Applying the Kaiser Permanente(KP) Early Onset Sepsis Risk Calculator **NICEly**

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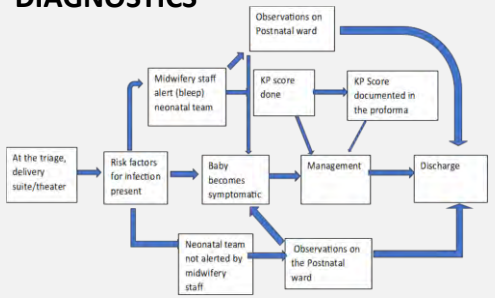
BACKGROUND AND EVIDENCE:

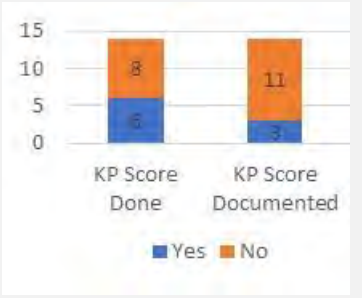
NICE guidelines recommended the use Of KP Score as an alternative only as a part of the prospective audit which should record: number of babies identified by the score; number correctly identified with a positive blood culture; number incorrectly identified without a positive culture and number missed.

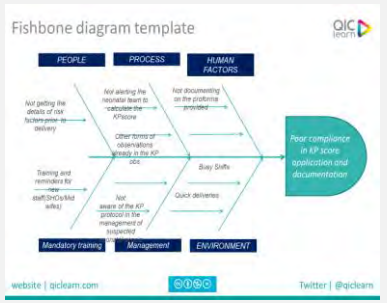
PROBLEM

We are not always applying the Kaiser Permanente (KP) calculator to detect a baby's risk of serious infection. Cases are not being identified quickly or accurately leading to delays in treating babies at risk of serious infection

DIAGNOSTICS







AIM

All babies with risk factors for sepsis will have their Kaiser Permanente risk score done, documented appropriately, and managed accordingly by March 2023.

MEASURES

- *Number of babies with risk factors for sepsis with Kaiser Permanente sepsis risk calculator score done.*
- *Number of the Kaiser Permanente sepsis risk score documented appropriately in the proforma and acted on.*

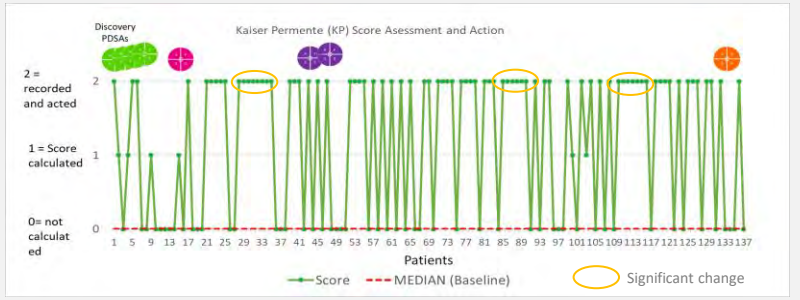
CHANGE IDEAS

- Teaching sessions on KP score and documentation to trainees as a reminder to trainees after initial induction.
- Reinforcement of the importance of proper usage KP Score to SHOs & midwives (5 minutes educational session on ward)
- Flagging up the proforma for risk factors as an easy form to fill in, to aid KP scoring.
- Posters: in work areas of midwives and virtual on WhatsApp groups of trainees as an additional reminder.
- Presentation/discussion of case samples of inappropriate application in the perinatal meeting.
- To include a forcing function in the 'iclip' documentation.

PDSAs (summary table)

PDSA Test #	PLAN	Do	STUDY	ACT
1.1	**DICOVERY PHASE** Discussed with my educational supervisor and other colleagues to generate measurement ideas	I worked out steps on how to get the data to evidence the level of compliance of the use and documentation of the KP Score	I reflected on the feedback and identified that I needed to do a snapshot audit of the level of compliance at the moment.	To improve the compliance of the use and documentation of the early onset neonatal sepsis risk calculator (Kaiser Permanente) score
1.2	Retrospective review of 14 patient notes of neonates delivered at 34 weeks gestation and above who had maternal and neonatal risk factors for sepsis.	Data collected during shift and plotted on a bar chart.	Bar chart clearly illustrated that we were missing data more often than recording it.	Share snapshot audit of the compliance of the use and documentation of the early onset neonatal sepsis risk calculator (Kaiser Permanente) with wider team
1.3	Share snapshot audit of the compliance of the use and documentation of the early onset neonatal sepsis risk calculator (Kaiser Permanente) with wider team	Presented the result to the department which showed non-compliance. Also shared with the midwifery team.	I used the feedback from the team to complete my fishbone process in the QIP	Explore more with staff
1.4	To have one on one discussion with the medical and midwifery staff of their knowledge of the use of the KP score	One on one discussions with the medical and midwifery staff at work provided useful feedback on the challenges of using and documenting the KP Score.	Feedback which pointed out the lack of awareness of the use of the proforma and other existing protocols that were all intended to be used routinely.	A baseline survey to understand the problem and help target my change ideas.
2	**CHANGE IDEA:** Posters in work areas of midwives and virtual on WhatsApp groups of trainees as an additional reminder.	One-page posters laminated for infection control: for the midwifery team to alert the neonatal team and for the neonatal team to calculate and document	This helped in the awareness though I had to monitor the posters as some were obscured by new posters.. improved seen when posters first used dropped afterward.	To find other ways to improve the use and documentation.
3.1	**CHANGE IDEA:** 5 minutes microsessions as reminders in work areas: labour ward, postnatal wards and staff rooms	Reached out to more midwifery staff and discussed with the trainees the fishbone process and high level process map for further ways to effect change.	I reflected on the feedback and planned the next step. Some of the feedback included the quick turnover of staff and new ones not aware of the score and when to alert the neonatal team.	Teaching sessions on KP score and documentation to trainees/midwifery staff as a reminder to trainees after their initial induction.
3.2	Highlight the importance of the appropriate use of the KP score in avoiding unnecessary term neonatal admission in the neonatal intensive care unit.	Continue to collect data in real time on the number of neonates with neonatal and maternal risk factors who had the KP score calculated, documented, and managed as appropriate.	I was happy to have noted an improvement in the use of the KP score and appropriate documentation as all the babies who had the score done were also documented and managed accordingly.	Presentation/discussion of case samples of inappropriate application in the perinatal meeting.
4	**CHANGE IDEA:** To have a force function in the iclip documentation	Proposal for the IT team to include this in the documentation.	This will be a long-term plan to ensure every neonate with neonatal and maternal risk factors for sepsis has the KP Score documented if applied in their management	To continue to improve and ensure all neonates delivered 34 weeks and above with maternal and neonatal risk factors have the KP score documented

RUN CHART



REFLECTIONS & LEARNING

- There was an improvement in assessment and action on KP scores from a baseline of 2/10 patients with a significant change seen after the poster was introduced. With the addition of micro-teaching sessions improvement was sustained at 6/10 patients.
- I encountered the difficulty of staff who have been long in the system finding it difficult to adapt to the use of the protocol of alerting the neonatal team when the baby is delivered in good condition because they would be on observations.
- I learnt the importance of involving other members of the team as the midwifery lead has been very pivotal in educating the midwifery team and sending reminders.

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