Health First Connecticut Authority

Availability and Use of Health Care Data

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Introduction

• Our Background
• Three Significant Market Perspectives
• Recent Technology Advances
• Demonstration of Modern Analytic Platform
• Data Refinements
• Current & Potential Data Sources
Our Background and Overall Market Perspective

Three Significant Market Perspectives

• Major US Health Insurer

• Large Teaching Hospital

• Self Insured Public Employer
Three Significant Market Perspectives: A Major US Health Insurer

“Create a Single Source of the Truth”

• Develop an Enterprise wide analytic platform that combines clinical, financial and operational data.
• A single reporting source to external and internal clients
• Web based, widely accessible system
• Member level sub second analytics
Three Significant Market Perspectives: A Major US Health Insurer

From Data to Information

- Fragmented Process
- Integrated Process

- High Value
- Low Value

- Paper based Reporting
- Web-based Reporting

- Predictive Informatics
- Retrospective Leadership

No Clear Leaders Today

Health & Wellness Leadership
Three Significant Market Perspectives:
A Major US Health Insurer

Sources of Data

Typical Types of Data Today

• Medical Claim
• Rx

Additional/ Evolving Sources

• Health Risk Assessment
• Clinical Lab
• Electronic Medical Record
Three Significant Market Perspectives: Large Teaching Hospital

**Objective**
Coordinate care management

- Physician Hospital Collaborations
- Participation in Commercial medical management programs

Improved Capacity in changing Reimbursement Environment

- Pay for Quality/Performance
- Medical Home

**Resources**
Development of data-warehouse/analytic resources

Promotion of a system-wide EMR

Aggregation of disparate databases
Three Significant Market Perspectives:
A Large Employer

CalPERS

The California Public Employees Retirement System, provides health care benefits to over 1.5 million California State Employees, retirees, their families, and 2,500 California employers.
Three Significant Market Perspectives:
A Large Employer

CalPERS Decision Support Proposal Design Objectives

“...Enable CalPERS to collect, compile and report on health care costs at all levels of reporting for the sole purpose of providing quality health care at reasonable costs.”

- Model a variety of disease management programs for populations.
- Identify and target enrollee health needs and disease presence.
- Ongoing validation of specialized care management programs.
- Provide transparency with regard to health care costs.
Data & Financial Flow: Traditional Employer Model

Health Delivery System

Claim

Payer

$ Reimbursement

Premium

Employer
Data & Financial Flow: Advanced Employer Model

ADVANTAGES
- Maximizes Leverage
- Superior Outcomes
- Negotiation Strength
- Catalyst for Quality
- Improved Benefit Design
Recent Technology Advances

Historic Limitations

• Disparity and Incomparability of Data

• Size of Databases

• Excessively long, complex and costly analysis

• Security

• Portability
A Relevant Example for the HealthFirst Connecticut Authority

In the 2007 Legislative Session, Senate Bill #1 created a primary Care access authority.

The Request: Determine the average per person cost of primary care …and, if you can, add the following!

- Blend the cost for age and gender
- Include visits for specialty care
- Laboratory testing
- Diagnostic imagining
- ER visits
- Mental Health (not severely or persistently mentally ill)
Demonstration of a Current Analytic Platform
Data Refinements

• Data cleansing

• Data array by Diagnosis
  (Diagnostic Related Group)

• Data array by Episode of Care
  (Episode Treatment Groups)

• Data array by Severity of Illness
  (Severity Ranking, Predicting Illness)
Application of Predictive Modeling

• Promoting Fair and Efficient Payment
  • Paying MCO’s more for Sicker patients

• Create a Common basis for Comparison
  • Physicians with sicker patients aren’t penalized

• Targeting Healthcare resources
  • Focusing on Potential High Risk Members
A Look at Current and Potential Data Sources

- National Data Warehouse Initiatives
  - The largest Data Warehouses
  - Access and Availability

- Available Statewide Data Sources
  - Husky Program
  - State Employee

- Potential State-wide Data Sources
The Largest US Population Based Data Warehouses

- Aetna: 14M
- Medstat: 15M
- Milliman: 15M
- Ingenix: 30M
- CMS: 43M
- BHI: 80M
Available Statewide Data Sources

• Husky Program

• State Employee
Connecticut Commercial Insurers
A Consolidating Market- 1995-2008

1995
Then

Now
2008

BlueCare
MD
ConnectiCare
Medspan
Aetna
Cigna
Healthsource
Kaiser*
WellCare*
HealthChoice*
Prudential
U.S. Healthcare
Oxford
PHS
CHCP
Const. Health Net

CIGNA  AETNA  UNITED  HIP  HEALTH NET  ANTHEM

*Ceased Operations