BRIDGING THE GAPS BETWEEN COMMUNITY SERVICES AND HEALTHCARE INFORMATION SILOS

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**Millie's Story**

A story of disconnected health information

- **Millie Jones**: 72 year old woman living with her 76 year old husband in an old farmhouse a few miles from town.

- She has type 2 diabetes with complications of peripheral vascular disease, neuropathy, congestive heart failure, and coronary artery disease with coronary stent placement 2 years ago. She is overweight and has limited mobility due to degenerative joint disease of hips and knees. Her husband had farmed the land until his own declining health made this too difficult. Both are increasingly forgetful, have problems managing finances, but together can care for most basic needs. Their income consists of Social Security payments and a yearly payment from another local farmer for rental of their land, all managed by their son, who lives a few hours away and sends a monthly ‘allowance’ to his parents. They are unwilling to sell and move from their home as it provides needed income. They do not drive.

- They have declined services such as Meals on Wheels, rarely seek medical care because of transportation difficulties, and have missed multiple scheduled medical appointments over the past year. Millie fell last week and has been unable to walk more than a few steps without severe left hip pain.
DISCONNECTS IN MILLIE'S STORY:

• **Medical team knows:** Millie’s full medical problem list and detailed clinical information, limited mobility, declined Meals on Wheels and social services, recent hospitalization, multiple missed appointments with PCP and cardiologist.

• **Medicaid case manager knows:** Millie’s multiple missed medical appointments but no expressed need for transportation (son will transport), three recent emergency room visits for CHF exacerbation.

• **No one knows:** Millie’s degree of functional limitation, recent fall and consequences, social isolation, increasing cognitive impairment, potential elder abuse, poor nutrition, extent of financial problems.
HOW DID WE GET HERE?

• Rise of Healthcare-based EHRs
• Community Service Organizations develop databases
• Health Information Exchanges connect Healthcare
• Complexity of the community services sector

• How do we get out of here??
Socio-technical infrastructure...

• Imagine for a moment...

• A telephone call between you and someone you have never met before, BUT you need to do business with
  • How do you handle introductions?
  • How do you establish what the conversation is about?
  • How do you gain trust?
Now imagine...

- That same telephone call with someone you know and have worked with before?
- What's different?
## FOUR LAYERS OR VIEWS

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From Professor Mike Martin, Newcastle University
WHAT ARE THE INFORMATION NEEDS...

- WHAT DOES HEALTHCARE NEED TO KNOW:  
- WHAT DO COMMUNITY SERVICE ORGS NEED TO KNOW

Small Group Brainstorm Time!

And...what are our mutual responsibilities and obligations?
IF ALL THESE ARE NEGOTIATED AND KNOWN...

- Which telephone conversation is this more like?
- How is this different from the conversations you have been having so far about exchanging information?
- What would it take to bring it to this level?
A VISION...
Amy’s Journey
Emergency and Acute Care

Paramedics

Gerontologist

Orthopaedic Surgeon

Operating Theatre

Pre and post operative nursing

Pathology

Radiography

Pharmacy

Accident & Emergency

Amy’s Journey
We are identifying “Conversations of Care”.

Amy’s Journey
This is an attempt to represent the web of sessions that support the conversations of care in the Amy scenario.
A session on a “Home” system:

An authenticated session

Session Navigation: log on

 Pane 1 Pane 2 Pane 3 Pane 4

Side Navigation:

Portlet/Applet with widgets and content

Syndicated Content & trusted transactions

Hub

“Home” Record

Local Applications

Status and activity
Accessing a Federation of community systems:
FOR DISCUSSION

- Could this work in your community?
- What would need to happen to catalyze the conversations?
Jackson, Michigan

70 mi W of Detroit
1 city, 19 townships, 7 villages
County population: 160,248
City population: 33,534
11%+ unemployment rate
$47,424 median household income
1 in 3 with more than HS diploma
39% children insured by Medicaid
19% of children live in poverty
The first community triangle: the Jackson CBRN

Community
HIO/JCHD/stakeholders

Practice
JHN/Allegiance/Hillsdale

Research
MICHR/UMHS/GRI

Community outreach
Prevention
Care coordination
BH integration
**Health IT development**
Work of the Jackson CBRN

2011-2016

Behavioral health support in primary care (2011-2015)
Behavioral health integration (2015-)
- creating population management approach

Experience of Care study (2015-6)
Community power structures (2016-)
- qualitative studies to describe community

CLSH collaboration (2015-6)
Community Health Information Hub (2015-6)
Community data model (2016)
- co-design of scalable, federated IT approach

Michigan SIM demonstration (2016-2019)
- Statewide community health IT support
- Local community-clinical linkages
The second community triangle: clinical
Jackson County State Innovation Model demonstration

Concept model for Community Health Information Hub

September 2016
CORE CONTENT OF HUB

- **Summary Medical Data** can be posted to HUB from EMR. EMR has evolving capability to pass through data received from other EMRs. Alternatively, service events can be posted through ADT messaging.

- **Summary BH Data** could be posted from BHR where available, but need to develop simple solution for BH practices without BHRs.

- **Summary Community/Social Services Data** needs to be standardized and a central repository may need to be selected or developed to enable posting to HUB.

- A **secure clinical messaging protocol** needs to be selected or developed to enable providers to communicate with each other and care coordinators; messages should be able to post directly to/from EMR portal(s).

- An **assessment toolkit** containing common assessment and measurement instruments (needs to be developed to enable common intake, assessment, and outcome monitoring across all sectors, with data used for both clinical and evaluation (reporting) purposes.
DISCUSSION

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