

Suffolk & Northeast Essex Local Maternity & Neonatal System – Written evidence (PRT0080)

Suffolk & NE Essex use additive language and use the term "women and birthing people" when describing our pregnant population. In this instance, to provide a concise document I have used "women."

Introduction

Suffolk & NE Essex have approximately nine thousand births per year, so one every hour. Over the last two years the LMNS has been national outliers in a number of areas:

- High rates of Preterm Births and continuing to rise.
- Smoking at Time of Delivery (SATOD) increased over the pandemic and was not reducing.
- Right Place of Birth - worst in region for the number of babies NOT born in tertiary units
- Criticised SEND provision within Suffolk
- As an ICB system, high numbers of people with respiratory, cardiovascular, and endocrine conditions

All three maternity units within the LMNS had:

1. Consultant led preterm birth prevention clinics.
2. Smoking cessation specialist midwife roles
3. One level 1 and two level 2 neonatal units², and tertiary units in neighbouring LMNS's.

Clinical Risk Factors

A retrospective clinical audit was completed to pinpoint areas to focus on.

Three months of data Nov 21 to Feb 22 were requested from each of the three hospitals for deliveries <37 weeks gestation, which equalled 142 records. The results showed:

- Parity - most were first pregnancies and therefore no obstetric history as a predictor, however the parity went up as high as P10.
- Majority had no risk factors at all, next highest risk was a multiple birth, followed by a previous preterm.
- No trend/significance of underlying medical conditions, although diabetes did feature.
- Slightly higher number of women over the age of 30 years than 20-29 yr. olds, two women under 20 years
- 54% were obese or morbidly obese, 4% were under weight.
- 11% of women had a white European heritage (White non-British)
- Approximately half of the preterm births occurred within the period 36+1 and 37+0.

In spring 2024, Mr Nishi Deole, Obstetric Clinical Lead at ESNEFT conducted a four-year retrospective notes review of all preterm births within the two hospital sites (seven thousand births per annum). His findings were like the above short audit, with the following results:

- Preterm birth was more prevalent in women over the age of 35 years, but their increased risk occurs after 34 weeks, prior to that their risk remains the same as other age groups. Women under 20 years are more likely to have an early preterm birth <34 wks. than all other age groups.
- Women with a BMI <18 had the highest risk of preterm birth, followed by women >35 BMI.

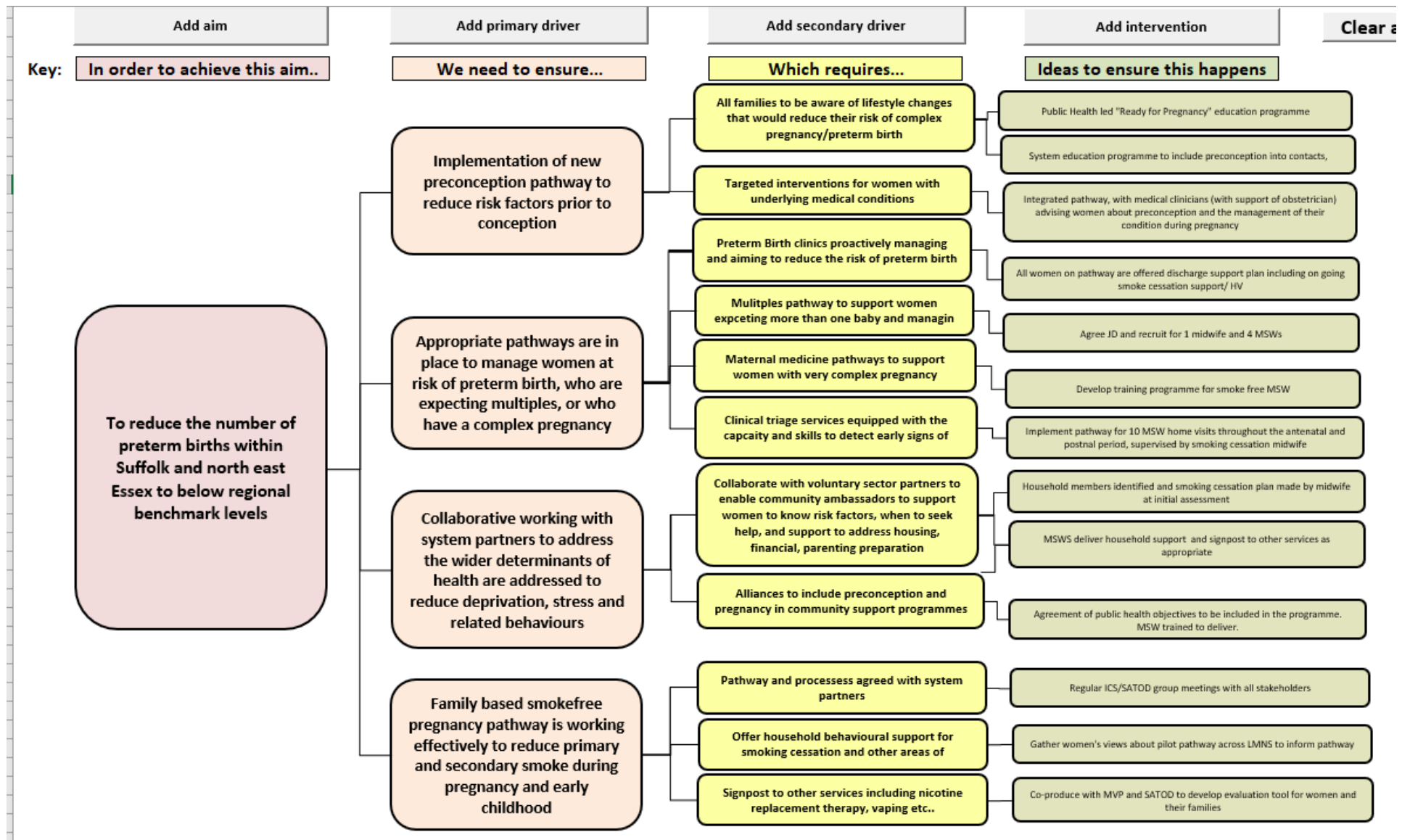
- Women from diverse backgrounds also had a higher risk level compared to the proportion of pregnant women from diverse backgrounds.
- Women living in deprivation decile one had the highest rates of preterm birth, and that was a higher risk at all gestations. Whereas women in decile 4 were the second highest group for overall risk of preterm birth but were at greater risk of preterm birth >34 weeks gestation. Decile four was closely followed by decile 2 and 5, with decile three having a significantly lower risk.
- Women who were still smoking at time of delivery had a 2½ times risk of preterm birth, and the risk was throughout the pregnancy.
- Approx 12% of women expecting twins or more experienced a preterm birth <34 weeks, but the greatest risk was between 34+0 and 36+6.
- Of those who birthed due to iatrogenic reasons, 39% were due to pre-eclampsia, 26% were due to abnormal CTG, 8% due to multiple births, and 7% gestational diabetes or poor control of pre-existing diabetes.

Approach to Preventing and Managing Preterm Births

A multi-agency Preterm Birth and Complex Pregnancy workstream commenced in October 2022 to formally bring together system partners to develop a robust to:

1. Preventing Preterm Births (primary prevention)
2. Optimal management of preterm birth risks to prevent preterm birth where possible.
3. Optimal approach to childbirth of preterm baby
4. Optimal neonatal/postnatal care of preterm baby
5. Bereavement support if a loss is experienced.

A driver diagram was developed to summarise the desired outcomes and the contributing actions that were needed:



A comprehensive care pathway was developed based on the risk factors raised through the clinical audits and national evidence base.

It has included us implementing the following:

Universal Preconception

- Social media campaign to promote Ready for Pregnancy to local population.
- LMNS website providing links to Tommys/NHS webpages.
- Education video developed for all system partners to enable them to have conversations with service users [Preconception Training for System Partners - Suffolk and North East Essex Wellbeing Support Services \(sneewellbeing.org.uk\)](https://www.sneewellbeing.org.uk)
- #Drymester campaign across whole LMNS
- Lesson plans under development for secondary school children
- Postnatal ward RGN's and MWs trained to insert LARC/
- Fast track referral path developed to sexual health services for vulnerable women.
- Poster campaign under development for workplaces, pharmacies etc...

Targeted Preconception

- Pathway developed for SMI physical health clinicians to refer directly to PNMH services for medication review and stabilisation prior to pregnancy.
- Obstetric led preconception clinic for women with underlying medical conditions commenced March 24
- Fast track referral path to drug and alcohol services due to pregnancy
- Developing place-based health coaching model to target people (through PHM) who are obese, smoke, or substance misuse.

- Partnership with VCFSE in our diverse and deprived communities to provide preconception advice through community ambassador roles.

Identification and Management of Risk of Preterm Birth

- Standardised operational process for booking appointment with midwife so that all risk factors recorded for every woman. Considering Chlamydia screening.
- VCFSE organisations supporting diverse, deprived, and young parent communities reinforcing presentation of premature birth.
- New Whole Household Smokefree pregnancy pathway developed and implemented – opt out at booking.
- Preterm Birth Prevention and Multiples clinics already insitu, all three clinics evaluated against NICE guidelines and LMNS pathway.
- PeriPrem introduced across LMNS.
- Preterm Birth Prevention Midwife role developed, to work across the whole LMNS to share learning, establish peer to peer supervision/MDTs to discuss complex case, and embed research and development approach.
- Education leaflet and film developed, to support informed decision making and provide standardised information across LMNS.
- Signs of preterm labour infographics under development for AN clinic televisions
- For those women under the preterm birth prevention clinic, proactive birth planning and colostrum collection in case of premature labour
- Registrars trained in TV scanning to assist in diagnosis of premature labour presentation in clinical triage.
- BSOTs clinical triage model in place within each hospital, developing red flag approach for notes so triage team aware if woman under preterm birth prevention clinic and at risk of premature birth.

- Fibronectin machines and QIPP App in all units (but due to national supply issues not currently in use)

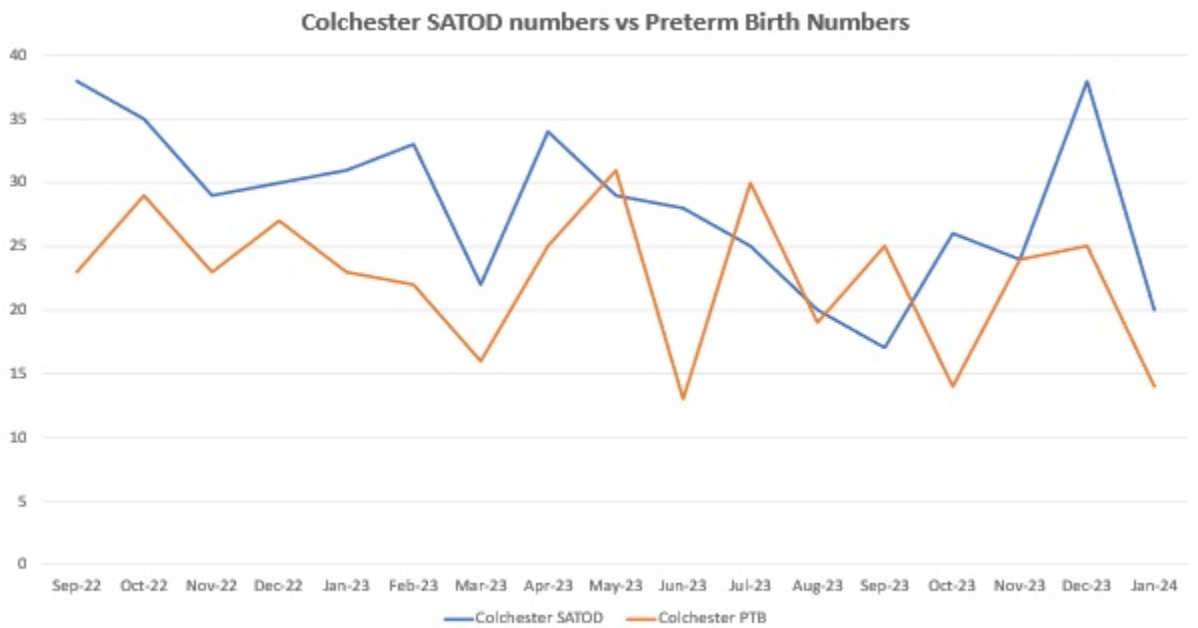
Premature Birth Management

- Clear standardised process for supporting women at risk of delivering baby <800g and/or before 27 weeks to ensure inutero transfer to tertiary unit.
- Postnatal reflection on how the woman may be able to reduce her risk of another preterm birth in subsequent pregnancies, and signpost to advice and local support services including birth reflections service.
- Offer LARC on PN ward if at risk of short pregnancy intervals.

Whole Household Smokefree Pregnancy Pathway

As explained above, the LMNS has coproduced a new Smokefree pregnancy pathway which is focused on supporting the whole household to quit smoking. It is one of a few of its kind within the country that is supporting not only the pregnant person but their partner/other household members to quit smoking at the same time. Pregnant people have said this has made it a little easier for them to quit.

A direct correlation has also been noted between the smoking at time of delivery and preterm birth rate. The below diagram shows how the two figures relate to each other.

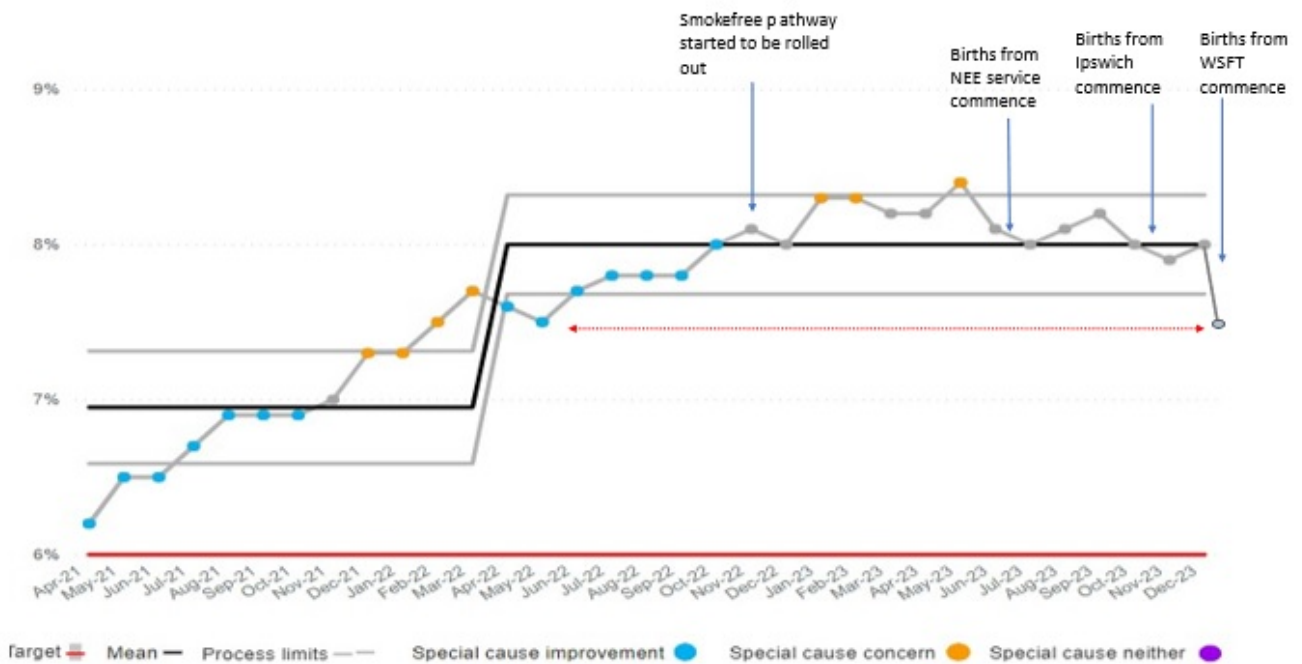


LMNS Preterm Birth Data

As a result of the above actions, but it is felt predominantly due to the smokefree service the rolling rate of preterm births plateaued and is now starting to decrease. Further data is required to confirm that this is a sustained decrease.

Based on the results of the deep dive it is predicted that the next significant impact will be preconception/primary prevention services.

Rolling Average of Preterm Births across LMNS



Conclusion

The working hypothesis of the LMNS is that a sizeable proportion of our preterm births are a result of women smoking during pregnancy. However, in addition to this there are certain cohorts of women who we should target with both preconception and antenatal healthy pregnancy messaging to women:

- Under 20 years
- Over 35 years
- Who are underweight <18 BMI, and those who are obese with >35 BMI
- From diverse communities
- From decile 1 and 4
- Expecting multiples
- Women with pre-existing diabetes

This is being delivered in a number of ways:

- Educating all system partners on healthy pregnancy so they can have preconception and antenatal conversations with women service users.
- Household Smokefree pregnancy pathway
- Primary care-based health coaching during preconception phase for smokers, women with <18 and >35 BMI, and women with diabetes
- Obstetric led preconception clinic for women with most complex pre-existing conditions.

- VCFSE collaborative programme to support our young parents, diverse and deprived communities with understanding pregnancy pathway and when to access it, as well as healthy pregnancy messaging.
- Review of multiple birth pathway and diagnosis and management of pre-eclampsia vs NICE guidelines.

24 April 2024