National Pregnancy in Diabetes Audit 2018
England, Wales and the Isle of Man
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NPID is the largest continuous audit of pregnancy in women with diabetes in the world (more than 4,400 pregnancies in 2018). This has allowed a depth of analysis not previously possible, including the development of locally relevant standardised ratios for key outcomes.

Preparation for Pregnancy

Few women were prepared for pregnancy in the ways recommended in the NICE guidelines:

- **NICE Guideline:**
  - Keep HbA1c <48 mmol/mol where achievable without causing problematic hypoglycaemia
  - Use a folic acid supplement prior to pregnancy
  - Suspend use of statins and ACE inhibitors/ARBs
  - Stop / substitute oral glucose-lowering medications apart from metformin

Overall 7 out of 8 women were not well prepared for pregnancy

Establishing good blood glucose control before conception and continuing this throughout pregnancy will reduce the risk of miscarriage, congenital malformation, stillbirth and neonatal death.

Recommendations

A collaborative approach by diabetes, maternity services, commissioners and networks is needed to improve pregnancy outcomes in women with diabetes by:

- Include teaching about pregnancy in diabetes in education sessions.
- Locally commissioned diabetes education programmes to include information about contraception and pregnancy preparation.
- Regional network initiatives to develop and test communication, education, pathway and treatment changes by collaboration between commissioning, primary care, maternity, diabetes and public health teams.
- Ensure all women with diabetes, irrespective of social and cultural barriers, understand the importance of preparing for pregnancy.
- During pregnancy women with diabetes receive high quality support to optimise glucose control and minimise maternal and fetal risk.
- All women with diabetes who may become pregnant should be identified and encouraged to develop a plan for either safe, effective contraception or for pregnancy preparation as part of routine review/care and support planning.
- Commit to monitoring and improving local performance against NICE guideline (NG3) and NICE Quality Standard (QS109).

Key Findings: after five years of NPID

**Pregnancy Outcomes:**
- There is a higher level of stillbirths and neonatal death, along with congenital abnormalities, in women with pre-existing diabetes compared to the general population. This has not changed over five years of NPID measurement.

**Social Deprivation:**
- More women with Type 2 diabetes are becoming pregnant than women with Type 1; these women are more likely to come from areas of social deprivation and have a higher stillbirth rate.

**Large for gestational age (LGA) babies:**
- Neonatal unit admissions are high for the babies of women with diabetes, especially for those who are born between 34 and 37 weeks. Full term babies of mothers with type 1 diabetes are more likely to be admitted to neonatal units than babies of mothers with type 2 diabetes.

**Adverse Pregnancy Outcomes**
- **Key Finding:**
  - Stillbirth rate: 98.6 per cent of registered births (live and stillbirths) in the 2018 NPID audit were live births, compared with 99.6 per cent of all registered births in 2017 in the general England and Wales maternity population.
- **Key Finding:**
  - For women with third trimester HbA1c levels at or above 48 mmol/mol, rates of preterm births, LGA and neonatal care admissions were significantly higher than for women with lower glucose levels.