



To repeat or not to repeat?

CORD BLOOD LACTATE is the question

Anna Rodgers
Luton & Dunstable University Hospital

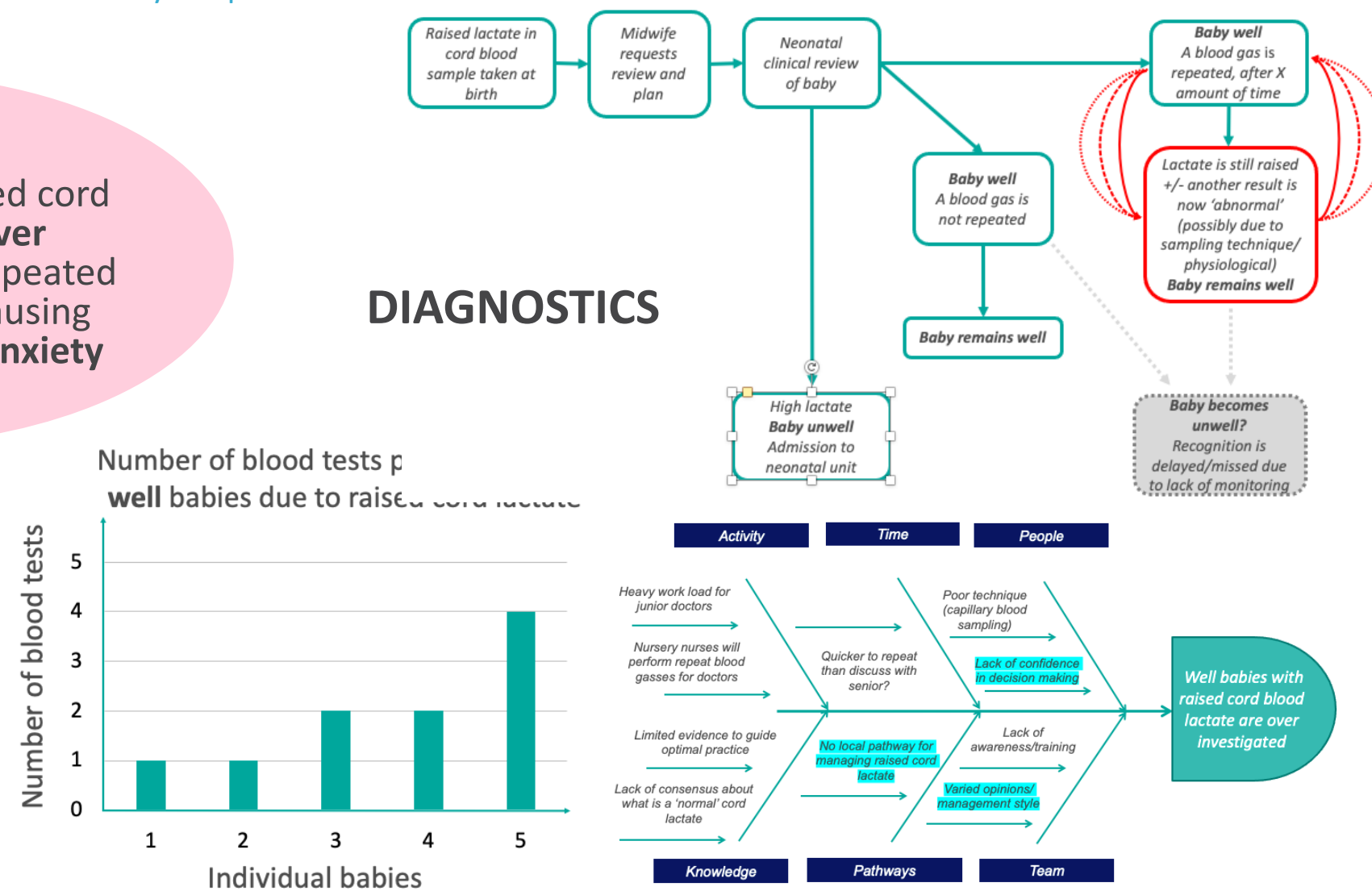
BACKGROUND

- Raised cord blood lactate may occur in hypoxic ischaemic encephalopathy but is also seen in clinically well babies
- A recent review suggests that a level of up to 10 could be normal in term deliveries¹
- A repeat blood gas is often performed postnatally for reassurance. This frequently yields 'abnormal' results related to sampling technique or timing (i.e. soon after birth) necessitating even more painful blood tests

PROBLEM

Well babies with a raised cord blood lactate are **over investigated** through repeated **painful** blood tests, causing parents **unnecessary anxiety**

DIAGNOSTICS



AIM & MEASUREMENT DEFINITION

Aim: By August 2023, only babies with a clinical indication will undergo blood sampling due to a raised cord lactate

Chosen measure: Number of well babies undergoing repeat blood sampling for a raised cord blood lactate *with* and *without* a clinical indication

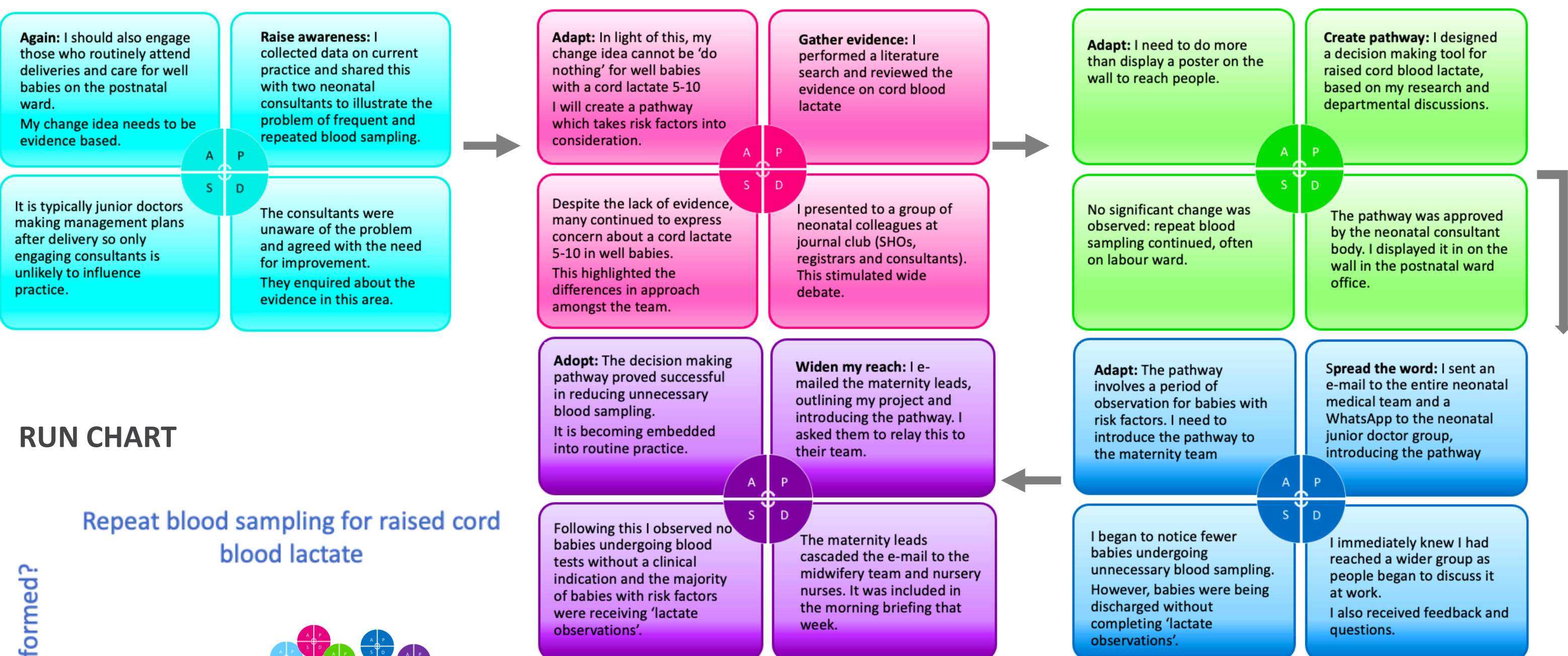
Inclusion criteria: Well babies at birth, with a cord blood lactate > 1

Exclusion criteria: Unwell babies at birth

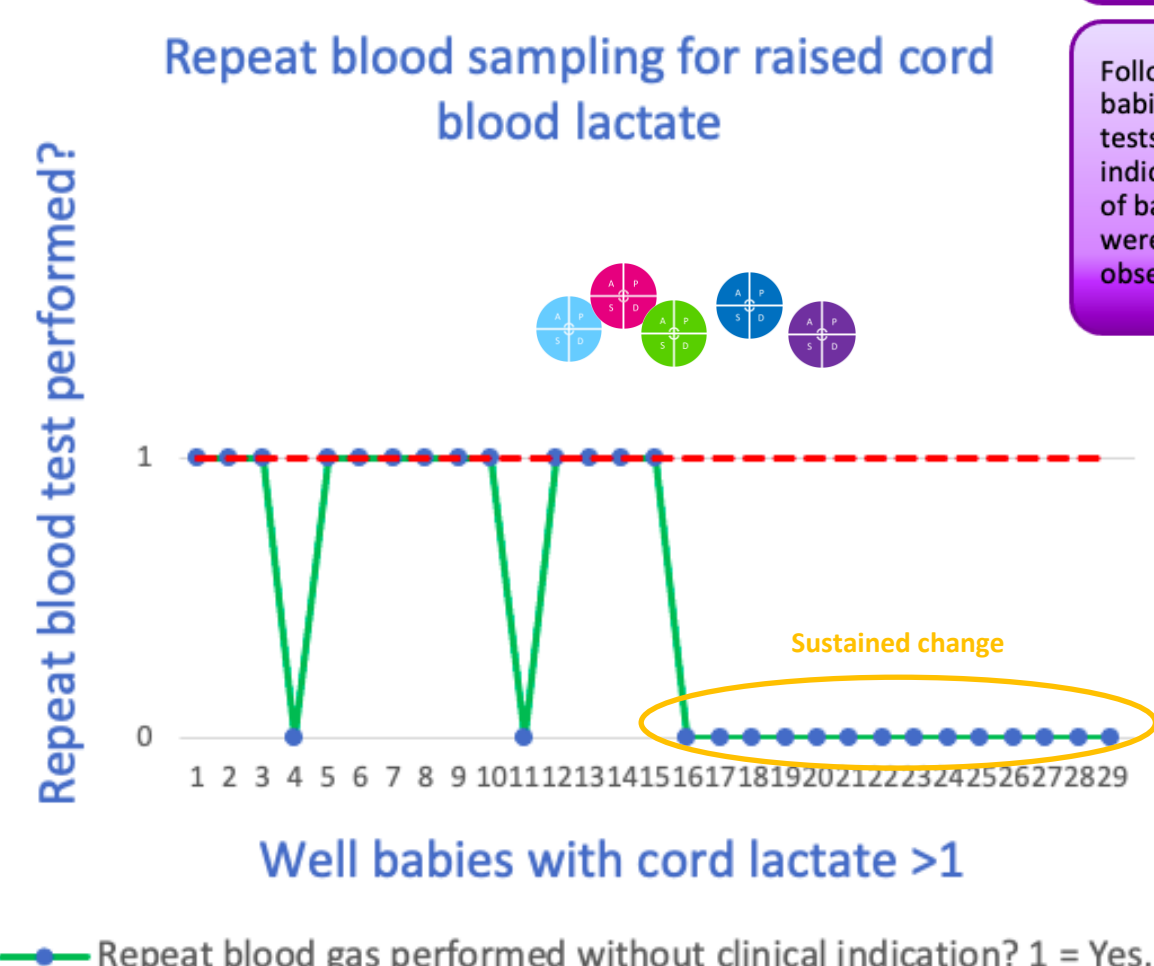
Change ideas	(Definitely =1, Maybe =2, No = 0)	LOGICAL?	QUICK & EASY?	EXCITES ME?	TOTAL SCORE
Engage colleagues: Share my observation of the problem to raise awareness	2	2	1	2	4
Stimulate discussion: Present the evidence in journal club, establish a consensus	2	2	1	2	4
Create risk assessment tool: Pathway to guide decision making	2	2	2	2	8
Teaching session for junior doctors: How to use pathway, when to escalate	2	2	1	2	4
Share with maternity staff: How to use pathway, when to escalate	2	2	2	2	8

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PDSA CYCLES



RUN CHART



REFLECTIONS & LEARNING

- Just because something is 'routine' doesn't make it right – consider the patient's perspective.
- Show your thinking – the bar chart was a simple tool to get my point across to colleagues.
- Introducing a pathway was able to lead to a sustained change in practice. In this case, significantly reducing the number of babies undergoing unnecessary blood tests

References

1. P Olofsson, Umbilical cord pH, blood gases, and lactate at birth: normal values, interpretation, and clinical utility, American Journal of Obstetrics and Gynecology, May 2023'

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Dr Usha Niranjana & Nicola Davey

