

Getting started

Checklist for implementing glucokinase hyperglycaemia genetic testing within the gestational diabetes pathway



Governance and Approval



Discuss with maternity diabetes MDT/maternity senior leadership team: Identify the most appropriate forum in which to discuss introducing this testing within your Trust, and who needs to be informed i.e. Head of Midwifery/Director of Midwifery, endocrinology team, obstetricians.

Review with appropriate transformation/QI/clinical audit team: They may advise that you introduce this testing as part of the QI process or that it can be introduced as an internal clinical process, however it is wise to seek their advice at the start and agree an audit completion date.

Liaise with your local maternal medicine network: Monogenic diabetes is part of the service specification for the Maternal Medicine Network; contact your regional Maternal Medicine Network and identify their preferred process for monogenic diabetes referrals

Clinical Pathway and Documentation



Amend existing diabetes in pregnancy clinical guideline: Assessing eligibility for genetic testing for GCK as they enter the GDM pathway needs to be added to the existing guideline

Development and Ratification of Standard Operating Procedure (SOP) for glucokinase hyperglycaemia genetic testing within GDM pathway. A generic SOP template is available within the GCK Toolkit within the NHS Futures page.

Review the current process for assessing OGTT results/FBG results: Clarify who is responsible and ensure that all relevant staff understand the eligibility criteria for glucokinase hyperglycaemia testing. Consider whether any improvements to this process are required.

Develop a standardised review system: Ensure consistent and equitable assessment of eligibility for genetic testing. This may involve adapting an existing database or creating a new system that can prompt staff when a woman may meet the criteria for GCK testing and record whether testing was offered, accepted, or declined.

Consider patient information requirements: Identify which patient information materials will be used (e.g., South East GMSA leaflets, Diabetes.genes.org) and agree when and how these will be incorporated into the pathway.

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Operational and Logistics Planning



Liaise with your Trust pathology laboratory: Agree how samples for genetic testing will be managed. Confirm whether samples should be sent to pathology for onward referral or sent directly from Maternity to the Exeter laboratory, and establish what packaging or materials are required and how these are sourced.



Liaise with the Exeter lab to discuss how you will receive results: Results are sent and received through a secure nhs.net email account, if you do not have access to an nhs.net account then the results can be sent via a secure Egress account on request.

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Roles, Responsibilities and Training



Confirm who is responsible for reviewing OGTT/FBG results and identifying women who may meet the criteria for GCK testing, including responding to any prompts within the review system.



Agree with the MDT who will be responsible for discussing genetic testing and/or results with the patient, including NIPT: This should be a member of the MDT who is both competent and confident to undertake this role, i.e. Diabetes Specialist Midwife.



Clarify who will document testing discussions and outcomes (offered, accepted, declined) to ensure consistent and accurate record-keeping.



Access and complete recommended training resources: Including the East Genomic e-learning module and expert-led lectures on the Diabetes Genes website.

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Implementation



Agree a start date



Communicate the agreed pathway: Share the agreed pathway, responsibilities and processes with all relevant staff groups, including midwifery, obstetrics, endocrinology, pathology, and administrative teams, to ensure consistent understanding and uptake.



Signpost updated resources: Ensure all updated guidelines, SOPs and training materials are clearly highlighted and easy for staff to locate.



Monitor early implementation to identify any issues with workflow, documentation, or communication, and adjust as required.