To: Kimberly Wilson
        HIT Policy Committee Accountable Care Workgroup

From: Karen Nelson, MD, MPH
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Re: Testimony for Panel 3: Community-based Accountable Care Arrangements
        Thursday, December 5, 2013

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1.   Identify the **high-value set of clinical strategies** you or your stakeholders are focusing on in order to meet cost and quality targets under **community-based accountable care arrangements** over the next 5 years. How are you seeking to **use technology solutions** to achieve these objectives.

Maimonides leads a consortium of approximately fifty medical, mental health and social service organizations, major payers and a national healthcare labor union to provide a Health Home for high-cost, high-risk patients in Brooklyn. This consortium, the Brooklyn Health Home, is working to advance care coordination and holistically address the needs of patients with complex chronic illness by delivering coordinated and comprehensive medical, behavioral health, and social services, and "virtually co-locating" providers at multiple partner organizations through an integrated suite of powerful, integrated, and widely accessible health information technology tools. By implementing common standards of care, the model aims to dramatically improve health outcomes and reduce the total cost of care for this population.

Maimonides first initiated this program five years ago as a recipient of New York State HEAL grants, and was a natural candidate to become one of the first NYS DOH-designated Health Homes in early 2012. Recognizing the significance, innovation and promise of this program, CMS' Center for Medicare and Medicaid Innovation (CMMI) awarded Maimonides a three-year Health Care Innovation Award (HCIA) in late 2012 to focus on 7,500 patients with serious mental illness (SMI). The HCIA has enabled the Consortium to build on the Health Information Technology infrastructure laid through the New York State HEAL and Health Home programs and to dramatically expand the Health Information Exchange (HIE), Care Coordination, and Analytics services.

Patients are assigned Care Managers who regularly assess their needs and connect them with services to address their medical, behavioral health and social service needs. In addition, the Care Manager serves as the hub for all providers by monitoring and sharing electronic alerts of patient events and other community wide patient clinical information; consequently engaging and linking clinicians as needed. Reductions in the cost of care are expected to be achieved through declines in hospital admissions and emergency room visits. Ultimately, the program will serve as a replicable model of care delivery to be implemented in other geographic areas.

To support the clinical program, the Maimonides-led consortium is building, implementing, and enhancing a comprehensive, health IT enabled care coordination system and data mining/analytics platform. This electronic system supports a model of care delivery that will transform how healthcare

services for this population are provided and reimbursed. It provides the capability for "virtually co-locating" medical and social service providers at multiple partner organizations who all currently work on different electronic health information systems and allows them to communicate with each other through a suite of powerful, integrated, and widely accessible health information technology tools. The unique, multi-purpose technology solution provides functionality and seamlessly integrated data and higher level information to support active care management, direct clinical participation and oversight, real-time asynchronous collaboration, analysis, and research activities by the full range of stakeholders in the program.

2.	How are you **leveraging shared, community-based health information exchange or other infrastructure to support care coordination and other objectives**?

The clinical model is supported by integrated, sophisticated Care Management, Clinical Decision Support, Patient Engagement, ONC Direct Messaging, and Analytics capability, all based on a single, unified Health Information Exchange (HIE) process engine (GSIHealthCoordinator) – the Dashboard. We have also used the Dashboard to support a multi-source Clinical Data Repository and Data Warehouse that provides seamless data and process integration throughout the application suite. The Dashboard provides electronic interoperability with the Statewide Health Information Network for New York (SHIN-NY), exchanging Patient Identity Management, Program Enrollment and Consent, Event Notification (e.g., Emergency Department Admission), and longitudinal Patient Clinical Summaries through HL7 and IHE standards based documents (e.g., Continuity of Care Document - CCD), messages and protocols. This standards-based interoperability architecture provides users, and ultimately patients, seamless access to community-wide clinical, demographic, and event information from SHIN-NY connected providers throughout Brooklyn today and throughout New York State in the near future.

The technology foundation of the system, the GSIHealthCoordinator platform, is built on a multi-tier Service Oriented Architecture (SOA) and Web Services framework, which delivers application functionality to users through any standard web browser wherever Internet access is available. The platform provides secure, seamless front end integration among the many applications (apps) presented to Users through the Health Home Dashboard (HHD), and is capable of further front end integration with Electronic Health Records (EHRs) through Single Sign On (SSON) technology including the transfer of User and Patient context. The platform also provides ONC Direct clinical data exchange capability, a multi-source Clinical Data Repository and Data Warehouse.

The Dashboard processes the data to provide real-time, actionable information to Care Managers and providers in a single unified care plan, which allows for the coordination of care for complex patients at care transitions and other essential inflection points in their care. Applications within the Dashboard provide functionality for Patient Enrollment and Consent, building and assigning multi-disciplinary Care Teams, Alerts and Event Notifications, Patient CareBook and Clinical Summary, Clinical Decision Support embedded in the workflow, Population Management and Analytics, an active/interactive Coordinated Care Plan, and Patient Engagement. A full functioned version of the application optimized for secure use on mobile devices (e.g. iPhone, Android) is targeted for release in 2014.

3. What are the **main challenges** you or your stakeholders implementing these strategies have experienced or expect to face?

Not surprisingly, there has been relatively slow adoption of the system on the part of clinical providers like primary care physicians and specialists. Part of bridging this gap is building a common understanding of the work needed for internal communication within organizations and that needed for communication across the community. The essence of this conflict is the misalignment of incentives – providers are not reimbursed for documenting their work in the Dashboard. When providers do begin to utilize the system, however, they quickly appreciate the value-add that this system offers them in caring for this very complex patient population and then become champions for the system. This information-sharing across agencies and across the multidisciplinary set of providers that care for each patient, as well as the creation of a shared, interactive Care Plan is key to effectively and efficiently coordinating the care of these patients.

4. How well do **current market offerings** provide adequate tools that can deliver these capabilities? **Where is more innovation needed** and how can market offerings be improved?

The Program is part of a larger transformation of the healthcare system and a great learning opportunity for the industry. Currently, providers are segmented and lack the appropriate tools to identify and communicate with the full range of patients' treating practitioners, leaving providers with an incomplete picture of each patient's healthcare utilization and prescribed medications. The tools and capability needed to provide coordinated and integrated care to the most vulnerable patients across multiple health systems are not available in the current marketplace so we have leveraged the federal Innovation award to grow our system with functionality that can be tailored as the needs of the patients and workforce change. The Dashboard provides a flexible, dynamic development platform that allows us to add applications and functionality with the changing political and care delivery landscape. With the SHIN-NY as its foundation, the Dashboard integrates community-wide data in a user interface that provides actionable information with incredible value.

The unique, multi-purpose technology solution provides functionality and seamlessly integrated data and higher level information to support active Care Management, direct Clinical Participation and oversight, real-time asynchronous collaboration, analysis, and research activities by the full range of stakeholders in the program. The Dashboard integrates information from the fifty participating organizations, whether or not they have an EHR or work with paper charts.

5. How do you plan to meet accountable care objectives for attributed patients with mental and behavioral health conditions? What is your technology strategy to support this work and what are the major challenges you are facing or expect to face in this work?

The consortium has focused on the needs of patients with behavioral health conditions beginning several years ago with the HEAL 10 and 17 grants and then a year ago received a Health Care Innovation Award to not only expand the technology solution, but also to focus significant efforts on implementing the model of care with this population. The consortium includes organizations that serve patients with SMI along the continuum of care – from discharge at Rikers Island to drug abuse treatment, to medical, behavioral health, and social services. The consortium is developing and implementing standards of

practice, with clear guidelines around assessment, patient engagement and documentation, and shared accountability for improving outcomes for the population.

6. **What are major challenges to obtaining the clinical or administrative data** needed to support care delivery priorities? What are your major challenges around aggregating, analyzing, and reporting data to satisfy accountable care contract requirements? How can HHS and other stakeholders address these challenges, such as encouraging easier linking of claims and clinical data to support analysis?

Challenges:

• Legacy clinical/operational/administrative policies, processes, systems, and financial and regulatory requirements in place and in force at organizations along continuum of care present significant obstacles to the full adoption of a community-wide Care Coordination system, i.e., the viewing and recording of activity and information in the community-wide Care Coordination system is often a duplicate or triplicate activity for Providers across the continuum, and usually the uncompensated and unreportable activity among the two or three.

• The fragmentation of the delivery system results in information silos. It is difficult to access, aggregate, and normalize the information necessary to creating a holistic view of the Patient.

• While great progress has been made by HL7, IHE, and other organizations in defining core medical data elements (e.g., Lab Results), vocabularies (e.g., LOINC), and standard packages ("documents") for data sharing like the Continuity of Care Document (CCD), there has yet been little progress in defining the same for Behavioral, Care Management, and Community/Social Support information, such as Progress Notes, Issues and Interventions, Psycho-social Assessments and Scoring Systems, and active/interactive Coordinated Care Plans as the encompassing package, similar to a CCD for Medical information sharing. This is a critical prerequisite to IT enabled interoperability across the continuum of care.

• The absence of deterministic links, e.g, standard means for identifying and tracking transactional "threads" among clinical, administrative, operational, claims and payment data generated by Providers, Payers, and other Stakeholders along the continuum of care is a major obstacle to assembling a holistic view of patient care and outcomes necessary, at both the individual patient and patient cohort levels, to support ongoing care, analysis, and continuous improvement efforts.

• Inconsistent, complex, and fragmented Patient Consent and information sharing policies that vary by State, type of Patient (e.g., Minor), Condition (e.g., Substance Abuse). This level of complexity is unsupportable in current systems and adds significant complexity and risk to collaboration and information sharing among diverse providers along the continuum of care, particularly those working with the complex, high cost, and vulnerable patients such as those with Serious Mental Illness and multiple serious co-morbidities.

HHS, State, Local and Other Stakeholder Actions Needed

• Standardize the building blocks: standard defined data sets and packages, e.g., the elements, structure, and content of complete psychosocial assessments.

• Align payment systems and financial incentives with the desired Coordination of Care activity; promote the simplification, streamlining, and de-duplication of the clinical, operational, and financial processes required for accountable care across the continuum.

• Promote, support, encourage, and reward the effective and efficient sharing of data with financial rewards and penalties for Providers, IT Vendors, and even Patients, e.g., streamlined access to resources for Patients who provide informed Consent.

• Working collaboratively with state and local stakeholders, simplify and standardize Patient Consent and data sharing requirements to promote collaboration among providers. Hold Providers accountable for the proper use of Personal Health Information with simple rules and strong enforcement at the local level.