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Refining your pathway to ensure patient and staff safety using digital tools

Experiences of a prenatal care team



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TECHNOLOGY FOR MATERNITY SERVICES

4-1-4 PRENATAL CARE PATHWAY

"National [US] guidelines currently recommend 12-14 in-person prenatal visits, a schedule that has remained unchanged since 1930"

Peahl et al. 2020

OVERVIEW

Created by a prenatal care team in Michigan, 4-1-4 is a redesigned care pathway which used patient preferences and clinical expertise to use telemedicine to deliver prenatal services with minimal face-to-face appointments whilst maintaining standard of care.

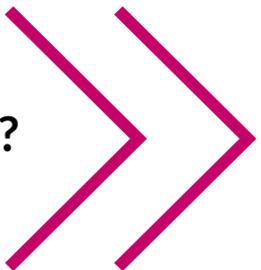
By surveying their own obstetric population the team identified that over 85% of their patients 'desired' the use of telemedicine for contact with staff between their appointments. This was seen as a means of offering flexible, personalised care for all 4000 patients whilst increasing health system capacity for those patients requiring more intense in-person care.

The pathway was designed 2019-2020 and rolled out in March 2020

98% of the 4 million women who give birth in the United States receive prenatal care



How was the pathway redesigned?



KEY STAGES

Step One: Identify your experts

The team identified a multi-stakeholder team of key stakeholders within:

- Prenatal care
- Information technology
- Administration



Having the right expertise from the outset ensures the team can make informed decisions at pace

Step Two: Diagnose your pathway and engage with patients

The team conducted systematic reviews, patient surveys and sought national expertise to ensure they could identify key challenges and enablers within the pathway

Step Three: Virtual appointments

The team identified those critical pathway milestones which could not be delivered virtually:

- Ultrasounds
- Vaccinations
- Laboratory tests
- Physical exams

Step Four: Pathway 'critical touch points'

Using existing national guidelines the team developed resources on key educational topics and identified the need for processes to provide psychosocial screenings

Refining the pathway



1. Collect evidence and data to allow you to refine your pathway .

"Given little evidence of benefit, remote monitoring of blood pressure and fetal heart tones was not required for transitioning care from in-person to telemedicine visits in the setting of the COVID-19 pandemic and need for social distancing"

2. Personalise the care experience

Every patient's needs will be slightly different. To ensure the pathway met all needs, the team developed 'choose your own' options for patients:

- An online programme of group prenatal care sessions, chat forums and classes on wellness and coping skills by experts. The programme ensured patients could build social connections and receive mentoring. This would normally have been part of face-to-face parenting classes that cannot be carried out due to COVID-19



NHS Tayside and NHS Borders also developed online resources and used social media to deliver prenatal care during COVID-19. Read about their experiences [here](#).

How did the team implement the pathway?



Implementation

Three processes were key to implementation:

1. Training providers
2. Engaging patients
3. Advocating for new policies to make the changes sustainable

1. Training providers

The team trained staff virtually by holding group training sessions online, developing new guidelines and materials circulated via email and nominating 'Physician Champions' to provide support on both Prenatal Care Redesign and Virtual Care. They provided immediate additional support for staff experiencing difficulties.

2. Engaging patients

Patient resources were developed and made immediately available. These provided details on 4-1-4, and what patients could expect from the redesign as well as more general resources on prenatal care during COVID-19. Also, patients were given guidance materials on self-monitoring and lists (with guides) of blood pressure cuffs and dopplers they could purchase. Additionally, 50 medical students were trained to call patients and discuss their new care schedule, home monitoring and provide links to social services.

3. Policy changes

The team has advocated for new federal and national allowances for telemedicine and new payment/reimbursement structures for remote monitoring devices to ensure the sustainability of the use of telemedicine for care as COVID-19 continues to present challenges for healthcare delivery.

Key Learning

These are quotes about the team's experience of the redesign at pace

By designing in-person care around critical services, maintaining connections virtually, and thinking flexibly about support, we can develop tailored care pathways that best meet patients' needs.

The principles identified here for prenatal care redesign have broad applications beyond the pandemic

Reduced in-person contacts can free provider and health system capacity for patients who need more intense in-person contact, such as those with high-risk medical conditions

You can read about the team's full experience [here](#).

Low-income and minority pregnant patients are less likely to receive recommended prenatal care, and are more likely to suffer severe maternal morbidity and mortality than white, high-income patients. Telemedicine may be one way to address these disparities by allowing providers to meet patients where they are: in their homes, workplaces, and communities.