

BACKGROUND

PROBLEM
Delaying treatment of babies with infection **can kill**. We must **give antibiotics quicker** to protect newborn babies and **save lives**.

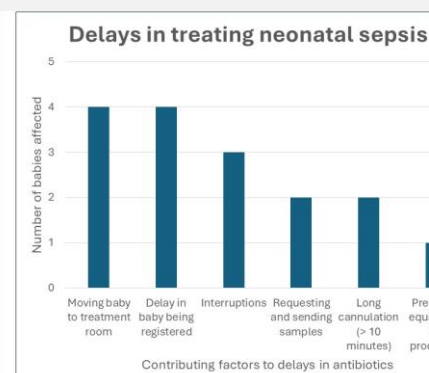
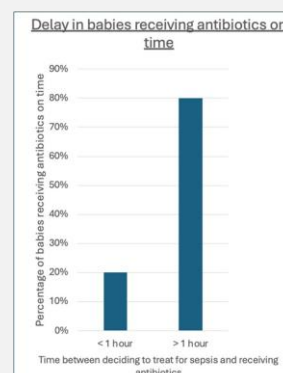
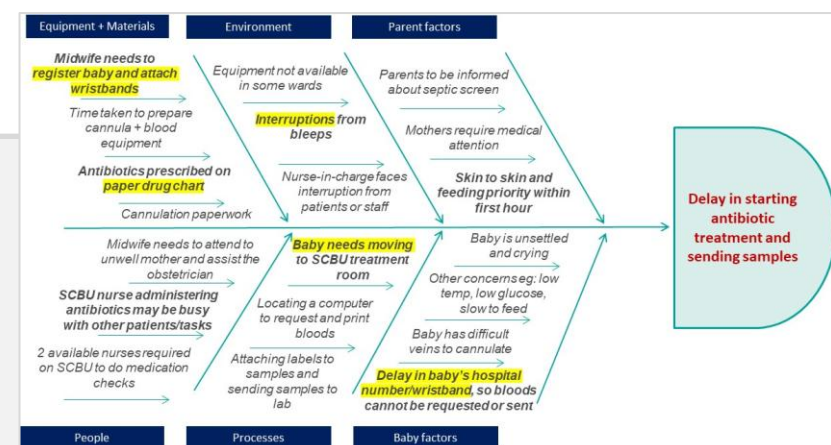
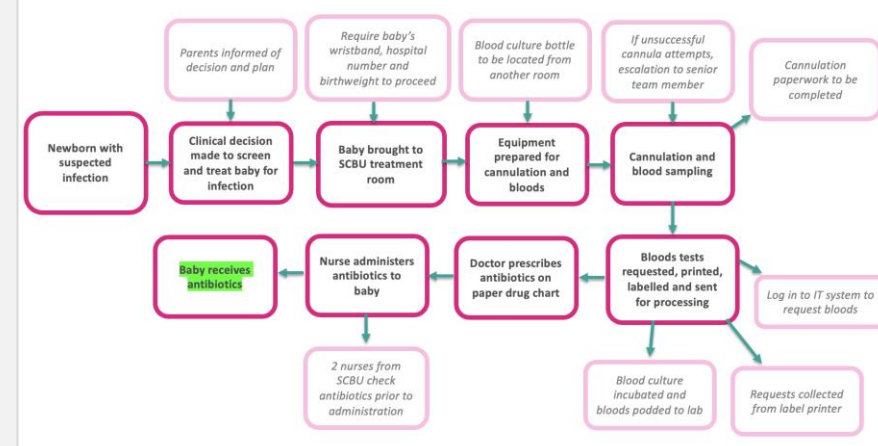
NICE National Institute for Health and Care Excellence
Neonatal infection: antibiotics for prevention and treatment

NICE guideline | NG195 | Published: 20 April 2021 | Last updated: 19 March 2024

1.3.9 If a baby needs antibiotic treatment, give this as soon as possible and always within 1 hour of the decision to treat. [2021]

DIAGNOSTICS

High-level process map



AIM & MEASUREMENT DEFINITION

Aim: By February 2026, the number of babies with suspected sepsis receiving antibiotics within 1 hour, will increase from 2 out of 10 to 7 out of 10.

Chosen measure: The number of babies receiving antibiotics within 1 hour from the decision to treat for sepsis.

Inclusions

Babies on the postnatal or labour ward/delivery suite requiring antibiotics for suspected sepsis

Exclusions

Babies being admitted to NICU or who are already admitted in NICU or SCBU requiring antibiotics

Sampling method and frequency

Using a spreadsheet to collect data on babies receiving antibiotics weekly

CHANGE IDEAS

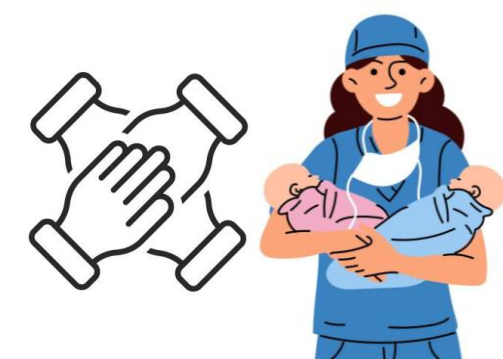


Speed up adding babies to EPR



2 person technique
- one clinician cannulates, the other prescribes

Increase stakeholder awareness of 'golden hour'



Cannulate on labour ward
- take 'grab bags' to labour ward to cannulate there



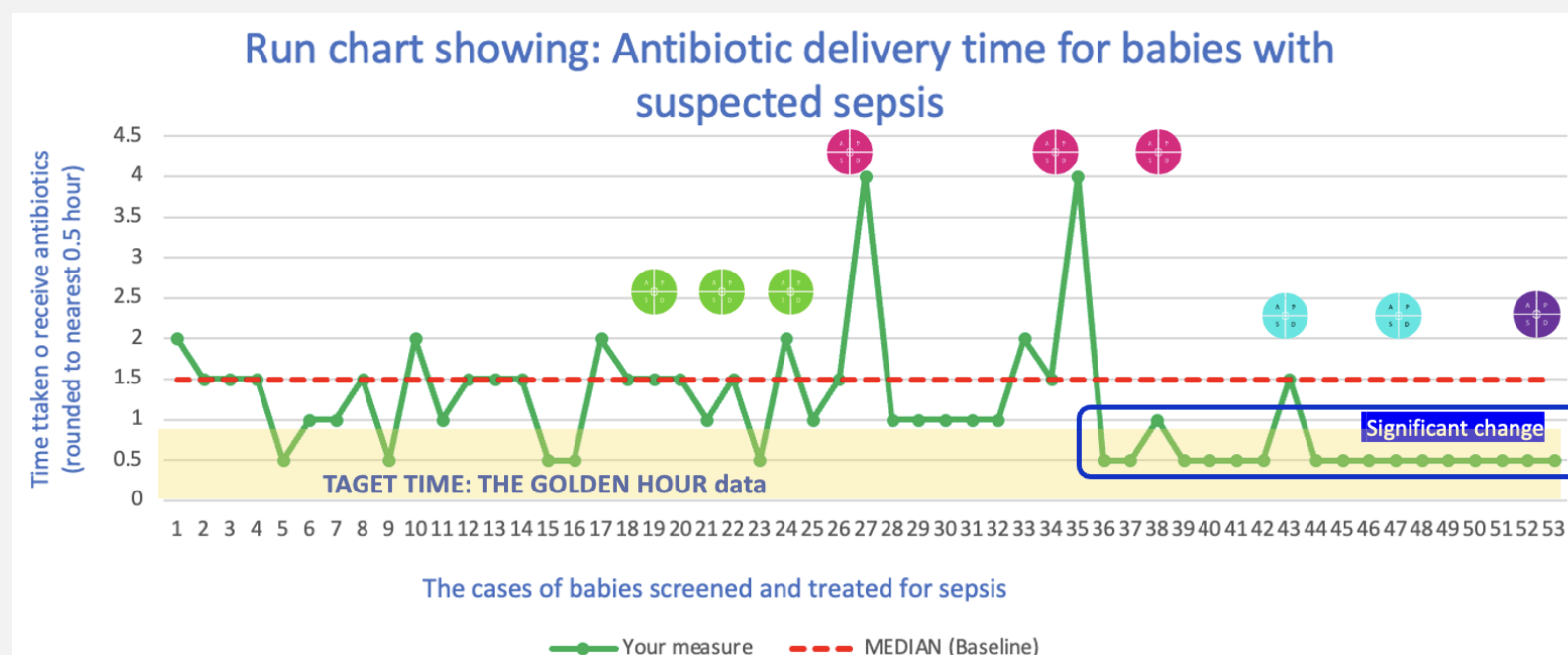
PDSA cycles

PDSA Test #	PLAN	Do	STUDY	ACT
1.1	Improve clinician awareness of the need to give antibiotics within 1 hour	13th Jan 2026 teaching session	Reduced awareness, identified barriers, gathered suggestions to trial	ADAPT + EXTEND – increase clinical priority to act fast
1.2	Regular weekly reminders to team covering labour ward and postnatal ward	Weekly WhatsApp group reminders	Many have 'seen' reminders Little engagement Lost amongst other messages	ADAPT – trial visual reminders, unsustainable so consider alternatives
1.3	Visual reminder in clinician workplace space	Put up a colourful poster in doctors office	Poster can be lost amongst other office posters	ADAPT – consider ways to extend education to new incoming trainees

PDSA Test #	PLAN	Do	STUDY	ACT
2.1	Encourage clinicians to chase up babies being added to EPR as soon as possible after deliveries	20th Jan 2026 WhatsApp message requesting to chase up babies being added to EPR	Little engagement and improvement seen from clinicians asking alone	ABANDON – need to bring up directly with source
2.2	Push midwives to add babies to electronic patient record (EPR) as soon as possible after deliveries	6th Feb 2026 teaching session with midwives (> 20 attended)	Identified the roles of midwives and ward clerks in adding babies to EPR	ADAPT – speak to ward clerks directly and involve midwife managers
2.3	Educate ward clerks on adding babies to EPR as soon as possible after deliveries to speed up process of giving antibiotics	9th Feb 2026 education given to ward clerks and clinicians	Learnt there is 24/7 ward clerk access – clinicians can directly ask them to add babies to EPR	ADOPT – clinicians to ask ward clerks to add babies to EPR after deliveries

PDSA Test #	PLAN	Do	STUDY	ACT
3.1	Cannulate on labour ward instead of SCBU treatment room	From 16th February 2026 ask clinicians to use cannula packs and cannulate on labour ward	Positive feedback on grab bags and improvement in results	ADOPT + EXTEND – continue stocking and using cannula packs
PDSA Test #	PLAN	Do	STUDY	ACT
4.1	Allocate antibiotic champions to take over project for continuation	From 26th February 2026 handover project to clinicians staying on	Continued work and changes despite rotation of clinicians	EXTEND – project continues past the 6 month rotation

RUN CHART



CONCLUSIONS & LEARNING

By February 2026, 8 out of 10 babies received antibiotics within the target time of 1 hour and improvement from the baseline of 2 out of 10 babies. The run chart showed a statistically significant change with 16 consecutive data points below the median line. Raising awareness with the MDT took time but was worth doing to get stakeholders on board with change in practise. Cannulation grab bags seemed to have the biggest impact on speeding up antibiotic delivery.

REFLECTIONS

Using the model for improvement helped to focus on one small aspect to improve and change, analyse the impact of change, and decide whether to adapt, abandon, extend or adopt the intervention. This was helpful to analyse which changes were effective and how further changes could be improved.

With rotational training it is important to consider how to maintain the improvements seen going forward. I plan to handover the project to 2 clinicians staying on in the department to continue implementing the changes made and continue running PDSA cycles.

Acknowledgements:

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Nikki Davey

