Cleveland Clinic Health System

- Locations
  - US: Ohio, Florida, Las Vegas
  - Canada
  - Abu Dhabi UAE
- 11 Hospitals
- Children’s Rehabilitation Hospital
- Home Health Care
- Total Revenue: $ 6 billion
Cleveland Clinic Main Campus

- 1,300 Hospital Beds
- Children’s Hospital (100 beds)
- 17 Family Health Centers
- 8 Ambulatory Surgery Locations
- ~2,800 Employed Physicians & Scientists
- Total patient visits over 5 million
- Acute care admissions ~53,000
- Surgical cases ~80,000
- Case mix index 2.33
- Average length of stay 6.6 days
- Research Funding: $252 million
- Residents/ Fellows: 1,001
Aligning Quality and Finance:

Documentation, Extraction, Reporting Transformation (DERT)
How are Clinical Outcomes Generated?
Outcomes = Data

Patient Care

Clinical Performance ↔ Documentation

Extraction/Coding

Report Public Measures

Outcomes → Outcomes
Reputation
Reimbursement
What are these measures? Patient Safety Indicators (PSI)

- Pressure Ulcers
- CLABSI (line infections)
- Iatrogenic Pneumothorax
- Post op VTE (blood clots)
- Post op Respiratory Failure
- Post op Hemorrhage / Hematoma
- Post op Sepsis
- Accidental Puncture or Laceration
Other external forces

- Value Based Purchasing
- Meaningful Use
- ICD-10
- Denials Management
Getting The Team Organized

Sponsorship

Stakeholder Identification

Steering Committee

FINANCE
Residents
IT
CDIS
Physicians
Quality
Medical Operations
Nurses
Compliance
ADMINISTRATION
Continuous Improvement
CODING
Regional Hospitals
Where Do We Start?
Key Drivers and Approach

Key Drivers from Discovery
• Fragmentation of financial data systems
• Suboptimal alignment of clinical frontline and coding

Approach
• Optimizing screening for potential errors
• Start at the back and move up stream
• Scope - PSIs
• Cross functional teams
# Project Chartering

## Project Name

<table>
<thead>
<tr>
<th>Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Lead-</td>
</tr>
<tr>
<td>Project Manager-</td>
</tr>
<tr>
<td>Team Members-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>What goal are we trying to accomplish with this project?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Date MM/YY</td>
</tr>
<tr>
<td>End Date MM/YY</td>
</tr>
<tr>
<td>Health G/Y/R</td>
</tr>
</tbody>
</table>

- Identify project leader and project manager
- Clearly define project goals and measures of success
- Vet charter with Steering Committee
- Support project teams along the way
- Prepare teams for updates in front of steering committee
- Steering committee environment “safe”
Project – Systems Mapping

Inpatient Main Campus Overall System Mapping

ADTR
- GDI
- Real-time
- Daily Batch

Clintrac, SoftMed
- Real-time
- Daily Batch
- Monthly

HBO
- Daily Batch
- Daily Batch

PSI Field (Source of Record)
- Admit Type (Clintrac)
- Admit Source (Clintrac/HBO)
- Discharge Status (Clintrac)
- Diagnosis Code (Clintrac)
- Present on Admission (Clintrac)
- Date of ICD9 Procedure (Clintrac)

EPSI
- UHC Comparative Database Extract

CASS/CEP
- Charge Info
- SMS
- 837 download file
- 837 download file

Relay Health ePremis

B37
- UHC Core Measures

Payers

Version 6, 07/16/11
Discovery Case Review

- **Clinical Care**
  - PSI 3 Pressure Ulcers N=32: 9%
  - PSI 6 Pneumothorax N=55: 35%
  - PSI 15 Accidental Puncture and Laceration N=68: 40%

- **Documentation**
  - PSI 3 Pressure Ulcers N=32: 25%
  - PSI 6 Pneumothorax N=55: 18%
  - PSI 15 Accidental Puncture and Laceration N=68: 49%

- **Extraction**
  - PSI 3 Pressure Ulcers N=32: 13%
  - PSI 6 Pneumothorax N=55: 9%
  - PSI 15 Accidental Puncture and Laceration N=68: 11%

- **Reporting**
  - PSI 3 Pressure Ulcers N=32: 53%
  - PSI 6 Pneumothorax N=55: 38%
  - PSI 15 Accidental Puncture and Laceration N=68: ?
• In 3 days: There were 28 unique notes, 14 providers
  - 9 RN
  - 4 staff, 3 fellow Physicians
  - 1 Cardiac Stenographer

**Discovery**

**Clinical Care: Tip of the Iceberg**

- **Clinical Care**: 32%
- **Non Clinical Care**: 68%
- 19 Coders/Extractors
- 5 Quality
- 6 others
Discovery
Administrative Data impacting Quality Metrics

- Present on Admission
- Documentation & Coding
- Admit Source
  - Elective/Emergent
  - Admitting physician
- Attending physician
- Procedures
  - Proceduralists
  - Procedure dates
- Discharge disposition
  - Discharging physician
- Discharge diagnoses
  - HACs & PSIs
DERT: Retrospective Review

Clinical Care → Documentation → Extraction → Reporting

Quality

Financial

Impact on Patient

Time to Intervention
Project - 1 Year Retrospective Review

6 Patient Safety Indicators Reviewed
(July 2010 through June 2011 Cases)

N=880

- PSI 03 Hosp. Acq. Pressure Ulcers (St. III/IV)
- PSI 06 Iatrogenic Pneumothorax
- PSI 07 CLABSI
- PSI 09 Post-op Hemorrhage/Hematoma
- PSI 11 Post-op Respiratory Failure
- PSI 12 Post-op PE/DVT

18.9% (167 cases) documentation opportunities
24.6% (217 cases) escalated for additional coding review
5.6% (50 cases) rebilled/resubmitted
The Challenge

Physician Documentation is recorded in CLINICAL terms.

Breakdown between the two dialects

Documentation for coding, profiling & compliance must contain specific DIAGNOSTIC terms.

Improved documentation bridges the communication gap.

This will be a bigger challenge with ICD-10!
### Examples of PSI 15 Documentation

<table>
<thead>
<tr>
<th>Coded as PSI 15</th>
<th>Not Coded as PSI 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The spleen was densely adherent to the retroperitoneum, in trying to peel it off the retroperitoneum, a large intact capsular tear occurred. For this reason, the splenic artery and veins were cross-clamped, divided, and suture ligated. The spleen was removed.</td>
<td>• Op Note amended on 9/15: &quot;At this point, we noted that there were a couple deserosalizations, which were inherent to the procedure and not clinically significant. They were oversewn with 3-0 silk in a Lembert fashion.”</td>
</tr>
<tr>
<td>• This documentation is reported with ICD-9 diagnosis code 998.2.</td>
<td>• Documentation was amended, so ICD-9 diagnosis code 998.2 was deleted.</td>
</tr>
</tbody>
</table>
DERT: Moving Upstream

Clinical Care → Documentation → Extraction → Reporting

Quality → Financial

Impact on Patient

Time to Intervention

Bill Hold Safety Net

Retrospective Review
Bill Hold Workflow

1. Patient Discharged → Record Coded
2. PSI/HAC? (Yes or No)
   - Yes: HAIs → Infection Prevention Review
     - No: PSI/HAC * → Quality Director / QIO
       - No: Pressure Ulcers → Nursing Quality Review
         - No: Docum./Coding Opportunity?
           - Yes: CDI / Coding Reviews, coordinates with Quality to route to Provider for Documentation Clarification
           - No: Provider Clarifies Documentation as Appropriate
         - Yes: Provider Clarifies Documentation as Appropriate
   - No: Claim Generated

CDI Escalates to Quality Administrator if >48 delay
Results - First Five Months

893 Expected PSIs & HACs

- Increased awareness
- Education & Resources
- Concurrent Review
- Clinical Improvement
- Bill Hold

330 PSI/HAC cases

63% Decrease
Results - First Five Months

- 419 Cases Reviewed
- 330 PSI/HAC cases
- 21% Corrected
- Avg. workdays held: 2.3
- Cases/day: 2.7

- PSI 15 Acc. Punct/Lac, 75
- PSI 12 / HAC VTE, 118
- PSI 11 Post Op Resp Fail, 74
- PSI 9 Post Op Hem, 21
- PSI 7 / HAC CLABSIs, 18
- PSI 13 Post Op Sepsis, 18
- HAC CAUTI, 16
- Other, 32
- PSI 3 / HAC PU, 47
Reward and Recognize
DERT 2012

- Build on Foundation
  - Focused
  - Collaborative
  - Action oriented
- Manage in Complex Environment
  - Enterprise Information Management
  - ICD-10
  - Technology Changes
  - Operational Changes
DERT: Moving Upstream

Clinical Care → Documentation → Extraction → Reporting

- Quality
- Financial

Impact on Patient

Concurrent Case Review

Bill Hold Safety Net

Retrospective Review

Time to Intervention
Lessons Learned

The obvious

• The overall process is extremely complex cutting across numerous functional groups
• Must ensure new processes remain compliant

The reality

• Many of the administrative fields in revenue cycle are same fields used in public reporting
• A majority of the failures exist due to documentation related issues

Takeaways to other projects/work

• Tremendous value in cross-sharing and collaboration
• Seek to understand before jumping to solutions
• A “safe” environment is a productive environment
• Leadership can be boundary-less
What Worked?

- Burning Platform
- Focused scope - PSIs
- Collaborative problem solving
- Boundary-less leadership
- Safe environment for discovery and sharing
Quality, Safety & Patient Experience

Improving safety means getting DERTy >>
Cleveland Clinic

Every life deserves world class care.