**Georgia Otter u3211700**

**Prioritising the Health of Women with Gestational Diabetes Mellitus**

Gestational Diabetes Mellitus is a highly reported health condition occurring during pregnancy with Australian statistics estimating a 15% prevalence. Higher rates of adverse antenatal, intrapartum, and postnatal outcomes, as well as lower rates of breastfeeding are reported. These adverse outcomes greatly increase the risk of mothers and infants developing long-term health complications, including Type 2 Diabetes Mellitus.

Research identifies the significant influence midwifery-led models of care have on optimising pregnancy, intrapartum, postnatal, and breastfeeding outcomes. However, access is often inequitably limited by hospital policy to well, low risk women. Women with any complexity experience a biomedical model, decreased midwifery support, and poorer outcomes.

This policy seeks to address that inequity and maximise the potential for optimal outcomes for women with Gestational Diabetes Mellitus. Upon diagnosis women will be transferred to a midwifery-led continuity of care model. Antenatal, intrapartum, and postnatal care will be provided by a known primary midwife, or team of rostered midwives, working within the full scope of midwifery practice with additional professional development in this condition. This service will act as a fulcrum, connecting and engaging women with obstetric, endocrinological, and dietetic services where needed. Six weeks of postnatal care will ensure a high uptake of a glucose tolerance test, to inform future care provision.

Success will be evaluated by collecting quantitative data on pregnancy, and birth outcomes, as well as qualitative data on women’s experiences. This service has the potential to promote greater public health outcomes for mother infant dyads in this cohort.

**References:**

Australian Institute of Health and Welfare. (2019). *Incidence of gestational diabetes in Australia*. www.aihw.gov.au/

Blixt, I., Johansson, M., Hildingsson, I., Papoutsi, Z., & Rubertsson, C. (2019). Women's advice to healthcare professionals regarding breastfeeding: "offer sensitive individualized breastfeeding support"- an interview study. *International Breastfeeding Journal, 14*(1), 1-12. https://doi.org/10.1186/s13006-019-0247-4

Bohren, M. A., Hofmeyr, G. J., Sakala, C., Fukuzawa, R. K., Cuthbert, A., & Bohren, M. A. (2017). Continuous support for women during childbirth. *Cochrane database of systematic reviews, 2017*(8), CD003766-CD003766. https://doi.org/10.1002/14651858.CD003766.pub6

Callander, E. J., Slavin, V., Gamble, J., Creedy, D. K., & Brittain, H. (2021). Cost-effectiveness of public caseload midwifery compared to standard care in an Australian setting: a pragmatic analysis to inform service delivery. *International Journal for Quality in Health Care, 33*(2). https://doi.org/10.1093/intqhc/mzab084

Chertok, I. R. A., & Sherby, E. (2016). Breastfeeding self-efficacy of women with and without gestational diabetes. *MCN: The American Journal of Maternal Child Nursing, 41*(3), 173-178. https://doi.org/10.1097/NMC.0000000000000233

Doughty, K. N., & Taylor, S. N. (2021). Barriers and benefits to breastfeeding with gestational diabetes. *Seminars in perinatology, 45*(2), 151385. https://doi.org/10.1016/j.semperi.2020.151385

Forster, D. A., McLachlan, H. L., Davey, M.-A., Biro, M. A., Farrell, T., Gold, L., Flood, M., Shafiei, T., & Waldenström, U. (2016). Continuity of care by a primary midwife (caseload midwifery) increases women's satisfaction with antenatal, intrapartum and postpartum care: results from the COSMOS randomised controlled trial. *BMC pregnancy and childbirth, 16*(1), 28-28. https://doi.org/10.1186/s12884-016-0798-y

Gunderson, E. P., Hurston, S. R., Ning, X., Lo, J. C., Crites, Y., Walton, D., Dewey, K. G., Azevedo, R. A., Young, S., Fox, G., Elmasian, C. C., Salvador, N., Lum, M., Sternfeld, B., & Quesenberry, C. P., Jr. (2015). Lactation and progression to type 2 diabetes mellitus after gestational diabetes mellitus: A prospective cohort study. *Annals of internal medicine, 163*(12), 889-898. https://doi.org/10.7326/P15-9038

Horta, B. L., & Victora, C. G. (2013). Long-term effects of breastfeeding: A systematic review. *World Health Organization*. http://apps.who.int/iris/bitstream/10665/79198/1/9789241505307\_eng.pdf

McIntyre, D., H, Catalano, P., Zhang, C., Desoye, G., Mathiesen, E., R, & Damm, P. (2019). Gestational diabetes mellitus (Primer). *Nature reviews. Disease primers*. https://doi.org/10.1038/s41572-019-0098-8

McLachlan, H. L., Forster, D. A., Davey, M. A., Farrell, T., Gold, L., Biro, M. A., Albers, L., Flood, M., Oats, J., & Waldenström, U. (2012). Effects of continuity of care by a primary midwife (caseload midwifery) on caesarean section rates in women of low obstetric risk: the COSMOS randomised controlled trial. *BJOG : an international journal of obstetrics and gynaecology, 119*(12), 1483-1492. https://doi.org/10.1111/j.1471-0528.2012.03446.x

Meedya, S., Fahy, K., Yoxall, J., & Parratt, J. (2014). Increasing breastfeeding rates to six months among nulliparous women: A quasi-experimental study. *Midwifery, 30*(3), e137-144. https://doi.org/10.1016/j.midw.2013.12.010

Morrison, M. K., Collins, C. E., Lowe, J. M., & Giglia, R. C. (2015). Factors associated with early cessation of breastfeeding in women with gestational diabetes mellitus. *Women and Birth, 28*(2), 143-147. https://doi.org/10.1016/j.wombi.2014.12.002

Nielsen, J. H., Olesen, C. R., Kristiansen, T. M., Bak, C. K., & Overgaard, C. (2015). Reasons for women's non-participation in follow-up screening after gestational diabetes. *Women and Birth, 28*(4), e157-e163. https://doi.org/10.1016/j.wombi.2015.04.006

Otter, G., Atchan, M., Davis, D., Kurz, E., Hooper, M. E., Shield, A., Samarawickrema, I., & Spiller, S. (2022). *The Factors Influencing Breastfeeding for Women with a Recent History of Gestational Diabetes Mellitus: A Systematic Integrative Review* [Under review].

Oza-Frank, R., & Gunderson, E. P. (2017). In-hospital breastfeeding experiences among women with gestational diabetes. *Breastfeeding Medicine, 12*, 261-268. https://doi.org/10.1089/bfm.2016.0197

Reichental, Z. L., O'Brien, V. M., & O'Reilly, S. L. (2021). Interventions to support women with overweight or obesity or gestational diabetes mellitus to initiate and continue breastfeeding: Systematic review and meta‐analysis. *Obesity reviews*, e13371-e13371. https://doi.org/10.1111/obr.13371

Renfrew, M. J., McFadden, A., Bastos, M. H., Campbell, J., Channon, A. A., Cheung, N. F., Silva, D. R. A. D., Downe, S., Kennedy, H. P., Malata, A., McCormick, F., Wick, L., & Declercq, E. (2014). Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *The Lancet, 384*(9948), 1129-1145. https://doi.org/https://doi.org/10.1016/S0140-6736(14)60789-3

Rollins, N. C. M. D., Bhandari, N. P., Hajeebhoy, N. M. H. S., Horton, S. P., Lutter, C. K. P., Martines, J. C. P., Piwoz, E. G. S., Richter, L. M. P., & Victora, C. G. M. D. (2016). Why invest, and what it will take to improve breastfeeding practices? *The Lancet (British edition), 387*(10017), 491-504. https://doi.org/10.1016/S0140-6736(15)01044-2

Sandall, J., Soltani, H., Gates, S., Shennan, A., Devane, D., & Sandall, J. (2016). Midwife‐led continuity models versus other models of care for childbearing women. *Cochrane database of systematic reviews, 2016*(4), CD004667-CD004667. https://doi.org/10.1002/14651858.CD004667.pub5

Tam, W. H., Ma, R. C. W., Ozaki, R., Li, A. M., Chan, M. H. M., Yuen, L. Y., Lao, T. T. H., Yang, X., Ho, C. S., Tutino, G. E., & Chan, J. C. N. (2017). In utero exposure to maternal hyperglycemia increases childhood cardiometabolic risk in offspring. *Diabetes care, 40*(5), 679-686. https://doi.org/10.2337/dc16-2397

ten Hoope-Bender, P., de Bernis, L., Campbell, J., Downe, S., Fauveau, V., Fogstad, H., Homer, C. S. E., Kennedy, H. P., Matthews, Z., McFadden, A., Renfrew, M. J., & Van Lerberghe, W. (2014). Improvement of maternal and newborn health through midwifery. *The Lancet, 384*(9949), 1226-1235. https://doi.org/https://doi.org/10.1016/S0140-6736(14)60930-2

Tracy, S. K. P., Hartz, D. L. P., Tracy, M. B. F., Allen, J. B., Forti, A. R. M., Hall, B. M., White, J. R. M., Lainchbury, A. M., Stapleton, H. P., Beckmann, M. F., Bisits, A. F., Homer, C. P., Foureur, M. P., Welsh, A. P., & Kildea, S. P. (2013). Caseload midwifery care versus standard maternity care for women of any risk: M@NGO, a randomised controlled trial. *The Lancet (British edition), 382*(9906), 1723-1732. https://doi.org/10.1016/S0140-6736(13)61406-3

Vounzoulaki, E., Khunti, K., Abner, S. C., Tan, B. K., Davies, M. J., & Gillies, C. L. (2020). Progression to type 2 diabetes in women with a known history of gestational diabetes: systematic review and meta-analysis. *BMJ (Online), 369*, m1361-m1361. https://doi.org/10.1136/bmj.m1361

World Health Organization. (2013). *Diagnostic criteria and classification of hyperglycaemia first detected in pregnancy*. https://apps.who.int/iris/handle/10665/85975