

Introduction

Nausea and vomiting in pregnancy (NVP) affects 90% of pregnant women. It has a significant physical and psychological impact for women and their families, the additional social and financial burden often goes unrecognised. Women often face multiple interactions with health care professionals before being offered safe medication options. They often feel dismissed and that their experience is not validated. Our project aimed to address the impact on women and their families, by understanding their journey and ensure they have access to timely evidence based care at each interaction.

Development

We worked with our local Maternity and Neonatal Voices Partnership (MNVP) to co-produce a service user survey which was advertised on social media and in maternity areas of the hospital and invited respondents to join us for focus groups. This identified key areas to target service improvement.

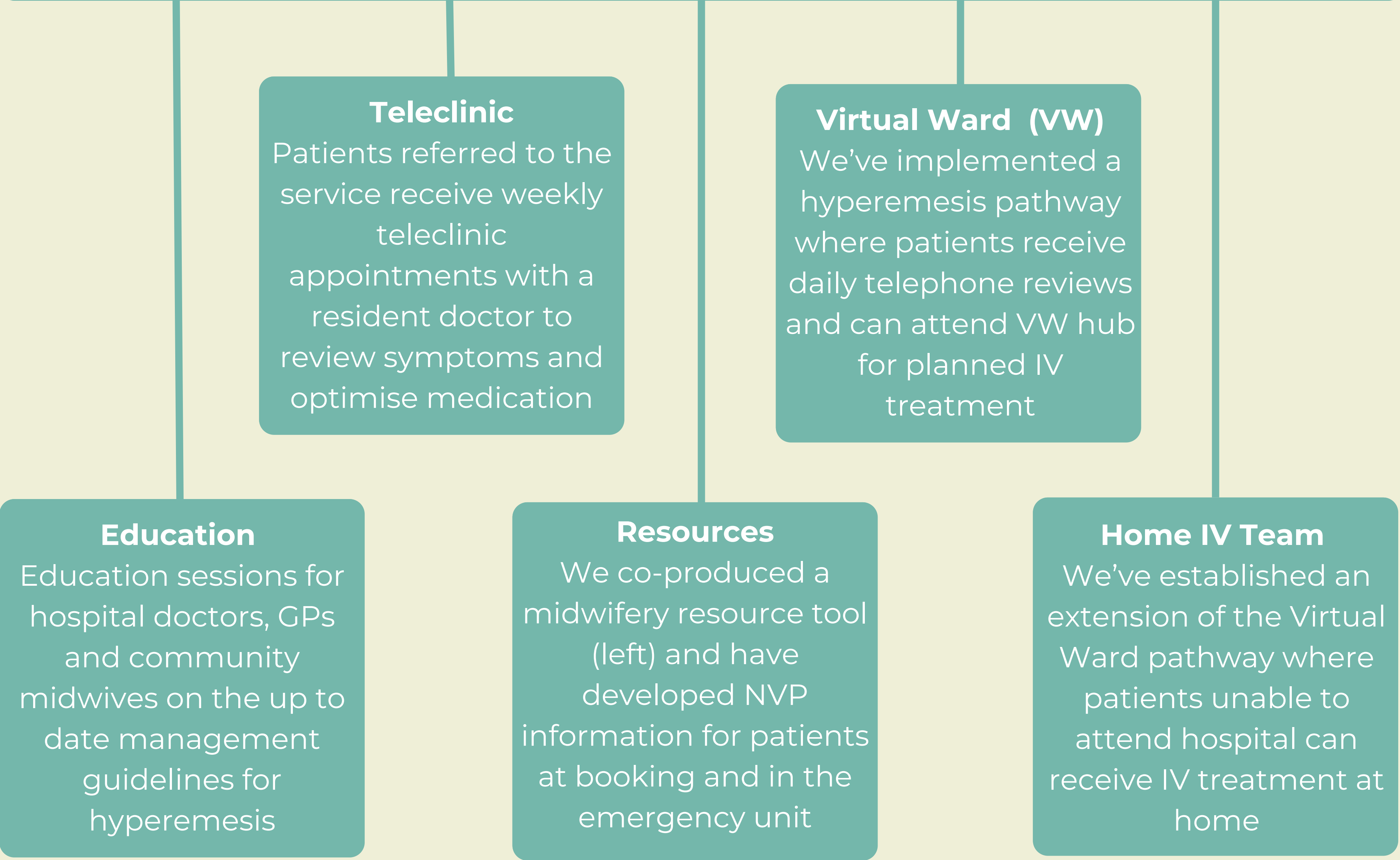
Did you experience hyperemesis, nausea and/or vomiting in pregnancy?

We need to hear from women and birthing people with lived experience of these conditions to provide feedback and add their voice to improvements.

Please complete the anonymous survey here

If you would like to share more or would rather speak to someone about your experience of care please email NorfolkNorwichMNVP@gmail.com and

Service Improvements



Results

Clinical 45 patients referred to teleclinic 15 have been admitted to VW 3 have recieved IV Tx at home	Environmental 1804kgCO2e to 1,266 kgCO2e Estimated 1yr = 6,462 kgCO2e Equivalent to 14,110 miles in car
Financial 22.9 -> 9.8 bed days/month Saving of £63,440 Projected annual saving £762,044	Social Scan to hear feedback from our service users

Midwifery Resource

NAUSEA AND VOMITING IN PREGNANCY (NVP) AND HYPEREMESIS GRAVIDARUM (HG)

NVP is defined as the symptom of nausea and/or vomiting during pregnancy when onset is prior to 18 weeks of gestation and where there are no other causes. HG is a severe form of NVP which interferes with quality of life and ability to eat and drink.

NVP/HG is associated with serious health consequences for both mother and baby. One of the issues many women face is lack of understanding, and that exacerbates an already isolating experience.

ASSESSMENT OF NVP / HG

Other conditions may cause nausea and vomiting in pregnancy, and this may be the case if associated with:

- Urinary symptoms
- Infective symptoms
- Abdominal pain
- Medication use eg. oral iron

MANAGEMENT OF NVP / HG

ANTIEMETICS
Several different anti-emetics are available. While some of these medicines may not be licensed for use in pregnancy, they are considered safe for mum and baby. Often a combination of two, three or four antiemetics are required to control symptoms.

ACID REFLUX
NVP can exacerbate symptoms of reflux and a PPI eg. omeprazole is safe to take in pregnancy.

THROMBOPROPHYLAXIS
Women with NVP / HG are at high risk of VTE. Hyperemesis, reduced mobility and dehydration all score separately on the TRa score.

Safe and commonly used antiemetics:

1st line

- Cyclizine
- Prochlorperazine

2nd line

- Metoclopramide
- Ondansetron

CONSTITIATION
Symptoms of NVP can be exacerbated by constipation and women may benefit from a laxative. Ondansetron is well known to cause constipation.

NUTRITION
Supplementation with oral thiamine should be considered if severely reduced dietary intake. Women are unlikely to tolerate oral iron therefore IV replacement is often preferable.

HIGH RISK PATIENTS

- Co-morbidities which may be complicated by lack of oral intake of essential medications (eg. epilepsy, diabetes, HIV, hypoparadentism)
- Inadequate fluid intake
- Women with ongoing NVP in 2nd trimester should have serial growth scans
- Unresponsive to outpatient management
- Weight loss >5% body weight
- Significantly reduced mobility and risk for VTE

PREGNANCY-UNIQUE QUANTIFICATION OF EMESIS (PUQE) SCORE

The PUQE score can be used to determine whether the NVP is mild, moderate or severe. The PUQE score can also be used to assess the response to treatment for mild to moderate NVP but is not valid for severe NVP and HG.

Choose the option that best describes your symptoms on your worst day of NVP

In the last 24 hours, for how long have you felt nauseated or sick to your stomach?

1 Not at all	2 1 hour or less	3 2 to 3 hours	4 4 to 6 hours	5 > 6 hours
-----------------	---------------------	-------------------	-------------------	----------------

In the last 24 hours, have you vomited or thrown up?

1 I did not throw up	2 1 to 2 times	3 3 or 4 times	4 5 to 6 times	5 7 times or more
-------------------------	-------------------	-------------------	-------------------	----------------------

In the last 24 hours, how many times have you had retching or dry heaves without throwing up?

1 None	2 1 to 2 times	3 3 or 4 times	4 5 to 6 times	5 7 times or more
-----------	-------------------	-------------------	-------------------	----------------------

Mild 3 - 6 : Mild NVP should be managed in the community with oral antiemetics

Moderate 7 - 12 : Fluid intake will help guide where these patient should be managed

Severe >12 : A score of 13 or more has been used as a criterion for admission to hospital/ambulatory care (also see HIGH RISK PATIENTS section overlaid)

"I was told vomiting was a sign of a healthy pregnancy and was told to "ride it out"

Did you know? It is no longer recommended to use urinary ketones as a marker of severity

"I felt everyone was worried for my baby but no one was concerned about me"

If symptoms aren't controlled with two or more antiemetics in primary care then further advice can be sought from: hyperemesis@nnuh.nhs.uk

From staff feedback we discovered midwives felt ill equipped to give advice on NVP and were unsure where to signpost women to. We designed a double side A5 laminate for community midwives to carry in their packs with information, screening tools and QR codes to further information.

Discussion

This project demonstrates the value of collaboration with service users and staff to co-produce clinical quality improvement projects. We challenged the traditional model of care and made changes resulting in sustainable patient centred, personalised and community based care. Good clinical care in this case is associated with financial, operational and environmental savings.