What am I leaving on the table?

Using analytics to maximize reimbursement

2015 HFMA Region 5 Dixie Institute
February 19, 2015
This is an overview of the value of analytics and how it can help hospitals in their efforts to manage risk and uncertainty in an ever-changing environment.

### Intended outcomes

1. Explain ways analytics can be used to restructure your approach to information

2. Understand how analytics can help uncover new insights and increase collections /reduce cost

3. Use analytics to help develop leading practices and implement action plans
## Speakers

### Lisa Sasso

<table>
<thead>
<tr>
<th>Position: Financial Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization: Orlando Health</td>
</tr>
<tr>
<td>Experience: 28 Years</td>
</tr>
</tbody>
</table>

Contact: [Lisa.Sasso@orlandohealth.com](mailto:Lisa.Sasso@orlandohealth.com)  
+1.321.841.4616

Lisa is currently a Financial Manager at Orlando Health and previously held several roles in the IT department since 1998. Lisa is responsible for managing the Revenue Management Analytics and Quality Assurance team, implementing special projects, supporting revenue management applications and coordinating EDI transaction sets. Lisa is a CHFP and has been an active member of the Florida Chapter of HFMA for the past several years serving in various roles such as Education Co-chair, Registration Chair, Policy Chair and ANI Conference volunteer.

### Jonathon Hess

<table>
<thead>
<tr>
<th>Position: Senior Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization: Deloitte Consulting LLP</td>
</tr>
<tr>
<td>Experience: 16 Years</td>
</tr>
</tbody>
</table>

Contact: [jhess@deloitte.com](mailto:jhess@deloitte.com)  
+1.612.397.4747

Jonathon is currently a Senior Manager at Deloitte Consulting LLP, responsible for leading the product development and strategy of Deloitte Consulting LLP’s Revenue Intellect Solution; a vendor agnostic, modular analytics solution that focuses on process and performance improvement. Jonathon has been with Deloitte Consulting LLP for over 16 years and has primarily focused on improving the financial performance of hospital and physician organizations. He is an HFMA member and has presented at Minnesota and Virginia – Washington D.C. chapter events.
Analytics can help organizations – and healthcare providers are no different - pull pertinent information from each of these frameworks to help them make strategic decisions.
Find the right information to drive business decisions

The quantity of information and data can make it difficult to drive quality insights

<table>
<thead>
<tr>
<th>6 billion mobile phones</th>
<th>60 billion intelligent devices</th>
<th>Number of information bits in the world has exceeded the number of stars in the universe</th>
</tr>
</thead>
</table>

Amazon & Google know more about our daily activity, sleeping and consumption habits than our physicians do…

**Common Data Complaints**

1. The information you **have** is not the information you want
2. The information you **want** is not the information you need
3. The information you **need** is not the information you can obtain
4. The information you can obtain **costs** more than you want to pay

How do providers determine what information matters from what they have access to?

---

Traditional business intelligence can only get us so far

Standard insights on historical performance are limited by process and time constraints and involve many stakeholders.
Analytics provides another level of understanding

Individual business owners can uncover new insights, prioritize attention and drive action with analytics

Analytics

Business Question  →  Instant Access  →  Fast Answers  →  Share Insights  →  Build Foresight

1. Share insights instantly through mobile access and report production and take action now
2. to a broader range of data allows users to ask and answer new questions
3. Answer business questions immediately with only a few clicks to drive action
4. Share insights efficiently through mobile access and report production and take action now
5. Develop new insights to focus attention on issues before they arise to help build foresight

Analytics provides more insight than traditional business metrics and provides foresight into issues before they occur
An analytical based approach can improve revenue cycle performance

Tracking accounts by facility can only get us so far

<table>
<thead>
<tr>
<th>Patient Access</th>
<th>Charge Integrity</th>
<th>Patient Financial Services</th>
</tr>
</thead>
</table>

**Registration**

**Traditional Business Intelligence**

*Traditional approaches can allow for basic profiling but do not always lead to strongest action possible*

![Pie chart showing accounts by facility](chart.png)

- Ridge
- Rock
- Cascade
- Summit
- Basin
- Valley
- Crest

**Insight**

- Cascade Hospital has the most accounts
- Areas with largest account volumes might lead to insights

**Action**

- Investigate key issue areas for potential causes of top issue areas
- Begin to work focused accounts
An analytical based approach can improve revenue cycle performance

Using analytics to solve business questions can enable managers to pull new insights about rev cycle

Patient Access  Charge Integrity  Patient Financial Services

Registration

Analytics

In an attempt to cut registration costs, a provider decentralized its registrars. A closer look at the denial rates for registrar IDs uncovered some unintended consequences of that decision

- More is better: the more registration per user, the lower the denial rate per user
- The higher denial rate for staff who did less than 20 denials a week, cost this organizations $7.2M in registration write-offs

Insight

- Increase average registrations per week per user to build experience and promote consistency
- Consider impact on reimbursement for both cost and revenue strategies

Action

Denials by Registrar ID Volume

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

0 1,000 2,000 3,000 4,000 5,000 6,000 7,000

Average: 11%

(1) Aggregate data from Deloitte Consulting’s Revenue Intellect™ application
An analytical based approach can improve revenue cycle performance

Tracking denial rate by payor does not always capture the entire problem

**Patient Access**  | **Charge Integrity**  | **Patient Financial Services**

**Patient Financial Services**

**Traditional Business Intelligence**

*Tracking denial rate by payor uncovers repeat offenders at an aggregate level*

**Denials by Payor**

- **Insight**
  - Payor 1 is responsible for a third of denied dollars but has a relatively low denial rate compared to other payors
  - Payor 4 and Payor 5 seem to have disproportionately high denial rates

- **Action**
  - Investigate root cause issues of denials
  - Inform payor negotiations

- **Payor 1**
  - $200 million
  - 11% denial rate

- **Payor 2**
  - $133 million
  - 12% denial rate

- **Payor 3**
  - $113 million
  - 13% denial rate

- **Payor 4**
  - $58 million
  - 18% denial rate

- **Payor 5**
  - $47 million
  - 22% denial rate

- **Payor 6**
  - $15 million
  - 11% denial rate

- **Payor 6**
  - $200
  - $133
  - $113
  - $58
  - $47
  - $15

- **Millions**
  - $0
  - $20
  - $40
  - $60
  - $80
  - $100
  - $120
  - $140
  - $160
  - $180
  - $200
An analytical based approach can improve revenue cycle performance

Using analytics can help identify commonly overlooked pain points

### Patient Financial Services

**Analytics**

A provider tracking denials by payor does not identify avoidable dollars until investigating specific payor plans. Comparing denied dollars by payor plan identifies 1,000 accounts driving up denials.

<table>
<thead>
<tr>
<th>Payor Plan</th>
<th>Count</th>
<th>Gross Charges ($M)</th>
<th>Denied Dollars ($M)</th>
<th>Denial Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Payor Plans</td>
<td>112,626</td>
<td>1,122</td>
<td>133</td>
<td>11.8%</td>
</tr>
<tr>
<td>Payor A's Medicare Advantage Plan</td>
<td>1,283</td>
<td>17</td>
<td>14</td>
<td>85.5%</td>
</tr>
</tbody>
</table>

**Insight**

- Missing the accounts that matter
- Avoidable denials are left on the table because they're hiding in the aggregate

**Action**

- Group avoidable denials by payor plan to uncover 'paper cut' accounts
- Identify, prioritize and allocate resources to open AR payor / plan accounts that historically created high value underpayment

---

(1) Aggregate data from Deloitte Consulting Revenue Intellect™ application
Orlando Health is one of Florida’s most comprehensive private, not-for-profit healthcare Organizations since 1918

People
- 9 Facilities
- 2,200 Affiliated Physicians
- 14,000 Employees

Care
- 1983 Licensed Beds
- Graduate Medical Center
- Level 1 Trauma Center

Discharges FY14
- IP: 95,325
- OP: 629,368
- ED: 250,465

Financial Metrics: How we ended FY14¹
- Total Cash: $1,698B
- Cash to Net: 100.2%
- Operating Margin: 6.0%
- Days Cash on Hand: 169
- AR Days: 50.2
- Community Care: $298M
- Bills Transmitted: 990,850
- Call Handling: 71,279 Calls

¹ Statistics provided by Orlando Health team
Analytics - Our never ending journey to find opportunities before your boss finds them for you!

**Collect, Process & Analyze**
Why Orlando Health uses analytics

<table>
<thead>
<tr>
<th></th>
<th><strong>1</strong></th>
<th>To Generate Insights</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>2</strong></td>
<td>Identify trends and anomalies</td>
</tr>
<tr>
<td></td>
<td><strong>3</strong></td>
<td>To inform</td>
</tr>
<tr>
<td></td>
<td><strong>4</strong></td>
<td>Fact based decision making</td>
</tr>
<tr>
<td></td>
<td><strong>5</strong></td>
<td>Monitor</td>
</tr>
<tr>
<td></td>
<td><strong>6</strong></td>
<td>Competitive edge, leverage business strengths</td>
</tr>
<tr>
<td></td>
<td><strong>7</strong></td>
<td>Streamline Internal Operations</td>
</tr>
<tr>
<td></td>
<td><strong>8</strong></td>
<td>Clearer ways to drive more revenue</td>
</tr>
</tbody>
</table>
Denial Management & Prevention

Orlando Health improved our approach and strategy for managing denials by utilizing analytics

Key Considerations

1. Focus on understanding and utilizing information
2. Compliance
3. Quality
4. Reduce administration cost and rework

Key Strategies

1. Team Structure
2. Process Change
3. Analytics Software Solution
   - Dashboard
   - Centralized Reports – Summary & Detail

(1) Aggregate data from Deloitte Consulting Revenue Intellect™ application
Using analytics to identify opportunities

We have found some of the following strategies and best practices useful in managing denials

**Groupings are foundational**

Group denial reason and remark codes for analysis, identification of root causes and assignment of responsibility

- Denial code groupings drive management reporting to identify high-level issues
- Denial code groupings support root cause analysis to resolve issues and reduce denial rates
- Denial code groupings support routing of claims for more efficient follow-up

**Best Practices**

Below are some lessons learned from our experience grouping denials

- Focus on a limited number (<20) of denial reason code groupings
- Group first to “owner”, or responsible party then to denial reason
- Group denials into recoverable and unrecoverable buckets
- Use both reason, remark codes for grouping/assignment

*Documenting and sharing business leading practices will help to promote consistency and standard methodology across systems*
Review denials based on root cause area

Having aggregated denials according to responsibility and root cause area, analytics can uncover actionable insights

1. Root Cause High Level Area Map to CAS Codes
2. Then group by Reason for the Denial
3. Group by Avoidable and Recoverable

Patient Access
Registration related denials

Uncovered large opportunity in *High Dollar Radiology* procedures

**Opportunity**
- Procedure authorized is not what was actually performed

**Denial Type**
- Authorization missing/invalid

**Steps Taken**
1. Multiple processes in the workflow need to be addressed
2. Show data on timeline
3. Note what was monitored, responsible parties
4. Outcome/results/recommendations

Patient Financial Services
Underpayments by Payor

Identified underpayments by payor across time to better understand reimbursement pain points

**Opportunity**
- Average days to pay and reimbursement issues

**Underpay**
- Summary of underpayments by payor

**Steps Taken**
1. Resources allocated to work specific open AR
2. Recovery effort focus (claim events, negotiated settlements)
Measuring historical denial rate and root cause areas uncovered disproportionate outliers

**Denied Gross Charges**

<table>
<thead>
<tr>
<th>Month</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul '13</td>
<td>$38</td>
</tr>
<tr>
<td>Aug '13</td>
<td>$37</td>
</tr>
<tr>
<td>Sep '13</td>
<td>$34</td>
</tr>
<tr>
<td>Oct '13</td>
<td>$40</td>
</tr>
<tr>
<td>Nov '13</td>
<td>$39</td>
</tr>
<tr>
<td>Dec '13</td>
<td>$57</td>
</tr>
<tr>
<td>Jan '14</td>
<td>$63</td>
</tr>
<tr>
<td>Feb '14</td>
<td>$46</td>
</tr>
<tr>
<td>Mar '14</td>
<td>$43</td>
</tr>
<tr>
<td>Apr '14</td>
<td>$49</td>
</tr>
<tr>
<td>May '14</td>
<td>$44</td>
</tr>
<tr>
<td>Jun '14</td>
<td>$48</td>
</tr>
<tr>
<td>Jul '14</td>
<td>$47</td>
</tr>
<tr>
<td>Aug '14</td>
<td>$51</td>
</tr>
<tr>
<td>Sep '14</td>
<td>$46</td>
</tr>
<tr>
<td>Oct '14</td>
<td>$59</td>
</tr>
<tr>
<td>Nov '14</td>
<td>$61</td>
</tr>
</tbody>
</table>

**Denial Rate**

- **Average:** 7.1%

---

**Top Appeal Root Cause**

- PB - Lack of Notification: 3,294
- PB - Lack of Medical Necessity: 969
- PB - Late Notification: 449
- PB - Auth does not Match: 219
- PB - No Auth / Prior Error/Debit: 210
- Timely Filing: 136
- CM - Admit Not Medically Necess: 58
- PB - Not a Covered Benefit: 55
- PB - Experimental/Investigational: 42
- CM - Poor Error/Ouality: 38

---

1. Aggregate data from Deloitte Consulting Revenue Intellect™ application

---

Copyright © 2015 Deloitte Development LLC. All rights reserved.
Patient Access Denial Deep Dive

Investigating root cause area helps to refine search and discovery of key issue drivers

**Analysis**

- Authorization related denials accounted for **72%** of denied accounts within the analysis
- These accounts also made up **61%** of denied dollars
- Tracking Authorization denials across time can identify areas that require further investigation and drive action

**DMU AR – Denial Reason**

**Denial Type**

<table>
<thead>
<tr>
<th>Denial Type</th>
<th>Volume</th>
<th>Outstanding AR</th>
</tr>
</thead>
<tbody>
<tr>
<td>D- Authorization</td>
<td>416</td>
<td>$1,018,023.09</td>
</tr>
<tr>
<td>D- Not Available</td>
<td>73</td>
<td>$226,537.14</td>
</tr>
<tr>
<td>D- Medical Necessity</td>
<td>37</td>
<td>$257,995.92</td>
</tr>
<tr>
<td>D- Billing Error</td>
<td>15</td>
<td>$42,114.57</td>
</tr>
<tr>
<td>D- Coordination of Benefits</td>
<td>8</td>
<td>$4,401.34</td>
</tr>
<tr>
<td>D- Non-Covered Benefit</td>
<td>8</td>
<td>$16,768.25</td>
</tr>
<tr>
<td>D- Coding (Procedure Codes)</td>
<td>5</td>
<td>$8,318.45</td>
</tr>
<tr>
<td>D- Timely Filing</td>
<td>4</td>
<td>$71,556.68</td>
</tr>
<tr>
<td>D- Documentation</td>
<td>4</td>
<td>$12,747.28</td>
</tr>
<tr>
<td>D- Other</td>
<td>3</td>
<td>$9,329.70</td>
</tr>
<tr>
<td>D- Eligibility</td>
<td>2</td>
<td>$3,373.24</td>
</tr>
<tr>
<td>U- Payer Contract Dispute</td>
<td>2</td>
<td>$1,526.53</td>
</tr>
<tr>
<td>D- Registration</td>
<td>2</td>
<td>$346.08</td>
</tr>
<tr>
<td>D- Coding</td>
<td>1</td>
<td>$1,496.53</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>579</strong></td>
<td><strong>$1,674,534.80</strong></td>
</tr>
</tbody>
</table>

**Registration/Auth Denials**

Average: **3.2%**

- **Registration Denials**
- **Reg Denial Rate**

---

(1) Aggregate data from Deloitte Consulting Revenue Intellect™ application and covers one payor only
Focus on utilizing analytics to prioritize and set action plans in place to address issues

- **Staff are on site to resolve accounts one by one**

- **Non-contracted payors**

- **Contracts state payors will meet >60 and >90 day AR dollar thresholds. This covers the entire inventory of AR, Denials, underpayments. This was a big help when PUP went insolvent.**

- **(Automatic) - After Insurance pays, billing changed to self-pay**

- **Maintain cadence schedule**
Lessons Learned

A few things to keep in mind…

1. More is not always better
2. Analysis paralysis
3. Leadership engagement – Buy-in & Support
4. Continuous Learning Cycle & evolution
Questions
References:

(1) Any aggregate data detailed throughout the presentation is was pulled from Deloitte Consulting Revenue Intellect™ application


(4) Ion Skillrud, Wendy Gerhardt and Maulesh Shukla “The great consolidation: the potential for rapid consolidation of health systems” Deloitte Center for Health Solutions. October 24, 2014

(5) Bill Copeland “Good for what ails us: The disruptive rise of value based care” Deloitte Center for Health Solutions. June 17, 2014

(6) Deloitte Research “Global LSHC Overview” October 24, 2014


