CARE SETTING

- Fifty-bed NICU at Vidant Medical Center (East Carolina University) in Greenville, NC
- Teams involved nurse, medical student, nurse practitioner, attending physician, and resident physician

DETAILED & INTERVENTIONS

- Multimember team formed to amend inadequate diuresis protocol previously in place to manage fluid in neonates
- A new fluid management sheet was designed for better access and decision making
- Provider education, closer monitoring of hydration status, and delaying the addition of sodium to fluids were also part of the intervention

REFERENCES


STRENGTHS

- Inadequate diuresis decreased to 29% (from 43%) over 12 months
- Techniques generalizable to all neonates
- Neonatal fluid volume and maximum daily fluid volume decreased by statistically significant margins
- Tool underwent 6 PDSA cycles

OPPORTUNITIES

- Better EMR integration for patient flow
- Nurse lead rounds started for nightly fluid management
- Possibility to reduce sodium content in IV medication and blood products
- Fluid management sheet as a teaching tool

RECOMMENDATIONS

- Collect and present qualitative survey data from provider teams
- Perform root cause analysis to determine if there are more areas where intervention may help
- Continue to implement educational trainings for providers and monitor inadequate diuresis

PROJECT AIM

To decrease incidence of inadequate postnatal diuresis (loss of <6% birth weight) during first week of life in infants less than 28 weeks’ gestation by 50% over 1 year. The incidence of inadequate postnatal diuresis was 43%, compared to 3-8% in other units.