Switching EHRs and Maintaining a Strong Revenue Cycle

March 4, 2016

Rosh Plugge
Director, Revenue Systems and Controls
Baptist Health System

Pete Welch M.B.A.
Sr. Revenue Systems Analyst
Baptist Health System

DISCLAIMER: The views and opinions expressed in this presentation are those of the author and do not necessarily represent official policy or position of HIMSS.
Conflict of Interest

Rosh Plugge

Has no real or apparent conflicts of interest to report.

Pete Welch M.B.A

Has no real or apparent conflicts of interest to report.
Agenda

• Introductions
• Overview of Baptist Health System and the Use of Analytics
• The Advantage of an Analytics Tool during an EHR Conversion
• Ongoing Value of an Analytics Tool
• Summary
Learning Objectives

1. Identify the impact switching EHRs can have on workflow, revenue cycle and patient satisfaction
2. Explain how opting out of Medicaid has created reimbursement challenges for hospitals
3. Create flexible workflows and company cultures that can quickly adapt to IT changes as they arise
Introduction of Benefits Realized from EHR Transition

During any internal transition or industry change, several goals are established from the onset:

- Patient Education & Satisfaction
- Outstanding Patient Treatment & Care
- Minimal Operational Impact
- Elimination of Negative Financial Impact
Baptist Health System

4 Hospitals, 2 Imaging Centers, and 2 Surgery Centers in Central Alabama

4,300 Employees

- 106 employed physicians, 832 affiliated physicians

1,100 licensed beds

- 33,000 Inpatient admissions
- 150,000 ER visits
- 370,000 Outpatient visits

Payer Mix:

- 55% Medicare and Medicare Replacement
- 21% Blue Cross
- 10% Medicaid

Nationally recognized Medical Education program

2009 – 2011, 2015 HFMA Map Award Winners
History of Analytics at Baptist Health

Consistent Analytical Platform

Divestitures and Joint Ventures

Legacy Conversion from hosted to remote processing

• Transfer DRG Changes
• RAC
• Tax ID Change

Conversion from Legacy to New EHR

2006 - 2007

• DNFB Monitoring
• AR Analysis
• Write Off Monitoring
• Volume and Payer Mix Trending
• Joint Venture Management

2008

• Reserves Implementation
• Advanced Accrual and Net Revenue Analysis
• Support for shortened close calendar

2009 - 2011

• Payer Scorecard Reporting
• Patient Liability and POS Collection Analysis
• Outlier Monitoring
• Cash Trending and Projections

2012 - 2014

• EHR Conversion Support
• Unallocated Cash Monitoring
• Net Revenue Component Trending
• Budget Variance Analysis
Continued Need for Analytics Tools with an EHR: C-Suite Buy In

- Pressure to replace Analytics tools with EHR reporting tools
- Gap analysis between Analytics and EHR reporting capabilities
- Illustration of synergy between analytics platform and EHR
  - Single platform for AR analysis through Legacy sun-setting
  - Consistent KPI measurement and seamless trending over time
  - Ability to create custom data elements and groupings without impacting operations
  - Advanced calculation capabilities – Run Out Reports, Reserves
  - Self service analytical ability freeing IT resources to focus on operations
How Analytics Build off Operational Data to Drive Action & Results

By combining an Analytics system with an EHR system, Baptist Health System maximized the core competencies of both platforms to achieve a full complement of workflow, data, reporting, analysis and action capabilities.
EHR Conversion Financial Goals

Our goals during any transition are the same, and our analytics platform is designed to support those goals.

- Preservation of Net Revenue
- Consistent Cash Flow
- Accurate Financial Reporting
- Ability to Trend, Analyze, and Project
EHR Conversion - Analytics Vision

1. Legacy PAS System
   - Translated to EHR Terminology

2. EHR System

3. Combined Analytics Platform
   - Consistent Trending
   - Trusted Methodologies
Benefits to Analytics Approach

• Familiar reporting of financial information provides consistency through transition.

• Normalized data means that trending is available immediately after go-live and can be used to identify areas of concern and facilitate process improvement.

• Quick discovery of process issues means reduced losses to untimely filing, lower denial rates and faster cash flow recovery.

• Patient information can be compared directly against legacy information to identify process and data issues in new HIS.
Revenue Analytics Results

• Fully functioning site upon go-live with complete translated historical data

• All reporting was available at first month end post go-live. *(month end occurred 2 weeks after go-live)*

• Alerts & exports helped detect process improvements

• Trending identified operational process issues
Sample#1: Increase in Self Pay Emergency

- Payer Mix trend detected an elevation in self pay levels
  - Further drill down identified Emergency Accounts as the primary driver
- Resolution came from historical data pull of pre-conversion visits

Problem Identification:

Payer Mix % for Emergency Accounts

<table>
<thead>
<tr>
<th>Legacy Account</th>
<th>EHR Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ins 1 Medicare</td>
<td>Ins 1 ________</td>
</tr>
<tr>
<td>Ins 2 BCBS</td>
<td>Ins 2 ________</td>
</tr>
</tbody>
</table>
Sample#2: Cash Flow

- Outstanding Net Revenue trended by payer and age identified areas for increased follow up efforts
- Targeted follow up accelerated cash flow recovery

<table>
<thead>
<tr>
<th>Primary Insurance Category Payer</th>
<th>March 2013</th>
<th>April 2013</th>
<th>May 2013</th>
<th>June 2013</th>
<th>July 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDICARE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhouse</td>
<td>1,923,442</td>
<td>2,935,184</td>
<td>2,587,861</td>
<td>1,976,973</td>
<td>2,069,526</td>
</tr>
<tr>
<td>0-30 Days</td>
<td>10,578,923</td>
<td>10,123,899</td>
<td>11,589,691</td>
<td>11,701,608</td>
<td>10,812,585</td>
</tr>
<tr>
<td>31-60 Days</td>
<td>1,042,359</td>
<td>1,283,395</td>
<td>2,181,152</td>
<td>2,406,619</td>
<td>1,844,937</td>
</tr>
<tr>
<td>61-90 Days</td>
<td>516,431</td>
<td>590,635</td>
<td>514,377</td>
<td>946,386</td>
<td>1,300,817</td>
</tr>
<tr>
<td>91-120 Days</td>
<td>376,906</td>
<td>275,459</td>
<td>457,505</td>
<td>389,573</td>
<td>734,581</td>
</tr>
<tr>
<td>121-150 Days</td>
<td>352,643</td>
<td>272,168</td>
<td>201,335</td>
<td>417,183</td>
<td>274,207</td>
</tr>
<tr>
<td>Total: MEDICARE</td>
<td>14,790,704</td>
<td>15,480,740</td>
<td>17,531,920</td>
<td>17,838,341</td>
<td>17,036,652</td>
</tr>
<tr>
<td>MEDICARE REPLACEMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhouse</td>
<td>1,587,402</td>
<td>1,190,556</td>
<td>1,222,921</td>
<td>1,414,434</td>
<td>1,544,058</td>
</tr>
<tr>
<td>0-30 Days</td>
<td>7,940,037</td>
<td>7,424,485</td>
<td>6,822,323</td>
<td>7,624,656</td>
<td>7,878,160</td>
</tr>
<tr>
<td>31-60 Days</td>
<td>2,753,493</td>
<td>2,849,614</td>
<td>3,548,249</td>
<td>3,151,833</td>
<td>3,354,808</td>
</tr>
<tr>
<td>61-90 Days</td>
<td>1,084,171</td>
<td>1,210,776</td>
<td>1,414,326</td>
<td>1,903,241</td>
<td>1,487,636</td>
</tr>
<tr>
<td>91-120 Days</td>
<td>394,953</td>
<td>634,998</td>
<td>757,442</td>
<td>861,997</td>
<td>1,093,519</td>
</tr>
<tr>
<td>121-150 Days</td>
<td>402,276</td>
<td>315,033</td>
<td>575,285</td>
<td>642,436</td>
<td>785,124</td>
</tr>
<tr>
<td>Total: MEDICARE REPLACEMENT</td>
<td>14,162,332</td>
<td>13,625,461</td>
<td>14,340,546</td>
<td>15,598,598</td>
<td>16,143,305</td>
</tr>
<tr>
<td>Total: Selected Filter(s)</td>
<td>28,953,037</td>
<td>29,106,201</td>
<td>31,872,466</td>
<td>33,436,939</td>
<td>33,179,957</td>
</tr>
</tbody>
</table>
Sample#3: Agency Review

- Problems were identified with Bad Debt vendor invoiced fees
- Utilized analytics platform to identify fees collected on payments not covered under contract (e.g. grace period, takeback\repays)
- Received $10k fee refund from a single vendor and implemented new self-invoice process
- Able to reduce resources needed to review vendor invoices

<table>
<thead>
<tr>
<th>Procedure Name</th>
<th>Txn Amt</th>
<th>Post Date</th>
<th>Agency Payment Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATIENT PAYMENT (ACCOUNT)</td>
<td>-25.00</td>
<td>12/31/2015</td>
<td>20</td>
</tr>
<tr>
<td>ONLINE BILL PAY (ACCOUNT)</td>
<td>-41.88</td>
<td>12/2/2015</td>
<td>11</td>
</tr>
<tr>
<td>PATIENT PAYMENT (ACCOUNT)</td>
<td>-50.00</td>
<td>12/3/2015</td>
<td>12</td>
</tr>
<tr>
<td>ONLINE BILL PAY (ACCOUNT)</td>
<td>-15.96</td>
<td>12/9/2015</td>
<td>18</td>
</tr>
<tr>
<td>PATIENT PAYMENT (ACCOUNT)</td>
<td>-40.00</td>
<td>12/15/2015</td>
<td>6</td>
</tr>
<tr>
<td>PATIENT PAYMENT (ACCOUNT)</td>
<td>-94.62</td>
<td>12/29/2015</td>
<td>6</td>
</tr>
</tbody>
</table>
Reserve Analytics Results

• Calculated accruals at the account level were available at go-live, allowing drill down into payers/account types with atypical net revenue.

• An accrual logic “safety net” calculated accruals for accounts that had not netted down as expected.

• Accruals were posted to the general ledger from the analytics platform at month end with limited top-side corrections.

• Net revenue variances to budget were analyzed and explained before financial statements were issued.

• Financial statements were published on time with a planned one day delay (8th working day).
Troubleshooting in the Analytics Platform

- Trended impact over time
- Sorted accounts both by highest and lowest net revenue impact
- Analyzed accounts producing too much or too little impact
Drill Down to Root Cause

- Identified account balances with no accrual
Success: KPI’s pre and post Conversion

Net AR Day Recovery

Cash % to Net Recovery

EHR Go Live April 20, 2013
Ongoing Value of Analytics

Baptist Priorities

- Minimize ICD-10 Impact
- Mitigate Annual EHR Upgrade Implementation Risk
- Measure Brookwood Merger Through Analytics
- Adapt to Ongoing Industry Changes
- Increase Value Based Contracts

2015  2016  2017
Monitoring with Analytics – Finance

Net Revenue Component Trending by Metrics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Month Charges</td>
<td>100,000,000</td>
<td>200,000,000</td>
<td>200,000,000</td>
<td>200,000,000</td>
<td>100,000,000</td>
<td>200,000,000</td>
<td>100,000,000</td>
</tr>
<tr>
<td>Current Month Bad Debt Write Offs</td>
<td>-250,000</td>
<td>-150,000</td>
<td>-400,000</td>
<td>-600,000</td>
<td>-500,000</td>
<td>-500,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Current Month Bad Debt Accrual Est</td>
<td>-25,000,256</td>
<td>-3,788,693</td>
<td>-3,600,892</td>
<td>-3,764,425</td>
<td>-3,788,693</td>
<td>-3,585,695</td>
<td>-4,185,796</td>
</tr>
<tr>
<td>Previous Month End Bad Debt Accrual Est</td>
<td>-3,752,318</td>
<td>-4,500,356</td>
<td>-3,865,694</td>
<td>-3,764,425</td>
<td>-3,865,694</td>
<td>-3,865,694</td>
<td>-3,540,552</td>
</tr>
<tr>
<td>Current Total Bad Debt Expense</td>
<td>-250,000</td>
<td>-150,000</td>
<td>-400,000</td>
<td>-600,000</td>
<td>-550,000</td>
<td>-500,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Current Month Charity Write Offs</td>
<td>-25,000,256</td>
<td>-3,788,693</td>
<td>-3,600,892</td>
<td>-3,764,425</td>
<td>-3,788,693</td>
<td>-3,585,695</td>
<td>-4,185,796</td>
</tr>
<tr>
<td>Previous Month End Charity Accrual Estimate</td>
<td>-1,007,556</td>
<td>-1,288,109</td>
<td>-1,786,210</td>
<td>-1,938,533</td>
<td>-1,521,381</td>
<td>-1,420,314</td>
<td>-1,412,762</td>
</tr>
<tr>
<td>Current Total Charity Expense</td>
<td>-250,000</td>
<td>-150,000</td>
<td>-400,000</td>
<td>-600,000</td>
<td>-550,000</td>
<td>-500,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Current Total Bad Debt &amp; Charity Expense</td>
<td>-25,000,256</td>
<td>-3,788,693</td>
<td>-3,600,892</td>
<td>-3,764,425</td>
<td>-3,788,693</td>
<td>-3,585,695</td>
<td>-4,185,796</td>
</tr>
<tr>
<td>Current Month Contractual Write Offs</td>
<td>-3,752,318</td>
<td>-4,500,356</td>
<td>-3,865,694</td>
<td>-3,764,425</td>
<td>-3,865,694</td>
<td>-3,865,694</td>
<td>-3,540,552</td>
</tr>
<tr>
<td>Current Month Contractual Accrual Estimate</td>
<td>-25,000,256</td>
<td>-3,788,693</td>
<td>-3,600,892</td>
<td>-3,764,425</td>
<td>-3,865,694</td>
<td>-3,865,694</td>
<td>-3,540,552</td>
</tr>
<tr>
<td>Previous Month End Contractual Accrual Est</td>
<td>-3,752,318</td>
<td>-4,500,356</td>
<td>-3,865,694</td>
<td>-3,764,425</td>
<td>-3,865,694</td>
<td>-3,865,694</td>
<td>-3,540,552</td>
</tr>
<tr>
<td>Current Total Contractual Expense</td>
<td>-100,000,000</td>
<td>-75,000,000</td>
<td>-80,000,000</td>
<td>-89,500,000</td>
<td>-90,984,277</td>
<td>-100,000,000</td>
<td>-150,000,000</td>
</tr>
<tr>
<td>Current Net Revenue Impact</td>
<td>18,000,000</td>
<td>18,500,000</td>
<td>17,000,000</td>
<td>17,500,000</td>
<td>16,000,000</td>
<td>15,560,000</td>
<td>5,000,000</td>
</tr>
</tbody>
</table>

- Consistent analytics helps minimize the impact of changes particularly when it comes to daily revenue and finance operations
- Analytical capabilities such as drill downs, enable the team to focus on individual problem areas
Monitoring with Analytics – Revenue Cycle Operations

### Accounts Receivable

<table>
<thead>
<tr>
<th>Unit</th>
<th>This Week</th>
<th>Last Week</th>
<th>% Change</th>
<th>20 Week Ave</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR Days</td>
<td>17.2</td>
<td>19.8</td>
<td>2.40%</td>
<td>17.5</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Dollars (M)</td>
<td>$153.0</td>
<td>$159.2</td>
<td>2.87%</td>
<td>$167.3</td>
<td>-2.7%</td>
</tr>
<tr>
<td>CFB Days</td>
<td>2.0</td>
<td>2.4</td>
<td>-14.9%</td>
<td>3.3</td>
<td>-37.7%</td>
</tr>
<tr>
<td>Dollars (M)</td>
<td>$15.0</td>
<td>$16.5</td>
<td>-14.7%</td>
<td>$25.5</td>
<td>-36.8%</td>
</tr>
<tr>
<td>Aging over 120 Days</td>
<td>$13.7</td>
<td>$14.2</td>
<td>-3.3%</td>
<td>$13.8</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Percent</td>
<td>10.25%</td>
<td>10.04%</td>
<td>-3.3%</td>
<td>10%</td>
<td>-2.2%</td>
</tr>
</tbody>
</table>

### AR Days

- Epic AR Days
- Legacy AR Days
- Total AR Days

### Charges, Payments, Adjustments

<table>
<thead>
<tr>
<th>Unit</th>
<th>This Week</th>
<th>Last Week</th>
<th>% Change</th>
<th>20 Week Ave</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charges Total (M)</td>
<td>$58.2</td>
<td>$54.3</td>
<td>3.8%</td>
<td>$54.4</td>
<td>3.3%</td>
</tr>
<tr>
<td>ADR Total (M)</td>
<td>$7.6</td>
<td>$7.8</td>
<td>0.2%</td>
<td>$7.8</td>
<td>0.7%</td>
</tr>
<tr>
<td>Payments Total (M)</td>
<td>$6.0</td>
<td>$7.2</td>
<td>23.0%</td>
<td>$9.1</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Epic Only (M)</td>
<td>$8.0</td>
<td>$7.2</td>
<td>23.8%</td>
<td>$9.1</td>
<td>2.0%</td>
</tr>
<tr>
<td>Adjustments Dollars (M)</td>
<td>$42.7</td>
<td>$47.0</td>
<td>-10.6%</td>
<td>$45.1</td>
<td>-5.3%</td>
</tr>
<tr>
<td>Collection Ratio Percent</td>
<td>15%</td>
<td>15%</td>
<td>-5.1%</td>
<td>17%</td>
<td>-8.3%</td>
</tr>
</tbody>
</table>

### Claims and Payments

- Claims
- Epic Payments

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• When internal and industry changes occur simultaneously, a unified source of analytics allows for the measurement of each individual change.

Monitoring with Analytics – ICD-10 Impact
Monitoring with Analytics – Merger Impact

Claim Errors - Count

Claim Errors - Amount

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Monitoring with Analytics – Medicaid Reimbursement Challenges

• Private pay net down
  – Used analytics to determine impact on cash flow and net revenue for budget purposes prior to implementing the net down
  – Monitored results against projections
• Identifying and assisting patients with exchange enrollment
  – Used analytics to determine which “frequent flyers” might be eligible for highly subsidized premiums
  – Sent exchange information to list of patients likely to receive large benefits from signing up
  – Assisted the enrollment process
Integration of Analytics Platform

Best Practice Utilization & Operational Efficiency

- Preservation of Net Revenue
- Consistent Cash Flow
- Accurate Financial Reporting
- Ability to Trend, Analyze, and Project
Summary of Benefits Realized from EHR Transition

• **S** – Patient satisfaction scores did not decrease with new POS collection methods which improved collections.

• **T** – Treatment improved as Baptist was able to tie fee to value by uniting the clinical and financial departments.

• **E** – Successful conversion and integration of EHR system and the existing analytical tool, helped improve financial standing and maintain high patient scores.

• **P** – Improved patient’s understanding of their financial obligations by implementing a patient payment estimator where accurate estimates of the patient responsibility can be obtained.

• **S** – Through data analytics and trending pre-conversion to post, A/R days never increased more than 4.4 days after implementation and returned to previous levels within 6 months.
Questions

Rosh Plugge
Director, Revenue Systems and Controls
Email: rosh.plugge@bhsala.com
Phone: 205-599-4201

Pete Welch M.B.A.
Sr. Revenue Systems Analyst
Email: pete.welch@bhsala.com
Phone: 205-599-4236