# The My Baby's Movements (MBM) Study Executive Summary

#### Background:

Stillbirth directly affects over 2,700 families in Australia and New Zealand each year. The proportion of unexplained stillbirths increases as pregnancy progresses. Towards the end of pregnancy, up to 60% of stillbirths have no cause identified. Stillbirth is associated with devastating and long-lasting psychosocial impact for women and families, and there is a strong impetus for more research investigating stillbirth causes and methods of prevention.

# What's movements got to do with it?

Fetal movements can be an indicator of fetal health. Decreased fetal movement (DFM) commonly precedes third-trimester stillbirths, and can be a sign of a pregnancy at-risk. DFM is thought to occur due to placental dysfunction. As a result of placental dysfunction, the baby reduces gross movement as a way to conserve blood flow for the vital organs. Despite this, research suggests that pregnant women do not currently receive quality information about fetal movements during pregnancy, and may delay reporting of DFM.

# What is My Baby's Movements (MBM)?

MBM will be a mobile phone software program designed to increase pregnant women's awareness of fetal movements. MBM will provide information and daily 'prompts' about fetal movements, and is intended to support women's decision-making about seeking care if DFM occurs. MBM will be available as an app for smartphone users, or as an SMS program for non-smartphone users. Importantly, MBM is not designed to replace any aspect of standard antenatal care, but rather to enhance and facilitate standard antenatal care.

# What are the aims of the MBM study?

There are 4 broad aims of the MBM study:

- 1. To conduct formative research, with a diverse group of pregnant women and clinicians, in order to inform the development of MBM;
- To develop and pilot test MBM among pregnant women, and refine MBM according to feedback;
- **3.** To implement MBM, in combination with education for clinicians, across hospitals in Australia and New Zealand as part of a large clinical trial;
- 4. To measure the effect of the MBM package on third-trimester stillbirth and reporting of DFM, along with adverse neonatal outcomes, health service utilisation and cost, and maternal psychosocial outcomes. We will also assess the acceptability of MBM among women and clinicians.



### Who is conducting this research?

The main coordinating centre for the MBM study is the Mater Research Institute, The University of Queensland (MRI-UQ), at Mater Health Services in South Brisbane. The study is being led by Associate Professor Vicki Flenady, a perinatal clinical epidemiologist based at MRI-UQ.

#### Where can I go for more information?

For more information about the MBM study and other projects in the ANZSA consortium, please contact ANSZA (info@stillbirthalliance.org.au), or visit www.stillbirthalliance.org.au.





