Collaboration between Respiratory Therapy and Clinical Engineering

Ronda Bradly MS, RRT

Background on Respiratory Therapy

- Minimum 2 year program with an Associate Degree in Science Registry in Respiratory Therapy.
- 2 National board exams CRT/RRT
- There are 448 Resp Therapy programs in the US. And Puerto Rico.
- There are approximately 155,000 Resp Therapist in the U.S.

International RTs

- Canada, China, Italy (MSRT), United Arab Emirates, Singapore and Taiwan. Growing in many Middle Eastern and Asian Countries
- Most South American Countries with Strong programs in Columbia and Venezuela.

History of Respiratory Therapy and Clinical Engineering Collaboration

- 1970s/1980s: Developing devices to meet patient needs
- More regulations preventing “off label use” and non-FDA approved equipment
- RT and CE working more closely with Medical records implementation
    - Connectivity of devices
    - Understanding nomenclature on ventilators for mapping to EMR.

Acute Care Partnership

- Purchasing new equipment:
  - Communication with other devices
  - PM routines what can be done in house
  - Assist with cost of ownership analysis
- Maintaining Current Equipment
  - Interface with vendors and direct discussion with engineering at device companies
  - Ensuring PM maintained

Example: Purchase of devices that can not be maintained in house could lead to significant increase in Cost of Ownership (shipping, repairs, loaners)

Sub-Acute or LTAC* Partnership

*Long Term Acute Care

- All about mobility!
  - Looking for solutions to provide mobility to complex patients
  - Ventilator, heater system, oxygen, suction, monitoring, mobile power supply
  - Collecting data for studies and tracking equipment use and maintenance takes a team effort

Example: Mobility stands at Ranken Jordan Pediatric Hospital

Beyond the Bedside™

RankenJordan
PEDIATRIC BRIDGE HOSPITAL

R&D Partnership

- Solid clinical and engineering partnership is a must.
- Developing devices that are not only clinically efficacious but also are durable enough for the setting and operate at a cost of ownership that is feasible is key.
    - Example of Germany vs USA for Nafion®

IFMBE
Clinical Engineering Division

Team work makes Dream Work

THANK YOU!

Ronda Bradley MS, RRT, FAARC
VENTL8@sbcglobal.net