SAFETY ALERT

Inaccurate Use of Medical Equipment

"Sharing Lessons Learned"

A recent Sentinel Event reported using a imbalanced weighing scale that lead to an incorrect assessment of Neonatal weight, which contributed to delay in resuscitation and death.

Situation/Background:

30-year-old pregnant female presented with twins at gestational age of 22 weeks + 5 days. The patient had a preterm delivery; ultrasound recorded an estimated weight of twins (twin 1: 500 g), (twin 2: 300 g). The plan was to resuscitate if the Neonate was (500 g) or more.

Twin 1 was delivered and weighed (270 g), as per the plan, below 500 g, the Neonate was not resuscitated. Twin 2 was delivered and weighed (205 g). When neither Neonate reached (500 g), as estimated on the Ultrasound, twin 1 was re-weighed on a different scale and found to be (540 g). Hence, resuscitation started, but the Neonate could not be revived.

Assessment:

A Root Cause Analysis was done; multiple factors contributed to the event:

- Inconsistency in the CIPP with national / international guidelines: *Resuscitation of Premature Neonate (CIPP- 8184)* does not indicate the Neonatal weight along with the gestational age when assessing Neonatal viability.
- Discrepancy in Labor and Delivery (L&D) weighing scale reading: The scale was placed on an uneven surface (trolley). The scale base was not completely touching the flat surface, which caused imbalance and inaccurate reading.

Recommendations:

- Review the *Resuscitation of Premature Neonate (CIPP-8184)* to align with international and institutional guidelines.
- Conduct Neonatal Resuscitation Program *(NRP)* mock codes to ensure effective communication exists in emergencies.
- Reinforce providing clear documentation as medical justification when adapting international guidelines, if inconsistent with the internal policies.
- Revise the daily medical equipment checklist to include weighing scales availability, functionality, and accuracy in L&D.
- Increase the frequency of checking weighing scales, Planned Preventive Maintenance (PPM), every six (6) months as high-risk equipment.
- Clarify all weighing scale placements and remove the unfitted trolley used as a base for the weighing scale from L&D rooms and expedite the purchase of new suitable tables.
- Implement Just Culture for the involved staff.