

## AHM Findings and Recommendations

### BACKGROUND

The Advanced Health Models and Meaningful Use Workgroup focuses on the following charge:

*Provide recommendations to the HITPC to facilitate the effective use of health IT to support and scale advanced health models in support of the Advanced Health Models and Meaningful Use Workgroup charge and of delivery system reform goals.*

On June 2<sup>nd</sup>, 2015, the Workgroup conducted a hearing bringing together a diverse set of stakeholders from across the country to describe key opportunities and barriers to accelerate the design, evaluation, and adoption of advanced health models that promise to impact individual health and overall community health.

This document provides a brief summary of findings from the hearing as well as a set of recommendations for consideration by the Health IT Policy Committee.

### INTRODUCTION

Stakeholders seeking to improve individual health and well-being are increasingly focused on the fact that an individual's health is shaped largely by life circumstances that fall outside the traditional health care system. An extensive body of research has shown that social, psychological, and behavioral factors, such as family support systems, stress, housing, nutrition, income, and education are a severely underestimated and major contributor to an individual's health outcomes. Yet the traditional medical care system remains narrowly focused on the small fraction of time individuals, their families, and other caregivers spend interacting with physicians and hospitals.

The Workgroup recognizes that improving health will require a broad expansion of the traditional medical "continuum of care" to encompass all of the entities and individuals within a community that influence an individual's health. This includes both the full spectrum of clinical settings, including long-term and post-acute care providers (e.g. home health and hospice), as well as a range of nonclinical settings in the community such as schools, food banks, and social services agencies. Accordingly, the IT solutions and systems that are used to support a holistic approach across all of these entities must evolve to enable truly seamless services to the right individual at the right time.

Under the heading of advanced health models (AHMs), the workgroup has sought to describe a range of emerging, community-level interventions that pragmatically utilize a mix of clinical, social, psychological, and behavioral data to improve and to coordinate health across settings for individuals. In many cases, these models start within the medical system but seek to bridge gaps with a wider set of relevant services. In other cases, these models may be driven by community-based organizations seeking to incorporate clinical services to meet individuals in their preferred setting, such as where the individual lives, or another community setting. Rather than prioritizing traditionally measured clinical outcomes, these models seek to drive sustainable health improvements through prioritization of person-centered

individual goals and priorities that matter most to the individual, as well as new measures to demonstrate effectiveness.

Accelerating AHMs through better information systems requires recognizing a broad ecosystem of technology solutions beyond the traditional electronic health records system used in clinical care. In the clinical setting, these include tools which may exist outside the traditional EHR, such as care management modules and population health management and analytics applications, as well as third-party services, such as those offered by health information exchange organizations. Meanwhile, nonclinical organizations may have a wide range of software solutions that support case management. At the community level, technology platforms that link human-services information and deliver consumer education are also integral to improving health. AHMs that bring together these disparate systems frequently rely on an additional layer of information management that can match, normalize and aggregate data to support individuals and inform targeted service provider decision-making.

In developing these recommendations, the Workgroup considered a variety of levers which ONC and other agencies across HHS can utilize to encourage behavior by various stakeholders and effect change within the market. These levers included the following:

- **Convening.** HHS can use its position and visibility to bring together disparate stakeholders to solve challenging problems where private stakeholder leadership is essential to workable solutions.
- **Transparency.** HHS can help promote better decision-making by individuals, health professionals,<sup>1</sup> and other stakeholders by increasing transparency around key elements of health outcomes.
- **Payment policy and reporting requirements.** Through its role as a health care payer, HHS can have a significant effect on the market by tying desired provider behaviors and health outcomes to payment policy.
- **Voluntary ONC certification of health IT.** HHS can set new criteria for health IT products and test products against these criteria to ensure they are implemented appropriately by vendors.
- **Funding for innovation.** HHS can identify promising early stage innovations and apply targeted funding to advance technical and operational experience.
- **Catalyzing shared learning across communities.** HHS can support emerging AHMs by facilitating learning opportunities with peer communities exploring similar interventions.

While these recommendations are intended to accelerate progress on key issues for AHMs, the Workgroup recognizes the need to balance increased standardization with the flexibility to encourage innovation. These models are still exploring a range of different methods for integrating data from

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<sup>1</sup> For the purposes of these recommendations, health professionals consist of licensed providers and other paid or unpaid workers who have a role in accessing and using health information of an individual in support of their health and care. The term “service professional” is used to encompass a broader set of actors, including both health professionals and those delivering services in other non-clinical settings.

multiple sources. A lack of consistency across settings today points to the need for more collaboration and experimentation before stakeholders arrive at a consensus approach. Policy actions in the interim must avoid overly-prescriptive approaches that preclude existing successful practices and hinder productive innovation that will produce more efficient and effective solutions in the future.

#### FINDINGS FROM ADVANCED HEALTH MODELS HEARING

- 1. Community organizations are integral partners to advanced health models and are highly motivated to share data, but sharing across clinical settings and social services is not standardized and poorly incentivized.**

In connecting to community-based organizations, technical challenges are more substantial than with other clinical settings, but there is strong demand for broader access to information. Additional attention to where federally funded health care and social services programs can share information on mutual clients using endorsed standards for social service interoperability would help drive data exchange.

- 2. Advanced health models are making substantial progress by making existing data actionable in new ways, but stakeholders need seamless access to analytics capabilities to make this data useful.**

Innovative AHMs are making an impact on individuals' health by mobilizing data that already exists and applying analytical tools to data outside of the transactional health information system. For instance, the Southcentral Foundation in Alaska looks at third party data to impute social and environmental factors impacting health based on the individual's street address. However, most organizations do not have the financial, technical and workforce resources to effectively establish this infrastructure and derive value from this data.

- 3. Some advanced health models are responding to interoperability challenges by granting community organizations with access to a single platform, rather than realizing true interoperability across different systems.**

Today, many AHMs are making progress by "friendly commandeering" of a single EHR system or other legacy platform and providing access to this system to other providers, for instance, Hennepin Health in Minnesota and the Institute of Family Health in New York. These strategies reflect ongoing challenges with interoperability, patient identification and matching across systems, and lack of standards for relevant data. However, service providers often must use these platforms in addition to their own systems, leading to significant workflow burdens. Stakeholders are eager to transition to interoperable solutions that would allow providers to access relevant information in their native systems.

- 4. Advanced health models will need a data infrastructure that goes beyond EHRs.**

The current transactional EHR is not focused on exchanging information across the continuum to nonmedical providers. AHMs such as Advocate Health System in Illinois, Community Care of North Carolina, and the Alliance of Chicago have all invested in additional data layers beyond the EHR system

to support their work. Information exchange taking place in these systems is less about actual exchange and transfer of record and more about having access to actionable information. Integrating these types of approaches with EHR-based systems will require a broader focus from EHR vendors, which are still tied to medical/episodic based needs.

**5. Mapping patient identities across data sets is very challenging without consistent patient identifiers.**

Reconciling data from many different sources with data warehouses is a labor intensive and manual process, in large part due to challenges in linking patients across data sets. Most panelists described a need for a reliable method of matching patients and alluded to a unique health identifier.

**6. There are many advanced health model use cases that require only limited information about an individual, not the complete record; stakeholders need tools that allow them to filter information so that only actionable information is transmitted, to avoid overwhelming the data recipient and to avoid unnecessary privacy and security risks.**

Panelists emphasized that a key finding in many models has been the effectiveness of a parsimonious set of information targeted to each provider. These participants aren't looking for all data needed at all times, but want to find the right balance and present information that matters in a usable, digestible manner. Indeed, for many service providers, receiving too much information to process is a hindrance and leads to overload when all that was needed was a "tap on the shoulder" to trigger a care coordination event. Better tools are needed to be able to filter this data, such as natural language processing tools. Dallas is using these tools to try to reduce interactions between providers and consumers to "a single page" so that a social service provider can quickly identify the new plan for an individual.

**7. Lack of clarity around privacy and security issues raised by sharing information with non-HIPAA covered community-based organizations impedes data sharing and raises concerns about adequate protection of PHI.**

AHMs are working closely with community and health care system partners to understand and address privacy and security issues in models that bridge gaps between HIPAA covered and non-covered entities. Ensuring that consumer protections are maintained in these models requires workforce education, widespread awareness about permissible activities, and system capabilities supporting robust role based access.

**8. A shared longitudinal care plan is a critical concept for managing an individual's health across a continuum that includes both clinical and nonclinical settings.**

AHMs are taking a varied set of approaches to care plan development. For instance, New York's Institute of Family Health is customizing a care plan module within its EHR system while HCIA grantees at the University of Buffalo are creating care plans in collaboration with community-based entities and providers that can be hosted in a third-party application. Multiple stakeholders (e.g., professional

schools, training programs, professional societies, healthcare organizations, patients and families) must be engaged to develop consensus about what is included in the shared care plan, how to define care plan goals, etc. so that there is consistency across settings. In addition, data governance and identification of a steward who keeps and maintains the information in the system updated is important. Today's care plans are a long way from achieving the vision of a true dynamic shared care plan that is a virtual conversation between clinical and social service providers, and patients and families.

**9. Community service organizations have varying levels of data support with their internal systems.**

Engaging community-based service organizations in AHMs will require addressing the wide variations in the sophistication of internal systems across these partners. Ensuring that these partners have access to effective, low cost software, technical specialists and the training to use these systems is important. Stakeholders can engage these organizations in community-centered design approaches that allow for rapid cycle improvement to ensure solutions are effective across participants.

**10. Lack of standards for human social services impedes their use and integration with clinical systems.**

AHMs are challenged by a lack of uniform data standards to share information across the continuum, e.g. with partners such as agencies providing foster care, schools, shelters, etc. AHMs linking non-clinical systems, such as the San Diego Community Information Exchange (CIE) and the Dallas Community Health Information Exchange Portal, would benefit significantly from more standardization in this space. The absence of incentive mechanisms (e.g. in the Meaningful Use program) and limited market demand likely contributes to a lack of focus among EHR vendors on standardizing these elements.

**11. Integrating social determinants data into existing health information exchange (HIE) organizations with clinical stakeholders presents governance and privacy and security challenges.**

In general, existing HIEs are not focused on the integration of social determinants of health (SDH) and social services data, despite general interest in using HIEs in this capacity. For instance, neither the SASH program linking senior housing in Vermont with expanded services nor the Community Information Exchange (San Diego) are connected to the active HIEs in their regions at this time. In part this may be due to a lack of maturity in the market and ongoing questions about HIE sustainability, but there are also governance challenges in obtaining buy-in from clinical stakeholders to expand the HIE's focus to SDH data, and concerns about sharing protected information with non-clinical service organizations.

**12. Innovative approaches to community resource directories are addressing new ways to meet individual needs.**

Many AHMs are focused on bringing together community resources including both clinical and non-clinical services. These strategies allow communities to use technology to create the Open Table or Yelp for community resources and provide crucial information to consumers (e.g. insurance accepted,

languages available). Alliance of Chicago strengthens awareness about available community resources via the EHR in real-time.

**13. Advanced health models have recognized the importance of caregivers and individuals being able to access, use, and contribute to their health data to actively support and promote individual shared care planning and shared decision making.**

AHMs recognize the importance of capturing health information from the individual and his or her caregiver as part of episodic care and from across non-clinical settings. This includes patient reported outcomes and feedback from a clinical office visit in real time. For instance, the Southcentral Foundation surveys individuals as they leave the clinic to ask them specifically about their encounter visit for that day; they find this strategy is more effective for ensuring informative patient responses.

**14. AHMs are still at an early stage of developing effective patient engagement strategies.**

AHMs recognize the need for greater focus on strategies that can reach the consumer, but few scalable models for robust, bidirectional individual engagement have been identified so far. For instance, Hennepin Health is using their patient portal to provide read access, but individuals are not yet able to contribute information. AHMs are also an important vehicle for advancing patient engagement strategies that are initiated outside the health system.

**15. Global budgeting and tracking total cost of care across settings are major enablers of advanced health models and will further align incentives to encourage investments across settings and stakeholders.**

Methods for tracking total cost of care across settings and for measuring total savings are key components of AHMs. For instance, Dallas hospitals participating in the community information portal are moving to a shared savings arrangement, Hennepin Health focuses on sharing accountability and savings across relevant county agencies, and the Alaska Southcentral Foundation has instituted global budgeting practices. AHMs must capture the cost savings outside of medical care, identify the data required to capture this information as well as the outcome for the patient, and ensure that benefits accrue to those investing in the model.

RECOMMENDATIONS

**1. Promote greater standardization and usability of human services and clinical data across systems utilized by all health and service professionals, caregivers, individuals and their families.**

HHS/ONC should articulate a strategy to enable greater interoperability between human services standards and standards used by clinical systems.

*Considerations for HHS:*

- What are the key use cases for sharing individual data across human services and clinical systems that can help prioritize standards development/alignment activities?

- How should ONC work with other initiatives supporting standards for human services organizations, such as the National Information Exchange Model (NIEM), to advance information exchange?

## **2. Promote greater standardization for social determinants of health data, including data reported by individuals, families and caregivers, and related performance measures.**

Electronic capture of a core set of social determinants information is an important strategy for increasing the availability of structured data on social factors impacting individual health. While better standardization is needed, policymakers should avoid being overly prescriptive to allow space for innovation and should ensure a flexible, innovative, glide path for evolving social determinant related standard development and uses.

### *Considerations for HHS/ONC:*

- How can patient-reported social determinants data be prioritized as part of new data collection standards? How can this information be standardized to support risk assessment tools?
- What is the incremental path forward for HHS/ONC to adopt and integrate measures using SDH data?
- How should HHS and others include social determinants data to improve risk adjustment used to determine payment?

## **3. Accelerate the implementation of dynamic, shared, longitudinal, care planning models that incorporate information from both clinical and non-clinical services and empower individuals to manage and inform their own health and care.**

The need for an IT-enabled dynamic shared care plan is widely appreciated as a fundamental tool for coordinating patient health across a virtual team comprised of disparate service providers. Yet a variety of operational, technical and business considerations will need to be addressed to successfully scale shared care planning approaches. Stakeholders across disciplines will need to work together to develop a shared understanding of professional roles and responsibilities with respect to the shared care plan. In addition, significant work must be done to better understand how to effectively engage individuals and their families, and workable approaches to privacy and security issues and models for role/purpose-based access must be developed. Finally, stakeholders will need to clearly articulate the value proposition for shared care planning approaches.

### *Considerations for HHS/ONC:*

- Can ONC partner with a private Foundation to convene relevant stakeholders in a working Summit on dynamic shared care plans to identify the goals, enumerate the tasks needed to be completed, and develop a strategy for accomplishing the work? Ideally, a public-private consortium would carry out the activities.
- What are the priority domains for care plan information that stakeholders should focus on to gain practical experience with shared care planning?

- What future standards development will be needed to transition from the static care plan documentation (e.g. the document template in CCD Release 2.0) to a dynamic shared care plan that supports more robust care coordination?
- How should existing care plans developed for clinical settings evolve to capture and display social factors in standardized ways?

**4. Explore better individual matching strategies to facilitate aggregation of data across clinical and non-clinical settings and other high-priority use cases.**

Bringing together information from both clinical and non-clinical settings to create a holistic view of an individual is contingent on the ability to easily match individuals across settings. HHS should continue to evaluate strategies to improve matching rates through improving matching algorithms and consistent data collection of elements for matching. In addition, the private sector may wish to pursue further activities around the development of a voluntary universal health identifier to facilitate record matching.

*Considerations for HHS/ONC:*

- What matching strategies are most effective for high-need transient populations, e.g. those that do not have a regular phone number or address?
- How can we begin to standardize high priority data elements (e.g. birthdate, phone number, etc.) that can improve matching across clinical and human services data?

**5. Provide clarifying guidance and disseminate best practices related to sharing individual data among HIPAA covered entities and other community organizations.**

Advanced health models that seek to bring together new sources of data will need to effectively manage a variety of privacy and security issues to ensure adherence to current law and robust protection for patient information. These considerations relate to HIPAA statutes governing health information, as well as interactions between HIPAA and other federal and state privacy laws governing other settings, such as schools.

*Considerations for HHS/ONC:*

- HHS should clarify, through guidance and FAQs, how existing statutes and regulations govern information-sharing activities, protect the confidentiality of health information exchanged among HIPAA-covered entities and community service organizations, and what the role of the patient is in directing information to be exchanged.
- What does HHS need to do to ensure widespread clarity about patient information protections in advanced health models?
- What are best practices for community based organizations acting as business associates of covered entities under HIPAA in support of advanced health models?
- What are best practices for community based organizations to obtain patient-directed authorizations so that the organization can receive HIPAA regulated health information about the individual?



- What are the best practices for ensuring an individual's access to and use of protected health information under HIPAA?

**6. HHS should support additional development and promote utilization of population based outcome measures that can measure health across an accountable community.**

There are few measures today that reward communities for doing population health best practices and incentivize regional and community entities to perform to the best of their ability. Such measures will be crucial for assessing AHM performance where a wide range of entities share accountability for community outcomes.

*Considerations for HHS/ONC:*

- How do we define new measures that effectively assess performance on quality and cost at a broader population level?
- What high-priority population-based outcomes should HHS clarify or endorse to drive measure development activities?
- How can HHS lead and encourage data sharing among agencies and contribute to enabling data availability for localized uses?