April 3, 2015

Karen B. DeSalvo, MD
National Coordinator for Health Information Technology
U.S. Department of Health and Human Services
200 Independence Ave SW
Washington, DC 20201

Re: Comments on Draft Interoperability Roadmap

Dear Dr. DeSalvo:

The Advisory Board Company (ABC) applauds The Office of the National Coordinator for Health Information Technology (ONC) for its proposal to further meaningful adoption of interoperable health IT in "Connecting Health and Care for the Nation: A Shared Nationwide Interoperability Roadmap." We strongly believe that expanding the accessibility of data and aligning market incentives to drive its optimal use will result in care improvements that benefit patients and improve the overall sustainability of our health care system. The proposed Roadmap represents a significant step in moving interoperability forward and would contribute to essential advances in the nation's health IT infrastructure. We appreciate the opportunity to comment on the draft and offer additional information as ONC finalizes the roadmap.

ABC is a global research, technology, and consulting firm, with expertise in developing and implementing highly effective health information technology (IT) tools and data analytics solutions. We work with more than 3,800 hospitals and health systems, and our technologies support health care providers in analyzing clinical, administrative, and financial data to improve quality and efficiency at the individual provider, health system, and population levels. Data covering over half of U.S. inpatient admissions flow through our products. Our Crimson® technology platform includes software tools that, among other things, help providers assess physician quality; identify potential gaps in patient care; stratify patients according to clinical risk; engage care team members in care management; and improve physician practice management. Based on our extensive experience developing health IT solutions that help providers elevate the value of care they provide, our comments focus on the importance of interoperability of IT systems to improving quality and efficiency of care.

I.   The Roadmap moves the nation's health IT infrastructure in the right direction

Interoperability of information systems is critical to fostering innovation in care delivery and population health. Health care needs more insights that can change behavior, and those insights need to be able to roll out across variable systems and geographies. In clinical settings, the utility of available data is only as good as a clinician's ability to access information in the natural flow of his or her work. Likewise, innovation in care delivery is best supported at large

scale when actionable insights are being generated and shared by diverse organizations or individuals. Today, numerous barriers prevent such wide-scale innovation, despite the exponential increase in electronically available information. It is critically important that both the public and private sector work together to address these challenges in an expedient fashion.

We believe that, on balance, the proposed Roadmap outlines activities that could mitigate many of today's challenges, lead to gains in interoperability and represent a significant step forward for the nation's health IT infrastructure. ONC correctly proposes a multi-pronged approach to addressing barriers to interoperability. Improved technical standards must be coupled with realigned business incentives, and patients, providers, health IT vendors, health care purchasers, and regulators must all be engaged in driving interoperability. Moreover, we believe that technical support to facilitate improvements could be paired with penalties for those who disrupt the constructive and appropriate flow of information. Ultimately, this type of broad-based approach to interoperability presents the best opportunity to generate enough momentum to rapidly drive the technology advancements needed to keep pace with the health system transformation underway.

II.   The Roadmap's vision for interoperability should span all health IT and not be limited to focus on EHRs

We are encouraged by the substantial increase in the adoption of electronic health records (EHRs) in recent years. More data than ever is now available in electronic format, and the volume is growing exponentially. However, we have not seen as rapid an increase in the adoption of the tools that drive utility of that information. It is important to recognize that EHRs' ability to facilitate the use of data is necessary but not sufficient—the core competency of an EHR is to capture clinical information about a patient during an episode of care, such as documenting the episode and enabling electronic ordering of medications and tests. Equally important, however, are the analytics and applications that derive actionable insights from the information contained within an EHR, and interoperability between EHRs and these additional tools is essential to modifying behavior and optimizing workflow. In addition, the health IT architecture is evolving and, as the April 2014 JASON Report observes, "Today's EHR systems are already legacy systems."[1] Thus, our interoperability framework needs to be dynamic with regard to technology's forms to offer long term value.

Developing innovative solutions that go beyond today's EHRs will dramatically improve providers' success under population health models and patients' engagement in their health. Therefore, it is essential that the Roadmap address not only interoperability of EHR technologies, but also interoperability of third-party applications, such as data analytics tools, mobile applications and patient engagement platforms. The JASON report refers to these as "UI apps" and "middleware apps." Creating usable information should be thought of as distinct

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[1] JASON, "A Robust Health Data Infrastructure," published by AHRQ, April 2014, page 29.

from implementing and using the EHR, and the development of new applications should not be limited to EHR vendors. Elevating the Roadmap's vision to a holistic view of present and future health IT will spur more rapid innovation, resulting in a more effective, modular infrastructure.

To that end, we strongly believe that an interoperability governance body should prioritize use cases that reflect this broader vision of health IT, focusing on function more than form and working toward advanced capabilities. For example, Roadmap section D4 ("Interoperability of processes and workflows") proposes developing interoperability for specific workflows. In addition to the EHR functionalities represented in these goals, ONC should consider explicit inclusion of more advanced functionalities that involve third-party applications and analytics. Care coordination and management, patient engagement and stratification of risk are all essential functions that will benefit from the interoperable exchange of data with applications and analytics outside of an EHR.

Additionally, for data to provide value, it must be available to patients and providers in convenient, user-friendly formats. For providers, this means that health IT is able to deliver insights in a seamless way within workflow at the point of care. This requires EHRs to allow other applications to feed insights into the main user interface in real-time on a transaction basis, recognizing the need for appropriate privacy and intellectual property protections. ONC should consider making explicit in the Roadmap the need for use cases, standards, and APIs to be designed in ways that ensure information is delivered in a timely manner that maximizes its value to providers and patients.

III. The Roadmap should drive interoperability that is reasonable from technical, financial, and competitive standpoints

In the Roadmap, ONC states that, "[n]o policy, business, operational, or technical barriers that are not required by law should be built to prevent information from appropriately flowing across geographic, health IT developer and organizational boundaries in support of patient care." We fully support this objective to move toward barrier-free interoperability. The Roadmap, through its multi-pronged approach, would address many of the barriers to achieving interoperability and sharing data. Realigned incentives, increased standardization of data and semantics, published APIs and other actions in the Roadmap all help erode these barriers. In addition, proposed activities like the certification of the interoperability of health IT and transparency around data sharing fees will lower providers' costs of sharing data.

Despite these activities, more may need to be done to ensure that interoperability is both technically and financially within reach, including penalizing "bad actors" who create competitive barriers to data sharing. To that end, we support the Roadmap's acknowledgement that the proposed governance body will need to establish robust policies for identifying and addressing behavior that intentionally restricts interoperability.

IV. **The Roadmap's governance framework should ensure strong federal leadership and robust private sector participation**

We commend ONC for recognizing the critical role of private sector engagement in achieving interoperability. Building an interoperable health IT infrastructure depends upon input and support from numerous private sector stakeholders. The Roadmap provides an opportunity to establish a governance mechanism that builds on ONC's significant and commendable efforts to engage the private sector and gathers insight from a broad range of stakeholders. We encourage the agency to ensure that any new governance structure continues to provide broad opportunities for input.

While the Roadmap outlines a limited description of a proposed governance framework, ONC articulates a preferred model with "industry-led governance." While we agree that interoperability must ultimately be driven by market-based incentives, we also believe that it is important for the public sector to proactively participate in the framing and support of at least the initial phase of the governance model. Relying too heavily on the alignment of private sector entities-—including many stakeholders with varied and sometimes competing interests—may slow the pace of progress and result in unclear authority. If we are to realize rapid increases in interoperability at this stage, the public sector must also be prepared to provide substantial leadership and accountability. The public sector has unique abilities to convene stakeholders from across the industry, to build consensus for plans to move forward, to arbitrate conflicts and to enforce participation and compliance where necessary. Achieving a practical balance between public and private sector leadership will be key to success of any governance body, especially given the broad authority and jurisdiction ONC envisions for that body in the proposed framework. Therefore, we recommend that ONC consider further opportunities to drive an early governance infrastructure while ensuring significant opportunity for private sector leadership and participation.

V. **The Roadmap correctly emphasizes that re-aligning payment incentives will drive market demand for interoperability**

Given the current barriers to interoperability, existing market incentives may not be adequately reward vendors and providers for using and sharing health care data in ways that would accelerate IT innovation. Under traditional fee-for-service payment models, providers' primary focus is on quality and cost of care within their own organization during an isolated episode. While providers would welcome access to more clinical data about their patients, movement towards value-based payment models will offer greater rewards to justify investments in acquiring data from external sources or sharing information about the episode with other provider organizations. Accelerating the pace of adoption of payment models in which providers assume financial risk for care beyond an individual service will increase providers' incentive to access and share data, and importantly, demand that IT vendors offer products

that support that objective. In addition to accountability and enforcement, provider-driven market demands will serve as a key driver for enhanced interoperability and continued innovation.

For the new incentives to be significant enough to change provider and vendor behavior, value-based payment models that include a degree of performance risk must be widely utilized by both public and commercial payers. HHS' recently announced value-based payment goals coupled with the Health Care Payment Learning and Action Network further encourages providers to invest in additional data and analytics capabilities. However, adoption of value-based models in Medicare alone may not be sufficient. The Roadmap acknowledges the federal government's multiple roles as a purchaser of health care services. To catalyze market demand for interoperability, ONC may consider a more explicit call for the federal government to adopt alternative payment models across its many programs, including traditional Medicare, Medicare Advantage, Medicaid, the Federal Employee Health Benefits program, the Department of Defense, and the Department of Veterans Affairs. The increasing prevalence of such payment incentives emphasizes the value of information technology, and providers in turn will demand greater interoperability as the primary purchaser of such technology.

> **VI.   The Roadmap's plan to further standardize data and semantics will facilitate interoperability**

We support the Roadmap's efforts to improve standardization of data and semantics. Developing a common vocabulary for a core data set will ensure that health IT tools can share data at minimal cost and will enable analyses of aggregate data to uncover new opportunities to improve care for populations. Importantly, standardization of data and semantics should be aligned with specific use cases to generate meaningful impact. In defining and refining standards for specific use cases, the governance body should ensure that standards generate output that is both relevant to the use case and easily applied by the end user. For example, the current format of consolidated clinical documents (CCDs) follows a "one-size-fits-all" approach. Looking at individual use cases, the governance body could consider defining CCD requirements specific to each use case that would enhance the value of the included information— such as designing CCDs for use at the point of a patient's hospital discharge or for patient referrals to a new physician.

> **VII.   The Roadmap should encourage APIs capable of pulling and pushing data within workflow**

Development of publicly available APIs is critical to establishing a modular health IT infrastructure that fosters and adapts to innovative solutions. The availability of APIs will spur a dramatic increase in the number and type of tools available to patients and providers. ONC's inclusion of API goals in both the Roadmap and the EHR Incentive Program Stage 3 Proposed Rule provides a meaningful start to increasing the availability of APIs. In both cases, ONC

should ensure that the necessary components to operationalize APIs in a meaningful way (e.g., security requirements, data definitions, licensing requirements etc.) are well- defined, helping minimize barriers to use. In addition to encouraging APIs that enable pulling data from other health IT tools, the governance body should also drive development of APIs that push data and insights (e.g., alerts for clinicians) into providers' workflow. Finally, we support the inclusion of the emerging FHIR standard as part of the Roadmap's "Timeline of Select High-Level Critical Actions for Near-Term Wins." We would encourage the governance body to consider the FHIR standard—which has broad industry support—as a priority standard for API development.

VIII.   The Roadmap's use case-based approach will help ensure requirements yield value

We also support the Roadmap's proposal to prioritize new technical standards, APIs, and implementation specifications based on specific use cases that would benefit from interoperability. This approach will ensure that new requirements focus efforts on improving processes and care for the broadest number of patients and in the most impactful ways. Within the list of use cases compiled by ONC in Appendix H of the Roadmap, the following uses merit the most immediate attention for efforts to drive interoperability because of their potential for rapidly driving the migration to population health:

1. The status of transitions of care should be available to sending and receiving providers to enable effective transitions and closure of all referral loops.
2. Population health measurement is supported at the community level and includes data from all relevant sources on each patient in the population and is accessible to providers and other stakeholder focused on improving health.
3. Providers should be alerted or have access to notifications that their attributed patients have had an ER visit, or an admission to or discharge from a hospital.

IX.   The proposed Roadmap represents significant progress but additional detail and an accelerated timeframe may be benficial

We appreciate the opportunity to comment on ONC's Interoperability Roadmap, which represents a significant and essential step forward for ensuring the interoperability of data necessary to support and drive innovation in health IT. The health care sector's success in achieving higher-quality, value-driven care depends upon the appropriate availability of health data at a reasonable acquisition cost. Implementation of the plans outlined in the Roadmap has the potential to contribute significantly to the well-being of individuals and populations as well as stimulate additional innovation and economic growth. However, we in order to optimize the effectiveness of the proposed framework, we encourage ONC to consider providing additional detail in the areas discussed above and to further develop the plans for a proposed governance sector. Additionally, while we appreciate the need to provide a manageable and appropriate pace of change, we also encourage ONC to aggressively pursue implementation of the Roadmap's provisions to address barriers that are impacting the

development and use of information technology in the market today. We would welcome further opportunities for dialogue around these issues and look forward to serving as a resource in the future.

Sincerely,

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Vice President, Health Policy