

New inpatient guidelines for pregnancy and mental illness

The Joint British Diabetes Societies for Inpatient Care (JBDS-IP) aims to improve inpatient diabetes care across the UK through the development and use of high-quality, evidence-based guidelines and inpatient care pathways. **Professor Mike Sampson**, Norwich and Norfolk University Hospitals and JBDS-IP Chair, presents new guidelines on inpatient diabetes care in pregnancy and mental illness.



Management of glycaemic control in pregnant women with diabetes on obstetric wards and delivery units

The purpose of this document is to support existing processes in acute Trusts providing safe and high-quality care to pregnant women with diabetes

when they are admitted to hospital for any reason. When women with diabetes are admitted to maternity units, they are often in the care of multiple healthcare professionals, some of whom may have little knowledge of the condition.

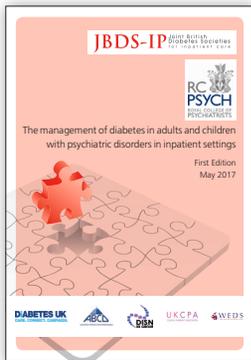
These women may need special care. Neonatal hypoglycaemia continues to affect up to 25–30 per cent of babies, putting them at risk of impaired neurologic development. There is increasing consensus that effective control of maternal glucose during pregnancy, delivery and birth for all women with diabetes is essential, not least because it has the potential to reduce this complication. The National Institute for Health and Care Excellence has already produced evidence-based guidelines on the target blood glucose which should be maintained. These new JBDS-IP guidelines attempt to provide a standardised template by which these targets can be safely and effectively achieved.

Pregnant women are at higher risk of diabetic ketoacidosis (DKA) and its adverse consequences. The new guidelines also provide a standardised protocol on how to recognise and treat DKA in the special situation of pregnancy.

Our key recommendations are listed below.

Key recommendations

- Capillary blood glucose (CBG) should be monitored hourly when mothers are administered steroids in pregnancy. The most effective way to control steroid-induced hyperglycaemia is by using variable rate intravenous insulin infusion (VRIII).
- All women with diabetes of any type should have hourly CBG monitoring in established labour, and it should be done on the morning of elective caesarean section. If general anaesthesia is used, monitoring should be every 30 minutes until the baby is born and the mother is fully conscious.
- Maintain CBG in labour in the target range according to NICE guidelines (4–7mmol/l).
- All women with Type 1 diabetes, and some with Type 2 diabetes or gestational diabetes (GDM), may require VRIII in established labour to keep the CBG in this range. An example pre-printed prescription chart and guidance is included in the guidelines.
- Women who are on an insulin pump may choose to remain on it, in agreement with their treating physicians, unless they are not able, or willing, to continue pump therapy during labour.
- Reduce the rate of VRIII (if, and when, used) by 50 per cent (or change to the lowest scale) once placenta is delivered. Contact the diabetes team to review the ongoing insulin requirement in insulin-treated patients with Type 1 and Type 2 diabetes. The insulin dose may be 25 per cent less than the doses needed at the end of the first trimester.
- These mothers are at increased risk of hypoglycaemia, especially when breastfeeding, and should have additional carbohydrate with their meal, or as a snack available during or before food.
- Stop all antidiabetic medications at delivery in all patients with GDM. Continue monitoring CBG pre- and one hour post meal, for up to 24 hours, to capture pre-existing diabetes, new-onset diabetes and also in order to avoid hypoglycaemia.
- If breastfeeding, women with pre-existing Type 2 diabetes can take metformin and glibenclamide after birth, but should avoid other antidiabetic treatments.
- Breastfeeding women should continue to withhold other medications that were stopped after conception.



The management of diabetes in adults and children with psychiatric disorders in inpatient settings

The JBDS-IP group and the Royal College of Psychiatrists (RCPsych) Faculty of Liaison Psychiatry are pleased to

present the first edition of this new guideline. The main purpose of this guidance is, first, to reduce the inequity of diabetes care for people with severe mental illness (typically those with schizophrenia and bipolar disorders) by clarifying that local and national standards of diabetes care applies to people with severe mental illness (SMI) as well and, second, to ensure that these standards are delivered whether the patient is an inpatient in an acute Trust, in a mental health Trust or in residential care.

The new guidance recognises the reduced life expectancy of people with SMI and the lack of integration of diabetes care in the inpatient mental health setting. It also recognises that diabetes teams are often unaware or inexperienced in managing mental health issues in the acute inpatient setting. Our guidance will potentially improve outcomes for patients with SMI and diabetes by increasing awareness, encouraging routine screening of diabetes and mental health, and by improving communication between mental health and diabetes healthcare professionals.

Our recommendations, given below, recognised the various stakeholders and settings in which those with diabetes and SMI are cared for.

Recommendations

Commissioners

- Ensure the needs of people with diabetes and SMI are specifically addressed in contracts with providers of inpatient care.
- Avoid financial or other barriers to cross-organisational working, make specific targeted efforts to bring all relevant healthcare professionals together to scope and address obstacles to good care.
- Ensure patient-structured education is commissioned that meets the complex needs of people with diabetes and SMI.
- Consider incentivising good joint care through Commissioning for Quality and Innovation Payments.

Acute Trusts

- Develop joint pathways with mental health providers.
- Facilitate multidisciplinary working between mental health professionals and others involved in diabetes care.
- Screen for mental ill health in those admitted with acute complications of diabetes whose aetiology is unclear or not medically explained and ensure staff are appropriately trained to do this.

Mental health Trusts

- Create a diabetes register, particularly in units where individuals may have prolonged inpatient admission (eg in secure hospitals).
- Screen for diabetes, particularly in those prescribed second generation antipsychotics.
- Implement diabetes-related competencies as part of mandatory training, with particular focus on managing and avoiding hypoglycaemia and safe use of insulin.
- Audit current practices in diabetes care.

Clinical teams

- Ensure staff receive the basic skills in diabetes and in mental health that are in keeping with their job role to care for patients with comorbidity.
- Develop and increase awareness of local pathways and policies for contacting diabetes or mental health services.
- Ensure best practice tariff criteria are met for DKA and hypoglycaemia and for children and young people with diabetes.

The guidelines go on to discuss, in detail, the care of people with diabetes and SMI in the following groups/ settings:

- older people: dementia and later life functional disorders
- inpatients in acute hospital trusts
- general adult mental health units, including forensic and criminal justice, learning disability and substance misuse
- paediatric and adolescent inpatient wards in acute and mental health trusts: child and adolescent psychiatric inpatient settings and paediatric wards
- eating disorder units.

i The full JBDS-IP guidelines are available at www.diabetes.org.uk/joint-british-

SELECTED REFERENCES

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- 5 Doherty AM, Gayle C, Morgan-Jones R et al (2016). Improving quality of diabetes care by integrating psychological and social care for poorly controlled diabetes. *International Journal of Psychiatry in Medicine* 51 (1); 3–15