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Reducing Neonatal Extubation Failure through Best Practice Guidelines

Problem:
A recent survey in neonatal intensive care at Al Wakra hospital revealed that the extubation failure rate in neonates is 33 %. Evidence-based studies internationally has shown that this can lead to increased morbidity, increased length of hospital stay, higher cost of care and mortality.

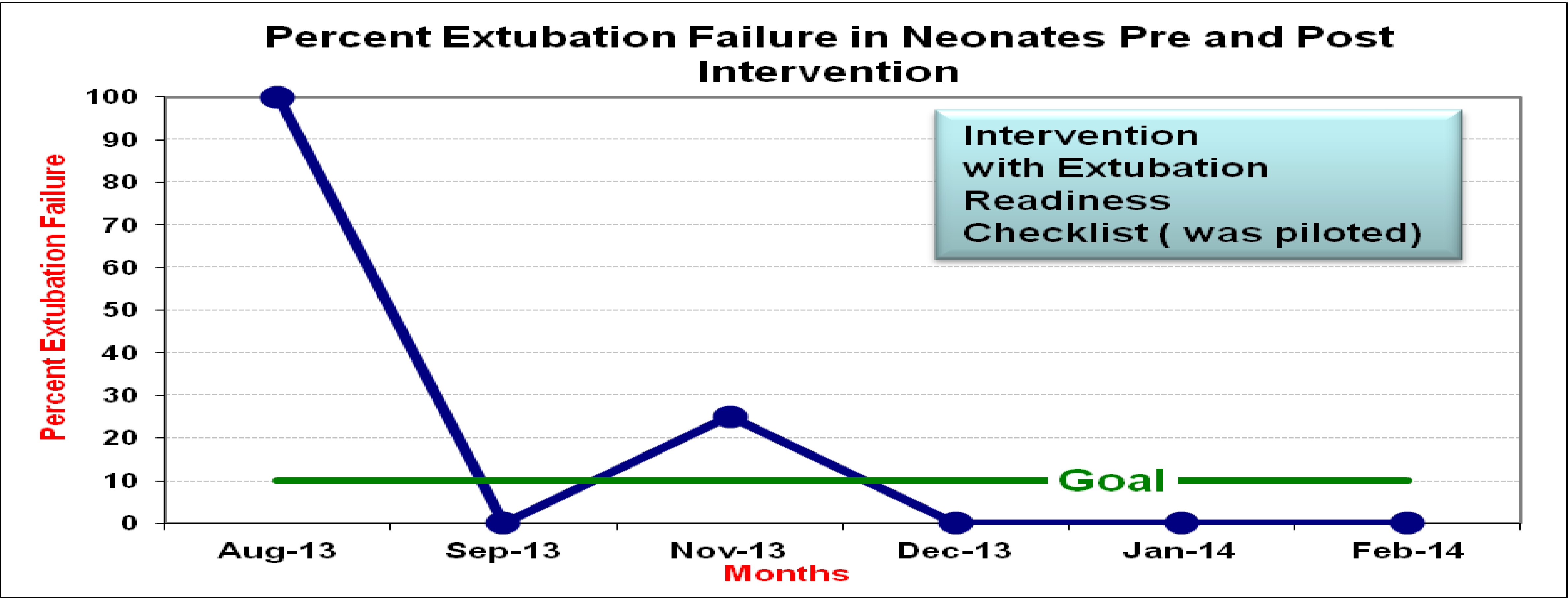
Aim:
To reduce extubation failure in neonatal intensive care from 33 % to 10 % from December 01,2013 to February 15 , 2014.

Intervention:

- Pre-printed extubation readiness assessment checklist was piloted by 2 NICU specialists in intubated neonates and was later finalized.
- Best practice guidelines for neonatal extubation & education of all specialists and intensive care staff .

Methodology:

- Extubation readiness checklist was used prospectively for every planned neonatal extubation.
- Percent extubation failure was used as key Performance Indicator (PI).
- Data depicted in form of run charts.



CONCLUSIONS:

- After implementation of extubation readiness assessment checklist along with best practice guidelines, the extubation failure rate reduced in limited time and in small number of patients. This shows a short term success.
- Our team is heading in right direction and this project needs more time and data for long term success and sustainability.

RECOMMENDATIONS:

- To reduce exbutaion failure rate to less than 10 % over next 10 months in neonatal intensive care
- To use successful extubation rate as quality indicator for neonatal intensive care .