POLICY BRIEFING
NOVEMBER 2025

Addressing Gestational Diabetes Risk

Summary

- Gestational diabetes is raised blood glucose in pregnancy. It affects approximately one in seven pregnancies globally[1] and can cause life-threatening complications in pregnancy or at birth for both the mother and baby. Women who have had gestational diabetes are almost ten times more likely to develop type 2 diabetes[2].
- The Impact Diabetes B2B (Bump2Baby and Me) project used a randomised controlled trial to test the **Bump2Baby and Me mHealth Coaching Programme**. This novel healthcare intervention provided women, at risk of developing gestational diabetes, with evidence-based healthy eating and exercise information, during pregnancy and for the first year after birth. The programme used a smartphone app and real-life health professionals to provide the coaching.
- The trial showed promising results, including **a significant increase in breastfeeding, a 30% reduction in gestational diabetes incidence, and improved metabolic health**. A follow-on project, Bump2Baby and Me+, commenced in June 2025 and will explore whether the trial results will translate into new countries and whole maternity services.

Policy Recommendations and Actions

Policy and healthcare decision makers should consider:

- Investigating the adoption of a gestational diabetes mHealth coaching intervention into routine maternity care.
- Tailoring gestational diabetes interventions to meet the needs of diverse at-risk populations.
- Offering self-weighing to all women at risk of gestational diabetes.
- Funding research to a) further understand how pregnant women engage with mHealth interventions, and b) achieve consensus about best practice in the prevention and treatment of gestational diabetes.

#1 Policymakers should investigate adopting a gestational diabetes mHealth coaching intervention into routine maternity care

What research was done?

Project researchers undertook a randomised controlled trial to test the Bump2Baby and Me mHealth Coaching Programme. Women were screened for gestational diabetes risk factors in early pregnancy. Those identified as at risk and willing to participate, were randomised into two groups. Half of the trial participants received the intervention plus usual care, while the other half (the control group) received usual care.

The intervention provided women with personalised, evidence-based, healthy eating and exercise coaching during pregnancy and for the first year after birth. The programme used a smartphone app and real-life health professional to provide the coaching.

What did we find?

The trial findings suggest that personalised digital health coaching spanning pregnancy and postpartum can improve important maternal and infant health outcomes. The Bump2Baby and Me intervention demonstrated statistically significant reductions in gestational diabetes incidence and improvements in metabolic health markers and early breastfeeding rates[3].

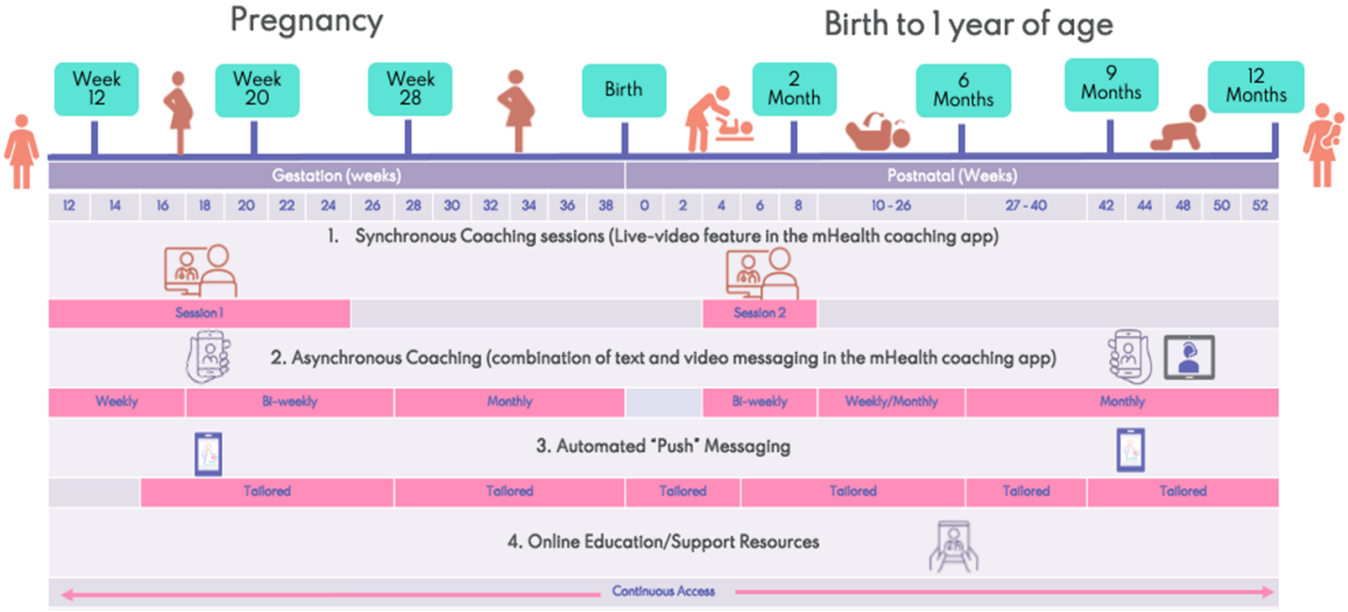


Figure 1. Bump2Baby and Me mHealth Coaching Programme intervention components

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Gestational diabetes

Women receiving personalised health coaching through the smartphone app were 30% less likely to develop gestational diabetes than those who received standard care alone. The incidence of gestational diabetes was 20% in the control group versus 14% in the intervention group.

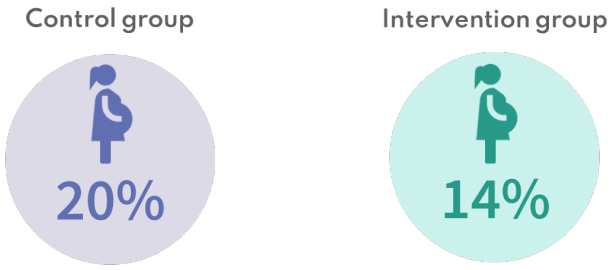


Figure 2. Gestational diabetes incidence in the Bump2Baby and Me trial

Breastfeeding

More women who received the Bump2Baby and Me mHealth Coaching Programme were breastfeeding at six weeks after birth compared to those in the control group. This behaviour continued at the three-month mark, where exclusive breastfeeding was higher in the intervention group.

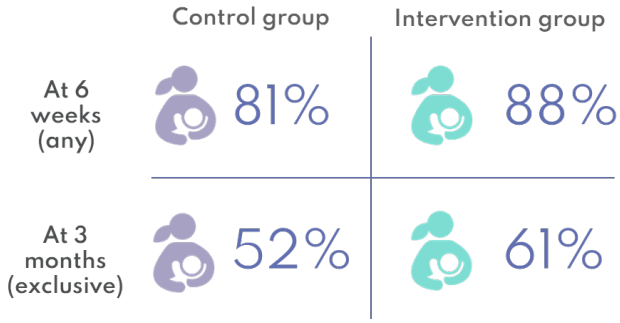


Figure 3. Breastfeeding rates in the Bump2Baby and Me trial

Metabolic health

Women who received the intervention showed more favourable metabolic profiles at 12 months, with lower fasting glucose, lower insulin and improved lipid profile including lower triglycerides and higher HDL (good) cholesterol.

Policy call to action

Our findings suggest that an mHealth coaching intervention may be an effective way to reduce women's gestational diabetes risk and improve breastfeeding. It also offered subtle but meaningful benefits for long-term metabolic health.

Policymakers and healthcare professionals should consider adopting mHealth coaching (similar to Bump2Baby and Me) for gestational diabetes prevention, that would be complementary to usual care, to better support women's health beyond pregnancy.

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#2 Gestational diabetes interventions should be tailored to meet the needs of diverse at risk populations

What research was done?

Researchers within the Bump2Baby and Me project examined the variations in risk factors and demographic and clinical characteristics among pregnant women at increased risk of gestational diabetes across the four international trial sites.

The baseline characteristics analysed included demographic, clinical and lifestyle data such as age, ethnicity, height, weight, BMI, blood pressure, food intake, physical activity, health literacy, living situation, education, and employment status.

What did we find?

The results provided compelling evidence that women at high risk of gestational diabetes represent a diverse population with distinct demographic, clinical and behavioural characteristics shaped by ecosocial drivers, and their cultural and healthcare contexts[4].

Marked variations in risk profiles were seen across the four trial sites, which underscores the importance of moving beyond *one-size-fits-all* approaches to the prevention of gestational diabetes.

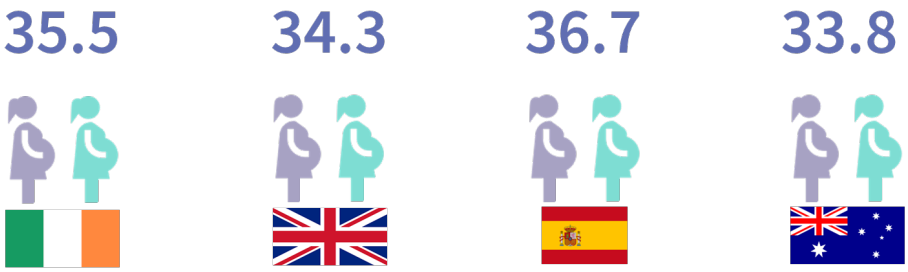


Figure 4. Women's average age in pregnancy in the Bump2Baby and Me trial

Policy call to action

Policymakers and healthcare professionals should consider developing targeted interventions that acknowledge and respond to the diversity of populations at risk of gestational diabetes.

Funders should prioritise research into the development and validation of adapted risk assessment tools and longitudinal studies to understand how the baseline characteristics influence gestational diabetes development and pregnancy outcomes across different settings.

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#3 Policymakers should consider offering self-weighing to all women at risk of gestational diabetes

What research was done?

The intervention and control groups in the Bump2Baby and Me randomised control trial received Bluetooth scales to support self-weighing.

Policy call to action

Policymakers and healthcare professionals could consider offering scales for self-weighing to all women at risk of gestational diabetes, with additional mHealth coaching for those who need or want more

What did we find?

Women in both groups maintained their early pregnancy weight through to 12 months postpartum. This is significant, as most women typically retain some pregnancy weight long-term. A return to pre-pregnancy weight is a positive health outcome linked to reduced risk of diseases like diabetes.

Researchers found that regular self-weighing may be a powerful tool all by itself. Women who weighed themselves regularly during both pregnancy and postpartum had significantly better weight outcomes at one year postpartum, regardless of which group they were in[3].



Figure 5. User quote adapted from qualitative interviews with women in the intervention group

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#4 Policymakers should fund research to further understand how pregnant women engage with mHealth interventions

What research was done?

The Bump2Baby and Me project developed and tested a mHealth coaching intervention and project researchers looked at the engagement patterns of the women who received the intervention.

What did we find?

The results revealed that women engaged with the intervention differently[5].

Policy call to action

Additional research is needed across diverse populations and healthcare contexts to gain insights into the evolving dynamics of engagement patterns during pregnancy and postpartum, as well as variations among distinct cohorts to contribute to the understanding of how pregnant women engage with mHealth interventions to support the development of effective interventions in the future.

"Some of the changes that I implemented, I continue to do now, such as taking 10 minutes out for well-being or how I eat certain foods. It became part of my life so now it's normal."

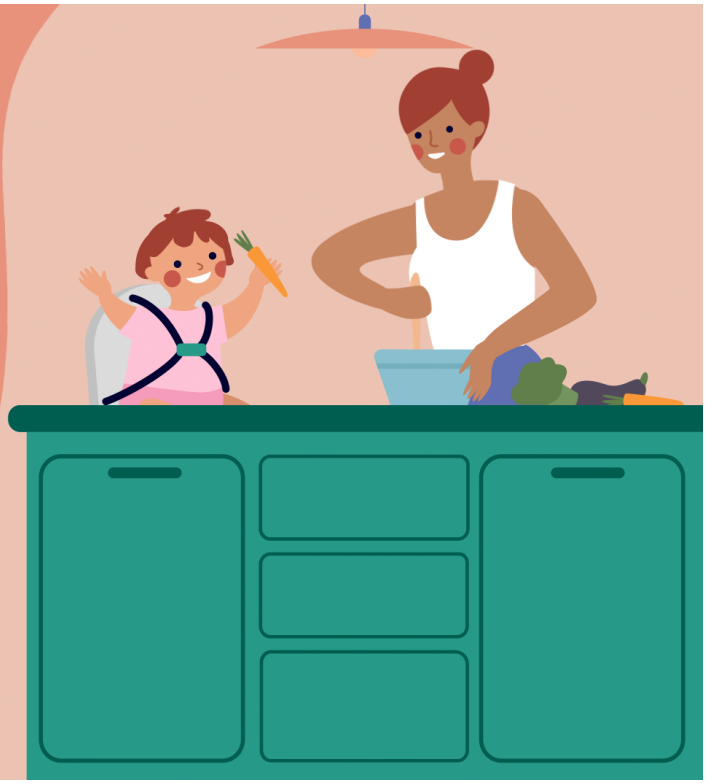


Figure 6. User quote adapted from qualitative interviews with women in the intervention group

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#5 Policymakers should fund research to achieve consensus about best practice in the prevention and treatment of gestational diabetes

What research was done?

At the project outset, researchers carried out qualitative interviews with key healthcare professionals and then undertook an online survey to investigate gestational diabetes screening, diagnosis and care practices in the UK, Ireland and Australia.

What did we find?

Numerous variations were found, such as using different gestational diabetes screening risk factors, first-line medications, and birthing strategies. These variations suggest perinatal outcomes for women will differ according to the maternity hospital or unit attended and the country where the woman delivers.

Policy call to action

Policymakers should fund research to achieve consensus about best practice for the prevention and treatment of gestational diabetes, taking contextual factors (i.e. population, health service delivery and health economics) into account.

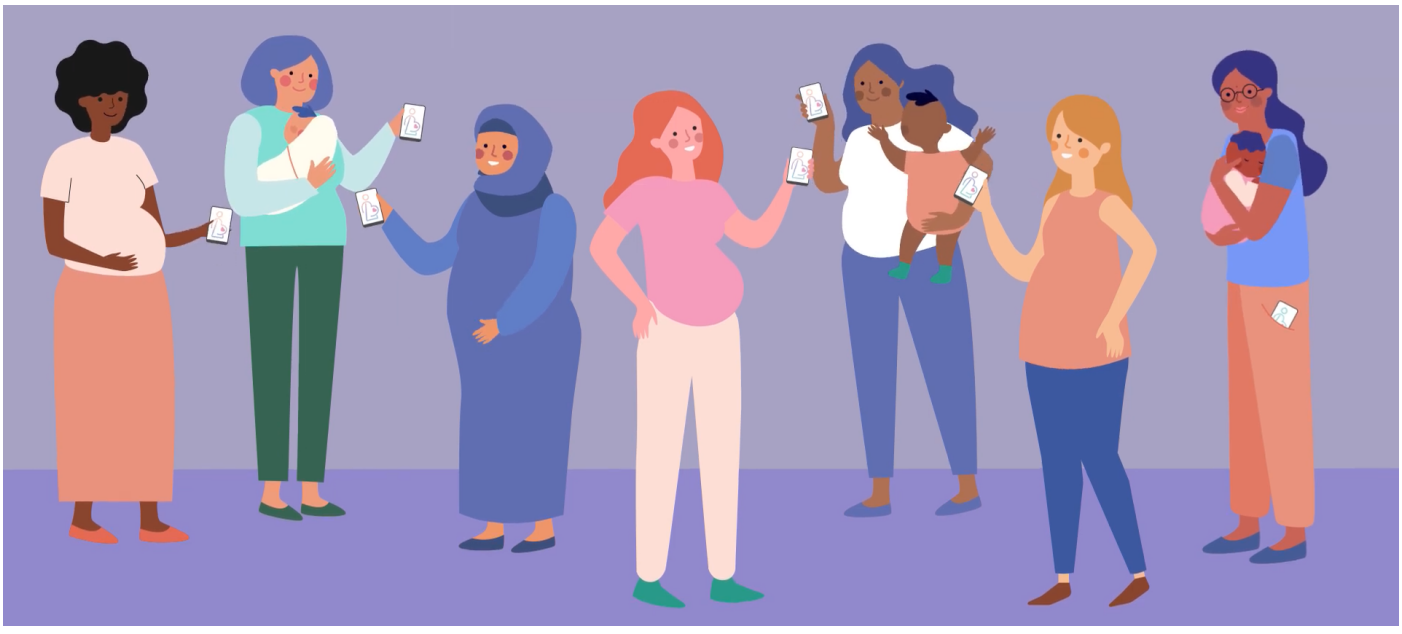


Figure 7. Snapshot from the Bump2Baby and Me mHealth Coaching Programme User Experience video

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We're delighted that our trial showed improved health outcomes for women and would urge policymakers to consider our policy recommendations.

Professor Sharleen O'Reilly
Project Coordinator

For more information

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