

# Two-Cycle Audit on Diagnosis and Outcomes of GDM Patients at WSH

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## Introduction

GDM is one of the most common conditions affecting women during pregnancy, and is known to be associated with **adverse maternal and foetal outcomes**, as well as lifelong risk of the mother and child developing diabetes later in life

## Objectives

1. Compare two cycles of patients, before and after the adoption of current NICE guidance (December 2020), and determine any differences in workload for the trust and perinatal outcomes
2. To assess the practice of early screening for previous GDM patients
3. Determine areas for improvement in our current practice with gestational diabetes mellitus (GDM) patients

## Design

We had two cycles of patients analysed from March to December 2021, before the NICE guidance from December 2020 was adopted, and from January to October 2022, after which the NICE guidance was applied.

**The diagnostic criteria for GDM changed** - Fasting glucose level of 5.6 mmol/litre or above or a 2-hr plasma glucose of 7.8mmol/litre or above

Screening in previous GDM patients – Early self monitoring of blood glucose or OGTT as soon as possible following booking and repeat OGTT at 24-28 weeks, in case of normal results

## Methods

- In the first cycle, **256 patients were retrospectively reviewed** from the hospital registry for GDM patients, with information regards to risk factors, diagnostic timings and method, and outcomes in the perinatal and postnatal period.
- In the second cycle, we followed **159 women screened for GDM**, using the NICE guidance criteria, and **76 were followed through after testing positive for GDM**.

## Results

- **Fig 1: 3 times** as many patients diagnosed with GDM in the **2021 (256)** compared to **2022 (76)**
- **Fig 2:** However, **proportionally more women** were having inductions and Caesareans in the second cycle, with a **19% increase** in the proportion of women having **emergency and elective Caesareans** in 2022 (80 in Cycle 1 vs 29 in Cycle 2)
- **Fig 3:** We found since revising the guidance, only **48% of women who were labelled as “previous GDM”** were diagnosed to have GDM in their current pregnancy
- There was also a focus in reducing the number of women tested for GDM after 36 weeks: in **2022, only 7 patients were diagnosed with GDM ≥ 36+0 weeks**, in comparison to **35 patients in 2021**.

Fig 1: Case Load Comparison

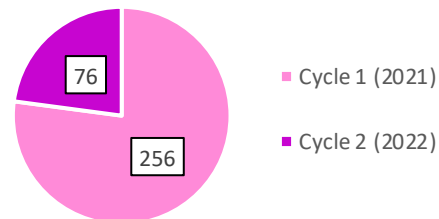


Fig 2: Comparative Caesarean Case Load

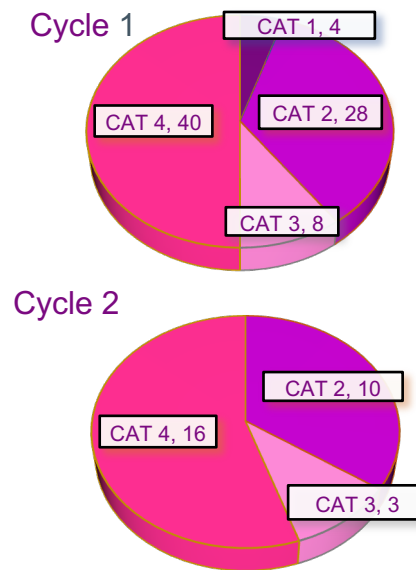
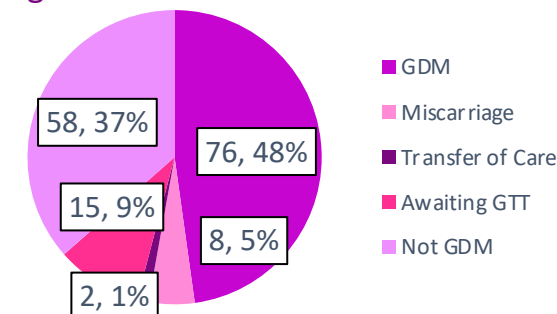


Fig 3: Previous GDM



## Conclusions and Action Required

Adopting the most recent guidance and a focus on strict compliance with early testing in previous GDM patients has **significantly reduced the case load of women for the trust**.

However, the increase in proportion of Caesarean sections is likely due to **higher risk patients being captured by stricter screening**.

Documentation of individualised GDM maternity plans whilst in hospital and in transferring care to the community has significant room for improvement, so education regarding this is necessary.

We endeavour to review whether the adoption of the guidance and focus on lacking areas make an improvement to outcomes from 2023 to 2024.