Coordinated Outcomes-Based Care: Behavioral Health Health Homes

Larry Seltzer
Netsmart Director
Architecture & Solutions Strategy
Netsmart at a Glance

- Founded in 1968
- Largest healthcare IT company serving Health and Human Services sector
  - 42 state systems; 20,000 providers
  - 1,000+ clinics, hospitals
  - Serving 20,000,000 Americans
  - #1 in behavioral health
  - #1 in public health

- Complete suite of solutions
  - Electronic Medical Record
  - Patient Billing
  - Practice Management
  - Managed Service Offering
  - Connectivity/HIE

- Broad range of Managed Services
  - IT Hosting/SaaS
  - IT Outsourcing
  - Revenue Cycle Management

- 600+ Associates in 4 locations
  - Kansas City, New York, Chicago, Columbus
Accountable Care
Disproportionate Cost for Members with Behavioral Health Comorbidity
CMS Three Part Aims for Healthcare Delivery System Improvement

• Improving healthcare quality & outcomes through seamless coordinated care

• Managing & Reducing healthcare cost Inflation through continuous improvement

• Improving the health status of populations
VALUE = \frac{Improving Outcomes}{Reducing Cost}
Fundamental Change in Orientation

- Needs of the patient
- Support of the individual provider at the point of care
- Treatment of chronic disease
- Islands of automation

→ Needs of the population
→ All providers across the spectrum of care
→ Management of chronic disease
→ Integrated information access across providers, settings & activities
Tools Required for Accountable Care

- Clinical Information and Point-of-Care Automation
- Enterprise/Master Data Management and Integration
- Health Information Exchange
- Patient Engagement
- Care Management and Coordination
- Performance Management
Clinical Innovation

- EHR & Medication Management
- Meaningful Use
- Clinical Decision Support

Care Coordination

- Information Exchange
- Primary Care Integration
- Population & Community Health Management

Improve Outcomes

Clinical Innovation Care Coordination
Clinical Innovation

Improve Outcomes

- Meaningful Use
  - EHR & Medication Management
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Care Coordination

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Meaningful Use

Improve Outcomes

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Meaningful Use
CDSS for Risk Management

- Inpatient Discharge to First Outpatient Visit
- Previous Inpatient Stay, No Regular Visits
- Drop in GAF Score
- Missed Appointments
- Feeling of well-being since previous session or visit
Requested Nursing Alerts/Guides

- Cardiac issues associated with antipsychotics
- Metabolic syndrome associated with antipsychotics
- Diabetic issues from obesity related to medication side effects
This is the beginning...

- Capture data
- Aggregate into data warehouse
- Allow analytical partners access to the data
- Refine the model
Value = \frac{\text{Outcomes}}{\text{Cost}}

Practice Based Evidence

"Day in the Life of a Clinician"

By Clinicians
For Clinicians

Naturally Intuitive
Efficiency Realized
REAL Portability
Ease of Access

Patient
Facilities

Entity Level Analytics

NTST Network
Research
Foundation

Outcomes
- Clinical
- Financial
- Operational

Clinical Operational Workflow

Cost Accounting Data

Predictive Modeling

\begin{align*}
    f(x) &= a_0 + \sum_{k=1}^{\infty} \left( a_k \cos \frac{2\pi k x}{L} + b_k \sin \frac{2\pi k x}{L} \right)
\end{align*}
Chance of Achieving Average or Better Outcome Improvement

**Service Package**

- **Meds**: 87.5%
- **CM+Ind**: 26.6%
- **CM+Grp**: 28.3%
- **CM+Meds**: 42.5%
- **CM+Meds+Ind**: 28.3%
- **CM+Meds+Grp**: 27.6%

Highest probability of Success
Netsmart CareConnect Vision

- Lab Results
- Lab Orders Out
- Reportable Labs
- CCD & Referrals
- Quality Measures
- Immunization
- Syndromic Surveillance

- Beacon Community
- Netsmart Clients (TIER, Avatar, Insight, MIS)
- State Public Health
- Community Practice
- Federal Agencies
- Labs
- Integrated Delivery System
- Health Center Network
- Health Information Organization

Image Source: http://healthit.hhs.gov
Playing Field

Health Homes

Acute Care 1 ➔ IHIE ➔ Acute Care N

Primary Care

CareConnect

MCO 1 ➔ MCO 2 ➔ MCO 3

CMHC 1 ➔ CMHC 2 ➔ CMHC N

% Clients shared between CMHC
Clinical Innovation

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- Meaningful Use
- Clinical Decision Support

Care Coordination

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Improve Outcomes
Uncharted Territory

- 3M Grouper provides Physical Risk data
- What to use for MH Risk?
- How to calculate:
  - MH Risk x Physical Risk = Aggregate Risk
Possible Solution: Functional Assessment

- Use Functional Assessment as a surrogate for pure risk tool
- Functional Assessment x 3M Risk Grouper = Aggregate Risk Monitor
- Can be administered easily and repeatedly
Possible Functional Assessment Tool: 
*Daily Living Activities (DLA)*

- 20 Areas of Life Functioning
  - Deficits and Strengths
- Normed for 4 populations:
  - Adult Mentally Ill
  - SED Children
  - Addictions
  - I/DD
- Yields GAF score with high Inter-rater reliability
- GAF accuracy falls off >~70
- 6-10 Minutes per administration

*Scott & Presmanes Research on Social Work Practice (v11:3), 373-389 (2001)*
## Behavioral/Physical Acuity Priorities

<table>
<thead>
<tr>
<th>MH Diagnosis</th>
<th>Physical Health Diagnosis</th>
<th>MH Functional Level from DLA (Score = 80-20) Or (GAF=1-100)</th>
<th>Physical Health Risk from 3M Grouper (0-100)</th>
<th>Aggregate Risk</th>
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<tbody>
<tr>
<td>Depression</td>
<td>CHF</td>
<td>45</td>
<td>70</td>
<td>3150</td>
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<td>Depression</td>
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<tr>
<td>Schizophrenia</td>
<td>Diabetes</td>
<td>40</td>
<td>80</td>
<td>3200</td>
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</table>
Business Efficiencies

- Hosting & SaaS
- Revenue Cycle Management
- Managed Services
- Technology Partners

Reduce Cost
Our focus with our provider clients

Clinical Innovation
- EHR & Medication Management
- Meaningful Use
- Clinical Decision Support

Care Coordination
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Business Efficiencies
- Hosting & SaaS
- Revenue Cycle Management
- Managed Services
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Delivering Accountable Care

- Improve Outcomes
- Reduce Cost
Policy Advocacy to Support Integrated Care
Federal Advocacy

• S.539
  – Introduced by Sen. Whitehouse
  – 10 Co-sponsors

• H.R. 6043
  – Target 50 Co-sponsors

• SAMHSA
  – Fix to 42CFR
Health Homes Today
# Health Home Examples

<table>
<thead>
<tr>
<th>State</th>
<th>Model Type</th>
<th>Division</th>
<th>Region</th>
<th>Managing Entity</th>
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</thead>
<tbody>
<tr>
<td>New York</td>
<td>Health Home</td>
<td>NYS</td>
<td>NYC</td>
<td>Health Home</td>
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<tr>
<td>Florida</td>
<td>Managing Entity</td>
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<td>County Level</td>
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<td>Rhode Island</td>
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<td>CBHC</td>
</tr>
</tbody>
</table>
New York City Health Home

CASE STUDY: COORDINATED BEHAVIORAL CARE
Coordinated Behavioral Care

Provider Network

Care Management Agencies

Bronx
Queens
Brooklyn
Manhattan
Staten Island

Care Manager
• Enrollment
• Demographics
Coordinated Behavioral Care

Provider Network

Care Management Agencies
- Bronx
- Queens
- Brooklyn
- Manhattan
- Staten Island

Care Manager
- Assessments
- Notes
- Care Planning
- Referrals
Coordinated Behavioral Care

Provider Connect
- Demographics
- Outcomes
- Referral receipt
Phased Implementation
Needed to be live within 30 days. Accomplished this by aggressively managing scope.

Mutual Agreement
Netsmart and CBC agreed on scope and worked together to adapt to changing requirements.

Project Management
Increased frequency of project meetings to support aggressive timeline.

CBC Implementation Timeline

30 days

Install
Team Training
End-User Training
Requirements Capture
Build

7/12
9/12
10/12
12/12

GO-LIVE
Initial Screening Health Risk Assessment SF-12 Provider Connect
HIE Integration Events CCD
Quality Measures
Scott, Vicki

Feb 27, 1960

Appointment Type: Office
Chief Complaint: Bronchitis
Visit Date: Apr 15, 2012
Start Time: 10:15 Duration: 105
Resource: Admin
Contact Phone: 0
Facility: General Physician
### Treatment Recommendations

- **Spirometry**
- **Chest X-Ray**
- **Sputum Sample**
- **Medication**
  - **Guards**: Normal Male, Normal Female
  - **Rectal**: Normal Sphincter Tone, Prostate, Heme neg. No Mass
  - **Lymph**: Neck, Axilla, Groin
  - **MS**: NROM, No Peripheral Edema, MS 5/5 BUE, BLE
  - **Pulse**: 2+ B DP, PT, Femoral, Radial
  - **Neuro**: CN 2-12 Intact, DTR’s 2+ B Ankle, Patella, Biceps, Triceps, Gait...
  - **Skin**: No Rash, No Cyanosis, Good Turgor
  - **Psych**: Normal Affect, Judgment, Mood, A&O x 3

### Current Vitals for Apr 21, 2012

- **Temp**: 100.3°F
- **BP**: 140/72 mmHg
- **Pulse**: 85/min
- **Resp**: 20/min
- **Weight**: 127 lbs
- **Height**: 66 in.

### Patient Information

- **Name**: Scott, Vicki
- **DOB**: Feb 27, 1960
- **Age**: 52
Larry Seltzer – Director, Architecture and Solutions Strategy

Q & A
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