2019 STS AQO Annual Meeting

Presenting Data to Physicians & Executives

Best Practices

Ellie Huff MSN, RN
Goal of This Presentation
Why Should We Master Presenting Data?

Build Credibility, Trust, Impact

"The person who is able to tell an effective business story is perceived as being in command, and deserves the confidence of others."

“Presenting to Win - The Art of Telling Your Story” by Jerry Weissman
Traditional Hospital STS Data Process

Discreet STS Data Request

Drive By/Email/Meeting

STS Data Request Fulfilled

Transactional

Excel/Graph/Pivot Table
How Quickly Our World Has Evolved into **Data Science**

- STS
- NCDR
- EMR/Epic/Cerner
- Billing
- Claims
- Patient Satisfaction

---

**Capture**
- Data Acquisition
- Data Entry
- Signal Reception
- Data Extraction

**Process**
- Data Mining
- Clustering/Classification
- Data Modeling
- Data Summarization

**Maintain**
- Data Warehousing
- Data Cleansing
- Data Staging
- Data Processing
- Data Architecture

**Communicate**
- Data Reporting
- Data Visualization
- Business Intelligence
- Decision Making

**Analyze**
- Exploratory/Confirmatory
- Predictive Analysis
- Regression
- Text Mining
- Qualitative Analysis

---

https://datascience.berkeley.edu/about/what-is-data-science/

---

- CV Executives
- Hospital President/CFO
- Quality Leaders
- Chest Pain Coordinators
- CV Researchers
Three Drivers of Change From Raw Data to Analytics Insights

- Shifting industry landscape
- Data Tsunami
- Rapidly accelerating innovation curve

“The ability to take data- to be able to understand it, to process it, extract value from it, to visualize it, to communicate it- that’s going to be a hugely important skill in the next decades”

- Hal Varian, chief economist at Google /UC Berkeley professor of information sciences, business and economics
CV data science teams will need well experienced, educated & seasoned talent to sift through all the information to create meaning.
HBR: Data Science Requires 6 New Skill Sets

- Data Wrangler/Data Scientist/Hacker
- Data Analysis
- Subject Matter Expert
- Project Manager
- Design & Design Thinking
- Executive Storytelling
My Personal 25 + Year Journey in Healthcare

System Director
CV Operations Director
QUALITY/PI
CONG
Flight Nurse
System Director
Patient Advocate
CV ICU RN

Today: Translational STORY TELLER Persuade Others to Action
Change Agent
Manager
CV Operations Director
Mosaic Skill Sets Merge to Transform

Interim Head of Enterprise Analytics
VP of Digital Innovation
Tom Bowen Wright

SME/Storyteller
Eleanor Tronn RN, MSN

SME/Orienting
Corporate Manager
CV Quality
Kathy Lewis RN, BSN, CCRN

CV Registry Oversight
• Abstraction quality
• Registry training
• Registry upgrades
• Registry billing, invoicing
• Registry elements/reporting

Project Manager
Corporate Manager
CV Strategic Initiatives
Laila Mallari, MPH

CV Project Management
• System PI projects
• CV system goals
• CV Governance Initiatives
• Annual CV Best Care meeting organization

Data Wrangler/SME
Corporate Manager
CV Scorecards & Registries
Melissa Pummill BSN, RN-BC

CV Scorecard Analytics
• NCDR registry expert
• CV scorecard strategy
• CV sub-specialty & project scorecard development and automation
• Develop requirements for IDW build

Data Wrangler/Architect
Corporate Manager
CV Analytic Reporting
Allison Archibald

CV Reporting & Analytics
• CV custom report development
• CV custom registry database strategy
• Demand queue management - triage & manage data requests
• Develop requirements for IDW build
Turning Data Into Knowledge.....
And Knowledge Into Transformation

Change is mandatory for extraordinary results.
Lessons Learned & Best Practices
Best Practice # 1  Data Request Scoping

 ✓ Ask smart questions upfront
 ✓ Wrangle the relevant data
 ✓ Determine preferred format
Best Practice # 2  Develop Team “Data Standards”

MUST HAVES

✓ Titles
✓ Sources
✓ Dates
✓ Benchmarks
✓ Inclusions/Exclusions
✓ Key Takeaway Box

Consulting Tip: Create every slide so that if you left the PPT behind in the room.....
Example Data Slide- **WEAK for Data Standards**

Data Source
- Billing data?
- STS data?
- Why just two years?

Message:
- How much are we growing?
- Who is shrinking?
- What does this mean?
**Example - Strong Data Standards**

**ISO CABG – System Performance Trend**

*STS STAR Categories Trended Op Mortalities %*

- **2014 – 2018 ISO CABG Op Mort**

**Health System X is performing well below the STS Benchmark for Operative Mortality**

- **STS 2017 ISO CABG Op Mort Rate – 2.3%**

Data Source: STS registry data in Apollo Advance; Cardiac Surgery Outcomes Report

Time Period: Jul 1, 2014 – Jul 31, 2018
# Example - Strong Data Standards
## 2018 Impella Purchasing Data Per Facility

### Highlights:
- Approx 52% of Impella devices purchased were for Impella CP.

### Data Source:
- Lawson/Supply Chain
- Date Range: CY 2018

### Total spend for Impella was ≈ $2.8M

<table>
<thead>
<tr>
<th>DEVICE</th>
<th>VOLUME</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPELLA 2.5</td>
<td>20</td>
</tr>
<tr>
<td>IMPELLA 5.0</td>
<td>28</td>
</tr>
<tr>
<td>IMPELLA CP</td>
<td>63</td>
</tr>
<tr>
<td>IMPELLA RP</td>
<td>9</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

---

[Graph showing device volume distribution]
Best Practice # 3  Your Data Story....What Does it All Mean?

✓ Uncover the insights
✓ Realize the impact to the business, translate
✓ Utilize patient stories to make it real......
ACS Recommendation
“Work on patient transfers from outside hospitals”
Data Example to Build Story - Transfer/Transport Data
First Quarter Report

- **2426** patient referral calls to transfer center
  - Does not include calls to ED Referral Nurses
  - Does not include
    - 10-15 calls/patient referral
    - Pages and faxes

- **43** denials due to lack of beds
- **170** denials due to divert
  - 54 Trauma divert/denials

- **99** consultations without referral (Don’t need admissions)

*But Data Isn’t Always Sufficient.....*
We Say We Are The One for Children

*But not for “Tommy” on This Day…..*

Actual Patient Call Record

- **0136** Referral ED called Transfer Center for access and emergency transport for seriously injured infant.

- **0140** Seven pages to various attending physicians, three calls within hospital and three calls from referring hospital for status report for transport.

- **0249** Patient was accepted to another hospital after one call.
Best Practice # 4  Rushing to Meet a Deadline?

✓ Take your time
✓ More important to be **accurate**
✓ Goal: build trust
Best Practice # 5  Practice Your Story

✓ Print it out and walk through slides
✓ Key message for each slide
✓ Rehearse in front of your team: typos
✓ Work on simple visuals
Stressful: physician questions data integrity in big meeting

✓ Understand voiced concern
✓ Don’t take it personal
✓ Follow up quickly, be a problem solver

Ellie’s 5 Stages of MD Data Realization Journey

1. DENIAL/Attack
2. DENIAL
3. Less denial
4. Avoidance
5. Acceptance - ACTION
In Summary.....

Ellie Huff, MSN, RN
System Director, CV Quality & Analytics
Baylor Scott & White Health
Dallas, Texas
(214) 820-5784 Office
Eleanor.Huff@bswhealth.org