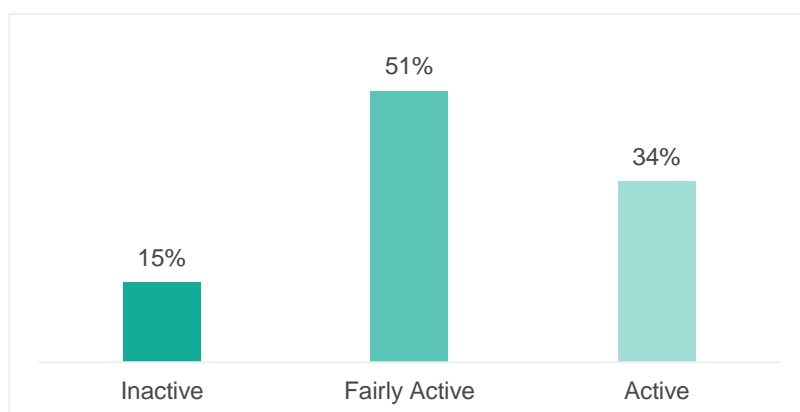


Figure 4. Percentage of women in each physical activity category from all pregnant women and new mum surveys (n=159).

## Reasons for being active during pregnancy or postpartum

“

*I really wanted to start moving as I am aware how exhausted I will be later on, and how much labour will take off me. I want to make sure my body is ready for it and I'm not someone who usually does physical activity for pleasure, but I'm doing it because I know there is a benefit for my body.*

”

*My motivation for being active is for weight loss reasons. I am very body conscious and the way I feel when I look in the mirror affects me.*

”

*I wanted to stay really active, especially for my mental health, and with lockdown and not being able to see people it became even more important.*

”

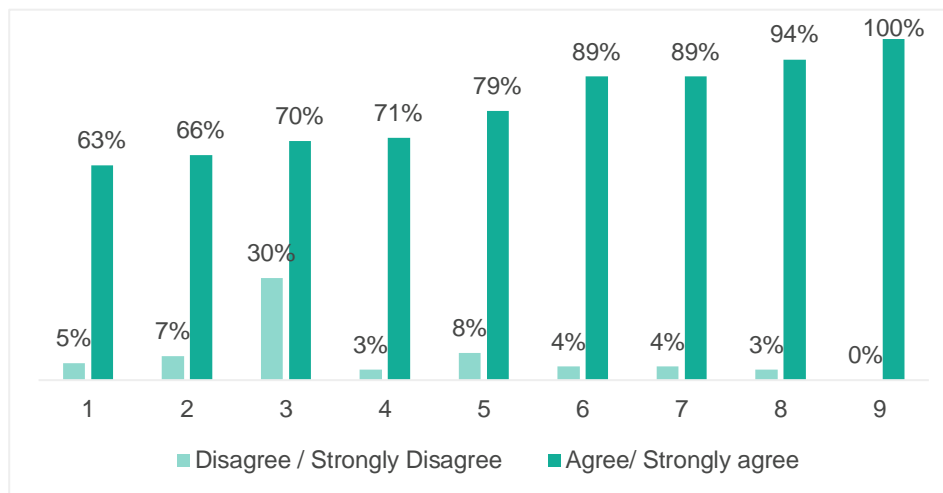
*It's a stress release. It's how I de-stress, and I use exercise for weight management.*

”

Pregnant Women and New Mums,  
Interview data

Pregnant women and new mums are asked to rate their agreement of statements relating to the CMO guidelines. For most statements, the majority of respondents 'agree' or 'strongly agree', indicating that they have a good understanding of the physical activity recommendations for their population (Figure 5). Guidelines relating to specific complex health benefits (blood pressure and diabetes) are the least understood, and about a third of women reported 'I don't know' to these statements.

Overall, 94% of women agreed that physical activity could 'improve mood' and 100% agreed that it could 'control weight gain'. However, 30% of women disagreed with 'During my pregnancy, I should listen to my body and may need to adapt the activities I do'.



1. Regular participation in moderate physical activity helps to prevent diabetes in pregnancy
2. I should do muscle strengthening activities twice a week
3. During my pregnancy, I should listen to my body and may need to adapt the activities I do
4. Regular participation in moderate physical activity during pregnancy helps to reduce high blood pressure problems
5. I should aim to accumulate 150 minutes of moderate intensity physical activity per week
6. Regular physical activity during pregnancy can improve sleep
7. Regular participation in moderate physical activity during pregnancy improves fitness
8. Regular physical activity during pregnancy can improve mood
9. Regular participation in moderate physical activity during pregnancy helps to control weight gain

Figure 5. Percentage of pregnant women who agree or disagree with each CMO guideline statement (n=148).

## Types of activity

"

*I enjoy team sports and the social side of them. I do enjoy doing things on my own, but I do prefer social sport.*

"

*Due to lockdown and the bad weather I haven't been doing as much. I used to go to the gym.*

"

*Swimming was something I was doing but now the pools are shut. I would definitely be there if I could.*

"

*I am more motivated when do things I enjoy, like dancing.*

"

*I always go walking but I can't do the variety I used to do now. I can't do things like gym classes or go for a run on my own now. My priorities are very different and I don't have a lot of time on my own anymore.*

"

*I've never really bothered with home workouts before as I'd rather be in the gym, but I've quite enjoyed that to be honest, it's been a bit of a change.*

"

Pregnant Women and New Mums,  
Interview data

A series of questions endeavour to gain insight into the physical activity habits of participants and how these may adjust during pregnancy and postpartum. The frequency of types of behaviours, scheduling and mindset were ranked by frequency (never; rarely; sometimes; often; always). At least 23% of women answered 'sometimes' to all questions, highlighting high levels of variability in practice and attitudes towards activity within participants. It is also important to acknowledge the impact of COVID-19 on physical activity behaviours; group physical activity has widely been prohibited since March 2020. While 48% of women say they 'often' or 'always' carry out their physical activity alone, and 55% 'rarely' or 'never' participate in a group, this may not reflect true preference for solo or group activity.

Only 12% of pregnant women said they 'often' or 'always' saw other pregnant women being physically active. This did not deter most women from being active themselves as just 6% of women were 'often' or 'always' worried about what others would think of them being active.

Responses suggest that most women want to be physically active and are generally able to accomplish what they set out to do; 19% 'never' or 'rarely' feel motivated to be physically active, and 12% 'never' or 'rarely' achieve the physical activity goals they set themselves.

Overall, just 1% of women 'never' have time to be physically active, 2% 'never' incorporate physical activity into their daily life, and 10% 'never' set aside time each week to be physically active. During pregnancy, 15% of women 'always' have time to be active, however no women gave this response postpartum. Throughout pregnancy and postpartum, most women incorporate physical activity into their daily life, demonstrating a tendency to be active amongst the survey population (Figure 6).

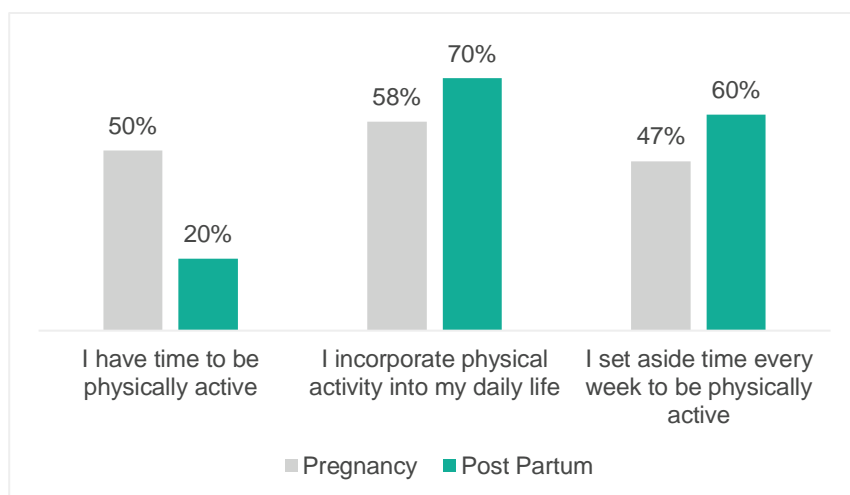


Figure 6. Percentage of women in pregnancy (n=148) and postpartum (n=11) who responded 'often' or 'always' to physical activity behaviours.

## Engagement with healthcare professionals

"

*She was an incredible midwife. She listens to my concerns and was positive about exercise which was important to me.*

"

*I felt like my appointment was really rushed. It was really focused on the purpose of what's supposed to happen and there wasn't any interest in other things on top of that.*

"

*There was a lot of chit chat going on during the appointment, but it didn't feel like this had a specific purpose and they never mentioned physical activity.*

"

*Personally, if a professional recommends something to me, this is the first step to get me interested.*

"

*My midwife mentioned physical activity levels she's not been discouraging, but she's not been interested.*

"

*I asked my GP about running. She was very encouraging and said there is some evidence that you can recover faster afterwards.*

"

Pregnant Women and New Mums,  
Interview data

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## Engagement with healthcare professionals

At all survey timepoints, women are asked to recall if physical activity is discussed during appointments with their midwife, health visitor and other healthcare professionals.

In the first trimester, 33% of women talked about physical activity with their midwife at their 6-8 week booking appointment while 36% of women said they did not talk about physical activity at all. When asked about their communications with other healthcare professionals, 6% said they had talked about physical activity with a doctor and 4% had spoken with a physiotherapist.

In the second and third trimesters respectively, 58% and 55% of women did not talk about physical activity with their midwife, and just one woman reporting speaking to a doctor or physiotherapist.

In trimester three, 14% of participants reported talking about physical activity with a health visitor while 33% of women did not talk about physical activity with their health visitor. A further 43% of women did not have an appointment with a health visitor. Two women reported seeking additional support from a chiropractor and antenatal class instructor.

After their baby was born, 63% of women said they did not talk with a midwife about being active and 55% said this topic was not discussed in appointments with a health visitor or doctor.

A large proportion of women (33% first trimester, 58% second trimester, 40% third trimester and 55% postpartum) said they had received no advice from healthcare professionals. Of those who did receive advice at any time during pregnancy or postpartum, this consisted of verbal advice (30%), a leaflet (18%), or advice to visit a website (3%). No women reported being referred to an exercise professional, or another medical practitioner at any time point.

Women are asked about their experience and engagement with healthcare professionals in relation to their own physical activity choices. At all time points, most women 'disagree', 'strongly disagree' or 'don't know' when asked if the healthcare professionals they had encountered 'approved of' or were 'interested in' their physical activity choices. In the first trimester, 54% of women felt encouraged to be physically active by their healthcare professionals, however there was a significant shift in this mindset in the second trimester when 40% of women felt encouraged to be active and 35% felt that they were not encouraged to be active.

Some women gave examples of specific questions they asked their healthcare professional, and said these questions were not answered clearly. Most of these questions are specifically related to certain activities and probably required bespoke responses. From exploration of the healthcare professionals survey responses, midwives and health visitors expressed ongoing concern at their lack of confidence in answering highly specific

---

## Reasons for reducing physical activity in the first trimester

"

*I have suffered with nausea and fatigue during this first trimester, coupled with leading a school through a global pandemic has left me exhausted.*

"

*I'm always tired and barely have the strength.*

"

*I am more tired. When finishing work, I just want to eat and lie down rather than doing any further exercise that I would have usually done.*

"

*Decreased due to weather and lockdown. I'm still doing 4/5 times a week but I would have done 6.*

"

*Felt extremely tired and sick so have struggled for motivation for the usual running I would do. Also slightly concerned around having another miscarriage as I continued running as normal in my last pregnancy and worry that this might have been a factor.*

"

*I have been worried about harming the pregnancy.*

"

*I don't feel confident about doing the same high intensity exercise classes I did before pregnancy.*

"

Pregnant Women,  
First Trimester survey data

physical activity questions. It remains clear that both healthcare professionals and pregnant women/new mums are unsure of where to find answers to specialised physical activity queries or concerns.

Across all time points, 38% of women report using online resources (apps or websites) to find information on physical activity options. Women mention using web sources including google searches for local activities, the NHS and Start4Life websites; social media apps such as Instagram, Pinterest, YouTube; mainstream fitness apps such as Strava, Peloton, MyFitnessPal, Fitbit; and pregnancy specific resources including Bounty, Pregnancy+, Babycenter, Jennis and Emma's Diary. There was no mention of the This Mum Moves website, or the Baby Buddy app.

The majority of women said they do not use online resources and have not received resources or guidance from a healthcare professional, however 62% of women agreed with the statement *'I feel like I have enough information to make an informed choice about my physical activity'*; the remaining participants said they disagreed (25%) or did not know (13%). This majority suggests that many women feel confident about the activity choices they make and are empowered to be active if they want to be. This mindset may be reflective of this particular survey sample who were confident and motivated to maintain their 'active' or 'fairly active' lifestyles throughout pregnancy.

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## How physical activity changes: during pregnancy

A key outcome measure for This Mum Moves was the *'Establishment of the point at which physical activity drops off'* when life changes due to pregnancy or parenthood. During each trimester and postpartum, women are asked if their activity levels had *'increased'*, *'decreased'*, or *'stayed the same'*. Comparisons between time points to this question reveal significant differences in how women adapt their physical activity at different stages of pregnancy, shown in Figure 7.

During the first trimester half of women report decreasing their physical activity, however in the second trimester 41% report an increase in physical activity. These trends are reflected in responses to open questions, with many women citing extreme feelings of fatigue and nausea as the reason for reduced physical activity in the first trimester, and alleviation of these symptoms as a reason for increasing their physical activity levels in the second trimester. Some women said they decreased their physical activity during the first trimester due to fear of miscarriage.

In the third trimester, the majority (65%) of women report a reduction in their physical activity, quoting reasons including tiredness, aches and pains, swelling and general discomfort.

---

### Reasons for increasing physical activity in the second trimester

"

*My sickness has reduced and I have a bit more energy than I did in my first trimester.*

"

*In my first trimester I was too nauseous to do any kind of activity.*

"

*My physical activity has increased as my morning sickness stopped. I have become more energetic and generally in a good mood. I also increased my activity to decrease possible ligament pains and prepare my body for labour and post-natal changes.*

"

*I feel like I have more energy in my second trimester so have been able to go to every gym class I had planned.*

"

*I have started working from home again and am making sure to exercise daily with small achievable goals for my mental health.*

"

*I did very little exercise in my first trimester and have now taken up swimming.*

"

Pregnant Women,  
Second Trimester survey  
data

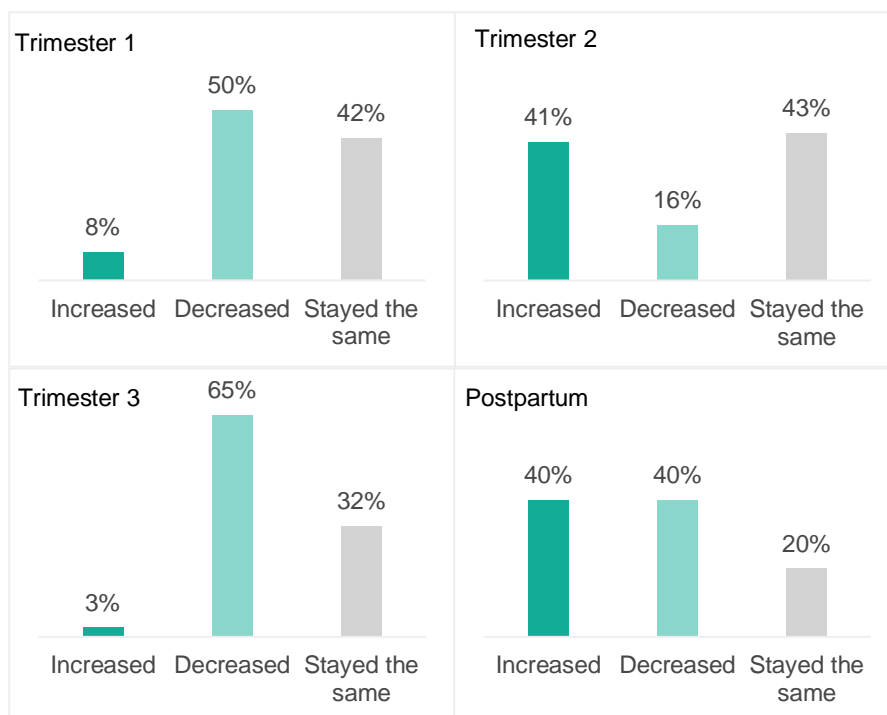


Figure 7. Percentage of women who reported physical activity increasing, decreasing and staying the same in Trimester 1 (n=66), Trimester 2 (n=40), Trimester 3 (n=42) and postpartum (n=11).

Accumulated physical activity scores collated using questions adapted for pregnancy and postpartum from the International Physical Activity Questionnaire (IPAQ) demonstrate a trend for higher average physical activity levels during the second trimester than in the first and third trimesters. This further supports a trend for physical activity attrition in the first and third trimesters, however this finding did not reach statistical significance within this preliminary sample.

Various examples of activities were provided by women at each timepoint. Throughout pregnancy and postpartum, most women mentioned 'walking' as one of their main forms of activity, giving reasons including convenience, transport, enjoyment, and intensity for this choice. A range of other activities were mentioned at all time points, including running/jogging, yoga, Pilates, strength training, circuit training, HIIT training, playing with toddlers/children and housework. Reasons given for participation in these activities commonly related to mood, maintaining existing habits, and health benefits.

## How physical activity changes: Postpartum

Six months after their baby's due date, women are sent a postpartum survey. Due to recruitment timelines the current sample size does not lend itself to detailed analysis. However early findings from the survey demonstrate complete concurrence of the benefits of an active pregnancy in recovery, with 100% of women agreeing that their high activity levels during pregnancy had a positive impact on their recovery from

*Do you think that your activity levels during pregnancy have had any impact on your physical recovery from childbirth?*

"

*I feel like because I was fit before pregnancy and active during labour, my recovery has been faster.*

"

*Keeping active during pregnancy meant that I recovered physically and was able to get back to fairly relaxed levels almost straight away.*

"

*Keeping my fitness up helped me with a long labour and recovery.*

"

*Exercising during pregnancy kept excess weight to a minimum and also made sure I was strong enough to cope with labour.*

"

*I kept walking until the day I went into labour and was happy to go out walking again two days after my baby was born. I think just keeping a baseline level of fitness helped me to get moving afterwards.*

"

*Building good habits during pregnancy have helped me to continue good habits in my recovery after birth.*

"

Pregnant Women,  
Postpartum Survey data

childbirth. Most women reported feeling ready to engage in light activity such as walking within a week of giving birth. Others believe that their positive birth experience was a result of their active pregnancy.

*It was a quick labour and the midwives said it was because I am fit and healthy, which helped me to have a straightforward birth. New Mum, Sheffield*

All participants either ‘agree’ or ‘strongly agree’ with all CMO guideline statements for physical activity postpartum, indicating a good understanding of physical activity recommendations and associated benefits. The effect of having a baby on activity levels revealed very mixed findings; 20% of women say their activity has stayed the same, while 40% have increased and 40% decreased their physical activity levels. Reasons for postpartum changes in physical activity relate to time; some feel they have less free time alongside the demands of taking care of a baby, while others report having more time due to maternity leave from work. Residual postpartum discomfort, a lack of motivation, and lockdown restrictions caused by COVID-19 are further reasons given for not increasing physical activity levels postpartum.

## Barriers and enablers

It is essential to acknowledge the inevitable impact of the COVID-19 pandemic on the physical activity behaviours of pregnant women and new mums.

Within healthcare provision, face-to-face contact with health visitors and midwives has been reduced, which may have impacted upon opportunities to promote being active with pregnant and postpartum women. Furthermore, some healthcare professionals reported being cautious to promote physical activity recommendations as these may have been seen to contradict the governments ‘stay at home’ directive.

Some women reported leaving the house less frequently due to the national lockdown while others aimed to follow shielding guidelines and minimise time spent outside the home, impeding engagement in physical activity. Other women noted the closure of leisure facilities as a cause of their decreased activity. There was recurring reference to the closure of swimming pools as a major barrier preventing women being active in their preferred way. The lack of indoor facilities was a further barrier to being active during the winter, as cold and wet weather made some women want to avoid outdoor activity.

Along with most team sports and group exercise sessions, pregnancy specific activities, such as prenatal yoga classes have not been running ‘face-to-face’ due to the pandemic. Telephone interviews with pregnant women and new mums revealed some women envisioned participating in these types of classes and were disappointed this wasn’t possible. Some continued to

## Postpartum physical activity examples

“

*Running with a running buggy. Buggy bootcamp classes. Postnatal core classes online. Walking, yoga and stretching.*

“

*Before lockdown 3, Pilates, swimming and buggy fit.*

“

*I try to do some activities with the baby, like throwing her up and down.*

“

*Online exercise videos.*

“

*At the moment, I am just walking and hiking about 4 miles, 4-5 times a week.*

“

*I can’t fit in as much as I used to but I tend to get a couple of runs a week.*

“

*I tend to go for a walk twice a day at the moment. Not always for a long time but I like to get out and get some air and keep moving. Sometimes I use the carrier but mostly I am pushing the pushchair.*

“

*New Mums,  
Survey and Interview data*

engage in these classes online but one woman commented that her motivation to attend face-to-face classes was to meet fellow 'mums to be', which was more difficult online. However, another noted that as long as she was able to participate, location was irrelevant.

General preference for certain types of activity may become a barrier for some women during pregnancy. Those who habitually participate in team sports recounted cessation of their engagement as they were unsure if they could continue to engage in these activities, or how they should adapt them to be safe for pregnancy. Other women noted a preference for being active with someone else and were less likely to be active if this meant doing it by themselves.

Family and peer influences may also affect women's behaviour and can act as a significant barrier or enabler. Some women mentioned parents or parents-in-law having different opinions on how active a woman should be during pregnancy. Generally, women find it encouraging when they have the support of family members, particularly partners, as it helps them set aside time to be active or gives them someone to be active with.

Anxiety around the safety of activity was also cited as a concern for some women. The belief that an active pregnancy can lead to miscarriage was recurrent in survey data and was responsible for activity attrition, particularly in the first trimester.

In the postpartum phase many women reported incorporating their activity into life with a baby or children. The issue of childcare was raised as a factor preventing women from doing the same types of activities as they had previously done. When COVID-19 guidelines allow facilities to open, new mums expressed an interest in attending fitness classes they could take their baby to, or facilities with a creche.

Women who had other children talked about needing to take them outside every day or joining in with active play at home, prompting them to remain active. Setting small personal goals, such as getting out for a walk each day, was cited as a helpful way to ensure they stay active. Taking the baby for a walk in a pushchair or carrier was widely reported as a great way to stay active and entertain the baby, especially while formal parent and baby activities and group meet ups are restricted.

---

## Barriers and Enablers

"

*When speaking to my parents, they are surprised that I am involved in yoga and swimming, they see the benefits but it wasn't like that when they were having babies.*

"

*It was nice to be in the studio and I'd love to be able to go back, but at the end of the day, where I do it [yoga] doesn't matter that much.*

"

*Not having someone to do something with was a major barrier for me. I wouldn't start swimming if my husband wouldn't go with me.*

"

*I prefer group activities and wouldn't want to do things on my own.*

"

*I had this vision of me swimming all the way through pregnancy because I love it. Unfortunately the pool closed due to lockdown so this wasn't possible.*

"

*I used to do things together with my husband, but that's more difficult now we have a child.*

"

Pregnant Women and New Mums,  
Interview data

## Pregnant Women and New Mums

Pregnant women and new mums had a good understanding of CMO guidelines

All women agreed that physical activity could help to prevent weight gain during pregnancy



Almost all women agreed that physical activity was beneficial for **sleep, mood** and **fitness**



### Engagement with Healthcare Professionals



54%

of pregnant women felt encouraged to be active by their healthcare professionals in the first trimester

33%

of pregnant women spoke about being active in their first midwife appointment

### Information



4 out of 10 pregnant women and new mums use online sources to find information about being active during pregnancy/postpartum



6 out of 10 pregnant women and new mums have enough information to make an informed choice about their physical activity

#### Women use:



Organisation websites e.g NHS

Social media



Search engine results

Fitness and wellness apps



Pregnancy resources

## Pregnant Women

Women reported engaging in various different **physical activities** during pregnancy

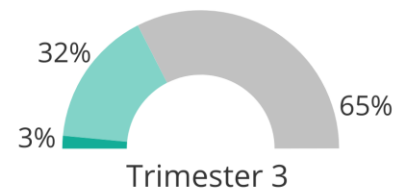
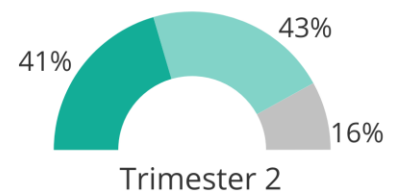
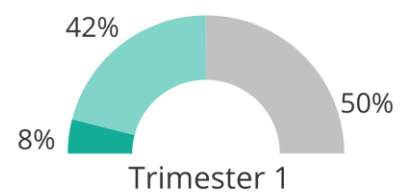


**Walking** is the most popular activity among women at all stages of pregnancy

12% of pregnant women see other pregnant women being active

During pregnancy **physical activity** levels...

- ↑ Increase
- Stay the same
- ↓ Decrease



## New Mums



**100%**

said their active pregnancy had an impact on postpartum recovery

**70%**

incorporate physical activity into their daily life

**60%**

set aside time to be active each week

No new mums said they '*always*' have time to be active



## Programme Actions

Recruitment, training and follow-up surveys for healthcare professionals and recruitment of pregnant women in the first and third trimesters will continue throughout 2021. It is hoped that specific delivery challenges relating to COVID-19 will be lessened into the summer and autumn, reducing restrictions on midwife and health visitor contacts with pregnant women and new mums, and enabling increased recruitment of participants.

Findings presented in this Annual Report describe preliminary insights from the pregnant women/new mums population. Further timepoint comparisons will be presented in the Final Report in Spring 2022 and is expected to include a larger sample from all recruitment locations.

**Ensure clear signposting to expert resources for healthcare professionals and pregnant women and new mums.** This Mum Moves healthcare professionals training provides comprehensive knowledge exchange with enduring impact on professional practice. To alleviate healthcare professionals concerns about being asked highly specific and sport targeted questions, healthcare professionals should have clear pathways to seek additional expertise to ensure women receive the advice they need to remain active confidently and safely during pregnancy and postpartum.

**Further promote the This Mum Moves website and Baby Buddy app.** Pregnant women and new mums interviewed and surveyed for this report did not report using the This Mum Moves website or Baby Buddy app amongst the resources they engage in. Ensure that healthcare professionals and healthcare settings are equipped with the leaflets and posters that promote the online presence of this programme.

**Display CMO guidelines on posters in waiting rooms.** Many women recalled seeing posters about smoking, breastfeeding, diet and alcohol in a waiting room, and felt information about how to have an active pregnancy was lacking. Survey findings show one third of women do not feel they have the information needed, but all women consistently visit healthcare waiting rooms during pregnancy. Some trusts place posters inside women's handheld notes to ensure they reach all pregnant women. Consistency in this practice across all engaged sites will ensure all women have access to basic physical activity information.

**Make every form of contact with women count.** Some women feel opportunities are missed to signpost them to useful information about pregnancy. They suggest opportunities for wider healthcare staff such as radiographers, consultants, GPs and physiotherapists to signpost them to relevant information, such as the NHS website. Furthermore, they indicate that information could be included on non-verbal correspondence,

*What can be done to encourage more women to be active?*

"

*I had a good look at the posters in the midwifery waiting room and there was nothing about physical activity. There are flashy posters to draw your attention, about diseases, issues, support groups, but not much on a positive note or how you can enjoy your pregnancy so that would be a good place to start.*

"

*It would be good to have some e-mail communication from the midwifery team in between appointments.*

"

*We get letters informing us about our appointments maybe a note somewhere on the bottom of the letter of where to go to for more advice.*

"

*I think this should be the midwives role, as some women don't have any other influence. The midwives and health visitors should be proactive as some women do want this.*

"

*For example, when the radiographer performing an ultrasound comments on baby's movements, this could be an opportunity to suggest 'it is important for you to keep moving too'.*

"

Pregnant Women,  
Postpartum Survey data

## Appendix A

# Methodological note: healthcare professionals

### Survey designs

The healthcare professionals' surveys are designed to assess key programme aims and outcomes of This Mum Moves. Demographic information is taken at T1 (the pre-training survey). Questions relating to professional practice are compared at T1, T3 and T4, while questions about knowledge, skills and confidence to deliver physical activity guidance to pregnant women and new mums are repeated at all four time points. The surveys and all research approaches are scrutinised by *spear's* quality assurance lead, Professor Mike Weed.

### Survey samples & MME

To date, This Mum Moves Training has been received by 355 healthcare professionals. To achieve an MME  $< \pm 5\%$  for the healthcare professionals who have received training, survey responses are needed from 185. The sample of survey returns from healthcare professionals exceeds this target in the pre and post-training surveys ( $n=226$  total responses, MME  $\pm 1.75\%$ ). Attrition is expected at follow-up survey time points, and due to delays in training delivery, 3 or 6 months has not elapsed since the training in many cases therefore at present the T3 and T4 sample sizes fall below the preferred sample size.

As the programme progresses and additional healthcare professionals survey responses are collected across the 5 sites, adjustment to the target sample will be necessary. For example, if 500 healthcare professionals are trained throughout the course of the project, 218 responses at each timepoint will be required to achieve a MME  $< \pm 5\%$ .

### Data Analyses

Throughout this report, data presented from the healthcare professionals survey represent the responses of all participants (ambassador and cascade) unless otherwise specified. Changes are only noted in this report when they are statistically significant. Where there appear to be differences in data which are not identified as statistically significant, these do not represent changes.

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#### Maximum Margin of Error (MME)

The MME shows the level of accuracy the participant sample has; the smaller the MME, the greater the accuracy. It is calculated at the standard 95% confidence level so we can be 95% confident that the sample results reflect the population results to within the MME. For example, if the survey sample has an MME of  $\pm 5\%$  and 50% of participants say they 'enjoy playing sports', if the survey were conducted 100 times, the percentage who state they 'enjoy playing sports' would range between 45% and 55% most (95%) of the time.

#### Statistical significance

Throughout this report, where changes in participants' responses are reported, they are significant at  $p < .05$ . This means there is a less than a 5% chance that the changes reported are not real changes that might be expected in the wider population beyond the sample.

# Methodological note: pregnant women and new mums

## Survey designs

The pregnant women and new mums surveys are designed to assess key programme aims and outcomes of This Mum Moves. Demographic information is taken on the first occasion of survey completion which could be at any time point. Questions relating to the CMO guidelines are compared during pregnancy and, where guidelines remain relevant, postpartum. Current levels of physical activity, reported change in physical activity, and behaviours and preferences to be active are compared at all time points. Perceptions of experiences with healthcare professionals are compared at all timepoints, and frequency of interactions relating to physical activity with healthcare professionals are collated per time point. The surveys and all research approaches are scrutinised by *spear's* quality assurance lead, Professor Mike Weed.

## Participants

The COVID-19 pandemic has impacted on participant recruitment. Survey completions are lower than projected and analysis has been adjusted to reflect this. Due to low recruitment, multiple points of entry into the research and attrition of women completing multiple time points, repeated measures analysis is not possible and responses at each timepoint are grouped together to be treated as independent samples. As This Mum Moves progresses and further pregnant women and new mums are recruited, more detailed sub-analysis will be possible, and will enable comparison of independent factors within and between timepoints.

## Data Analyses

Throughout this report, data presented from pregnant women and new mums is a comparison of all four time points, unless otherwise specified. Changes are only noted in this report when they are statistically significant. Where there appear be differences in data which are not identified as statistically significant, these do not represent changes.

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### Statistical significance

Throughout this report, where changes in participants' responses are reported, they are significant at  $p < .05$ . This means there is a less than a 5% chance that the changes reported are not real changes that might be expected in the wider population beyond the sample.