Using QA Data to Guide a Successful VAD Program

Barbara A. Elias BSN, RN, CCRN
VAD Coordinator
Texas Children's Hospital
Congenital Heart Surgery
Financial Disclosures/Relationships:

• I have no financial disclosures or relationships to disclose.

• I will not discuss off label use or investigational use during my presentation.

• Permission has been received from patients’ families for the photographs included.

• Relationship to disclose: Employee of Texas Children’s Hospital- RN-VAD Coordinator.
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Texas Children’s Hospital
• Administrative/procedural activities implemented in a quality system so that requirements and goals for a product, service or activity will be fulfilled.

• Systematic measurement, comparison with a standard, monitoring of processes with associated feedback that confers error prevention. This can be contrasted with quality control, which is focused on process output.

• Two principles included in Quality Assurance/Assessment are: “Fit for purpose" (the product/service should be suitable for the intended purpose); and "Right first time" (mistakes should be eliminated).
VAD Program Share Holders

Patient
Caregiver
Support System

Surgeon Team NP/PA’s
Cardiologist Team NP/PA’s
Anesthesia/Intensivist Team NP/PA’s
VAD/Txp Coordinator Team
Research Team
Quality Management Team
PT/OT Nutritionist Team
Social Work Pharmacist Team
Perfusionist OR Team

Pharmacist Team
Team
NP/PA’s
Team
What we know:

• INTERMACS tracks patient survival, adverse events and cause of death over time by patient profile, device and device category/strategy.

• Understanding of what Intermacs/Pedimacs is.

• Organized table of contents-> gets you started- orientation to organization of reports

• Reports: graphs/charts: creative ways to present data so it is more “eye friendly”- “easy to understand and follow”.

• We have the resources and tools = need to USE THEM
What we need/have:

• Intermacs/Pedimacs Site Administrator: Oversee data entry, data entry, receive Quarterly reports, disseminate reports with team members.

• VAD CMPI: Forum to review Intermacs/Pedimacs data and document QA reports are reviewed (Surgeon, Cardiologist, Research, VAD Coordinator)

• VAD/Transplant QAPI/CMPI: Forum to review QA report data that reports up to QM and administration (need to gain interest of ALL: we need involved SHAREHOLDERS)
Considerations/Concerns:

• Staffing to collect & enter data-> RESOURCES (lack of resources = data entry deficit)

• Interest /Understanding from/of Team to review data-> INTEREST (lack of interest = data review deficit)

• Time frame/Dedication to review data-> TIME (lack of time/dedication = data review deficit)

ISSUES: RESOURCES & TIME & INTEREST
How can we use QA data?

✓ Review AE’s: Reduce VAD related hospital readmissions - assess for specific causes.

✓ Patient Selection/ Optimize mode of treatment: Intermacs Severity score at time of implant?.

✓ Review to Optimize-standardize perioperative antibiotic use, driveline care - reduce infection.

✓ Review and develop Device thrombosis/bleeding protocols of management.

✓ Review to Improve Quality of Life measures, functional status.

Relationship of all of the above impacts Program Outcomes
How do we interpret data?

And you want me to do what, when?

Oh I wish it would just please go away....

KEEP CALM AND TAKE A DEEP BREATH
What we look at:

- **Review all data entry points**: provides a data snapshot of Key data entered into Intermacs.

- Review key points: *Total screened and Total enrolled: look for inconsistencies* and why not included- screen all patients. Implants/explants

- **Review and compare Severity scale/preimplant hemodynamics/labs with Adverse events** from your center with Intermacs database.

- **Review NYHA/Intermacs score at time of implant** (Ensure accuracy just prior to implant- not date of MRB = patient status/processes change! Take credit for your patient level of severity!).

- **QOL/Functional capacity/6 minute walks/Gait speed**: pre and post LVAD: see how these points improve= very important as patients are living longer with devices Pediatrics and Adults.
How we can use QA data:

• By reviewing all data points and assessing for outliers/inconsistencies: Transplant/VAD programs can develop QI projects/initiatives as well as Guidelines/Protocols/Policies such as reduced length of stay, blood conservation, patient preparation/preoperative screening/teaching.
How we use QA report data:

• Create **Post implant protocol** to mirror data entry points for Intermacs = Creates a standard of care – “Time line testing: labs, echo, 6 minute walk, QOL/KCQS”, Create on Excel spread sheet that plots time frames for testing/data entry-> Helps keep track of data points and prevent gaps in entry.

• **Set benchmarks/goals for program** = Using Intermacs data registry as guidelines.

• **QOL questionnaires- pair this with Patient satisfaction score sheet** = to help show patients satisfaction w/ program, device and quality of life prior to implant, post implant and long term.

• **Look at specific AE’s to develop Protocols** = if bleeding major concern- why, associated conditions- create best practice guidelines/protocols to reduce AE’s (Anticoagulation protocols, wound management, renal protection)

• Review all data- where there are deficiencies or “frequent flyer points of concern”- use those points to develop program QI projects, VAD program benchmarks, and care progression pathways.
**Example: QOL**

- **Reduced QOL**
  - Look at specifics
  - Activity, lifestyle, body image/inability to work/school?

- **Develop patient satisfaction surveys**
  - Reassess on monthly basis
  - Plot interventions on bar graph to show change over time

- **Review with Social work/Psych team on regular basis**
  - Include key players

- **Have social work/Coord/Psych follow-up with patient in clinic/phone calls**

- **Develop patient support group/patient volunteers**
  - Include Social work/coord/MD

- **Develop patient satisfaction surveys**
  - Reassess on monthly basis
  - Plot interventions on bar graph to show change over time
Example: Infection

Review and compare centers rates vs Intermacs Registry - Review current practice

Centralize dressing care kits/teach family to utilize this, screen shots of drivelines when concerned to show progression, stage driveline site infections.

Dressings - sterile dressing applied in OR, VAD coord completes all dressing changes, driveline stabilizer applied from OR.

Review sources of infection/patient selection/geographic area/patient selection/nutritional status pre implant - Team meeting - VAD team/ID

By reviewing our goals/objectives we develop Quality Performance Measures.

By reviewing what/when we develop a Process to follow.

By reviewing who and how we develop Procedures to follow.

With all above come Templates, guidelines, forms and checklists.
How do we Share the information?

Staff Meetings - Slides - open discussion, need staff participation - "buy in"

Postings: Dash boards / Locker rooms informatics boards

Hand outs for review: easy to follow graphs / flow charts
How we share information - CREATIVITY IS KEY
Dashboards/communication boards/Programs/Meetings
How Do We FEEL NOW: LETS AVOID THIS

I'm a little stressed right now...
(just turn around and leave quietly and no one gets hurt.)

GOOD GRIEF!

Trying to figure out when I can have that meltdown that I am entitled to...

Yes I'm Stressed!
What was you're first clue?

Stressed you say?
What makes you think that?
Time has come for a change:

• Isn’t it time to put an end to your frustration, inefficiency?

• Take back control of your QA reporting and data management processes with Careful, intuitive, comprehensive reviews builds QI projects, protocols leading QUALITY VAD PROGRAM..
**Shared Challenges moving forward**

- What do we do with the reports/who is responsible?
- Time to review data/ other research needs
- Forget to complete/Fall Through the Cracks causing Delays in Data review
- Limited knowledge: Review, Analyze and Report for QA/QI - Trends Identification
“What ever you do, do it well.

Do it so well that when people see you do it they will want to come back and say you did it again and they will want to bring others and show them how well you do what you do.” - Walt Disney

TEAMWORK

Focus on Quality

GROUP EFFORT

SKILLS

ABILITIES

KNOWLEDGE

TEAMWORK

The true thing about teamwork is that you always have others on your side.
Key Take Home Points:

- **Review reports:** *look for missing/late date/outliers= Develop QI projects* to address this- if QOL/KCQS not completed and reason is “no time”- create pre-implant data packets that have all information need pre-implant to ensure all data is captured.

- **Define and raise program goals/benchmarks** based on program data reports comparative to Intermacs database results.

- **Share your outcome data** quarterly during Multi-D QI team meetings to bring stakeholders to the table: - this will cultivate PI projects leading to improved outcomes.

- **Program data:** *RESULTS are only as good as DATA ENTRY* is= what you see is what you entered.

- **Review of date is KEY to helping Guide program guidelines, setting benchmarks/program goals,** along with evidence based practice- document data review (meeting minutes).

- Outcomes are an easy way *to track program productivity, guide patient management protocol development and define performance improvement projects.*

- **Quarterly reports of quality outcomes,  with patient satisfaction surveys** can be utilized in *Annual VAD Program Summary Report* to Hospital Board.
Why we do what we do?
Thank You!