

# Reducing avoidable stillbirth

## Two approaches

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# Objectives: participants will be able to...

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1

State 3 or more interventions to reduce avoidable stillbirths

2

Appreciate the value of providers sharing lessons learned and collaborative learning in changing care practices

3

Describe foundational elements of a Breakthrough Series Collaborative model

4

Describe a current innovation project to reduce avoidable stillbirths

# Agenda

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Our aim and why we did the work

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Our use of BTS approach

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How many teams we had and who was on them

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Our theory of change - what we worked on

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Our family of measures and results

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Pandemic interruption and restart

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Ariadne Labs

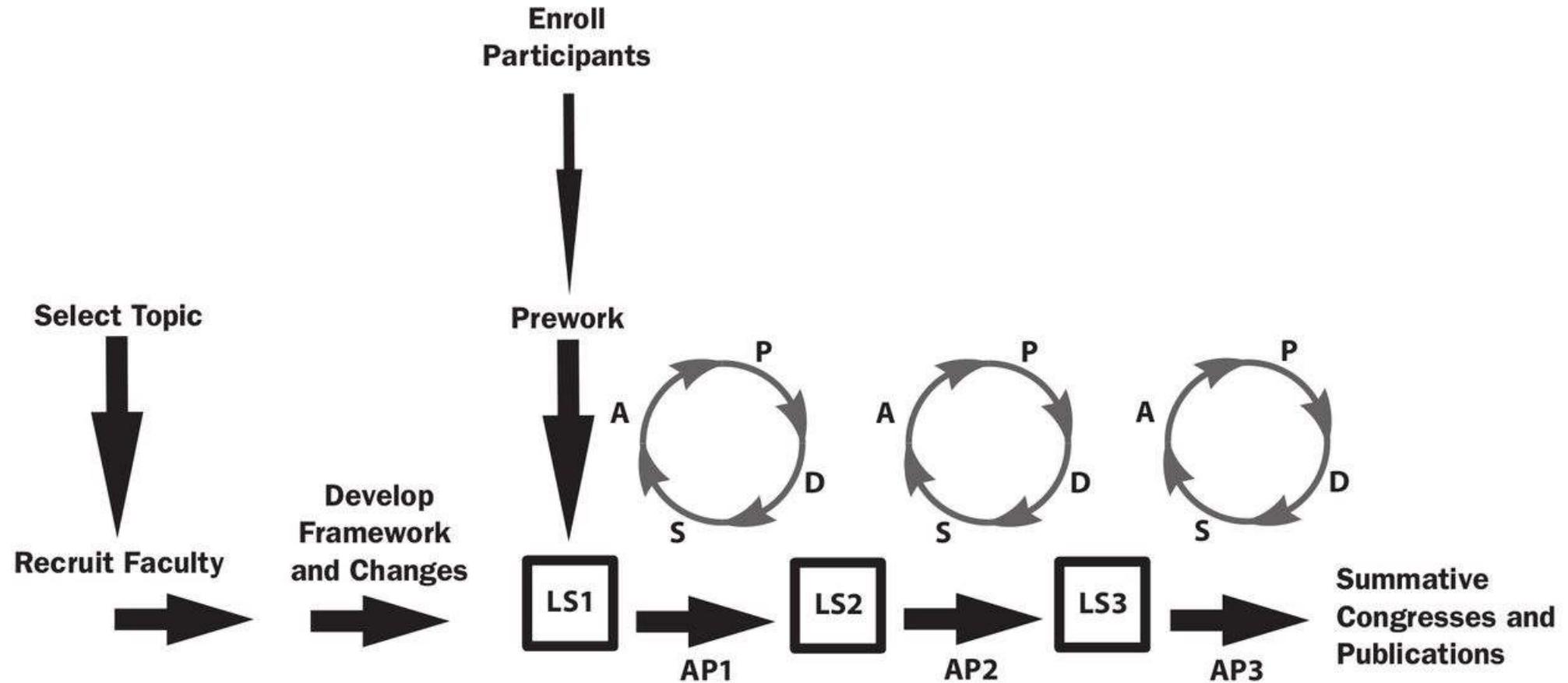
# The burning platform

- Reducing the rate of stillbirth – a national priority
- Unchanging rates of stillbirth for two decades, with many stillbirths thought to be preventable
- Harm experienced by women and their families

**By July 2020 we aimed to reduce the rate of avoidable stillbirths at 28 weeks or more by 30 per cent, in participating maternity services**



# Breakthrough Series Collaborative

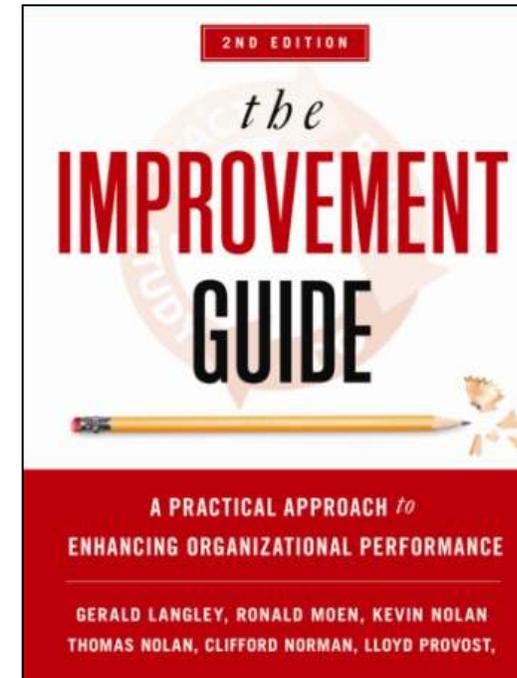


LS1: Learning Session  
AP: Action Period  
P-D-S-A: Plan-Do-Study-Act

**Supports:**  
Email • Visits • Phone Conferences • Monthly Team Reports • Assessments



# The Model for Improvement



# Safer baby participating health services



# Theory of change

AIM	PRIMARY DRIVERS	SECONDARY DRIVERS	CHANGE IDEAS
<p>By June 2021 we intend to reduce the stillbirth* rate by 30% in participating health services.</p> <p>*Stillbirth is defined as birth without signs of life at 28 weeks or more, excluding terminations and lethal congenital or chromosomal abnormalities.</p>	Partnering with women	At booking	<ul style="list-style-type: none"> <li>› Discuss expected length of pregnancy with all women</li> <li>› Include the consumer-designed poster and sticker, outlining 5 bundle elements, in all booking packs</li> <li>› Include information about stillbirth risk factors (smoking, FGR, DFM, maternal sleep position)</li> </ul>
		At pregnancy care appointments	<ul style="list-style-type: none"> <li>› Discuss stillbirth risk factors (smoking, FGR, DFM, maternal sleep position) at every visit</li> <li>› Share links to the Stillbirth CRE Safer Baby Bundle consumer site</li> </ul> <p><b>Bundle element 3: Management of decreased fetal movements</b></p> <ul style="list-style-type: none"> <li>› Share the 'Movements matter' resources with every woman</li> </ul> <p><b>Bundle element 4: Promoting optimal maternal sleep position</b></p> <ul style="list-style-type: none"> <li>› Share the 'Sleep on side' video and resources with every woman</li> <li>› Ask every woman about sleep position, during pregnancy care appointments in the third trimester</li> </ul>
		When planning for timing of birth	<p><b>Bundle element 5: Shared decision-making around timing of birth</b></p> <ul style="list-style-type: none"> <li>› Use shared decision-making tools to guide and document discussions</li> <li>› Share the 'Every week counts' resource with all women</li> <li>› Screen for stillbirth risk at term</li> </ul>
	Application of evidence-based clinical care	Routine professional development	<ul style="list-style-type: none"> <li>› Incorporate education and simulation training on the five clinical interventions</li> <li>› Create training videos for the five clinical interventions</li> <li>› Introduce daily SBC huddles in antenatal clinic, to gather feedback and share information</li> <li>› Incorporate teach-back skills</li> <li>› Identify opportunities for in-the-moment teaching, reflection and clinical reasoning development</li> </ul>
		Every episode of care	<p><b>Bundle element 1: Promoting smoking cessation</b></p> <ul style="list-style-type: none"> <li>› Screen for smoking behaviours using the Ask, Advise, Help brief advice intervention</li> <li>› Refer to Quit services</li> <li>› Include partners and other family members in screening and referral</li> <li>› Share information with GPs</li> </ul> <p><b>Bundle element 2: Detection and management of fetal growth restriction (FGR)</b></p> <ul style="list-style-type: none"> <li>› Screen all women for their risk of FGR</li> <li>› Use a consistent technique for measuring symphyseal fundal height (SFH)</li> <li>› Plot symphyseal fundal height (SFH) and estimated fetal weight (EFW) on growth charts</li> </ul>
		When reported	<p><b>Bundle element 3: Management of decreased fetal movements</b></p> <ul style="list-style-type: none"> <li>› Assess all women who report DFM as soon as possible</li> <li>› Ask every woman how long has passed since she first perceived DFM</li> </ul>

## 5 key focus areas

1. Smoking cessation
2. Recognising and responding to changes in fetal movements
3. Recognition and management of fetal growth restriction
4. Maternal sleep position
5. Promoting appropriate timing of birth and engaging women in birth timing decision making

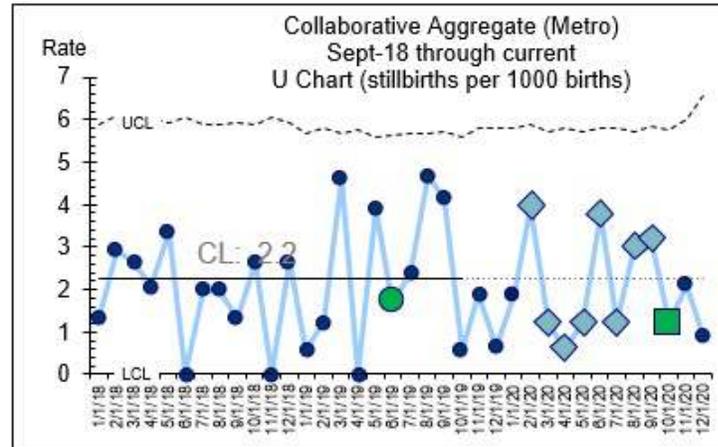
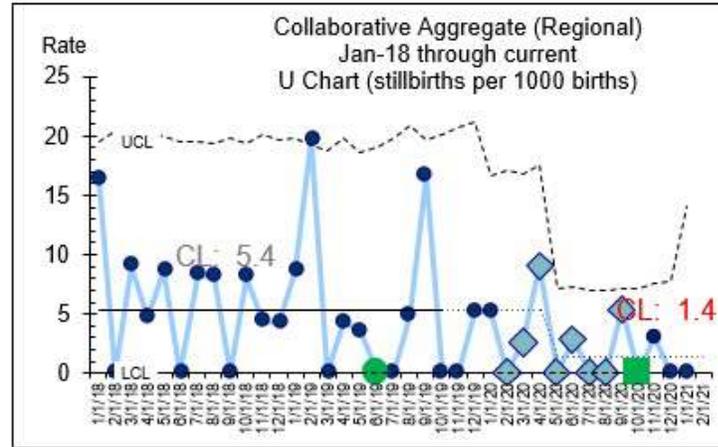
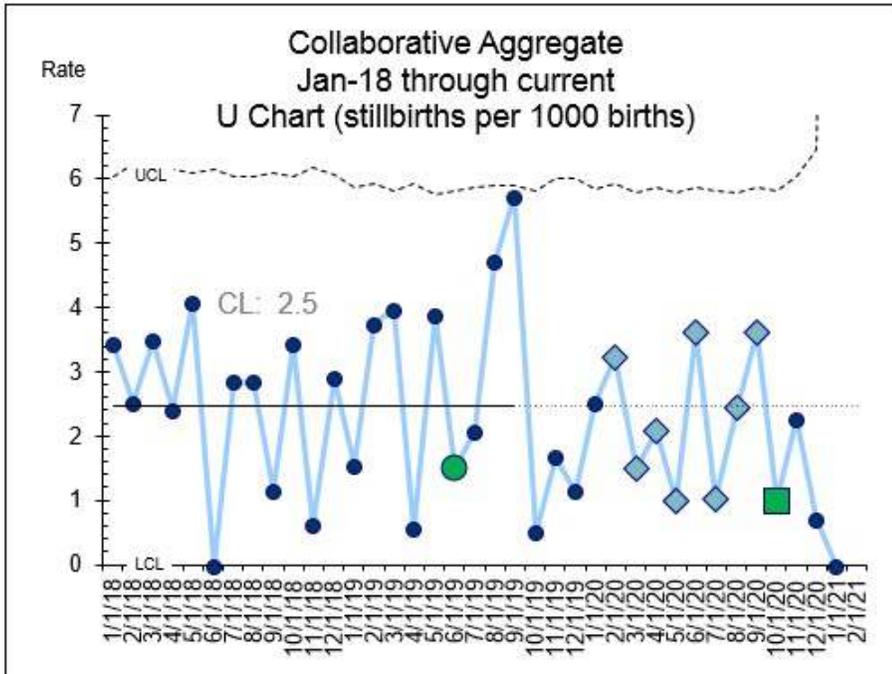
# Family of measures

Measure type	Measure
Outcome	Rate of stillbirths at 28 or more weeks gestation
Outcome	Percentage of women who cease smoking between conception and birth
Process	Percentage of women who receive 'Ask, Advise, Help' at each antenatal visit
Process	Percentage of women who are screened for FGR risk factors at each antenatal visit
Process	Percentage of women who have their SFH measured and plotted on a growth chart
Process	Percentage of women provided with DFM information and education
Process	Percentage of women provided with maternal sleep position (MSP) information and education
Process	Percentage of women who report being involved as much as they wanted to be with decision-making around timing of birth

Measure type	Measure
Balance	Percentage of women who give birth by induction of labour or caesarean section prior to 39 weeks
Balance	Percentage of babies admitted to special care nursery after 37 weeks

# Progress towards our aim

## Stillbirths per 1000 births



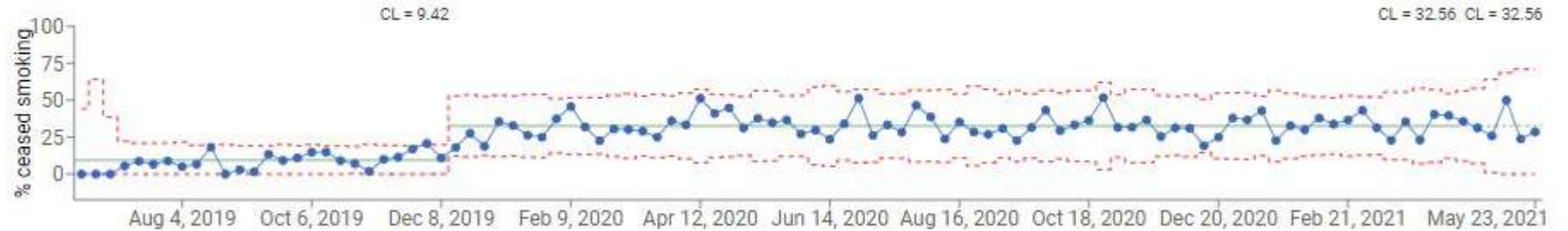
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# Process measures



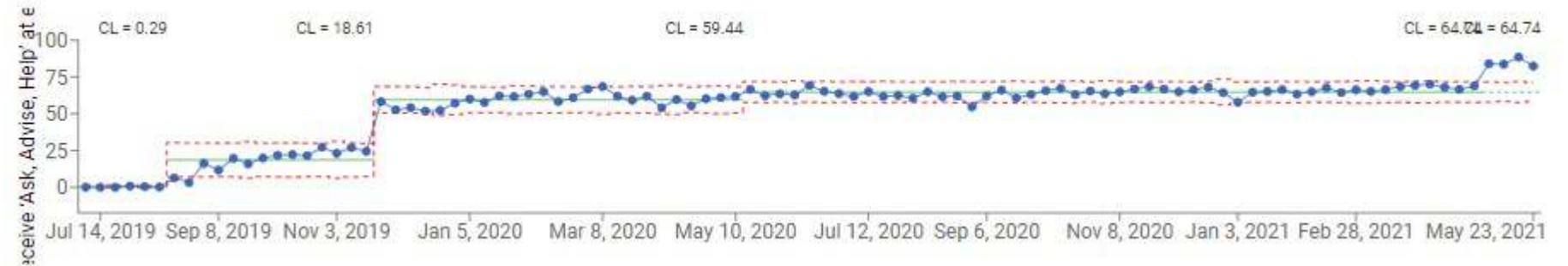
Ceasing smoking increased:  
**9% to 35%**

Aggregate - M-02 - Percentage of women who cease smoking between conception and birth



AAH intervention increased:  
**18% to 64%**

Aggregate M-03 - Process Measure: Percentage of women who receive 'Ask, Advise, Help' at each antenatal visit



# Process measures



SFH measure & plotting increased:  
**58% to 76%**



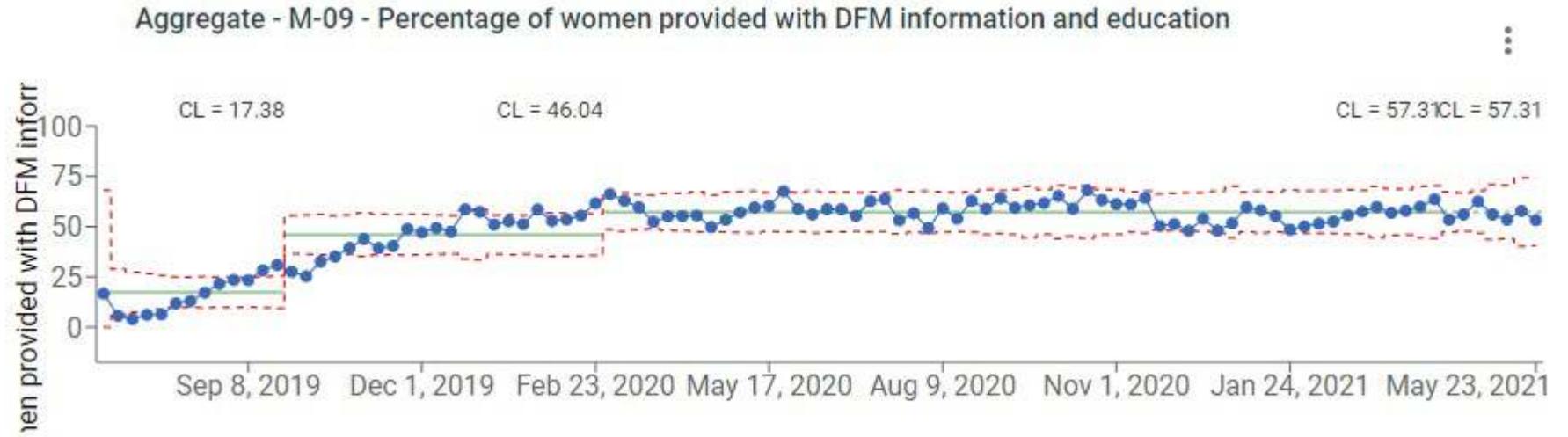
Screening for FGR increased:  
**7% to 46%**



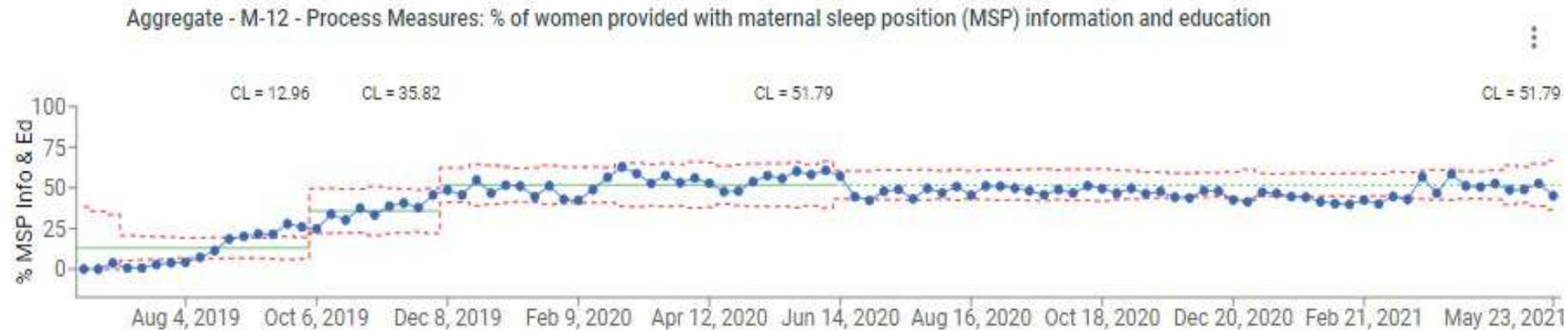
# Process measures



Provision of DFM material increased:  
**17% to 57%**



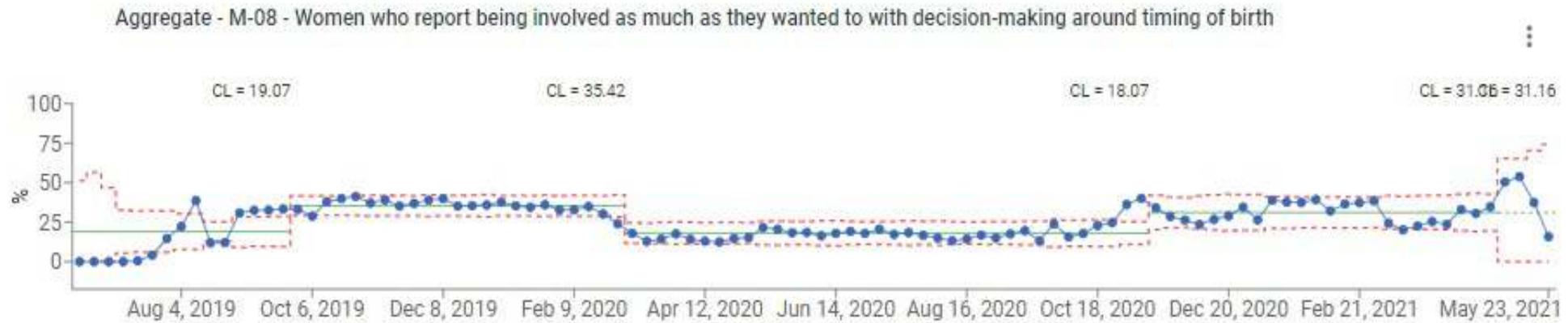
Provision of MSP material increased:  
**12% to 51%**



# Process measures



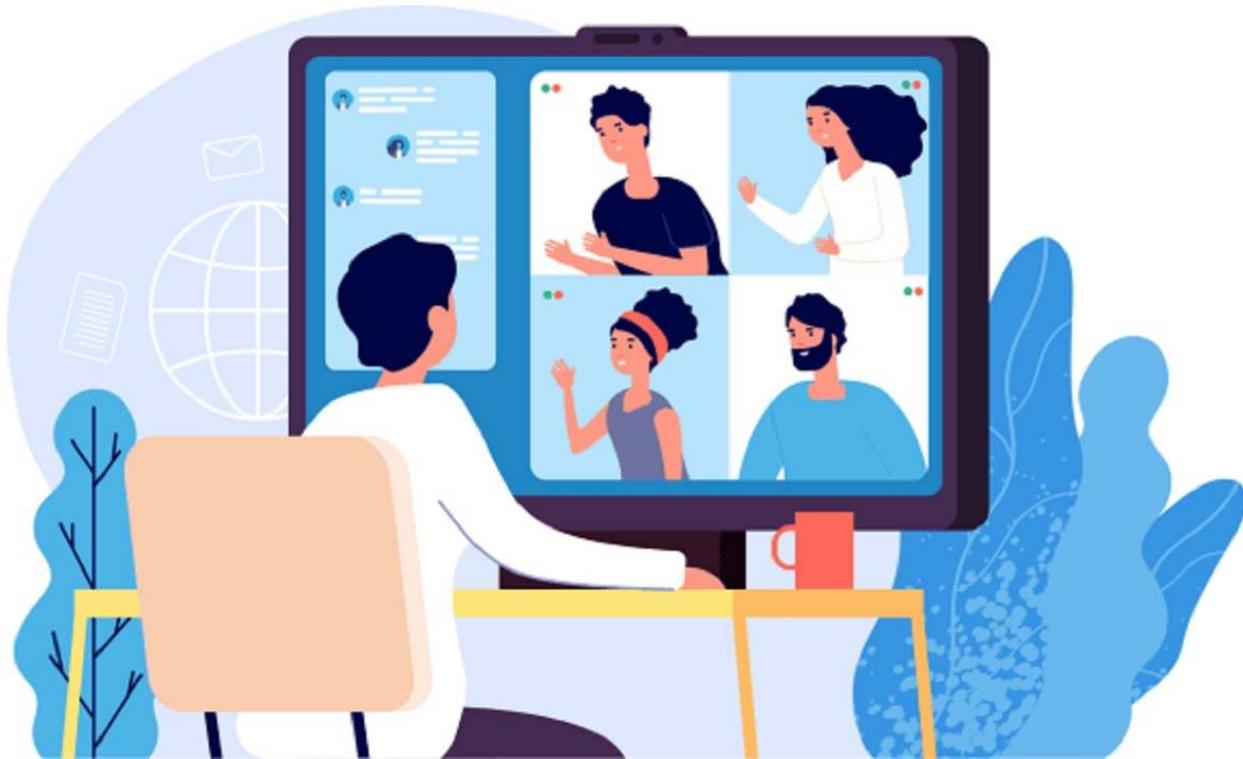
Shared decisions on timing of birth increased: **19% - 31%**



# Pandemic interruption

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- Work paused in March 2020
- Phase 2 began November 2020
- Six-month virtual program
- 16 teams returned
- **Work continued towards our shared aim and teams took advantage of opportunities to connect**





**ARIADNE | LABS**



# Ariadne Labs

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- A joint center for health systems innovation at Brigham and Women's Hospital and Harvard T.H. Chan School of Public Health.
- They develop simple, scalable solutions that dramatically improve the delivery of health care at critical moments to save lives and reduce suffering.

# Vision

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- Every health system delivers the best possible care for every patient, everywhere, every time.
- Work from prototyping to wide-scale dissemination around the world.
- The Ariadne Labs Arc — we design, test, and implement solutions.

# So far...

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- Literature review and evidence exploration
- In depth interviews
  - Those with lived experience
    - Women
    - Clinicians
    - Those involved in previous improvement efforts
- Synthesis
- Recommendations on scale up and broader implementation