

Specifications for Models to be Used for Trainings under Dakshata Initiative

1) MQ:- Preterm Newborn Simulation Mannequin

- The Preterm Newborn Simulation Mannequin should be realistic in size and appearance and also feel natural in weight, feel and touch.
- The appearance of Preterm Newborn Simulation Mannequin should be like a preterm baby (should feel approximately 1.6 kg, and mimic a newborn with 32 week gestational age when ready for use)
- The Mannequin should have features for training assisted feeding by Nasogastric/Orogastric tube insertion i.e a stomach pouch, oro- and nasogastric tract to practice correct placement of NG/OG tube
- The mannequin should include the following:
 - NG/OG tube (6 or 8 Fr size)
 - 2 training Stethoscope
 - training syringe (Syringe without needle)
 - Storage bag and teip
 - Diaper
 - Training stethoscope
 - Newborn care wrap
 - Training syringe
 - Preterm cap

2) MQ: ESSENTIAL NEW BORN CARE & RESUSCITATION MANNEQUIN

- The newborn mannequin should be realistic in size and appearance and also natural weight, feel and touch.
- Newborn mannequin should have features for training essential newborn care (ENBC) and newborn resuscitation.
- Newborn mannequin should facilitate effective bag and mask ventilation, chest rise only with correct technique.
- The newborn mannequins should include the following:
 - Squeeze bulbs for simulation of cord pulsation, spontaneous breathing, auscultation of heart sound and cry.
 - 4 external umbilical cords and 6 umbilical ties
 - 4 baby sheets or towels
 - 2 head cap
 - 2 Neonatal mucus sucker (easy to open, clean, autoclavable and reusable)
 - 2 training Stethoscope

3) **MQ: MANNEQUIN FOR SIMULATION AND MANGEMENT OF PPH**

- The mannequin should be highly realistic for simulating postpartum haemorrhage
 - The mannequin should have features to manually control the amount of bleeding and the conditions of uterus.
 - The mannequins should have the following
 - i. Full term fetus with placenta and umbilical cord
 - ii. Blood concentrate
 - iii. Full collection tray
 - iv. Fluid drain
 - v. Urine catheter
 - vi. 20 ml syringe
 - vii. Carrying bag
 - The mannequin should have features for training the followings
 - viii. Urine catheterization
 - ix. Normal delivery
 - x. Complete and incomplete placenta delivery
 - xi. Oxytocin injection
 - xii. Controlled cord traction
- Bimanual compression of uterus

4) **Breastfeeding Simulator:**

- Breastfeeding Simulator should be a wearable simulator that allows highly realistic simulation of breast feeding technique, breastmilk expression and Kangaroo Mother Care.
- The materials of Breastfeeding simulator should mimic the adult female breast in terms of shape and anatomical parts. It should ideally be of neoprene fabric, silicone nipples, and facility to strap it on a person.
- The colour of the simulator should ideally be skin tone neutral.
- The simulator should have water pouches, which when filled give it the contours of breast and the water can be realistically expressed from the breasts.
- The Breastfeeding simulator should include the following:
 - 30 ml cup
 - Transport / Storage bag
 - Directions for Use

5) **KMC wrap;**

- KMC wrap should be made of absorbent fabric strong enough to bear the weight of approximately 2-2.5 kg new born
- It should have provision to hold the pre-term new born baby against the mother's chest covering the baby and mothers chest fully from the front.
- It should have straps at the bottom and top end that can be fastened to secure the

baby against the breasts of the mother.

- The straps should be adjustable to accommodate various sizes and body shapes.
- The wrap should include the following:
 - Directions for use in pictorial form.