

Aim:

Through review of cases and implementation of changes, commence a downward trend in the SSI rate in women post caesarean section birth by July 2024

Situation: Current SSI rate is at the highest level in NHS D&G since surveillance commenced.

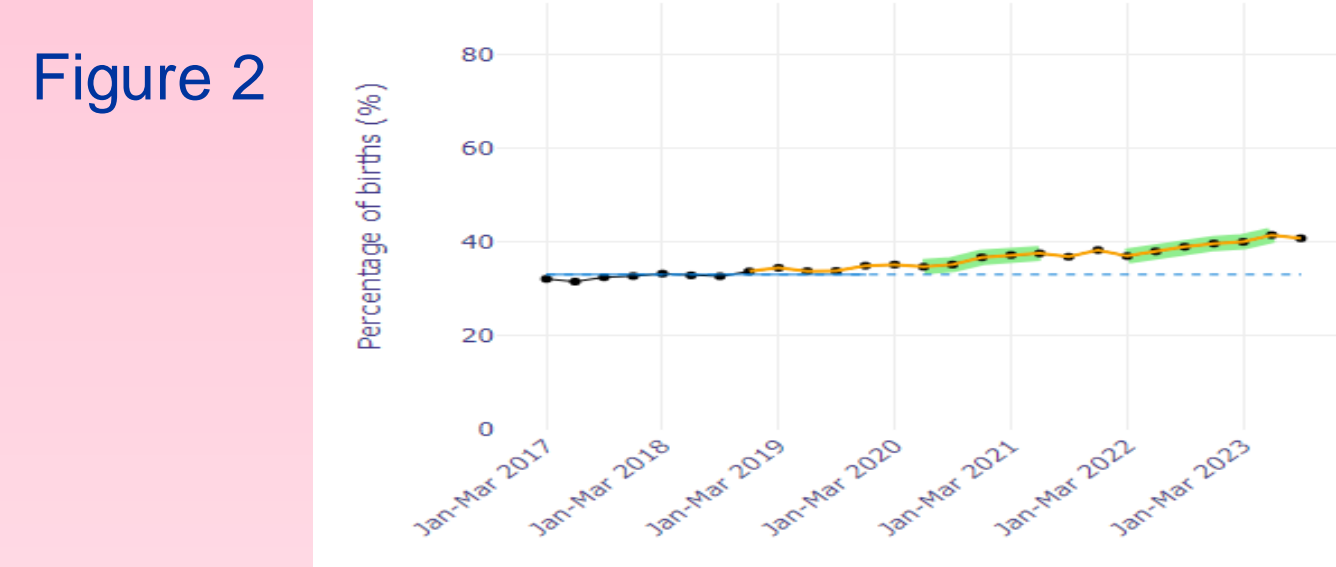
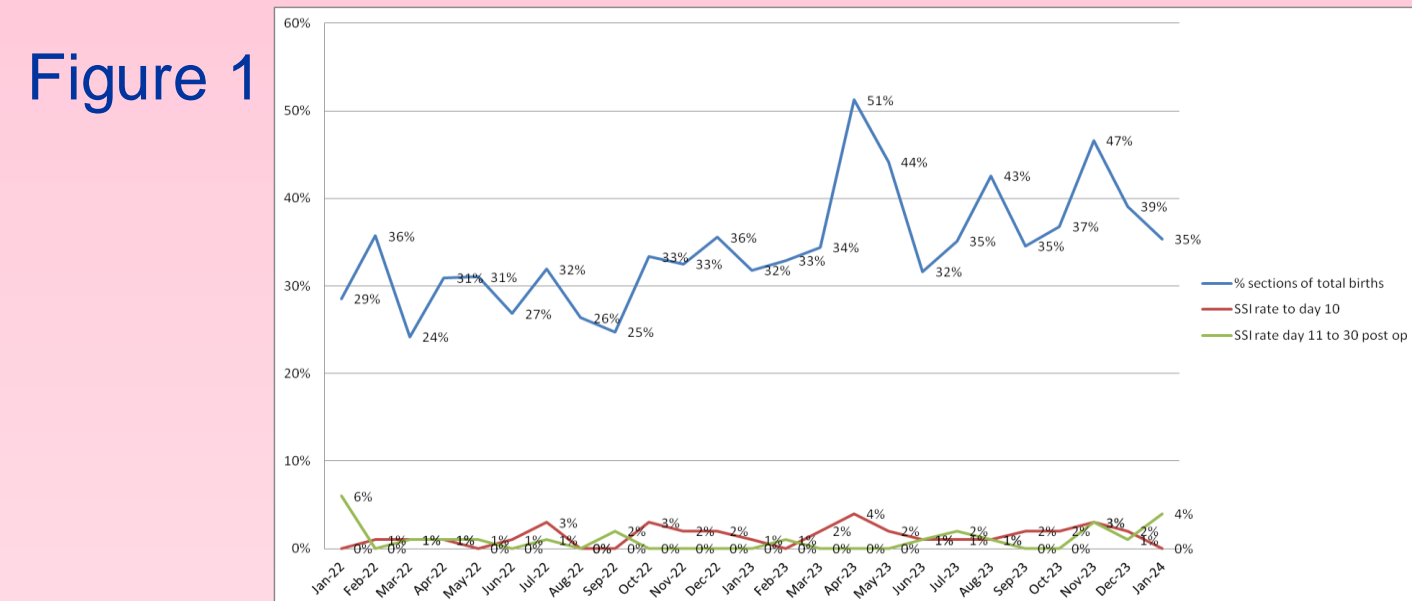
Background

National surveillance of SSI was suspended in March 2020 due to the Covid 19 pandemic. In 2021 NHS D&G were able to resume surveillance at a local level.

National surveillance is carried out to day 10 after the procedure. After this time, health boards can continue voluntary re-admission surveillance up to day 30.

It is important to note that during the same period the birth by caesarean section rate has also been rising. Figure 1 below shows that % births by caesarean section were at between 24-36% at the outset (Jan to Jun 2022). However when compared to July 2023 to Jan 2024 the rate has increased to between 35-47%.

It should be noted the rising births by caesarean section is not a local issue, similar patterns can be seen throughout Scotland. Public Health Scotland (PHS) data shows NHS Scotland's rate has risen steadily to 41% in September 2023 (figure2).



Where are we?

Local surveillance has found that from January 2022 to January 2024 there have been 63 caesarean site SSI's. This equates to an SSI average of 3.7% up to day 10 and 2.6% up to day 30, combined average rate of 6.3%.

This is compared to a local SSI rate of 1.9% in 2021 and 1.2% in 2019.

What we now know

The overall rates of SSI are growing in the lowest SIMD quintiles, SIMD 2 and 3 do make up the greatest % of our population (approx 60% combined, this is not specifically child bearing age) but they account for over 75% of caesarean section SSIs in 2022-23. SIMD 4 and 5 make up over 25% of population but account for 16% of SSIs. Interestingly this is more apparent in the 2022-23 cases in comparison to the 2018-2021 cases (figures 5 & 6).

Figure 5

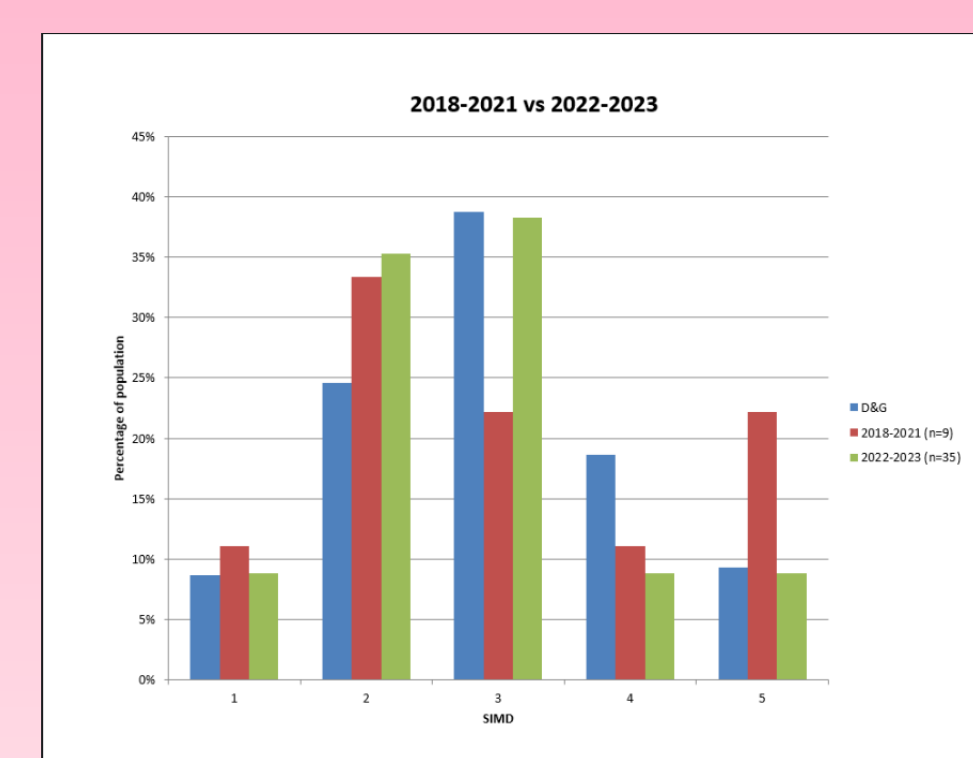
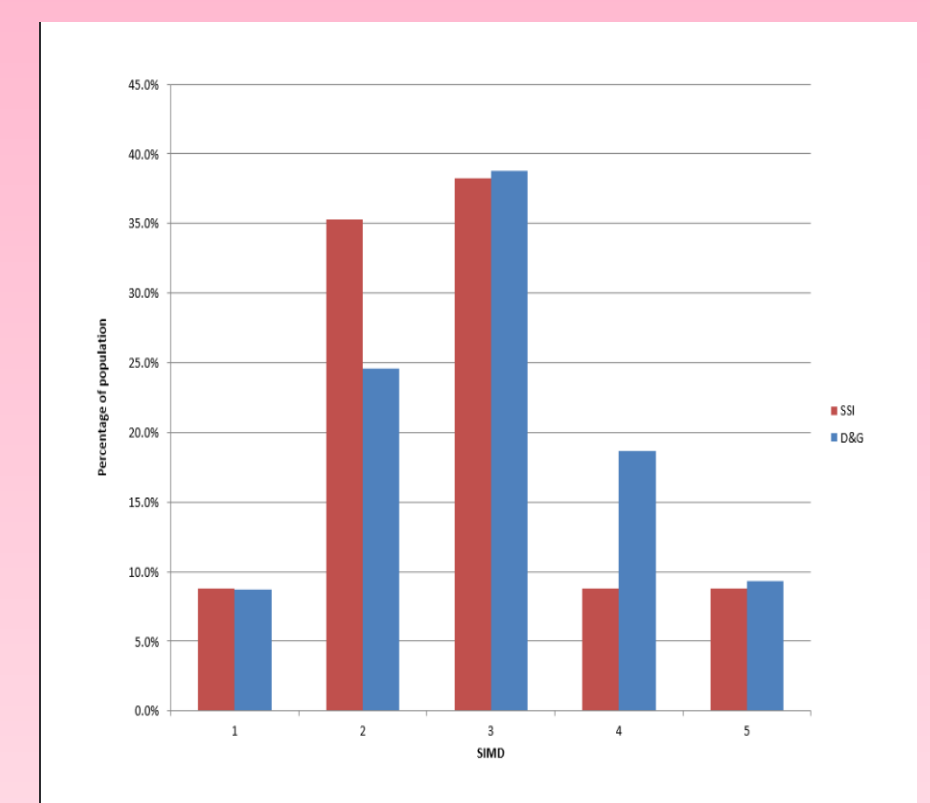


Figure 6



What have we done so far?

A local MDT SLWG was established to review the cases, there were little conclusions to be drawn and SSI rates were present across both planned and unplanned caesarean births. It was noted that the majority of individuals were anaemic, this is a well known contributory factor in wound healing. A deeper analysis, including local public health colleagues, commenced in mid 2023.

A number of interventions and proposed improvements for testing were explored by the MDT and can be viewed on figure 3 & 4 below.

A midwife was successfully recruited to undertake the pregnancy anaemia management in Scotland (PrAMS) improvement work aimed at optimising haemoglobin in pregnancy at the end of 2022. The enhanced recovery for obstetric surveillance (EROS) recommenced in July 2022. Both of these programmes had issues with data capture and data completeness that have excluded them from being annotated on the above charts.

In addition public health colleagues joined the MDT. They directly contacted the individuals with confirmed SSI and undertook some public health surveillance via telephone interviews. Through this data analysis there were some exploration of indicators of deprivation and rates of infection.

Figure 3

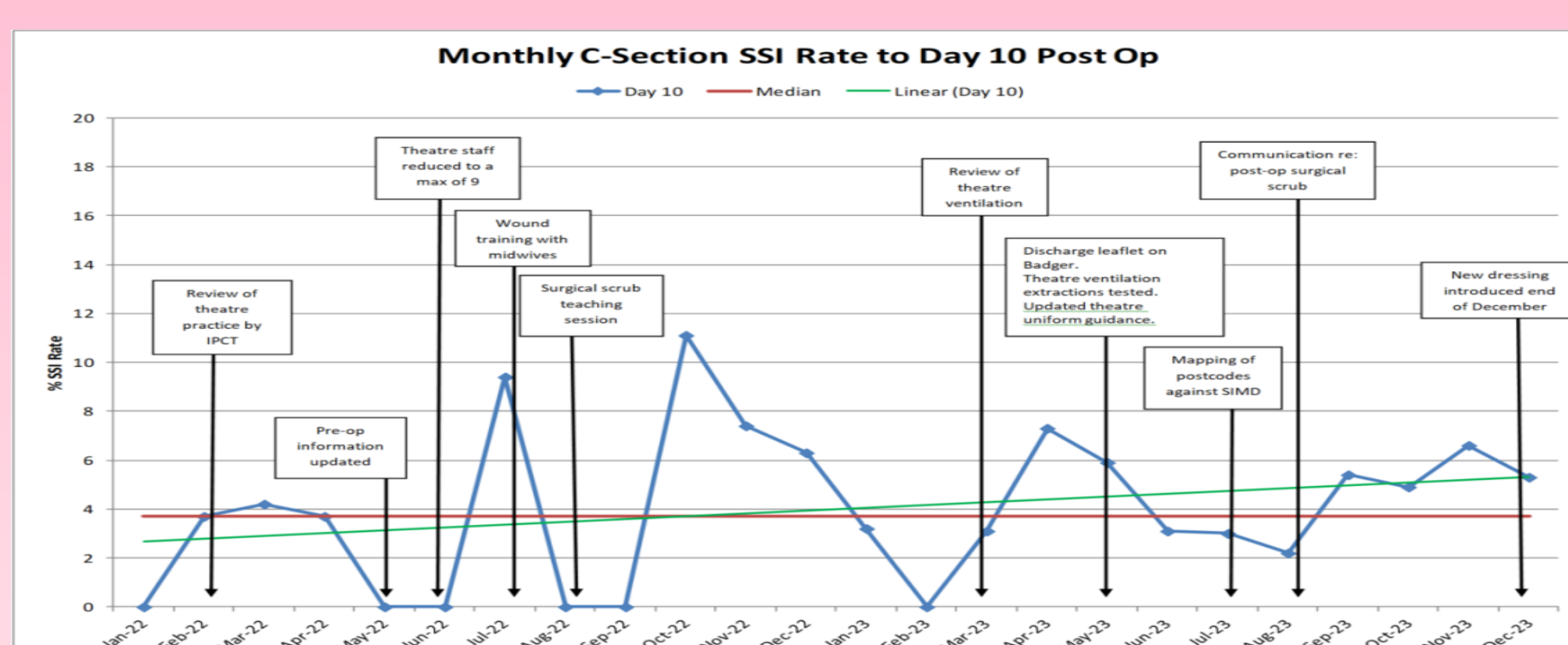
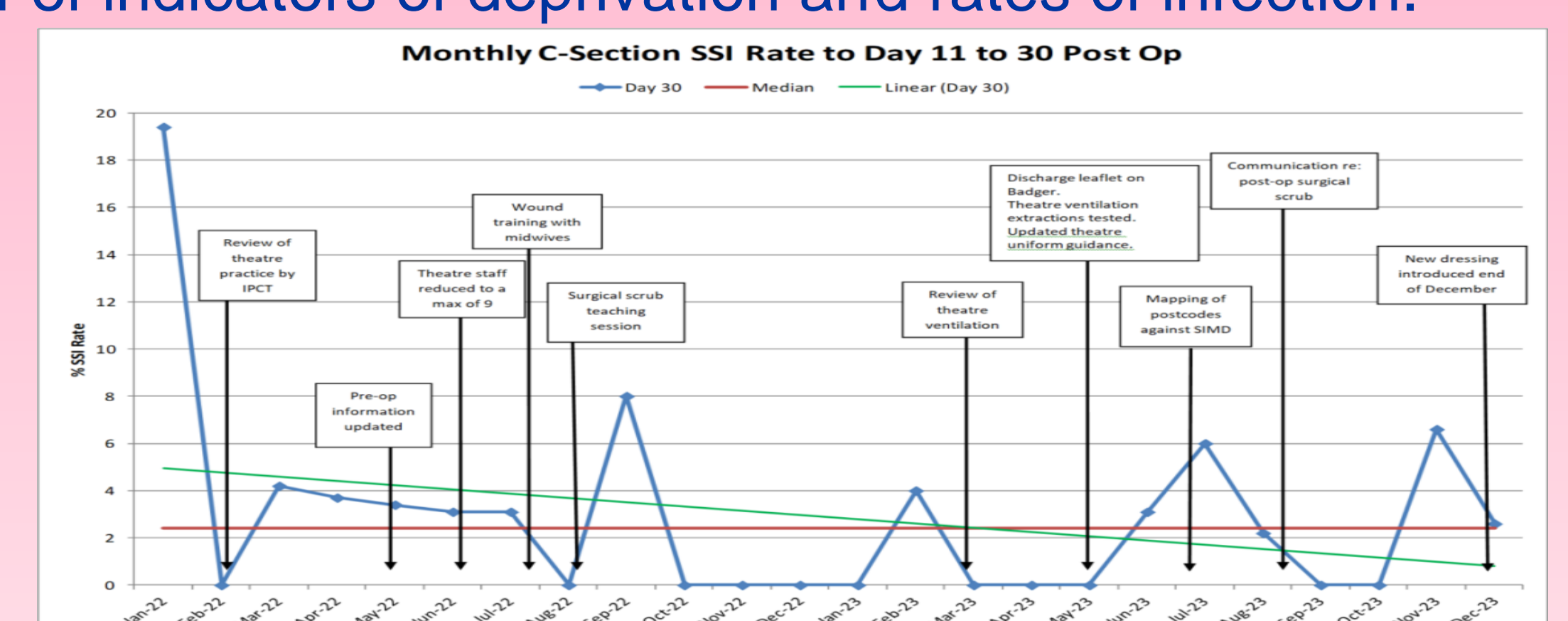


Figure 4



Next Steps

The local MDT working group to continue to monitor caesarean section SSI rates and local interventions; including PrAMS evaluation and prophylactic iron therapy.

Continued reporting to national systems and liaise with ARHAI/PHS to achieve benchmarking rates.

WCSH directorate are engaging in the Scottish Patient Safety Programme (SPSP), revised perinatal measures to review rising caesarean birth rates.

Encourage discussion at national forums; Directors of Midwifery and Infection Control Directors.

Introduction of Education on post operative wound care and management.