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INTRODUCTION

From October 2021 to March 2022 there were 531 babies discharged, out of which only 8 babies were discharged before 1130am i.e. 98.4% of babies were only discharged after 1130am (i.e. <5%). Delayed discharge increases exposure to iatrogenic harm, slows the flow of patients in the hospital system and can be a strain on hospital resources. This necessitated a change in strategy on how we could discharge our well babies in a timely and safe fashion.

METHOD

The team used various improvement tools to obtain valuable insights with the use of fishbone diagram, followed by separate diagnostic and testing of change ideas (PDSA cycles) with tracking of results. With the data gathered on a monthly basis, the team huddled and reviewed each implementation through careful deliberations and iterations.

OBJECTIVES

To increase the number of eligible newborn discharges by 1130am from current 18.5%* to 60% within 6 months

Eligible: clinically fit for discharge, >25 hours of age, screening tests completed, no need for phototherapy, no need for antibiotics, no need of monitoring of clinical condition, mother able to discharge as well or caregiver available to bring home

INTERVENTION STRATEGY

ROOT CAUSE	INTERVENTION	DATE OF IMPLEMENTATION
No clear timing to start rounds	Spoke to HOD, disseminated workflow to all consultants/junior team to start rounds by 9.15AM	1 st June 2022
Clustering of work	De-clustering of work done - For junior doctor led PM rounds with pre-written morning entries on new EPIC system	27 th May 2022
Fixed timing of routine checks	Revision of jaundice thresholds to allow for earlier transcutaneous bilirubin check by 6am/20HOL whichever earlier	26 th May 2022
Lack of standardized workflow for discharging patients	Department workflow done up For nurse-led discharges	1 st September 2022

RESULTS

For Staff:

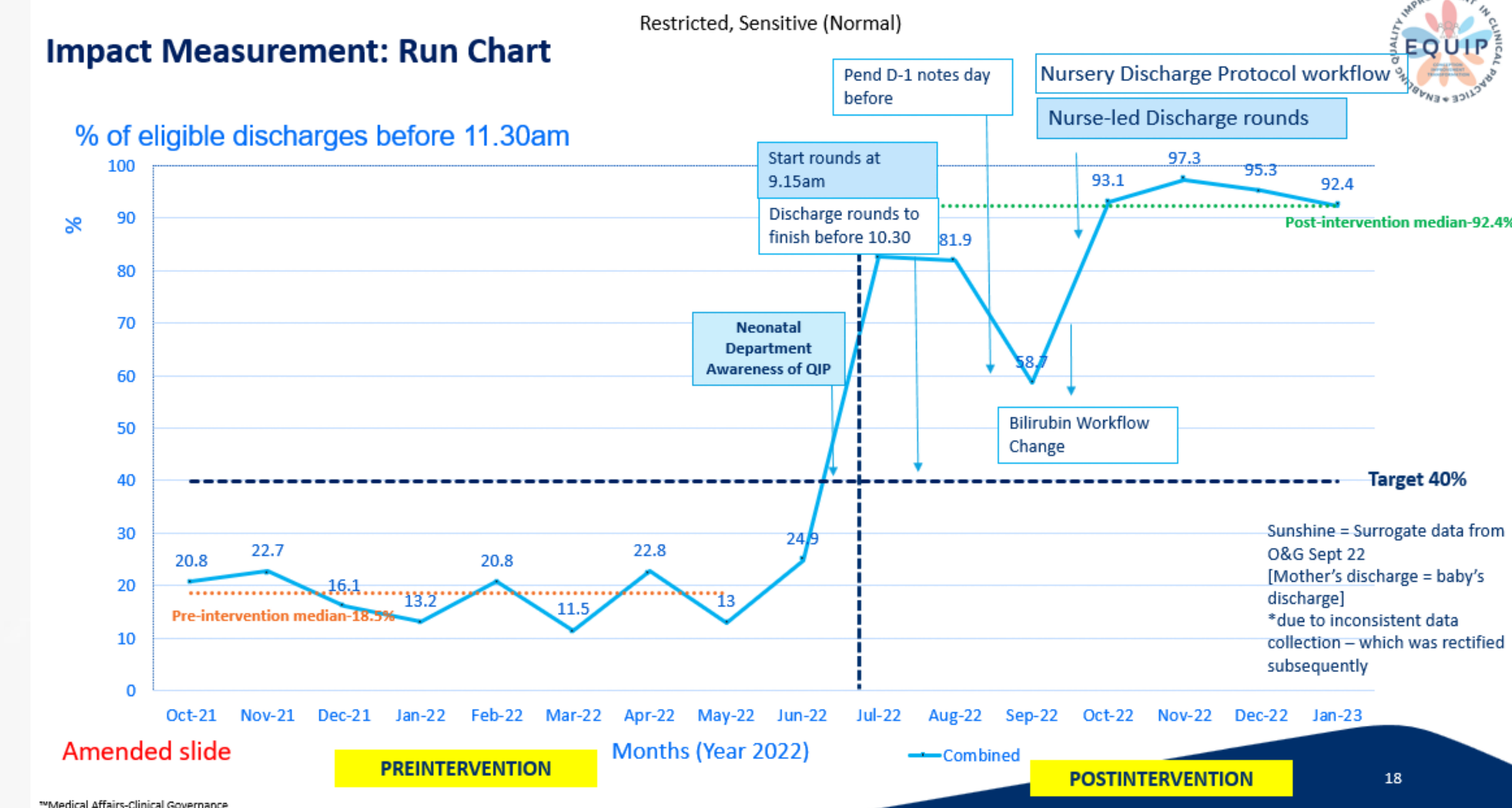
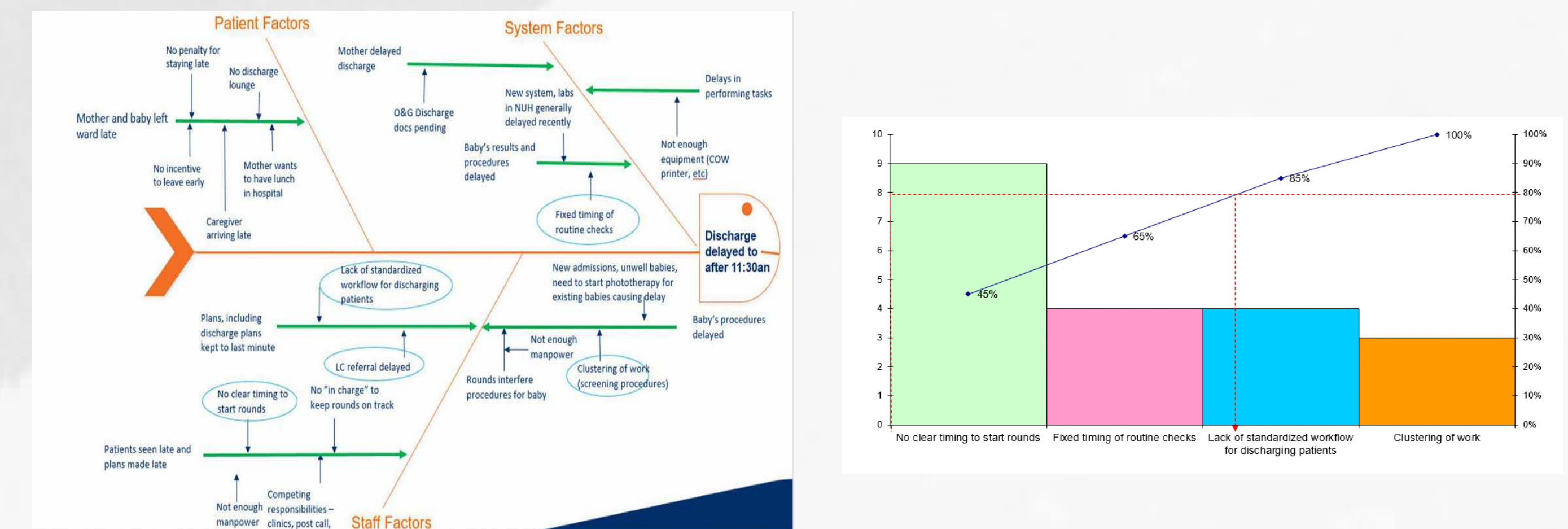
- More effective and efficient morning rounds
- Less duplication of work between junior staff and nurses
- More time for other non-clinical related work matters as rounds start and end earlier

For Patients:

- Allow for more timely discharges
- Quicker turnaround time to free up more beds for incoming patients

For Hospital:

- Quantitative cost savings:
- Average bill size for private patient = \$636.00 & subsidized patient = \$136.00
- Conservative average cost savings in a month = $636.00 \times 78 + 136.00 \times 78 = 49608 + 10608 = \60216
- % improvement in timely discharge = $(92.4 - 18.5)\% = 73.9\%$ [i.e. 4 fold improvement in timely discharge numbers]



CONCLUSION

- Department D-1 workflow put in place to ensure that new incoming ground team are familiar with workflow (Nursery Discharge Workflow was circulated as standard departmental practice amongst both nurseries (100% as NUH has 2 main nurseries))
- Nurse-led discharges was done with nursing empowerment for well-baby discharges
- Project was done for both nurseries (Private & Subsidised wards) in NUH simultaneously
- As staff found it more efficient with new workflow, project was made sustainable