Duke Patient Revenue Management Organization

HIMSS 2003

Paul Newman, Executive Director
Duke Private Diagnostic Clinic & PRMO
Overview of Duke University Medical Center and Health System

• Duke University Health System
  • Duke University Hospital
  • Durham Regional Hospital
  • Raleigh Community Hospital
  • Duke University Affiliated Physicians (DUAP)
  • Hospice
  • Home Infusion Therapy/Home Health
• Private Diagnostic Clinic, PLLC
• Duke School of Medicine
• Duke School of Nursing
## Duke Health System Statistics

### FY02 Actual

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharges</td>
<td>59,728</td>
</tr>
<tr>
<td>Patient Days</td>
<td>336,006</td>
</tr>
<tr>
<td>Average Census</td>
<td>921</td>
</tr>
<tr>
<td>Average Length of Stay</td>
<td>5.6</td>
</tr>
<tr>
<td>Surgical Procedures</td>
<td>55,384</td>
</tr>
<tr>
<td>Ambulatory Visits</td>
<td>1.4 million</td>
</tr>
<tr>
<td>ER Visits</td>
<td>141,591</td>
</tr>
<tr>
<td>Employees</td>
<td>11,600</td>
</tr>
<tr>
<td>Clinic Sites</td>
<td>80</td>
</tr>
<tr>
<td>Net Revenue</td>
<td>$1.5 billion</td>
</tr>
</tbody>
</table>
Duke’s Mission

• Research
• Teaching
• Clinical Care

*The continual focus on clinical care is paramount*
“No Margin, No Mission”

Clinical margin in healthcare driven by:

- Increasing services or productivity
- Changing the mix of patients
- Negotiations of managed care rates
- Promoting and sustaining efficiencies within operations

• Harsh reimbursement environment
• Inability to manage risk-based payment profitability
• Balanced Budget Act of 1997
• Stringent Medicaid eligibility; more charity care
• Large investments in IT, physician practices, hospitals; failure to realize economies
• Dominant insurers with a surplus of providers
Duke Organization Prior to PRMO

Duke Univ Trustees

Board

Duke Univ Health System

Raleigh Comm
- Revenue Mgt Cycle

Durham Regional
- Revenue Mgt Cycle

Duke Hospital
- Revenue Mgt Cycle

DUAP
- Revenue Mgt Cycle

PDC

Board

Clinical Depts
- Revenue Mgt Cycle
State of Revenue Cycle Activity

- Accounts receivable build-up
  - Hospital days in A/R = 100 days
  - Professional days in A/R = 92 days
- High cost of revenue cycle functions
  - Front/back office = 7.7% of collections
- Lack of customer service
- Employee turnover rates 35% in revenue cycle areas
- Bad debt and charity care 4.5% of revenue
Business Case for Change

• No one is “in charge”
• Lack of communication = duplication of work
• Administrative processes difficult for patients to navigate
• No system-wide policies and procedures
• Poorly defined roles and expectations for employees
• Fragmented, functional structure inhibits management effectiveness
PRMO Value Proposition

By leveraging and building upon what is right...

• Alignment between Duke Hospital & PDC operations
• Pockets of technological strength
• Leadership focus on revenue management
• Building on the existing service organization

...we will achieve our goals

• Maximize patient revenue realization
• Minimize investment in accounts receivable
• Provide outstanding service to patients, physicians, internal customers
• Use innovative processes and technologies
PRMO Goals and Objectives

• Promote and maintain revenue performance and cash flow
  • Accelerate cash collection
  • Minimize bad debt
  • Facilitate alignment with payers
  • Differentiate physician/hospital revenue recognition
PRMO Goals and Objectives (cont.)

• Create effectiveness and efficiency
  • Create economies of scale
  • Use outsourcing
  • Reduce labor cost
  • Ensure standardized business processes
  • Develop functional expertise
  • Create alignment between PDC and DUHS
  • Ensure compliance with federal billing regulations
  • Maintain a strong emphasis on quality control
PRMO Goals and Objectives (cont.)

- Provide excellent customer service
  - Focus on internal and external customers
  - Incorporate functions critical to PDC and DUHS
  - Address requirements of contracted entities
- Redefine work environment
  - Establish clear accountability
  - Allow for speed in decision-making and defined career path
  - Promote communication
  - Establish incentive-based compensation
Unique Considerations with PRMO

- Organizational considerations
  - Legal structure – single member LLC
- Operationalizing the PRMO vision
  - Combine functions and realize synergies
  - Preserve unique requirements critical to PDC and Duke Hospital
Organization Guiding Principles

• Singular accountability for critical path revenue cycle components
• Clear decision making authority across revenue cycle
• Reporting structure supports centralized and/or standardized functions
• Incentive-based compensation system
• Management of functional dependencies
New Centralized PRMO Organization

Duke University Health System

Single Member LLC

Private Diagnostic Clinic

CONTRACT DUHS

CONTRACT PDC

Executive Director

PRMO Director

Service Access
Care Coord & Billing
Medical Rec
Prof Billing & Coll
Tech Billing & Coll
Cust Service & Support
Contract Coord
Fin Mgt & Anal
Info Sys
Human Res
## PRMO Summary of Benefits

<table>
<thead>
<tr>
<th>Area of Recurring Benefit</th>
<th>DUHS</th>
<th>PDC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll benefits (@ $40k) (based on 15% FTE reduction)</td>
<td>$6 million (150 FTEs)</td>
<td>$2 million (50 FTEs)</td>
<td>$8 million (200 FTEs)</td>
</tr>
<tr>
<td>Cost of Capital (@ 10%) (investment value)</td>
<td>$5 million ($50 million)</td>
<td>$1 million ($10 million)</td>
<td>$6 million ($60 million)</td>
</tr>
<tr>
<td>Bad debt expense down 20%</td>
<td>$12 million</td>
<td>$3 million</td>
<td>$15 million</td>
</tr>
</tbody>
</table>

| Total benefits                                                | $23 million | $6 million | $29 million |
The Risk of Not Integrating

- Missed opportunity for leadership and decisiveness; continued distrust
- Significant loss of momentum
- Increased complexity
- Increased cost of compliance and risk
- Increased financial implications and risk
- Increased cost of $3-5M for the PDC and DUHS
PRMO IT Strategy

• Essential characteristics of an information system
  • Truly integrated in itself and with other systems
  • Provide information to facilitate decision making
  • Assist with Managed Care issues and contracting
  • Positioned to take advantage of e-commerce
  • Allow for tool sets and rule based workflow
  • Comply with HIPAA regulations
Information Systems Overview

- Duke Hospital
  - DHIS for hospital operations and PDC clinical
  - Integrated patient accounting
- Durham Regional Hospital
  - SMS for patient management and patient accounting
- Raleigh Community Hospital
  - Meditech for patient management and patient accounting
- Private Diagnostic Clinic and DUAP
  - IDX for A/R, transaction editing, appts and managed care
Primary Hurdles to Achieving KPIs

• Each issue had an associated action and solution, for example:
  • Issue: Duplication registration processes
  • Action: Implement common registration system
  • Solution: Implement Visit Management to provide common front end
Linking Proposed Solutions to Results

• Each solution was linked to results
• Example: Implementation of Visit Management to provide a common front end will lead to...
  • Decreased cost to collect – no duplication
  • Increased patient satisfaction – improved flow
  • Reduction in bad debt – improved data collection
  • Decreased DRO – reduced time to final bill
Revenue Management Cycle
PRMO 1st Year Results

PRMO Budget Performance
FY 2002 (000s) vs. Baseline
(13% Decrease in Expenses)

Baseline: 65,505
Actual 6/30/02: 56,968

PRMO FTE Performance
FY 2002 vs. Baseline
(20% Reduction in FTE's)

Baseline: 1,253
Actual 6/30/02: 999
Revenue Management Cycle
PRMO 1st Year Results

Gross Patient Revenue (Prelim.)
2001 YTD vs. FY 2002 YTD (000s)
(11.6% Increase in GPR)

Net Patient Revenue
FY 2001 YTD vs. FY 2002 YTD (000s)
(6.2% Increase in NPR)
Revenue Management Cycle
PRMO 1st Year Results

Cash Collected
FY 2001 YTD vs. FY 2002 YTD (000s)
(13.5% Increase in Cash)

- FY 2001 YTD: 1,143,667
- FY 2002 YTD: 1,295,478

Bad Debt & Charity Care
FY 2001 YTD vs. FY 2002 YTD (000s)
(13.7% Decrease in Bad Debt/Charity)

- FY 2001 YTD: 96,764
- FY 2002 YTD: 83,441
Revenue Management Cycle
PRMO 1st Year Results

Cost to Collect
FY 2001 YTD vs. FY 2002 YTD

DRO
FY 2001 YTD vs. Current
Next Steps for PRMO

- Complete implementation of IDX Visit Management and Siemens Invision products
- Further process redesign
- Consolidation of credit and bad debt policies across the system
- Integration of Raleigh Community Hospital into PRMO
Questions?
University of Iowa Health Care
Topics

- Decision to change systems
- Decision to buy not build software
- Selection of IDX
- Deliverables and success measures
Background

- 722-bed academic medical center
- 650 physicians, 400 residents and 6,000 employees
- 100-year history of service to Iowans
- Hospital serves as billing and collections for all hospital and physician services
Decision to Change

• Task forces across UI Health Care evaluated current system
• Identified opportunities for improvement in patient service and cash collection Common agreement that functionality and efficiency needed to change
• Ideal system conceptualized
Goals of the Billing & Collection Process

The billing and collection process must be integrated with the patient visit process of the clinics and be patient friendly and efficient. The common denominator for both processes is the patient.
revenue depends as much on patient-focused and efficient front-end effort in scheduling and charge capture as it does on back-end posting and collection.
Characteristics of Ideal System
Improve the Patient Experience

• Efficient patient flow
  – Integrate scheduling, registration, charge capture, and claims processing
  – Pre-authorize/pre-certify services with payor
  – Provide financial counseling

• “Patient friendly” bills
  – Timely, informative, comprehensive
Insurance

• Attach at a visit level
• Collect at initial patient contact
  – Authorize services
  – Facilitate patient flow and accurate data collection
• Facilitate “point of service” collection
  – Co-pays, co-insurance, self-pay balances
Billing

• Compliant; facilitate proper coding
• Timely claims and patient statements
• Comprehensive
• Automated, where appropriate
• Patient friendly
• Integrate to enhance efficiencies
Reporting

• Managed Care
  – Statistics
  – Referral tracking
  – Expected payment
  – Employer/payor databases

• Management reports
  – Payments, denials, adjustments at line item
  – “Productivity” stats & ad hoc reporting

• Worktools
Decision to Buy, Not Build
Identifying Options of Buy vs. Build

• Option 1: Build custom solution
• Option 2: Buy physician practice management system solution
• Option 3: Buy modular solution
• Option 4: Buy enterprise (integrated hospital and physician billing system) solution
Comparing Each Option Against the Ideal System

• Timeliness: Can it be implemented in time?
• Cost: What will it cost?
  – Acquisition
  – Maintenance
• Availability: Is it feasible?
Rationale for Vendor Solution

• Timeliness
  – Billing regulations change rapidly
  – Non-compliance penalties enormous
  – Clinic standards of excellence in place

• Cost
  – Internal programming = 72 person/yrs

• Availability
  – Design expertise needed for overhaul
Vendor Selection Process

• Potential vendors chosen based on perceived ability to deliver Ideal System
  – Eclipsys
  – IDX
  – Per Sé
  – SMS

• Detailed request for proposal sent to potential vendors
Evaluation Process
Involved Over 100 Staff

• Analysis and comparison of responses to RFI
• On site demonstrations using standardized evaluation tools
• Site visits
• Pros and Cons lists for issue resolution
• Reference checks
<table>
<thead>
<tr>
<th>Technical Ranking</th>
<th>Functionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Per Sé</td>
<td>• IDX</td>
</tr>
<tr>
<td>• SMS</td>
<td>• SMS</td>
</tr>
<tr>
<td>• Eclipsys</td>
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</table>

<table>
<thead>
<tr>
<th>Cost</th>
<th>Risk Sharing</th>
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</thead>
<tbody>
<tr>
<td>• SMS</td>
<td>• IDX</td>
</tr>
<tr>
<td>• IDX</td>
<td>• SMS</td>
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</table>
IDX “Risk Sharing” Proposal

• Required UI Health Care commitment
  – Executive sponsorship at the highest level
  – Guaranteed staffing commitments
  – Close working relationship with vendor’s development team
  – “Showcase” install, relationship
  – Open communication
Patient Friendly Bill

• Modeled after credit card statement
  – Carry-forward balance
  – New charges
  – Payments
  – Ending balance
• Shows physician and hospital payments
Implementation Guidelines

• Change work processes
• 18 - 24 month installation period
• Focused staffing commitments
• Plain vanilla - little customization
• Vendor partnership
• Revenue loss avoidance during implementation
Deliverables and Success Measures
Project Mission Statement

• Support UI Health Care’s mission
• Support future growth
• Support the reporting needs of UI Health Care
• Enable UI Health Care to meet regulatory requirements
• Provide on-line work tools
Project Mission Statement
(Continued)

• Provide a combined physician & hospital billing system
• Provide comprehensive training
• Create a “patient friendly” statement
• Respond to the needs of managed care patients
Business Objectives

• Improve financial viability
• Support the UI Health Care’s mission
• Increase patient satisfaction
• Support UI Health Care as an “employer of choice”
• Implement a system that supports future growth
Project Objectives

• Single friendly, timely, informative combined patient statement
• Standardize registration and admission
• Improve benchmark ratings of IT costs
• Improve timeliness of claims
• Increase dollar volume of charges
• Increase point-of-service collections
Project Objectives
(Continued)

• Improve cash collections as a % of charges
• Ensure effective integration
• Maintain or improve patient wait times
• Train users prior to go-live and ongoing
• Provide effective management reporting
• Ensure referral process
## Objectives Matrix

<table>
<thead>
<tr>
<th>Project Objectives</th>
<th>Financial Viability</th>
<th>Support Mission</th>
<th>Patient Satisfy</th>
<th>Employer of Choice</th>
<th>Future Growth</th>
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<tbody>
<tr>
<td>Standardize reg/admit</td>
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<td>X</td>
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<tr>
<td>Benchmark rating</td>
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<tr>
<td>Claims timeliness</td>
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</tr>
<tr>
<td>Dollar volume of charges</td>
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<tr>
<td>Front desk collections</td>
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<td>Cash as % of charges</td>
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<td>Combined patient statement</td>
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<td>Integrates w/legacy systems</td>
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<tr>
<td>Patient wait times</td>
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<td>X</td>
<td>X</td>
<td></td>
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</tr>
</tbody>
</table>
What’s Next?

• Identify gaps between current and best practices
• Make process improvements
• Collaborate with vendor on decisions
• Define measurements for tracking
Questions?