Policy context

Prevention of type 2 diabetes (T2DM) was the main recommendation in the National Chronic Disease Strategy signed off by the Council of Australian Governments in April 2007.

T2DM is currently the second highest contributor to the Australian burden of disease. It is projected that by 2023 T2DM will pose an economic burden of A$7 billion. Diabetes is associated with a wide range of macrovascular and microvascular complications including blindness, amputations, renal disease, and cardiovascular diseases.

Gestational diabetes (GDM) is a strong predictor of type 2 diabetes (T2DM). About 10-13% of all pregnancies in Australia are complicated by GDM. One of the most significant long-term health impacts of GDM is the significantly increased risk of developing diabetes. The greatest increase in the incidence of type 2 diabetes following GDM occurs within the first five years, with up to 50% of women with prior GDM developing T2DM within this timeframe.

Lifestyle intervention has been shown to prevent T2DM in high-risk populations. Dietary modification along with moderate physical activity resulted in weight loss and a reduction in diabetes incidence by 58%, which was nearly twice as effective as drug treatment (31% reduction). Lifestyle intervention has also been shown to reduce the development of diabetes in women who had GDM (averaging 12 years from index pregnancy) by 50%.

The Victorian government has led the way in diabetes prevention with the Life! Program. Started in 2007, this group based lifestyle modification program is a scaled up version of the Greater Green Triangle (National demonstrator) Diabetes Prevention Program. Unfortunately it is not tailored for women in the postnatal period but for an age group three to four decades older. The NHMRC-funded Mothers after Gestational Diabetes in Australia is evaluating the effectiveness and cost effectiveness of a specially tailored group-based intervention for postnatal women. It has proved exceedingly hard to recruit participants due to barriers such as difficulty arranging for childcare and the logistics of getting out of the house to attend a session, which is why a telephone-based intervention may offer advantages.

As a patient group with known risks of developing T2DM, postpartum women with prior GDM represent an enormous opportunity for the health system to intervene and prevent the development of diabetes.
Policy options

Research has shown that home-based intervention, on-site childcare facilities, and flexible appointment times are critical in engaging postpartum women in interventions. Reaching these women in their own homes at their convenience could be a cost-effective way of meeting the stated needs. Therefore, telephone-based intervention could be an effective way of reaching postpartum women.

Telephone-based interventions have been shown to be effective in producing and maintaining lifestyle changes. The Australia’s Get Healthy Information and Coaching Service® launched by the New South Wales government in 2009 provided telephone coaching services which resulted in significant improvements in body weight, waist circumference, fruits and vegetable intake, and physical activity.

If the pilot found telephone-based approaches to be a feasible and acceptable means of delivering lifestyle program to postpartum women with GDM, further investments can be done to test the effectiveness and cost effectiveness of the program.

Potential policy options:

> GP referral of all postpartum women with GDM to a home-based, telephone-delivered lifestyle program delivered by trained coaches.

> Existing providers such as Get Healthy could be engaged as partners to deliver the program
Key findings

Findings from the pilot will be available by the end of 2015.

Main outcomes:

> Participation rate
> Barriers to participation (reasons for non-participation)
> Attrition rate
> Acceptability
> Feasibility

These findings of this pilot will be used to develop the effectiveness trial.