DSRIP IT Target Operating Model (TOM)
Learning Symposium
September 17th, 2015

DST Presenters:
• Todd Ellis, Anu Melville, and Ken Ducote

Pilot PPS Panelists:
• John Dionisio – Director of IT, Advocate Community Providers PPS (ACP)
• Evan Brooksby – Director Of Health System Transformation, Albany Medical Center (AMC), Capital Collaborative PPS (CC)
• Kallanna Manjunath, MD – Medical Director of Albany Medical Center Hospital (AMC)
## Agenda

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September 17th, 2015
IT Target Operating Model Project Overview:

To assist with adaptation to the new IDS environment, the DSRIP Support Team (DST) is collaborating with PPSs to define an IT Target Operating Model

**OBJECTIVE**
- Generate a holistic target operating model: Generate patient-centric scenarios to demonstrate target state use cases that align with the goals of the 2 selected DSRIP projects (2.a.i & 3.a.i)
- Identification of system requirements: Assist PPSs to extract detailed system requirements needed to comply with DSRIP project requirements and enable an integrated delivery system

**SCOPE**
- Focus on 2 foundational DSRIP Projects: Projects 2.a.i and 3.a.i were specifically selected for elaboration because they provide the building blocks needed to enable the majority of additional DSRIP Projects
- Development of comprehensive scenarios: Leveraging a detailed capability model allows us to craft a select number of patient-centric scenarios that will provide wide-ranging coverage of required capabilities needed in an IDS target state
- Validation with a variety of PPSs: An agile development method will be used to incorporate feedback from multiple PPSs that were selected based on the complexity and diversity of their target state

**APPROACH**
- Conduct pilot design sessions: A series of design workshops will be conducted with 6 pilot PPSs to review each scenario and complimentary models and requirements
- Generate DSRIP specific IT TOM: Each pilot PPS will be provide feedback on needed capabilities, requirements and other design elements to create an IDS target operating model
- Share observations and findings: Throughout the project we will share results with the DSRIP community, and upon conclusion produce deliverables that can be used by all PPSs
Summary of the IT TOM Toolkit Components

**System Requirements Specifications (SRS)**
- **System Context Model**
- **Target System Operating Model**
- **Use Cases**
- **System Requirements**
  - Semantic Diagrams
  - Activity Diagrams
  - State Transition Diagrams
  - Test Cases
  - Gap Analysis
  - Roadmap
  - Data Requirements

**Business Requirements Definitions (BRD)**
- **Business Context Model**
- **Target Business Operating Model**
- **Process Flow Steps**
- **Capabilities**

**ADDITIONAL STEPS TO BE DEVELOPED BY THE PPSs**
- Context Templates
  - Semantic Diagrams
  - Activity Diagrams
  - State Transition Diagrams

September 17, 2015
## IT TOM Toolkit High-Level Timeline

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### IT TOM Updates

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### Master Toolkit Timeline

- Draft baseline Models for 2.a.i BRD
- Draft baseline Models for 2.a.i SRS
- Harvest PPS 2.a.i BRD Feedback
- Harvest PPS 2.a.i SRS Feedback
- Draft baseline Models for 3.a.i BRD
- Draft baseline Models for 3.a.i SRS
- Harvest PPS 3.a.i BRD Feedback
- Harvest PPS 3.a.i SRS Feedback
- Update and Finalize IT TOM Toolkit

### Workshop Week

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

★ Presentation of IT TOM Progress / Status Update to PPSs / HIT Work Group / Integrated IT PPS Meeting
Sample Business Target Operating Model View

Target state interactions between people and organizations, for a given scenario

- Highlighting changes that will be made to achieve patient and system outcomes
- Used to discover and highlight new, or obsolete, interactions & stakeholder changes/impacts
Sample System Target Operating Model View

The Target State System Operating Model identifies the system nodes, messages, and users for a given scenario:

- Includes highlighted model changes that are made to achieve required interoperability.
- The TOM will be used to discover and highlight new or obsolete system messages and required changes to stakeholders systems.

[Diagram of system interactions with labeled nodes and messages]

**New System Nodes**

- PPS Partner Zone
- Primary Care Integrated Service Provider Zone
- 9-1-1 System
- SHIN-NY
- RHIO System
- PCP EMR System
- HIE/QE
- EMR System
- Care Management System
- Patient Zone
- Chen's Sister
- Patient Encounter
- Record Admission
- Schedules Appointment
- Creates Referral
- Referral
- Symptom Discussion
- Response
- EMS System
- Referral
- Schedule Appointment
- 911 Dispatcher
- Initiates Dispatch
- EMR System
- Care Management System
- PCP EMR System
- HIE/QE
- PCP Search
- 9-1-1 System
- Dispatch Request
- Dispatch Response
- Attending ED Physician
- Faints
- Patient Encounter
- Schedules Appointment
- Creates Referral
- Referral
- Symptom Discussion
- Record Admission
- 9-11 System
- Response
- Call
- 2 Call
Create a Primary Care Service that integrates Behavioral Health Services to create a comprehensive treatment plan for the patient.

**PATIENT OUTCOMES**

- Because Chen’s care could be managed by **both** a Primary Care Physician as well as a Behavioral Health Specialist, he can adequately manage his diabetes and his depression improves markedly.

**BUSINESS OUTCOMES**

- The Emergency visits have reduced with outpatient treatment planning, patient education, and psychiatrist counselling.

**TECHNICAL OUTCOMES**

- Primary Care Physician, Behavioral Health Specialist, and Care Manager (the trans-disciplinary team) are able to communicate on integrated systems.
To date, several 2.a.i BRD themes emerged throughout our pilot workshop discussions with the Pilot PPSs

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<tr>
<td>CARE MANAGEMENT OPERATIONS</td>
<td>• Collaboration between PPS enabled care coordination and external, or outsourced care coordination&lt;br&gt;• Establishment of a Care Coordination “Command Center”</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>PHARMACY INTEGRATION</td>
<td>• Integration of pharmacy services and prescription tracking</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>HIGH TOUCH CARE</td>
<td>• Reliance on care givers and patient advocates</td>
<td>X</td>
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<td>CBO COLLABORATION</td>
<td>• Collaboration with Community Based Organizations (CBOs) and Social Care Coordination&lt;br&gt;• Collaboration with Community Based Organizations (CBOs) for both medical and social care coordination</td>
<td>X</td>
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<td>EXTERNAL PARTNER COLLABORATION</td>
<td>• Linkage to Outside PPSs&lt;br&gt;• Process Improvements with EMS Services</td>
<td>X</td>
<td>X</td>
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<td>PATIENT ENGAGEMENT</td>
<td>• Provision of Tele-Education&lt;br&gt;• Patient Population would be better served by a common Patient Portal&lt;br&gt;• Patient Education can originate from a variety of 3rd party sources and needs to be integrated into the delivery of patient education</td>
<td>X</td>
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To date, several 2.a.i SRS themes emerged throughout our pilot workshop discussions with the Pilot PPSs

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<td>CUSTOM HIE TO COMPLIMENT RHIO CAPABILITIES</td>
<td>Custom-built HIE to include capabilities that go beyond those of the RHIOs, such as: receiving scheduling messages, passing alerts as direct messages (e.g., pharmacy alerts and alerts received from CBOs), and connectivity to the data and analytics engine.</td>
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<td>FOUR MAIN TECHNOLOGY COMPONENTS</td>
<td>Four main components have repeatedly appeared as the core of PPS’s IDS: HIE, Data and Analytics system, Care Management/Case Management/Population Health Management system, and Patient Portal / Communication</td>
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<td>EMR BASED PATIENT PORTAL</td>
<td>Rely on EMR enabled patient portals – vs. universal patient portal, completely built and customized by the PPS – with the option of a central web page containing links to physician based EMRs and other PPS related information</td>
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<tr>
<td>CONNECTIVITY TO RHIOs AND SHIN-NY</td>
<td>The HIE will rely on RHIO and SHIN-NY connectivity for retrieval of historical patient record information, that may not be held within the PPS’s EMRs or HIE.</td>
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<td>SCHEDULING THROUGH THE HIE AND CARE COORDINATOR</td>
<td>Preference to provide a data field for appointments to be entered into the HIE, but have the Care Coordinator call Physician offices directly and enter that data as a field in the system.</td>
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<td>DEVELOPMENT OF CERTAIN SPECIALIZED SYSTEMS</td>
<td>Certain specialized systems, such as School Medical Records, were identified as currently being unavailable or would need additional development to fully realize the benefits in exchanging electronic messages.</td>
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Three Modes of Co-location – 3.a.i Scenario development considerations
Substance Abuse and Mental Health Services Administration’s (SAMHSA) Four Quadrant Clinical Integration Model

Quadrant I – BH ▼ PH ▼
- PCP (with standard screening tools and behavioral health practice guidelines)
- PCP-based behavioral health consultant/care manager
- Psychiatric consultation

Quadrant II – BH ▲ PH ▼
- Behavioral health clinician/case manager with responsibility for coordination with PCP
- PCP (with standard screening tools and guidelines)
- Outstationed medical nurse practitioner/physician at behavioral health site

Quadrant III – BH ▼ PH ▲
- PCP (with standard screening tools and guidelines)
- PCP-based behavioral health consultant/care manager (or in specific specialties)
- Specialty medical/surgical

Quadrant IV – BH ▲ PH ▲
- PCP (with standard screening tools and guidelines)
- Outstationed medical nurse practitioner/physician at behavioral health site
- Nurse care manager at behavioral health site
- Behavioral health clinician/case manager

Persons with serious mental illnesses could be served in all settings. Plan for and deliver services based upon the needs of the individual, personal choice and the specifics of the community and collaboration.

Source: SAMHSA.gov
To date, several 3.a.i BRD themes emerged throughout our pilot workshop discussions with the Pilot PPSs

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| LOCALIZED CARE MANAGEMENT ALONGSIDE CENTRALIZED CARE MANAGEMENT | • Identified the need (in some cases) for localized care management functions co-located within the integrated clinics.  
• PPS’ centralized care coordination function concurrently remains involves and is notified with regards to the care path and risk status of the patient. | X     | X     | X     |       |
| SHARED TREATMENT PLANS                          | • Demonstrated the need for primary care and behavioral care providers to share care plans between them.  
• Care coordination functions (localized and centralized) will need the ability to view and share the care plans.  
• Primary owner of the care plan will be the provider responsible for the primary diagnosis – behavioral health specialist or primary care physician (In most cases). | X     | X     | X     | X     |
| THE PCP AS THE PRIMARY OWNER OF THE CARE PLAN   | • Emphasized the requirement for the PCP to be the owners of the patient’s care plan, even in cases where the patient receives behavioral care in addition to primary care.  
• PCP will share the care plan with behavioral health as well as care coordination. |       |       | X     |       |
| THREE MODES OF CO-LOCATION                     | • PPSs will select the modes of co-location from three options:  
• Co-location of behavioral health in primary care  
• Co-location of primary care in behavioral health  
• IMPACT Model | X     | X     | X     | X     |
To date, several 3.a.i SRS themes emerged throughout our pilot workshop discussions with the Pilot PPSs

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<td>REFERRAL TRACKING</td>
<td>• PPSs were performing referral tracking with limited automation, via phone calls</td>
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<td></td>
<td>• Some PPSs are moving towards creating a centralized referral management system with full automation</td>
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<td>LEAD ELECTRONIC HEALTH RECORD (EHR) SYSTEMS</td>
<td>• PPSs chose to rely on the lead clinic EHR when possible, avoiding additional integration between different systems</td>
<td>X</td>
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<td>• PPSs chose to integrate EHR systems when providers were co-located</td>
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<td>CARE MANAGER VS. CASE MANAGER</td>
<td>• Noticed some differences in Care Manager and Case Manager roles. ogłosił się</td>
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<td>• Mostly, Care Manager to co-ordinate the care between different providers whereas Case Manager to assist patient with their social needs</td>
<td>X</td>
<td>X</td>
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<td>PREVENTATIVE CARE SCREENINGS</td>
<td>• Some PPSs may conduct screenings onsite due to the complexity of the Patient Portal</td>
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<td>• Some PPSs may automate PHQ-9 screening through the Patient Portal</td>
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<td>CENTRALIZED BILLING</td>
<td>• Identified that centralized billing will need to be implemented to submit one claim. Confirmed that EMR will continue to submit claim to MCOs as usual without passing data through HIE/QE</td>
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Today’s IT TOM 3.a.i Panel Discussion includes representatives from the four IT TOM Pilot PPSs

**Capital Collaborative (CC) – Albany, NY**
- Evan Brooksby, Director Of Health System Transformation
  - Albany Medical Center Hospital (AMCH)
- Kallanna Manjunath, MD, Medical Director
  - Albany Medical Center Hospital (AMCH)

**Advocate Community Providers (ACP) – New York, NY**
- John Dionisio, Director of IT
  - Advocate Community Providers
Virtual Panel Discussion focusing on common 3.a.i findings and challenges across the pilot PPSs

High-level IT TOM Strategy Questions:
• What is the biggest takeaway for your organization from designing your Target Operating Model for Project 3.a.i?
• What do you anticipate will biggest implementation Challenge? How do you plan on addressing this Challenge?
• What next steps does your organization plan to take as a result of the IT TOM work completed to date?

Additional IT Strategy Question Topics:
• Preventative Care Screenings (PHQ-2 or 9)
• Shared Treatment Plans
• Warm Handoffs
• Referrals Tracking
• Centralized Billing
• Licensure Thresholds
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Our next steps for the next IT TOM update

• Collect additional 3.a.i SRS feedback from the Upstate Pilot PPSs
• Integrate 3.a.i feedback into IT TOM Toolkit
• Publish IT TOM Toolkit along with User Guide for all PPSs to leverage
• Collect PPS feedback through the use of the MIX site https://www.ny-mix.org/groups/7 (Group Name: DSRIP IT, Analytics and Reporting Collaboration Group)

UPCOMING IT DST INFORMATION SESSIONS

Additional IT Meetings and IT TOM Updates
• IT TOM Toolkit Review Webinar– October TBD
• IT PPS Meeting – October TBD