Health Information Exchange for Care Coordination Between Behavioral Health and Physical Health Care

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Presentation Agenda / Goals

Agenda

• The value of integrating behavioral and physical health
• Health Information Exchange (HIE)
• Behavioral Health and HIE
• Implementation of HIE with behavioral health: two case studies
• Conclusions / Discussion

Session goals are to enable participants to:

• Understand opportunities and obstacles for implementing technical HIE solutions between behavioral and physical health care
• Discuss privacy and security issues related to sharing mental and behavioral health information
• Cite examples of successful data sharing between behavioral and physical health
VALUE OF INTEGRATING BEHAVIORAL & PHYSICAL HEALTH
Behavioral health conditions are prevalent among adults in the U.S.

Chart 1: Percent of U.S. Adults Meeting Diagnostic Behavioral Health Criteria, 2007

- Anxiety Disorder: 31% within past 12 months, 19% ever in lifetime
- Mood Disorder: 21% within past 12 months, 10% ever in lifetime
- Impulse-control Disorder: 11% within past 12 months, 25% ever in lifetime
- Substance Disorder: 35% within past 12 months, 13% ever in lifetime
- Any Disorder: 32% within past 12 months, 57% ever in lifetime

Note: Anxiety disorder includes panic disorder, agoraphobia, specific phobia, social phobia, generalized anxiety disorder, post-traumatic stress disorder, obsessive compulsive disorder, and adult separation anxiety disorder. Impulse-control disorder includes oppositional defiant disorder, conduct disorder, attention deficit/hyperactivity disorder, and intermittent explosive disorder. Substance disorder includes alcohol abuse, drug abuse, and nicotine dependence.

Individuals with behavioral health conditions frequently have co-occurring physical health conditions.

Chart 2: Percentage of Adults with Mental Health Conditions and/or Medical Conditions, 2001-2003

29% of Adults with Medical Conditions Also Have Mental Health Conditions

68% of Adults with Mental Health Conditions Also Have Medical Conditions

The presence of a mental health disorder raises treatment costs for chronic medical conditions.

Chart 3: Monthly Health Care Expenditures for Chronic Conditions, with and without Comorbid Depression, 2005

Treatment for behavioral health problems is most frequently delivered on an outpatient basis.

Chart 6: Types of Mental Health Services Used in Past Year, Among Adults Receiving Treatment, 2009

- 4% Combination of Inpatient, Outpatient, and/or Rx
- 13% Outpatient Only
- 32% Outpatient and Rx
- 49% Rx Only
- 2% Inpatient Only, Rx

Note: Excludes treatment for substance abuse disorders.
Increased utilization of prescription drugs and decreased reliance on inpatient services has shifted spending over time.

Chart 7: Distribution of Mental Health Expenditures by Type of Service, 1986 and 2005

1986
- Prescription Drugs: 7%
- Residential*: 22%
- Outpatient: 24%
- Inpatient: 42%

2005
- Prescription Drugs: 27%
- Residential: 14%
- Outpatient: 33%
- Inpatient: 19%

Note: Excludes spending on insurance administration. Data not adjusted for inflation.
* Residential treatment includes spending in nursing home units of hospitals or in nursing homes affiliated with hospitals.

Slides 2 through 6 are reproduced from American Hospital Association, Trendwatch, January 2012.
Patients with Serious Mental Health Conditions vs Patients without SMH Conditions

<table>
<thead>
<tr>
<th>Measure</th>
<th>Range</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized Mortality Rates</td>
<td>0.6 – 4.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Average Years Life Lost</td>
<td>13.5 – 29.3</td>
<td>25.2</td>
</tr>
<tr>
<td>Average Age at Death</td>
<td>48.9 – 76.7</td>
<td>56.8</td>
</tr>
</tbody>
</table>

Source: AHRQ webinar, Joe Parks, MD, Chief Clinical Officer, Missouri Department of Mental Health, April 18, 2013.
Reasons for Shorter Life

• Physical health primarily
  – Smoking (44% of smokers)
  – Overweight
  – Triglycerides
  – HDL
  – Blood pressure
  – Glucose

Source: See prior slide.
Practice Transformations

• Focus on overall health
• More medically oriented team members
• Open access scheduling
• No-show/cancellation policies
• Increased patient input processes
• Significant increase in data reporting and outcomes
• Treatment planning tools supported by treatment guidelines

Source: Same as prior 2 slides.
Outcomes

• Cost
• Quality of care
  – Medications adherence
  – HEDIS
• Avoidable admissions
• Experience of care
Montefiore Medical Center

• Implemented behavioral health interventions for hospital physical health patients
• In two years, reduced readmission rate by almost 50%

Source: AHRQ webinar, 2013.
AHRQ Series of Webinars

• Combining mental health and physical health services
• Set in primary care environment as part of the care process
• Leaders
  – Veterans Administration
  – Community Clinics
St Anthony Hospital

Oklahoma City

- Added a mental health admission office in the emergency department
- Behavioral health screening prior to bed placement
- Average wait time for patients in ED from 44 min to 28 min
- Average time in ED reduced from 254 min to 177 min
- More patient now seen in ED with a 12 to 20% reductions in hospital admissions
ABOUT HIE
What is HIE?

• Health Information Organization. An entity that organizes and governs the exchange of health information for a specific set of participants.

• Health Information Exchange (noun). An HIO that operates the software for data exchange.

• HIE (verb). The exchange of health information.
What are the types of HIE entities?

• Repository
• Federated
• Hybrid
Repository Model HIE

Federated Model HIE

Hybrid Model HIE

HIE ACTIVITY IN CALIFORNIA
# Community HIEs

<table>
<thead>
<tr>
<th>Community Health Information Exchange</th>
<th>Area</th>
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<tbody>
<tr>
<td>Central Coast Health Connect</td>
<td>Monterey</td>
</tr>
<tr>
<td>Central Valley Health Information Exchange</td>
<td>Fresno, Madera, Tulare, Kings</td>
</tr>
<tr>
<td>ConnectHealthcare</td>
<td>Sonoma, Napa, Solano, Yolo</td>
</tr>
<tr>
<td>Inland Empire Health Information Exchange</td>
<td>Fresno, Tulare, San Joaquin, Madera, Sonoma, Napa, Solano, Yolo, San Joaquin, Stanislaus, Riverside, San Bernardino, San Diego, Imperial, Orange, Los Angeles, Mono</td>
</tr>
<tr>
<td>Los Angeles Network for Enhanced Services (LANES)</td>
<td>Los Angeles, Orange</td>
</tr>
<tr>
<td>North Coast Health Information Network</td>
<td>Del Norte, Humboldt</td>
</tr>
<tr>
<td>Orange County Partnership Regional Health Information Organization (OCPRHIO)</td>
<td>Orange</td>
</tr>
<tr>
<td>RAIN-Live Oak Health Information Exchange and Telemedicine Network</td>
<td>Santa Barbara, Ventura</td>
</tr>
<tr>
<td>Redwood MedNet</td>
<td>Mendocino, Lake, Sonoma, Marin, Humboldt</td>
</tr>
<tr>
<td>SacValley MedShare</td>
<td>Siskiyou, Modoc, Trinity, Shasta, Lassen, Tehama, Plumas, Glenn, Butte, Colusa, Sutter, Yuba</td>
</tr>
<tr>
<td>San Diego Health Connect</td>
<td>San Diego, Imperial</td>
</tr>
<tr>
<td>San Joaquin Community Health Information Exchange</td>
<td>San Joaquin, Stanislaus</td>
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<tr>
<td>Santa Cruz Health Information Exchange</td>
<td>Santa Cruz</td>
</tr>
</tbody>
</table>
# Enterprise HIEs

<table>
<thead>
<tr>
<th>Enterprise Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Integrated Date Exchange (Cal INDEX)</td>
<td>All of California</td>
</tr>
<tr>
<td>Coastal eHealth Connection</td>
<td>Santa Barbara</td>
</tr>
<tr>
<td>Dignity Health</td>
<td>Hospital and practice locations</td>
</tr>
<tr>
<td>St Joseph Health</td>
<td>Hospital and practice locations</td>
</tr>
<tr>
<td>Sutter Health</td>
<td>Hospital and practice locations</td>
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</table>
Source: HIE Activity in California, CHeQ, UC Davis Institute for Population Health Improvement, 2014.
DEVELOPMENT OF AN HIE
HIE Options

• Conventional HIE query/response
  – Dashboard (like an EMR)
  – See any data available immediately
  – May have access to data through local EMR
• Direct – point-to-point, like fax, but electronic
• eHealth Exchange – query/response; 3 steps:
  – Data on Lyman?
  – What data on Lyman?
  – Want x data on Lyman.
Issues in healthcare & HIE 1

• Transition from individual and group practice to value-based, organized care
• Use of care teams – many team members may desire access to HIE
• Patient matching – complex
• Other entity priorities
  – Community HIEs
  – Enterprise HIEs
Issues in healthcare & HIE 2

• Fear of loss of proprietary or historical market position
  – Vanity Fair: The publishing companies largely dragged their feet and failed to embrace electronic publishing leaving the field to Google and Amazon. [Paraphrase]

• Requirement for provider change

• Sustainability

• Move toward more systematized processes
BEHAVIORAL HEALTH & HIE
MENTAL HEALTH DATA
HIPAA & Sensitive Health Information

• With respect to mental health records, HIPAA only prohibits sharing of psychotherapy notes, which are not considered part of the medical record.

• The Chief Privacy Officer of the Office of the National Coordinator identifies 8 types of sensitive health information.
Sensitive Health Information based on clinical nature of the data

- HIV/AIDS
- Drug/alcohol abuse (not Part 2)
- Mental health/behavioral health
- Reproductive health of women
- Genetic information (not GINA)
- STD
- Teen health information
- Domestic violence health information

Source: Lucia Savage, CPO, ONC, HIMSS 2015.
State Laws

Source: Lucia Savage, CPO, ONC, HIMSS 2015.
Under California Law

• Mental health record data may be shared in accordance with HIPAA.

• Lanterman Petris Short Act places an additional restriction on data.
  
  – Ok for treatment
  
  – Ok for payment
  
  – Not ok for operations. Healthplan case management is considered operations.
42 CFR PART 2 DATA
Part 2 Data

Pre-NPRM

• Confusion about “Federally Assisted” meaning
• Confusion about “Program” coverage in general medical facilities and general medical practices
• No provision for HIEs
SAMHSA NPRM

• “[Part 2 regulations] are intended to ensure that a patient receiving treatment for a substance use disorder in a part 2 program is not made more vulnerable by reason of the availability of their patient record than an individual with a substance use disorder who does not seek treatment.”

Federally Assisted

• “Federally assisted” is a requirement for a part 2 program but because an entity is federally assisted, it is not presumed to be a “Program.”
“Program”

1. An **individual or entity** that holds itself out as providing, and provides, substance use disorder diagnosis, treatment or referral for treatment.

2. An identified **unit** within a general medical facility or general medical practice that ....

3. **Medical personnel or other staff** in a general medical facility or general medical practice whose primary function is the provision of....

Source: 42 CFR Part 2, Subpart B—General Provisions, §2.11 Definitions, Program means:
Disclosures with Patient Consent

“To Whom”

(4)(i) Name of the individual to whom a disclosure is to be made

(ii) The name of an entity with a treating provider relationship with the patient

(iii) Third party payer that requires patient information for reimbursement

(iv) The name of an entity that facilitates the exchange of health information [or research institution] and [next slide]
Within the HIE

- The name of an **individual** participant,
- The name of an **entity** participant with a treating provider relationship with the patient, or
- A **general designation** of an individual or entity participant or a class of participants who have a treating provider relationship with the patient, e.g., “my treating providers” or “my present and future treating providers.”
Consent and Data Flows

Part 2 Program

Treating Entity

HIE

Treating Providers

Treating Entity

Treating Providers
List of Disclosures

• Upon request, a patient who has consented to disclose patient identifying information using a general designation must be provided a list of entities to which their information has been disclosed:
  • Disclosures within the past two years
  • Response due in 30 days
  • Description of patient identifying information disclosed
IMPLEMENTATION OF HIE WITH BEHAVIORAL HEALTH
Local Health Departments and HIE

• County Local Health Departments
  – EHR adoption
  – Increasing interest in HIE
  – “Neutral convenors”

• Examples
  – San Joaquin, Marin, Merced, Stanislaus, San Diego, LA, Riverside and San Bernardino
LHD Interest in HIE

• Behavioral / physical health care integration
• Public / population health
• Federal programs
  – CDC Lifetime of Wellness
  – DHCS PRIME, Whole Person Care
  – Meaningful Use
Example 1: San Joaquin County, CA

- SJC Health Care Services Agency and BHS
- On Clinician’s Gateway EHR
- First County BHS department to contribute data to a community HIE in CA
  - San Joaquin Community Health Information Exchange (SJCHIE)
SJCHIE Founding Members

Health Plan of San Joaquin
Community Medical Centers, Inc.
San Joaquin County California
San Joaquin General Hospital
SJCHIE Initial Functionality

• Longitudinal patient record look-up
• Notifications / alerts
• Meaningful Use 2 related services
  – Direct messaging
  – Public health reporting
  – MU-2 certified patient portal
SJ Behavioral Health Approach

• Limited Mental Health data set shared
  – Demographics, diagnoses, medications, allergies, and lab results
  – No substance use information (42.CFR.2) or psychotherapy notes
  – Data filtered on way out of EHR & further segmented in HIE

• Opt-in, whereas rest of HIE is opt-out
  – 97%-98% opt-in rate to date
  – Consent status captured via electronic signature, transmitted from EHR to HIE
San Joaquin County Behavioral Health Services (BHS) Patient/Client Participation Form for SJCHIE

FILL OUT THIS FORM COMPLETELY AND RETURN IT TO BEHAVIORAL HEALTH SERVICES (BHS)

Patient/Client Name: ________________________________  Last  First  Middle

Maiden Name/Other Name Used in the Past: ________________________________

DOB: ________________________________  MR#: ________________________________

San Joaquin Community Health Information Exchange (SJCHIE) will make available the following information to other health providers solely for treatment purposes: Demographics, Diagnoses, Current Medications, Allergies, and Laboratory results.

BHS clients/patients can change participation in SJCHIE at any time at Behavioral Health Services (BHS) by requesting a change. The system will reflect your request as soon as the change is processed.
SJ BHS Next Steps

• Address “VIP Patient” issue
• Onboard SJ BHS clinician users
• Implement interfaces with Stanislaus County
  – Behavioral Health and Recovery Services
  – Primary Care Clinics
Example 2: Multnomah County, OR

The Problem: Primary Care Providers and Mental Health Consultants within small School Based Health Centers (SBHCs) practice on two separate, non-connected EHRs

- Conducted feasibility study in 2015
- Subcontractor to CedarBridge Group in Portland
- County implementing recommendations
Multnomah SBHC IT Landscape

Multnomah County Health Department

Department of County Human Services

Multnomah County IT

Epic

SBHC

Primary Care

MHCs**

NetSmart myEvolv

SBHC = School Based Health Center (13)

** MHCs = Mental Health Consultants
Existing State

• Existing data sharing within SBHCs
  – Face-to-face
  – Suicide risk binder
  – Red binder for referrals

• Existing data sharing in physical / mental health silos
  – Physical health: Epic Care Everywhere
  – Mental Health: Other programs on myEvolv, CCO / state-level reporting
Project Goals

1. Better Patient Care
2. Maintaining both EHR Systems
3. Consistent and Efficient Processes
Targeted Use Cases

1. Suicide risks identified in both EHRs
2. Electronic referrals between primary care / MHCs
3. Updated med lists / histories in both EHRs
4. Close the loop on referrals
5. Ensure matching demographic info
6. Matching diagnosis and chronic condition info
Selected Approach: Direct

• What is Direct Messaging?
  • National standards to support workflows where patients transition care settings
  • Functions like regular e-mail, with additional security to ensure messages are accessible only by the intended recipient
    • Ability to send either structured data (problems, allergies, medications, demographics) in documents / CCDAs or unstructured data (clinical notes)
    • Providers, or facilities, will receive a “Direct address” – The address will appear like a normal e-mail address, and will act as the credentials for sending/receiving messages
      • The domain of the address will specify the location (e.g. clinician@direct.ddsbhc.org)
  • For the County, functionality will be available from within the EHR systems
    • For myEvolv, a subscription to Netsmart’s CareConnect Interoperability Platform is required.
Benefits of Direct

Simple approach to help to cut costs, improve safety, and delivery of an improvement in the quality of care

• Address gaps in the ability for providers to share clinical information
• Reduce the costs (financial and time) associated with inefficient, manual processes
• Increase security and privacy protections for PHI
• Utilize a single national standard that both EHR systems can leverage; integrated into both EHRs
• Improve electronic communication between providers
Staffing / Workflow

• NPs and MHCs
  • Use current workflow, send Direct messages from EHR

• Referral Manager (Epic)
  • Expand upon responsibilities of existing County position
  • Processes Direct messages from the *Incoming Messages Report (IMR)*
  • Conduct patient matching and strive to prevent duplicate record creation
  • Ensure records are assigned to the correct provider

• Message Coordinator (myEvolv)
  • New, centralized role
  • Clinical training required (RN or CHN)
  • Conduct patient matching and strive to prevent duplicate record creation
  • Assign CCDs to clients or enroll new referrals based on message/CCD contents
  • Conduct clinical reconciliation, when appropriate, or reach out to provider for assistance with reconciliation via an Alert

• *Cross-training of other staff on these responsibilities is recommended*
Targeted Use Cases

1. Suicide risks identified in both EHRs
   - CCDA sent from Epic; CCDA plus suicide risk assessment sent from myEvolv
2. Electronic referrals between primary care / MHCs
   - Referrals via Direct
3. Updated med lists / histories in both EHRs
   - If new med prescribed during primary care visit, CCDA with new meds sent from Epic
4. Close the loop on referrals
   - CCDAs sent to close the loop
5. Ensure matching demographic info
   - Monitoring of incoming CCDAs and manual reconciliation
6. Matching diagnosis and chronic condition info
   - CCDAs sent when new conditions identified
Technical Conclusions

• More prevalence of HIE in California than ever before.

• Major behavioral health medical record systems like Cerner Anasazi and Netsmart Avatar now able to exchange data using HL7, CCDA.

• SAMHSA NPRM suggests that HIEs are empowered to participate in exchange of Part 2 data.
Implementation Conclusions

- Robust technical, policy, and workflow approaches are being adopted today to enable health information exchange between behavioral and physical health.
- We expect that this trend will significantly increase as lessons learned from early adopters are shared.
  - This excludes some sensitive information, although the SAMHSA NPRM indicates that substance use information will become sharable in appropriate circumstances via HIE.
- We anticipate a positive impact on both physical and mental health.
Questions

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