Challenges to Transferring Kaizen Methodologies to CI Programs Functioning in Non-Lean Medical Centers

Douglas D. Backous, MD, FACS
Stacey D. Watson, AuD
Center for Hearing and Skull Base Surgery
Swedish Neuroscience Institute
Seattle, Washington USA

14th Symposium on Cochlear Implants in Children
Nashville, TN
December 11, 2014
Hypothesis

• Using proven tools of continuous improvement, gains seen in our feasibility study (Cochlear Corporation, 2008) are transferrable to CI programs in non-Lean environments
  – MED-EL sponsored
Protocol

- Two centers in diverse markets
  - New York Eye and Ear Infirmary
- Initial session with leadership team and stakeholders
- Value stream mapping (VSM) and 5S training
- Used VSM to choose 3 projects over 12 months
  - 30, 60, 90 day follow-up
People

• Two centers in diverse markets
  – New York Eye and Ear Infirmary

• Rona Consulting
  – J. Michael Rona and Erin Ressler

• Swedish Medical Center
  – Stacey Watson and Doug Backous

• Med-El
  – Patrick Willhite and Mickey Matise
Sequence of kaizen

- Heijunka (leveled production)
- Equipment
- Plant layout
- Standard Work
  - Sort
  - Simplify
  - Sweep
  - Standardize
  - Self-Discipline

5S
Center A

Target

• Reduce lead time from initial contact by 50%

• Reduce cycle time for CI activation appointment

Outcome

• Lead time went from 94-51 days (45.7%)

• Cycle time for activation went from 120 min-90 min (14.3%)
**Center B**

**Target**
- Reduce lead time from initial contact by 50%
- Reduce “Routine” follow-up appointments by 50%
- Increase new patient CI volume by 50%

**Outcome**
- Lead time from 177-90 days (49%)
- From 96-66 minutes (31.2%)
- From 100 to 160 in first year (60%)

Reduced workshop time from 5 days to 2.5 days
**Conclusions**

- Staff and patient satisfaction data under review
  - “Empowering” project for NYEE team
- Standardizations bring large gains
  - “Leaned-out” the lean workshop
    - *Techniques and principles are transferrable*
- Frustration when systematic issues identified with finance teams that cannot be solved locally

*Thank you*