

Minimizing Central Line Insertion and it's Duration

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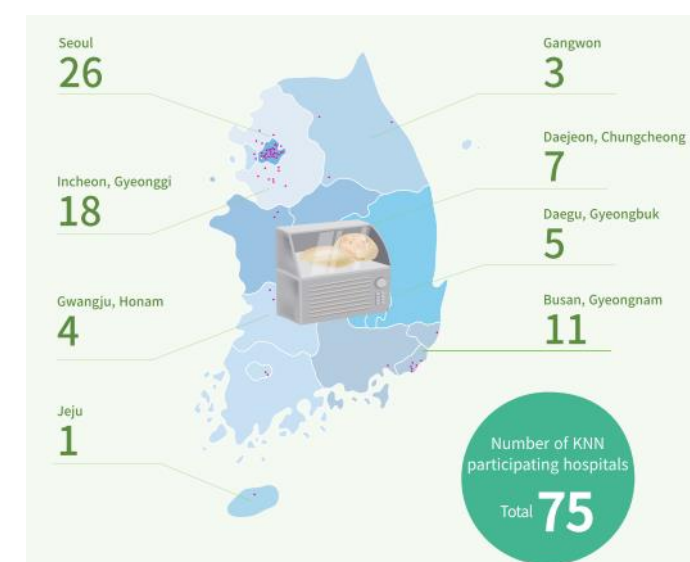
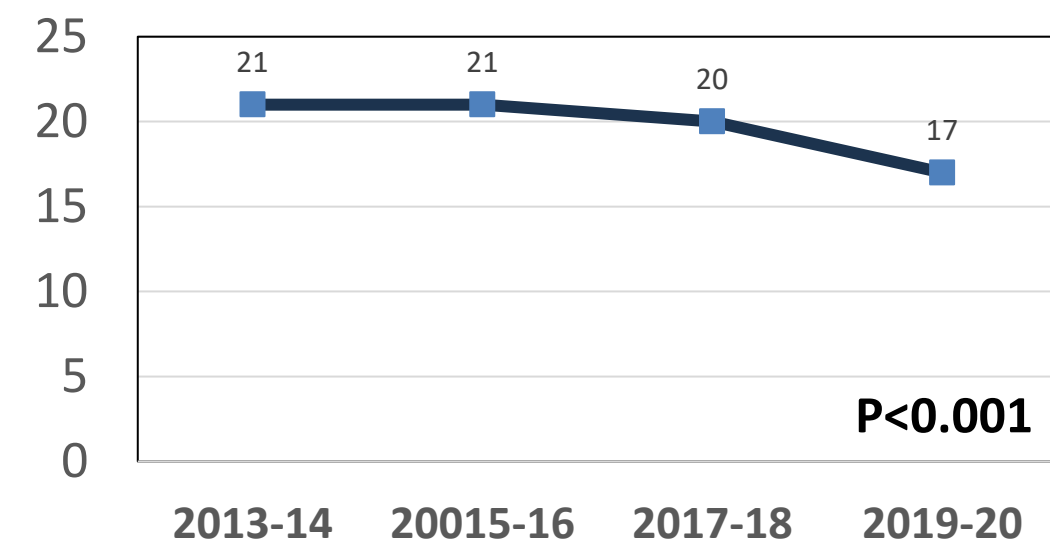
Aim

To prevent CLABSIs associated with PICC lines in the NICU, we have implemented network-based quality improvement efforts focused on minimizing peripherally inserted central catheter insertions and ensuring prompt removal when no longer needed, especially in preterm infants born at less than 32 weeks gestation or with a birth weight of less than 1500g.

Importance

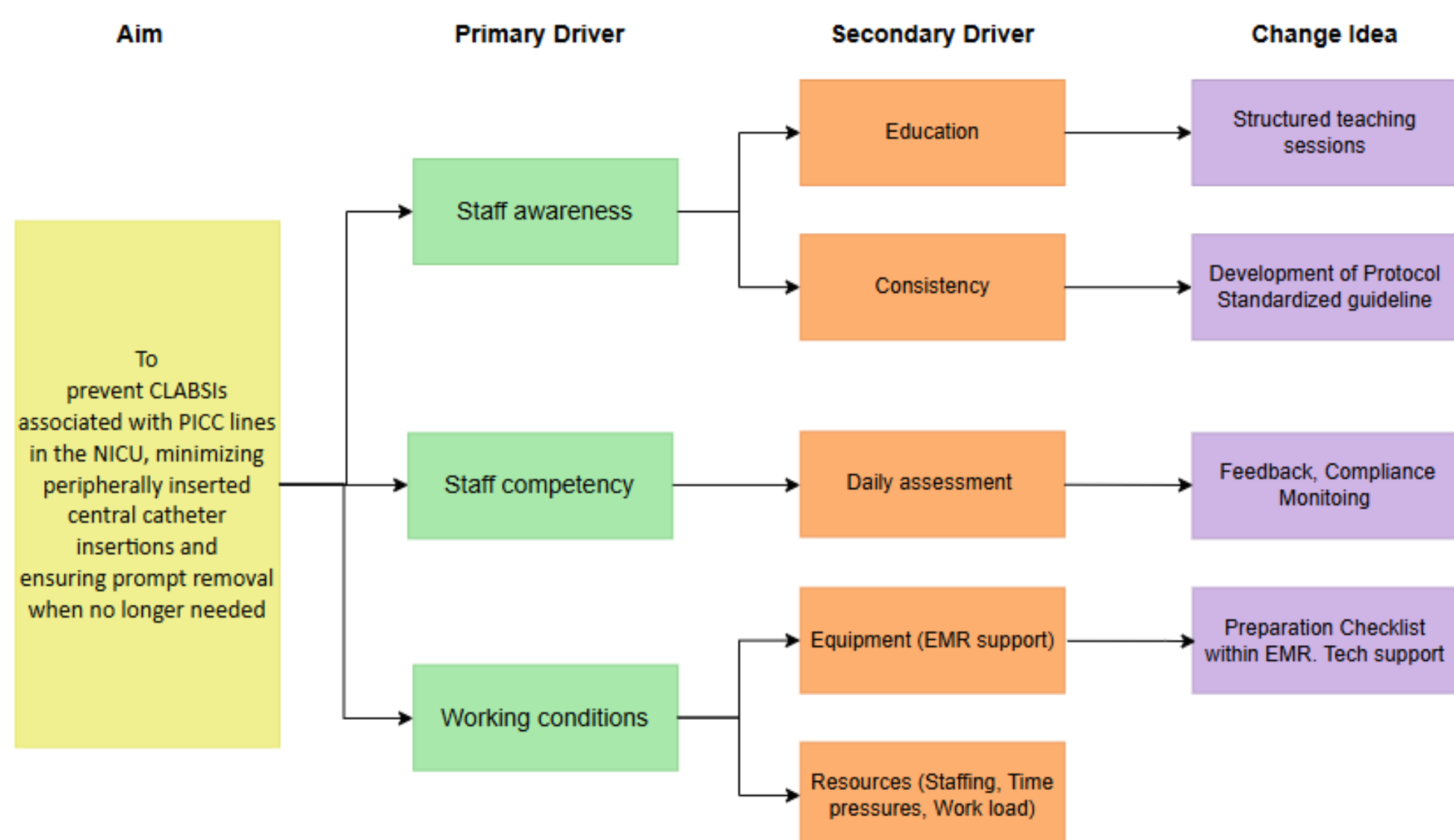
Incidence of Sepsis in KNN

→ Variations within hospitals remain

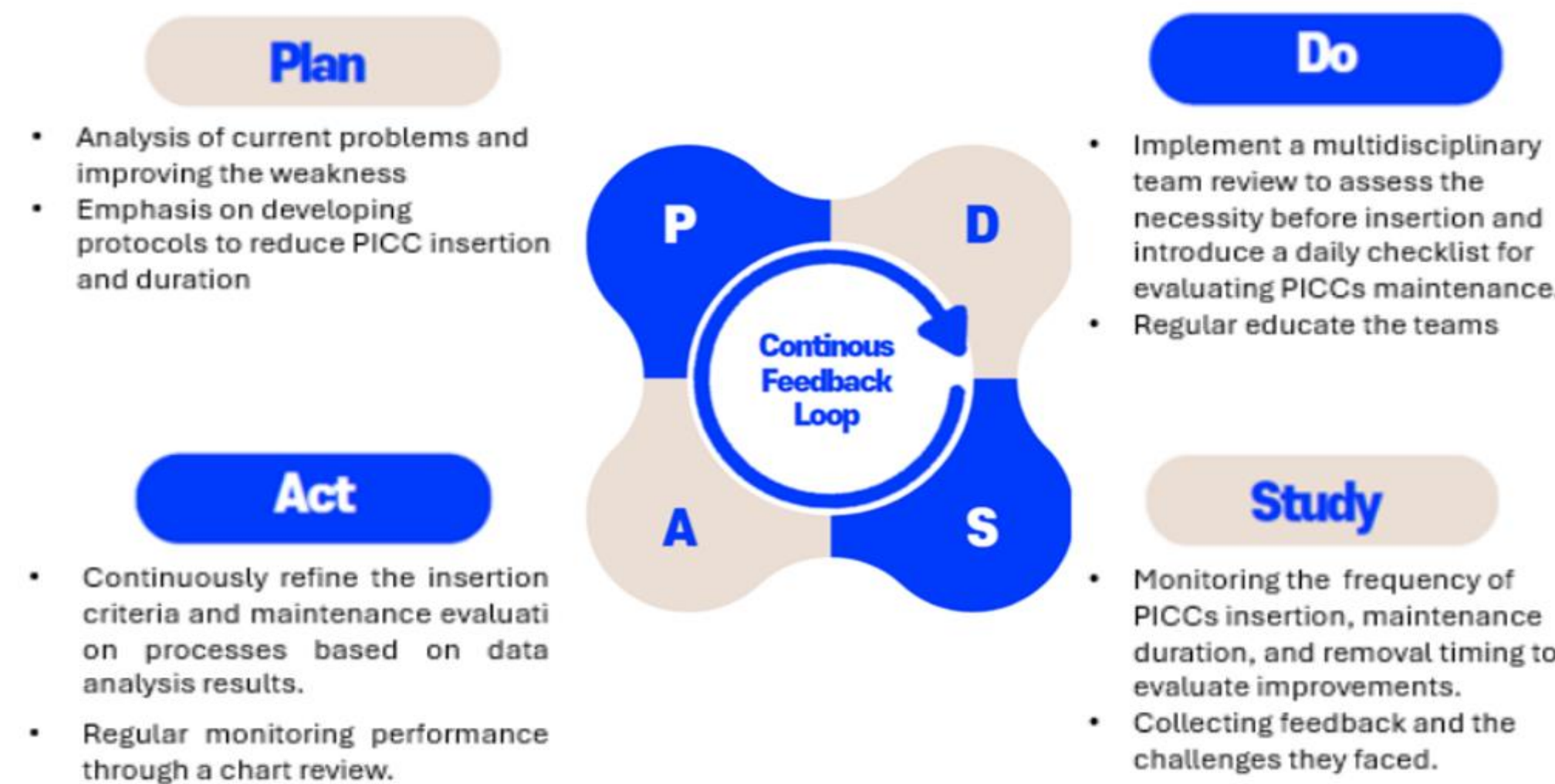


Jeon GW et al. JKMS. 2022;25;37(29)

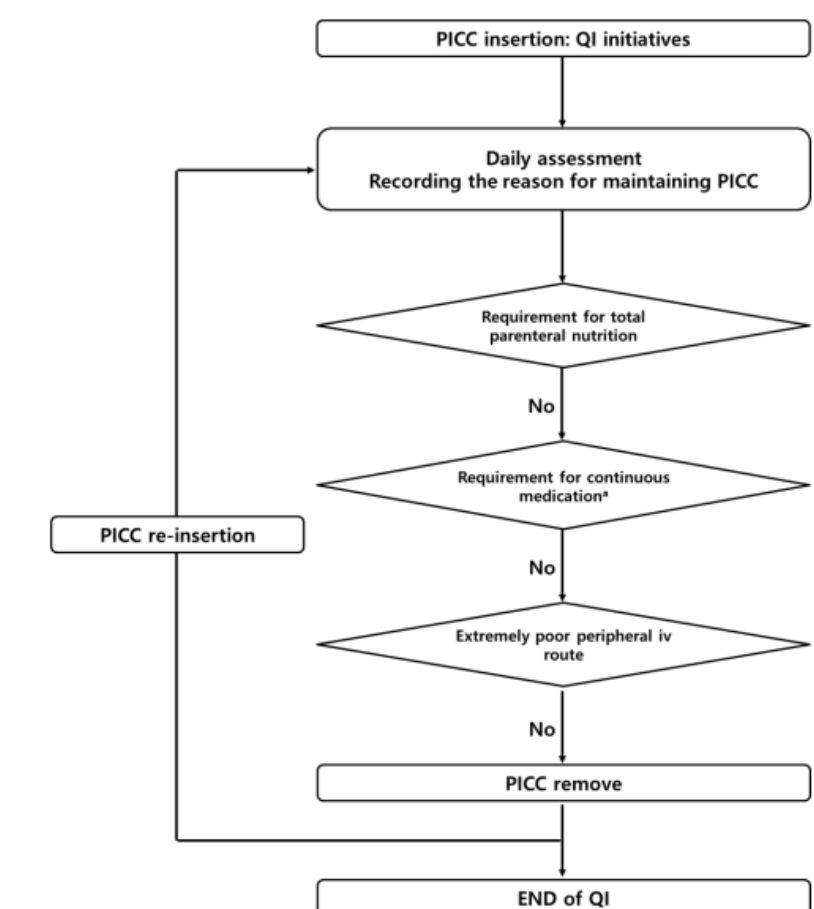
Driver Diagram



PDSA Cycle / Change plan



Daily Assessment



Data / Results

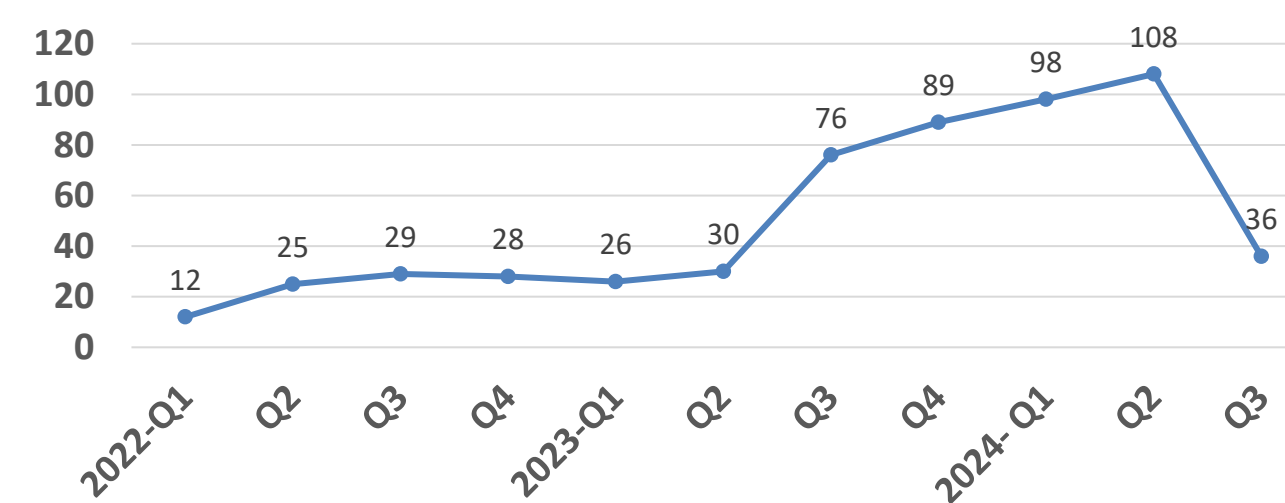
Process of Network QI

2022 2 Hospitals

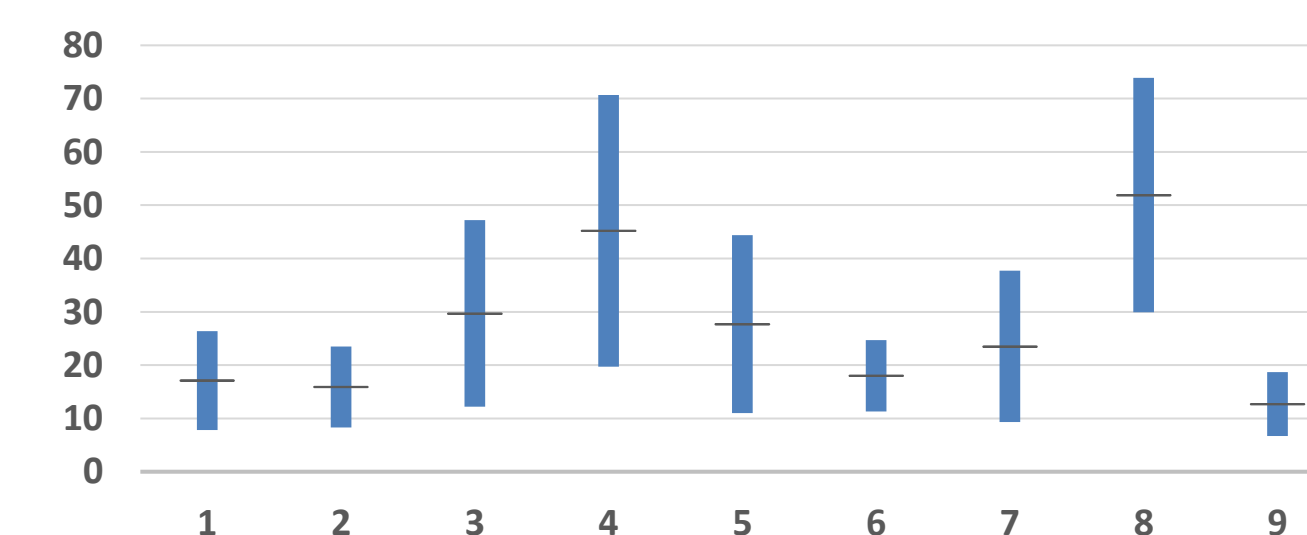
2023 9 Hospitals

2024 10 Hospitals

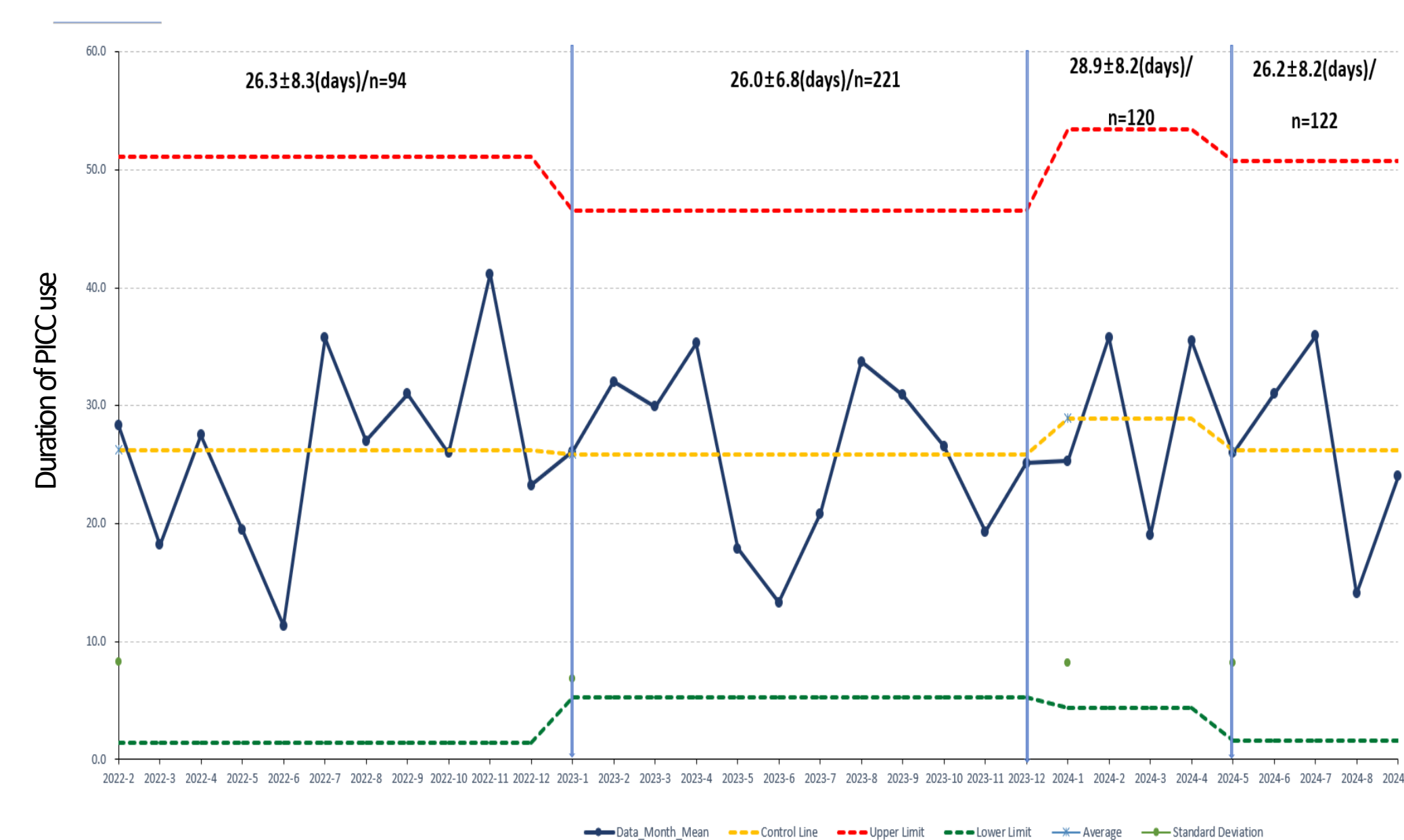
Number of Participation



Duration of PICC by hospitals from starting QI to 2024-Q3



SPC chart during QI



Lessons Learned / Next Stage/ Plan

The implementation of a QI initiative aimed at minimizing the use of PICCs and incorporating a daily checklist to assess the need for PICCs in preterm infants, along with ensuring prompt removal, was associated with a reduction in both the use of PICCs and the duration of PICC use during NICU admission. Expanding this initiative to hospitals registered in the Korea Neonatal Network is necessary to further reduce the incidence of CLABSI and improve patient outcomes across Korea.