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# An international cross-sectional survey to compare weight and weight gain management in antenatal care across the UK, Ireland, and Australia during the COVID-19 pandemic

A. Davies<sup>1</sup>, A. Howell<sup>1</sup>, A. Geraghty<sup>2,3</sup>, S. O'Reilly<sup>2,3</sup> and C. Burden<sup>1</sup>

<sup>1</sup>University of Bristol, Bristol, UK,

<sup>2</sup>School of Agriculture and Food Science, University College Dublin, Ireland and

<sup>3</sup>UCD Perinatal Research Centre, School of Medicine, University College Dublin, National Maternity Hospital, Ireland

Overweight, obesity, and high gestational weight gain (GWG) increases risk of gestational diabetes (GDM), with consequent impact on maternal and infant outcomes<sup>(1)</sup>. Inter- and intra-country variations in guidelines relating to weight assessment and management will impact who is offered weight-related care and what care is offered, with potential effects on risk of developing GDM. In the Impact Diabetes Bump2Baby study<sup>(2)</sup>, we explored variation in how gestational weight and weight gain are assessed within usual care and during the COVID-19 pandemic across three countries.

A cross-sectional online survey comprising closed- and open-ended questions was developed through interviews, piloted, and refined. It was distributed between July 2021 and November 2022 through professional networks and snowball sampling to obstetricians, diabetologists, diabetic specialist nurses and midwives, dietitians, and neonatologists in the UK, Ireland, and Australia. Questions addressed when and how frequently women are weighed, what care was offered during and after pregnancy, and which guidelines informed care. Questions covered usual practices and adaptations during the COVID-19 pandemic. Data were downloaded into R, visualised, and descriptively analysed.

159 clinicians participated (72 UK, 59 Ireland, 28 Australia). Weight was typically measured by health care professionals (HCPs) across all three countries with some units indicating that weight was both HCP measured and self-reported. There was an increase in the number of sites recording only self-reported weight or not recording weight during the pandemic. Weight was typically recorded at the first appointment across all three countries. In the UK it was infrequently recorded again before 36 weeks' gestation and it was infrequently recorded beyond the first antenatal appointment in Ireland. In Australia several respondents indicated weight was measured at each appointment. During the pandemic, the number of units recording weight beyond the first antenatal appointment for all three countries decreased. Care pathways for women with a high body mass index (BMI) at first appointment varied both within and between countries; information was frequently offered, along with attendance at a specialist clinic, additional scans and an anaesthetist consultation. There was limited individual or group education in any country for lifestyle interventions aimed at healthy weight management in pregnancy. There was limited measurement of GWG across all countries.

Variation exists for both within and between countries for how and when weight is recorded, and what care is offered. Limited recording of weight during pregnancy is a missed opportunity to support women who gain more weight than recommended, which may result in inequity of access to weight-related care to prevent GDM. In those with identified high BMIs or GWG, limited education is offered to support women reduce their GDM risk. Guidelines to standardise when women should be weighed and evidence-based care to support women to prevent GDM are needed.

## Acknowledgments

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## References

1. Langley-Evans SC, Pearce J, Ellis S (2022) *J Hum Nutr Diet* 35(2), 250–64.
2. O'Reilly SL, Burden C, Campoy C *et al.* (2021) *Trials* 22, 963.