Data & Analytics Done Right: Driving Value Creation
Wednesday, March 2nd 2016

Soyal Momin, Vice President, Data and Analytics, Presbyterian Healthcare Services
Scott Alister, Managing Director, Accenture

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

Soyal Momin
Has no real or apparent conflicts of interest to report.

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

• Background and Key Objectives
• Setting the Foundation for Data and Analytics Transformation
• Lessons Learned Across Governance, Value Discovery, Information Management, EDW, Analytics Organization, and Change Management
• Value Realization
• Setting Expectations for the Future
Learning Objectives

• Recognize the changing data and analytics requirements faced by healthcare providers with health plans

• Analyze a new seven-step data and analytics operating model

• Appraise the integration challenges a data and analytics transformation represents in a joint payer/provider organization

• Evaluate experience-based recommendations for staging a successful data and analytics transformation in a complex digital environment

• Assess the benefits an end-to-end data and analytics transformation can deliver
STEPS: Realizing the Value of Health IT

**Satisfaction**
- Leveraged CAHPS and extended data sets to improve 2017 MA PPO Stars rating by 0.5
- Beat composite HCAHPS score for inpatient VBP of by 2%

**Treatment / Clinical**
- Enhanced identification, stratification, and triaging of palliative care due to new predictive modelling with AUC of .946
- Improved adherence to evidence-based guidelines due to decreased turn-around time in physician gaps in care dashboard from 1 week to 30 minutes

**Electronic Secure Data**
- Improved UCI completeness across EMR and claims systems to 99.4% and UCI consistency to 97.4%
- Created new anti-trust and HIPAA compliant data access and sharing guidelines for integrated EDW
STEPS: Realizing the Value of Health IT

**Patient Engagement & Population Management**

19%

Improved direct-to-employer e-messaging and video engagement rates by 19% and 10%

5%

Launched effort to reduce grievances by 5% in Presbyterian main hospital

**Savings**

$6M

$4M to $6M savings through improved payment integrity analytics

$6.5M

$3.5M to $6.5M savings from reporting and analytics tool rationalization
Introductions

Soyal Momin
Vice President, Data and Analytics
Presbyterian Healthcare Services

Scott Alister
Managing Director
Accenture Digital
Data Overload and Increased Focus on Health Outcomes

Presbyterian Healthcare Services had made several strategic technology investments
- Facets - Health plan operations (e.g. claims processing)
- Cactus - Provider credentialing
- Epic – EMR

Proliferation of data and new applications
- Clinical encounters, physician profiles, membership data, claims, cost accounting, etc.
- Data rich, information poor: Lots of data without any actionable information

Strategic need to differentiate
- Budgeted care, outcome-driven clinical excellence, other industries more advanced in data and analytics
- PHS needed to optimize the electronic data and information it was capturing

The solution? A data and analytics strategy that would achieve the Triple Aim and serve a philosophy of One Presbyterian
# Laying the Groundwork

<table>
<thead>
<tr>
<th>Develop</th>
<th>Identify</th>
<th>Implement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop an integrated analytics approach while balancing anti-trust risks</td>
<td>Identify how analytics could bring the most value</td>
<td>Implement data governance to ensure reporting and analytics integrity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leverage</th>
<th>Organize</th>
<th>Be supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage investments in EMR, health plan and system service applications</td>
<td>Organize analytic talent to move from descriptive analytics to predictive analytics</td>
<td>Be supported by the right partner in developing and implementing the strategy</td>
</tr>
</tbody>
</table>
The “7-fold Path”: A Unique Data and Analytics Operating Model to Guide the Way
## Step 1: Governance and Sponsorship

**Assuring Stewardship**

| 30 quarterly milestones set for 2015 | Tied to performance incentives | 90% compliance rate needed for incentive payout |

**Milestones included:**

- Forming a Board Committee for Data and Analytics
- Embedded Operational Leadership into Analytics Program Steering Committee
- Forming New Strategic Partnerships to Advance Analytic Capabilities

**SUCCESS!**

PHS reached 100% of its 30 individual milestones for 2015

**THE INSIDE SCOOP**

- Enhanced milestones – process vs. outcomes based
- Governance committees are helpful for decision making, but accountability needs to have a single leader
- Need “skin in the game” from operational leadership

**WHAT’S NEXT?**

Changing the milestone framework to Foundational, Efficiency, and Applied milestones

---

©HIMSS 2016
Step 2: Value Discovery and Design
A Strategy Anchored in Value

Polled business unit leaders to identify:
• Key business problems
• How analytics can drive the most value for customers and the enterprise

SUCCESS!

THE INSIDE SCOOP
• Focus on incremental and discrete value over broad-sweeping opportunities (e.g. analytics to improve patient activation instead of analytics to improve population health)
• Look for opportunities to leverage existing analytical platforms or cloud solutions to minimize investment while increasing speed-to-value

WHAT’S NEXT?
Continued emphasis on execution and outcome measurement

$300M in identified value
“Quick win” savings
5-year roadmap
Step 3: Information Management
Getting the Infrastructure Right

Analytics prioritization helped define tools, reports, metrics and data that would need to be governed.

SUCCESS!
IM governance infrastructure operationalized; optimized investments in analytics tools; integration in support of One Presbyterian; improved completeness and consistency of UCI

THE INSIDE SCOOP
- Transition individual contributor role to full department
- Crawl, walk, and run approach preferred
- Move from homegrown tools to industry standard technology
- Include operational leadership in IM Governance Council

WHAT’S NEXT?
- Implementing data documentation and data quality tools
- Applying metrics governance for the first set of analytics prioritized on the data and analytics roadmap

$3.5 - $6.5M savings through portfolio management
Set up an IM organization
Implemented technology in support of IM governance
Improved Unique Customer Identifier (UCI) data quality
Step 4: Enterprise Data Warehouse
Emphasis on Integration

Building a technical infrastructure that helps deliver the One Presbyterian vision

SUCCESS!
- Build of new data warehouse underway
- Data loaded in alignment with value creation opportunities

THE INSIDE SCOOP
- Ensure a master data management solution is part of the EDW implementation to minimize “garbage in, garbage out”
- Ensure appropriate level of detailed business requirements before loading the EDW

WHAT’S NEXT?
- Integrating data from high priority source systems into the integrated payer/provider data model
- Identifying bolt-on analytic platforms that align with the data model and roadmap

Cross-enterprise integrated analytics
- For hospitals, clinics, health plans
- Access control

Leveraging tools already in place at PHS
Filling gaps with single-source vendor

Tool suite supporting:
- Data services/data repository
- Data management
- Data discovery
- Analytics
- Information delivery

New integrated data model
Supports needs across PHS delivery system and health plan
Step 5: Analytics Organization
Putting PHS on the Map as a Data & Analytics Leader

• Embraced a data-driven decision culture
• Established an organization and leadership structure that supports analytics talent and development

SUCCESS!
Transitioned 25% of staff into the Analytics Organization; expanded data access and outcomes for staff; increased transparency in career development

THE INSIDE SCOOP
• Commit to a decision and over-communicate the intent and rationale for shifting structure
• Know your talent and involve them in the design and transition to the new structure
• Be patient and sensitive to perceived changes in control

WHAT’S NEXT?
In 2016, PHS will be focused on growing the existing and attracting new talent

Implemented a hub-and-spoke org model
Leveraged “Analytics Champions”
Outlined an analytics job family with multiple career tracks

New VP of Data and Analytics plus Hub-and-Spoke leadership
New roles to serve descriptive, prescriptive, and predictive analytic projects

©HIMSS 2016
Step 6: Change Management
Fostering Engagement and Adoption

Ensuring ongoing communication, engagement, and adoption

SUCCESS!
• Applying interventions based on change readiness survey
• Adoption satisfaction score of 4 out of 5

THE INSIDE SCOOP
• Communication through various channels is the key
• Underscore the importance of change management in various data and analytics work streams
• Ensure appropriate resourcing for change management staff
• Unwavering leadership support around data-driven culture

WHAT’S NEXT?
• Continue interventions
• Embedding change management into operations based on analytical insights

• Change management executive sponsors
• Change management workgroup

Multi-year change management, training & communication plan

• Intervention toolkit
• Custom communication vehicles

• Involved learning center, marketing & communication, Change management consultant, and HR resources
Step 7: Value Realization
Seeing is Believing

In 1 year, PHS has recognized tangible benefits: Financial, organizational, infrastructural

- $4M - $6M in identified savings through overpayment and predictive analytics
- Improved UCI completeness to 99.4% and consistency to 97.4% across core EMR and claims platforms
- $3.5 - $6.5M in identified savings through portfolio maximization
- Integrated payer/provider data model
- Enhanced palliative care predictive modeling with AUC of .946
- Decreased turn-around time in physician gaps in care dashboard from 1 week to 30 minutes
Analytics to Achieve the Triple Aim

Presbyterian Healthcare Services’ Data and Analytics Program Delivers Broad Benefits

• Technical foundation that is a single source of truth
• Analytics supporting better health, cost leadership and exceptional experience
• Information that is managed as an asset across delivery system, medical group and health plan
• Talent model that drives innovation, integration and engagement across the enterprise and for the patients and communities PHS serves
• Leveraging the principles of change management

Looking Ahead

• Focusing on accelerating value and growing analytic talent, which includes:
  o Leveraging cloud solutions - Enables “quick wins”
  o Setting up R&D Informatics, Integrated Informatics, and Tool & Solution Development teams for the Hub-and-Spoke Analytics Organization
  o Focus on prototyping, predictive modeling, and point-of-care decision making
• Maintaining a disciplined process of data integration into the EDW
• Ensures data integrity and upholds a single source of truth
### STEPS: Realizing the Value of Health IT

#### Satisfaction
- **.5**
  - Leveraged CAHPS and extended data sets to improve 2017 MA PPO Stars rating by 0.5

#### Treatment / Clinical
- **.946**
  - Enhanced identification, stratification, and triaging of palliative care due to new predictive modelling with AUC of .946

#### Electronic Secure Data
- **UCI**
  - Improved UCI completeness across EMR and claims systems to **99.4%** and UCI consistency to **97.4%**

#### Beat composite HCAHPS score for inpatient VBP of by 2%
- **2%**

#### Improved adherence to evidence-based guidelines due to decreased turn-around time in physician gaps in care dashboard from 1 week to 30 minutes
- **30**

#### Created new anti-trust and HIPAA compliant data access and sharing guidelines for integrated EDW
- **EDW**
STEPS: Realizing the Value of Health IT

**Patient Engagement & Population Management**

- **19%**
  - Improved direct-to-employer e-messaging and video engagement rates by 19% and 10%

- **5%**
  - Launched effort to reduce grievances by 5% in Presbyterian main hospital

**Savings**

- **$6M**
  - $4M to $6M savings through improved payment integrity analytics

- **$6.5M**
  - $3.5M to $6.5M savings from reporting and analytics tool rationalization
Contact Information

Soyal Momin
Vice President, Data and Analytics
Presbyterian Healthcare Services
smomin@phs.org
+1 (505) 923-7532

Scott Alister
Managing Director
Accenture Digital
Scott.r.Alister@accenture.com
+1 (720) 234-4588
Questions