

**REPORT FROM THE
PUBLIC PROGRAMS IMPLEMENTATION TASKFORCE
TO THE STATE ALLIANCE FOR E-HEALTH**

December 31, 2008

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LETTER FROM THE PUBLIC PROGRAMS IMPLEMENTATION TASKFORCE

Dear Members of the State Alliance,

The Members of the Public Programs Implementation Taskforce are pleased to submit this summary report of their work to the State Alliance for e-Health. The report describes the accomplishments of the Taskforce to date, and advances recommendations it believes are necessary for states to improve the effectiveness of publicly funded health programs through participation in interoperable, electronic health information exchange initiatives.

The Taskforce worked under the charge provided by the State Alliance for e-Health when assessing the issues and creating the recommendations outlined in this report. The Taskforce opted to discuss strategies to promote health information technology (HIT) adoption and use and strategies to support bi-directional data exchange across health care and public health.

The Taskforce sought the expertise and perspectives of representatives from the federal, state, and private sectors to inform its deliberations and recommendations development. This report outlines findings and recommendations related to the challenges and opportunities for states' publicly funded programs to facilitate electronic health information exchange and to coordinate public and private health information exchange activities.

We present the following report for your consideration and look forward to speaking with you at the August meeting of the State Alliance for e-Health.

Sincerely,

The Members of the Public Programs Implementation Taskforce

I. Introduction

The Public Programs Implementation Taskforce was convened to build upon select recommendations developed by the 2007 Health Information Communication and Data Exchange Taskforce of the State Alliance for e-Health. The Public Programs Implementation Taskforce raised issues and other considerations that the State Alliance for eHealth and states should be mindful of when supporting implementation of the recommendations. The Public Programs Implementation Taskforce was charged specifically to:

“Support the State Alliance in its efforts to examine issues regarding state government roles in the exchange of electronic health information, including options and best practices related to purchasing health care, funding initiatives, regulating industry, and protecting consumer welfare. Develop and advance actionable policy recommendations to the State Alliance to facilitate the secure exchange of electronic health information within and among states. Provide input on implementation mechanisms for state government actions, in collaboration with the private sector, to further the exchange of electronic health information.”

The Taskforce met twice (April and June) in 2008 and presented initial deliberations and recommendations to the State Alliance at its May 12, 2008 meeting. During its April meeting, the Taskforce focused its efforts on creating actionable recommendations for consideration by states on ways to promote standards-based health information technology (HIT) adoption and use. The remainder of the Taskforce’s first meeting was spent discussing and developing recommendations to enable bi-directional electronic data exchange that supports improved quality outcomes for clinical care and public health within and across states. At its second meeting in June the Taskforce had further discussions on bi-directional electronic data exchange as well as flexible financing mechanisms to support electronic HIE.

During its second meeting, the Taskforce agreed that the topic of bi-directional data exchange is an important subset of a broader set of issues regarding the alignment of intra and inter- state government electronic HIE initiatives. This report highlights the recommendations made by the Taskforce on these topics of discussion. The Taskforce developed two recommendations (1.0 and 2.0) that provide a framework for state governments to take a greater role in helping to align electronic health information exchange (HIE) activities both within and between state agencies and with external stakeholders (e.g., providers, consumers, payers, vendors, etc). Taskforce members viewed the alignment of statewide electronic HIE activities as a critical role for state government in order to ensure successful and more robust outcomes from electronic HIE. Furthermore, the Taskforce regarded the alignment of statewide electronic HIE strategies and activities as critical to address and support the other recommendations presented here to guide state governments in their support of standards-based HIT adoption and use and leveraging flexible financing options for HIT and electronic HIE related projects.

A final report that integrates findings and recommendations from the Public Programs Implementation Taskforce, the Privacy and Security Taskforce and other State Alliance research efforts for year 2 will be provided to the State Alliance in the summer of 2009.

Analytical Process and Recommendations Development

The Public Programs Implementation Taskforce was formed to examine three topics specifically highlighted by the 2007 State Alliance Health Information Communication and Data Exchange (HICDE) Taskforce:

- Promote HIT adoption and use;
- Support bi-directional data exchange across health care and public health; and
- Develop flexible financing mechanisms to support electronic HIE.

In response to its charge, the Taskforce explored issues pertaining to publicly funded health programs' participation in electronic HIE through:

- Reviewing the recommendations, findings, and work product of the State Alliance Health Information Communication and Data Exchange Taskforce;^{1,2,3}
- Hearings and testimony received from representatives of state Medicaid agencies, state public health officials, representatives of state-level health information exchange efforts, representatives from the Centers for Medicare and Medicaid Services and the Office of the National Coordinator for Health Information Technology (ONC), and chairs and staff from groups like the American Health Information Community, the Buyers Health Care Action Group, Bridges to Excellence, and the Public Health Informatics Institute; and
- Facilitated discussions drawing on the collective expertise of Taskforce Members.

At its first meeting in April 2008, the Taskforce deliberated on ways to promote HIT adoption and use, building on the HICDE Taskforce recommendation:

“State Medicaid agencies and state employee health plans, in cooperation whenever possible, should implement incentive programs and/or reimbursement policies such as pay for participation, rate adjustment, and quality incentives that will encourage provider adoption and use of health IT systems and participation in electronic health information exchange.”
(Adopted by the State Alliance on February 22, 2008).

The taskforce heard from the state of Georgia about their pay for performance programs, the state of Colorado on establishing their differential reimbursement program, and testimony from Bridges to Excellence. Following these presentations, the Taskforce developed a number of recommendations (discussed later in this report) to further refine and address public program involvement in the adoption and implementation of electronic HIE. To organize its recommendations on HIT adoption and use, the Taskforce grouped them into five categories. The categories are:

- ***Setting Goals that Apply to the State e-Health Environment***
- ***Education of Providers and Consumers on HIT and Electronic HIE***
- ***Encourage Group and Collaborative Purchasing of HIT and Related Services***
- ***Provide Incentives for HIT Adoption***
- ***Require Adoption and Use of HIT***

At its second meeting, the Public Programs Implementation Taskforce focused on bi-directional data exchange building on the HICDE recommendation:

“All electronic health records systems supported by state funding must have public health functionalities to support objectives for bi-directional exchange of data across clinical care and public health. Upon purchasing or upgrading publicly purchased health information systems, states should establish a specific plan for continuing maintenance and staffing.” (Adopted by the State Alliance on February 22, 2008).

The taskforce heard testimony from a number of experts in order to obtain information to refine this recommendation including staff of the Office of the National Coordinator for HIT (ONC), the New York City Department of Health and Mental Hygiene, the Public Health Informatics Institute, and the Michigan Care Improvement Registry. As the Taskforce deliberated on specific aspects of public health bi-directional exchange, the issues and challenges related to the coordination and alignment of HIT and electronic HIE initiatives across all state agencies were discussed in detail.

Although the federal government has been active in providing resources for HIT and electronic HIE efforts in a number of states, the Taskforce reiterated a finding of the previous HICDE Taskforce: that, to date, the Federal Department of Health and Human Services has been very directive on the use of federal grants and contracts for electronic HIE and this has continued to promote siloed projects that are not conducive to collaboration and alignment across public and private HIT and electronic HIE efforts. The Taskforce suggested that increased federal coordination and flexibility in the use of federal dollars for electronic HIE would be helpful to advance HIT and electronic HIE efforts in the future.

The Taskforce agreed that the most effective way to support bi-directional data exchange across health care and public health was to focus on mechanisms to align state government HIT and electronic HIE efforts both internally and externally. As such, the Taskforce developed recommendations 1.0 and 2.0, which will be discussed later in this report. These recommendations built upon the HICDE Taskforce recommendation:

“Governors should designate a single authority for the state to coordinate state government based electronic health information exchange implementation activities and work, in collaboration, with public/private electronic health information exchange efforts.” (Adopted by the State Alliance on October 3, 2007).

The taskforce refined the recommendation to provide an initial framework for state governments as they align the assessment, planning, implementation, and evaluation of their multiple state-agency HIT and electronic HIE initiatives with each other and with other external public / private initiatives underway in their respective states.

Finally, the Taskforce deliberated on flexible financing mechanisms to support electronic HIE and build upon the HICDE Taskforce recommendation adopted in February by the State Alliance for e-Health:

“Governors and state legislatures should align to establish flexible financing mechanisms (e.g. pooling funds across relevant state agencies, bridge funding between federally-funded programs) across public agencies and within state jurisdictional boundaries to develop and support electronic health information exchange and ensure that state data partners (e.g. Medicaid, public health, state employee health plans) can operationally and financially sustain electronic health information exchange for the purposes of it being a necessary public

benefit and utility to improve public health and healthcare value to state residents.” (Adopted by the State Alliance on February 22, 2008).

The Taskforce heard testimony from a number of individuals regarding the financing of electronic HIE, including the CIO of the state of Maine representing the National Association of Chief Information Officers (NASCIO) report on state financing of IT, the states of Rhode Island and New York on the use of bonds to support electronic HIE efforts, the states of Florida and Utah on appropriation strategies and the HIT and electronic HIE initiatives currently underway in those states, and the Minnesota Buyers Healthcare Action Group concerning the Minnesota Smart Buy Alliance. Upon hearing the testimony of these experts and holding deliberations, the taskforce agreed that the financing of electronic HIE is specific to the unique initiatives taking place in each state, and that it was difficult to develop specific recommendations that were applicable to all states. The Taskforce agreed that the recommendations for alignment were an important focus of their efforts and that other projects of the State Alliance and ONC, including the “Examination of the Public Financing, Accountability, and Oversight Models for Sustainable Health Information Exchange,” as well as the American Health Information Management Association’s State-Level HIE “Value and Sustainability Analysis,” would help to further define the range of financing options available and help the State Alliance to work directly with states on the implementation of the recommendations.

The following section discusses the recommendations made by the Public Programs Implementation Taskforce during its two meetings in April and June. The Taskforce presented its findings and recommendations to the State Alliance for eHealth on August 6, 2008. The recommendations were adopted by the State Alliance for eHealth in December 2008.

III. Recommendations

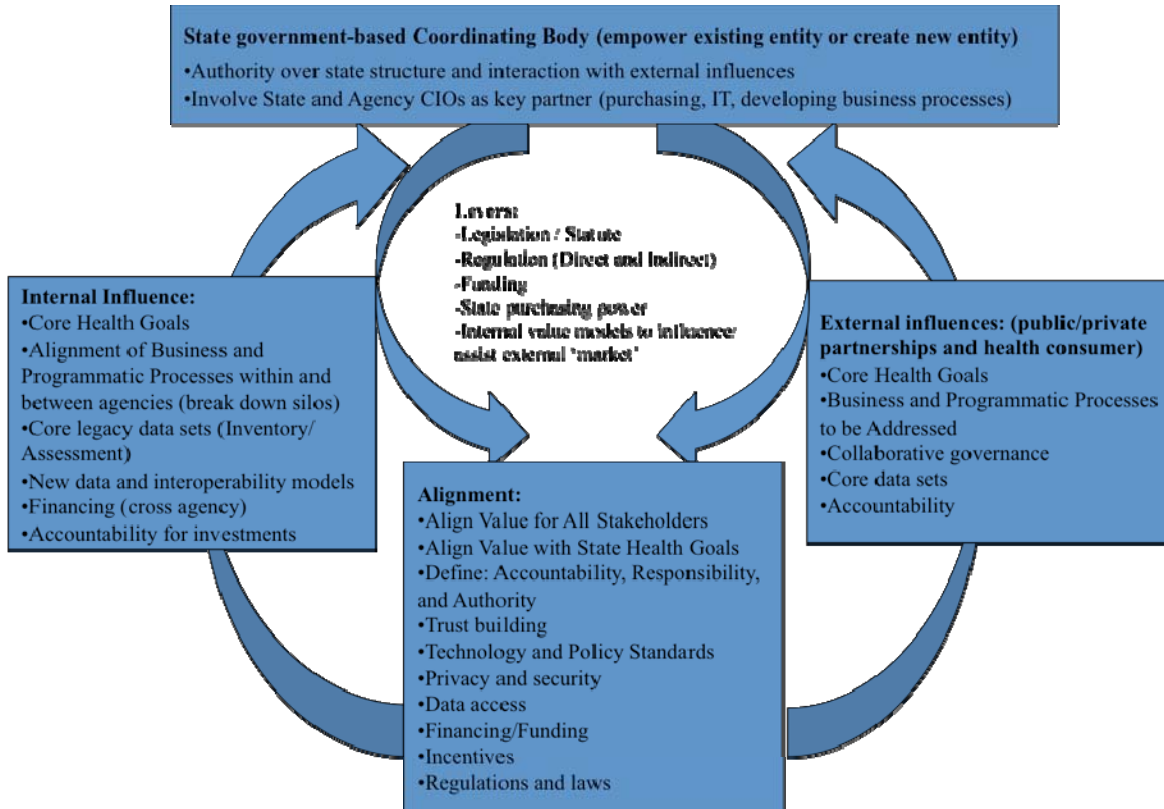
➤ RECOMMENDATIONS TO SUPPORT BI-DIRECTIONAL DATA EXCHANGE ACROSS HEALTH CARE AND PUBLIC HEALTH

Recommendation 1.0: *Governors and State Legislatures should designate an electronic health information exchange (HIE) coordinating body, with centralized authority over governmental agencies, to align both internal governmental agency electronic HIE activities and their intersection with external public private electronic HIE activities.*

- The ‘Coordinating Body’ should have authority over state agencies and structures as well as the financial resources to support its efforts
 - The ‘Coordinating Body’ should involve and align with the State and Agency Chief Information Officers (CIOs) or position equivalent
 - States can empower an existing agency or create a new entity
- The functions of the ‘Coordinating Body’ may include:
 - Provision high-level coordination of electronic HIE efforts;
 - Align internal electronic HIE efforts and their intersection with external electronic HIE efforts;
 - Enable bi-directional, interstate exchange for the purpose of public protection, biosurveillance, and population health;
 - Assess internal and external gaps;
 - Conduct readiness assessments;

- Develop and disseminate strategic plans to align efforts;
- Develop success measures and mechanisms to hold entities accountable; and
- Streamline implementation, evaluation, and continuous improvement strategies.

Figure 1: Recommendation 1.0 - Alignment of Statewide Electronic HIE Initiatives



The Public Programs Implementation Taskforce deliberated on how best to support bi-directional data exchange across health care and public health based upon a previous recommendation made by the Health Information Communication and Data Exchange Taskforce in 2007:

“All electronic health records systems supported by state funding must have public health functionalities to support objectives for bi-directional exchange of data across clinical care and public health. Upon purchasing or upgrading publicly purchased health information systems, states should establish a specific plan for continuing maintenance and staffing.” (Adopted by the State Alliance on February 22, 2008)

Taskforce members noted that public health operates at the national, state, and local levels, and that each of these need to be considered when discussing public health intersections with electronic HIE. In many states public health departments do not have consistent mechanisms to directly share information with the clinical care system and that this presented challenges in developing recommendations relative to bi-directional data exchange. Additional taskforce deliberations outlined the issues contributing to the bifurcation of public health systems and how internal public health data systems are not aligned. Major discussion points included:

- Siloed internal public health data systems;
- Lack of interstate data exchange to improve population health outcomes;
- Identity management challenges;
- Access management challenges: the difficulty of knowing if the right populations are being adequately served by the appropriate public health programs;
- Absence of clinical and public health data linkages: community providers have not traditionally thought of using public health data;
- Funding: both limited state funding and the reliance on federal funding regulations; and,
- Measures of success: e.g., for provider adoption, programmatic outcomes, etc.

Rather than developing specific recommendations to solely address public health, the Taskforce members agreed that any recommendations in this area should be focused more broadly on population health, improving the health status of state residents, and not on the specific data silos within public health and the clinical care delivery system. The critical need for alignment of all electronic HIE efforts both within state agencies and with external stakeholders to effectively achieve those population health improvement goals was highlighted as a focus area. The Public Programs Implementation Taskforce agreed then, to build upon a recommendation the Health Information Communication and Data Exchange Taskforce developed and adopted in 2007 that focused on alignment of electronic HIE initiatives across state agencies and external stakeholders.

“Governors and State Legislatures should designate a single authority for the state to coordinate state-government based electronic HIE activities and work in collaboration with public-private electronic HIE efforts” (Adopted by the State Alliance on October 3, 2007).

The Taskforce suggested that the State Alliance and Governors should adopt policy goals that support health care transformation and improvements in health care quality through the appropriate use of standards-based HIT and electronic HIE. The Taskforce recommended that states empower a state government actor, an individual or agency (new or existing), to align electronic HIE policy, processes, and functions across agencies and with the broader health care goals of the state. This entity, a “state government coordinating body”, would coordinate and collaborate with the state CIO and the respective state agency leadership. It was stressed that when separate agencies, organizations, etc., create separate business processes for electronic HIE, it dilutes the power of information exchange and saddles the flow of information with inefficiencies. Aligning the various actors involved with electronic HIE around a common set of business processes was seen as key to the role of the state coordinating entity.

Given the diversity in how states structure the role of the state CIO, the Taskforce did not feel that it could offer a clear recommendation for how to involve the state CIO other than to say that the electronic HIE coordinating should involve them.

One of the primary tasks for a state government electronic HIE coordinating body to undertake is to perform a state readiness assessment for electronic HIE, reviewing the range of electronic HIE stakeholders and initiatives in the public and private sectors. The readiness assessment would include an inventory of:

- Existing legacy data resources within state agencies
- Data resources in the private sector

- Potential public and private electronic HIE users
- Current HIT and electronic HIE initiatives underway

The inventory of resources, stakeholders, and initiatives would serve as the basis from which the coordinating body would undertake a gap analysis to identify needed strategies and policies to align existing and new electronic HIE efforts with the health care goals outlined by state leadership and the existing business processes of each stakeholder. A critical aspect of the strategy setting and policy development process will be developing the value proposition of coordinated electronic HIE between the state government agencies and external stakeholders. A well done assessment would give governors a clear starting point to link the electronic HIE coordinating body with internal public sector players as well as external health care stakeholders. Following the assessment, the state may then set about developing specific coordinated health care improvement initiatives involving the use of HIT and electronic HIE and establishing outcome measures and milestones of success, particularly in the areas of health care quality, affordability, and access.

The state electronic HIE coordinating body will need to clearly articulate its state government authority, responsibilities and accountability mechanisms and align these with the private and public/private sector stakeholders if electronic HIE is to reach its maximum potential within and across states. The Taskforce recognized that although the electronic HIE coordinating body would have authority over state government agencies, that it must work in collaboration with the private sector and the electronic HIE governance established in existing public and private electronic HIE initiatives. Trust is inherently important for any electronic HIE initiatives. Therefore, building trust among all involved parties, internally and externally is critical to adoption and continued use of HIT. Stakeholders need to trust that electronic HIE ensures privacy and security, appropriate use of the information contained within the exchange, and that all stakeholders are acting in a transparent manner.

While the Taskforce recommended that all states have an electronic HIE coordinating body, there was no consensus on how to fund such an entity, given the degree of variability between the 50 states and 6 territories. The Taskforce stressed that in order to establish an electronic HIE coordinating body, collaborative, bi-partisan leadership of both the governor and the legislature is needed.

Recommendation 2.0: *Governors should direct their state coordinating (as defined in Recommendation 1.0) bodies to enable bi-directional, interstate exchange for the purpose of public protection, biosurveillance, and population health.*

The value of exchanging data across states was another challenge raised by the Taskforce. As states perform internal electronic HIE readiness assessments, how can they likewise account for the needs of making data interoperable across state lines? What are the priority data sets that should be made interoperable first between states? Biosurveillance information, emergency management, and immunization records were all cited as critical data to be exchanged, and in some cases necessary information for neighboring states. Priority should be given to these data sets so that state governing bodies and applicable agencies are able to stimulate the necessary dialogue and outreach with respect to interstate electronic HIE for the purposes of public protection, biosurveillance, and population health.

The Taskforce discussed the network benefits of widespread adoption of standards-based HIT and the exchange of the information within these systems for population research, program evaluation, and policy development purposes to improve health outcomes. To begin to drive electronic HIE coordination between states the Taskforce drafted Recommendation 2.0, and highlighted that public welfare would benefit particularly in the areas of public protection, biosurveillance, and population health through the support of interstate bi-directional electronic HIE. This recommendation represents one of the priority focal areas for states' electronic HIE coordinating bodies as described in Recommendation 1.0.

➤ **RECOMMENDATIONS TO PROMOTE HEALTH INFORMATION TECHNOLOGY ADOPTION AND USE**

Category 1: Setting Goals that Apply to the State e-Health Environment

Recommendation 3.0: *States should establish quality, prevention and safety goals from which to base the development of their HIT/HIE infrastructure planning. States should then establish HIT infrastructure objectives to support broad quality, prevention, and safety goals.*

According to the Commonwealth Fund Commission on a High Performance Health System, a high performance health system is designed to achieve four core goals: 1) high quality, safe care; 2) access to care for all people; 3) efficient, high value care; and 4) system capacity to improve.⁴ The Taskforce wanted to emphasize that investments in HIT and electronic HIE should not be made simply because it is the newest technology. Investing in these new technologies should be predicated upon well-designed quality, prevention, and safety goals, which should drive the choice of technology.

States should work with their provider communities to help establish, clarify, and clearly articulate the goals for HIT and electronic HIE and help design and align a set of strategies that will help to achieve quality, prevention and safety goals through the use of these technologies.

Recommendation 4.0: *To establish implementation priorities and inform strategic planning efforts, states should regularly conduct a statewide assessment to determine the rate of HIT system adoption by providers as well as the infrastructure needed to support electronic HIE.*

- *States should assess how many of the adopted HIT systems can support interoperability and determine if any are currently interoperable. Specific areas that states should assess include:*
 - *HIT systems, such as:*
 - *Electronic health records*
 - *Electronic medical records, including claims-based EMRs*
 - *Electronic prescribing*
 - *Computerized provider order entry*
 - *Telemedicine systems (e.g., remote monitoring systems)*
 - *Available infrastructure (e.g., broadband, Wi-Fi, cellular) and needed infrastructure*
- *States should use standardized definitions (e.g., NAHIT-developed definitions) where possible when creating the assessment tool.*

By “statewide assessment,” the taskforce suggested the deployment of surveys or other tools used to assess the level and rate of standards-based HIT adoption. The Taskforce suggested that

the assessment included the types of standards-based HIT tools, the components of the tools, the content and messaging standards in use and other relevant information that would inform the the state's policy development processes in supporting both standards-based HIT and electronic HIE adoption. The Taskforce suggested that the assessment take place regularly, at least biennially, to appropriately incorporate changes in the landscape over time. The Taskforce also suggested that the development of a uniform assessment tool that could be used by all states, may be a potential role for the federal government to promote standardized tools of measurement.

The Taskforce determined that a state HIT and electronic HIE assessment would be best undertaken by the state HIE coordinating body outlined in Recommendation 1.0. No matter who at the state level was conducting the assessment, the Taskforce stressed that the assessment be made public and shared with other states in order to develop coordinated interstate electronic HIE initiatives and policies. As part of their state HIE assessments, states should also consider the infrastructure related to high-speed internet access and use by relevant stakeholders. Although many urban areas have high-speed internet access through broadband, fiber-optic networks and wireless, the Taskforce agreed that many rural areas of the U.S. are still facing challenges with gaining this type of access.

The Federal Communications Commission (FCC) Rural Health Care Pilot Program, recently made \$417 million was made available to develop the infrastructure of 69 statewide or regional broadband networks to support rural health care. This was considered by the Taskforce to be an important, initial project to drive rural internet access for health care purposes. In this project, the FCC will cover up to 85 percent of the costs of the design, engineering and construction of broadband networks dedicated to health care, connecting public and private non-profit health care providers in rural and urban locations in 42 states and three U.S. territories.⁵

Category 2: Education of Providers and Consumers on HIT and Electronic HIE

Recommendation 5.0: *States should direct their publicly funded health programs to host, or host in conjunction with public/private partnerships, HIT forums and ensure that the vendor exhibitors offer a forum for current provider customers who can share the realities and challenges associated with implementation.*

Recommendation 6.0: *States should consider establishing a provider-mentor program or partner with similar efforts (e.g., DOQ-IT) to assist providers with their implementation and practice re-engineering efforts.*

The Taskforce recognized that HIT implementation is challenging for providers. State agencies and programs could serve a greater role in assisting providers in making more informed decisions on the complex process of working with vendors, on a full range of implementation. Issues include choice of a vendor, implementation of the product, and evaluation of the use of the product (Recommendation 5.0). The Taskforce discussed potential mechanisms for bringing together providers and vendors in forums, conferences, HIT summits, webinars, etc., where the challenges and realities of HIT implementations can be discussed openly. The Agency for Healthcare Research and Quality (AHRQ) National Resource Center for Health IT's (NRC) website and the AHRQ NRC partnership with the Health Resources and Services Administration (HRSA) in producing a "toolbox" for HIT implementation were highlighted as helpful starting points.^{6,7} State agencies may collaborate with public/private organizations (e.g. Medical Associations, RHIOs, Hospital Associations and others) to carry out these initiatives.

The Taskforce also discussed that some providers may need specific assistance at their practice sites, and in Recommendation 6.0 suggested that states establish a provider-mentor program to educate providers specifically in the workflow redesign and reengineering efforts required with an EHR implementation. The support services of the Medicare Doctor's Office Quality Information Technology (DOQ-IT) project (a three-year, national quality improvement initiative to assist physicians who wish to purchase, implement and fully utilize EHRs in their practices) is an example of a successful mentoring program and one with which state agencies may wish to model or partner.

Recommendation 7.0: *In partnership with providers and other relevant stakeholders, states should develop standard operating procedures for HIT implementation in order to support provider practice transformation efforts.*

Building on the technical assistance recommendations 5.0 and 6.0, the Taskforce suggested that states consider partnering with providers and other relevant stakeholders in implementing standard operating procedures for HIT implementations. The state can play a helpful role in sharing the experiences of providers with which they have contact and in partnership develop standard operating procedures for the implementation and roll out of HIT at the practice level.

Recommendation 8.0: *States should require provider continuing education on HIT, as allowed by law, as part of provider licensure renewal requirements.*

Several Taskforce conversations revolved around health care licensing and how licensing requirements might best be used by states as an indirect incentive for standards-based HIT adoption. The Taskforce had multiple viewpoints on using health care licensing to drive adoption, and ultimately settled on Recommendation 8.0. Some members felt strongly that state boards should require physicians to have some level of investment in standards-based HIT systems, yet this view was not universally held. The Taskforce was able to come to consensus around requiring provider education on HIT and electronic HIE as part of their continuing education requirements, if state law will allow this approach. The Taskforce recommended that HIT education credits should be a part of the licensure renewal process in every state.

Recommendation 9.0: *States should direct their publicly funded health programs to make information about which providers are using standards-based, interoperable EHRs available to the public.*

Building upon recommendations 1.0 and 4.0 the Taskforce agreed that as states and their publicly funded programs conduct assessments of provider HIT adoption, they make this information transparent and accessible to consumers. Many states post health care cost and quality information on the internet. As part of this process, the Taskforce recommended that state agencies and programs publish a list of which providers are using standards-based interoperable EHRs and other HIT systems and provide consumer education on how to use this information. If consumers choose to use this information they may be better informed on the capabilities of their personal providers as well as the aggregate level of HIT adoption in their state. This may then serve to empower consumers to make better choices when selecting providers and also bring information on and context to the broader HIT and electronic HIE efforts and initiatives taking place in their respective states.

Category 3: Encourage Group and Collaborative Purchasing of HIT and Related Services

Recommendation 10.0: *States should consider negotiating discount rates or collaborative purchasing of consultant services to provide workflow re-design support for provider practices.*

Building upon Recommendation 6.0 relative to provider mentoring, the Taskforce discussed and agreed to suggest that states consider using their group purchasing power to negotiate discounts on standards-based HIT systems or collaborative consultant services to provide workflow redesign reengineering assistance to providers in need. The issue of workflow redesign is a particularly challenging issue in small practices where physicians have little IT support. The Taskforce therefore recommended that public programs negotiate discount rates on standards-based HIT implementation consultations as an incentive for provider adoption of HIT.

Recommendation 11.0: *In an effort to reduce overall purchase costs and promote the adoption of standards-based, interoperable HIT systems, states should encourage provider group purchasing of these HIT systems.*

- *States could, for example, convene providers in counties or regions of the state to encourage joint purchasing efforts and facilitate local and regional HIT system implementation initiatives.*
- *In addition, states could make available a purchasing guide that lists FAQs to assist providers in the purchase process.*

The Taskforce recommended that states work together with their provider communities to harness provider purchasing power where applicable. This could take the form of pooled purchasing, as is the case with the Minnesota Smart Buy Alliance and the State Employee Health Plan; or in another example, the state of Louisiana allowed rural hospitals to work together to negotiate with vendors for the implementation of standards-based HIT systems within their hospitals. Public programs could convene providers and communities to develop community-based or regional purchasing strategies through focused initiatives or broader educational programs as outlined in recommendations 5.0 and 6.0. An area where the Taskforce suggested a specific output for state programs of the e-Health coordinating body was in the development of 'Frequently Asked Questions' (FAQs) guidelines to assist providers and other stakeholders in these efforts.

Recommendation 12.0: *To help lower the start-up costs of HIT system purchases, states should consider negotiating a group discount with vendors for providers purchasing standards-based, interoperable EHRs, particularly Web-based systems. Web-based EHR systems avoid high purchase and implementation costs as well as costly maintenance and updating needs.*

Public programs have significant purchasing power to support integrated HIT efforts. The Taskforce agreed that Web-based HIT systems, such as those provided by Application Services Providers (ASP) are among the most cost-effective EMR/EHR systems. With such systems the provider does not buy the software but licenses the use of the software accessed remotely through a secure web-portal on the vendor's servers. Data is hosted off-site, which may be a concern for some providers, though this model is similar to software used in remote banking and other processes. This model reduces the cost of EMR/EHR for providers and addresses some of the maintenance challenges providers have faced when purchasing and upgrading proprietary HIT systems. There are few definitive studies of the costs of installing and maintaining HIT

systems. Compared to initial installation ranging from \$25-\$45,000 per physician in a practice, with maintenance and licensing fees estimated to range from \$3-\$9,000 per physician per year,⁸ studies of up-front costs of web-based systems range from \$1,500 to \$8,000 and a monthly hosting charge of \$400 to \$1,000.⁹

Category 4: Provide Incentives for HIT Adoption

Recommendation 13.0: *States should consider providing differential licensure fees, as allowed by law, as an incentive to promote provider adoption and use of interoperable, standards-based HIT systems.*

The Taskforce discussed using state licensure provisions to support standards-based HIT adoption by state licensed providers. As in Recommendation 8.0 states could require the use of HIT as a license renewal requirement. State licensing boards should also consider offering discounts on the cost of license renewal to providers who use interoperable, standards-based HIT systems. It was recognized by the Taskforce that this alone would not drive providers to adopt HIT systems but it may represent one of many incentives that are weighted by providers as they consider the purchase and implementation of interoperable systems.

Recommendation 14.0: *When developing reimbursement-based incentive programs to promote HIT adoption and use, states should consider implementing a step-wise or phased-in approach.*

- *States should consider incentives tied to building infrastructure and to quality-based process improvement, prevention, and achieving positive health care outcomes. States may consider the following strategies:*
 - *Provide financial incentives directly tied to adoption of HIT systems. Implement a phased-in incentive program, starting with pay for use and over time develop pay for performance incentives for reporting of quality metrics to state programs, prevention for at-risk patients, quality-based process (e.g., glucose level controlled for diabetics), and eventually pay for outcomes (e.g., reduced avoidable adverse events). States may consider increasing per member per month provider fees or offering enhanced reimbursement rates.*
 - *Provide financial incentives for health system transformation with the purpose of indirectly encouraging adoption of HIT systems. For example, states may consider tying payment/reimbursement to medical home certification and/or providers conducting care coordination, e-consults, and/or secure messaging.*

Following the direction of the Health Information Communication and Data Exchange Taskforce Recommendation to support HIT incentive programs, the Taskforce discussed a phased-in approach to incentivize provider adoption of HIT systems. It was widely recognized that as HIT systems are implemented and used, different incentive structures can be developed to support provider use of HIT systems to address adoption, performance, and quality outcomes. Building upon the recommendations of the eHealth Initiative's report "Parallel Pathways for Quality Healthcare: A Framework for Aligning Incentives with Quality and Health Information Technology," and the recommendations of their work group for financing and incentives from May of 2005,¹⁰ the Public Programs Implementation Taskforce recommended that as states consider developing incentive programs, they consider the evolution of HIT in practice. There was consensus that providers need incentives to support adoption, but in addition the Taskforce considered it essential that states and their public programs think more broadly and use the

incentives development process to drive provider performance and ultimately, once the HIT systems are implemented and in use, quality outcomes.

Another means to support HIT adoption is to tie incentive structures for broader health care reform efforts, such as the Patient Centered Medical Home, to measures that can only be calculated by providers using standards-based interoperable HIT systems. In this manner states can align their health care transformation efforts and prevent siloed projects and initiatives.

Recommendation 15.0: *States that are participating in the CMS Medicare EHR demonstration should consider simultaneously implementing a similar incentive structure and approach for the state publicly funded health programs and work with private plans and employers to increase the incentive offered and maximize the impact of the demonstration to achieving widespread adoption of EHRs statewide.*

Recommendation 16.0: *As states undergo a process of developing incentive structures for state publicly funded health programs, they should (at a minimum) consider using existing measures and incentive structures already implemented by other efforts to maximize the impact of the incentive program. States should, where possible, collaborate with private sector health plans and employers to standardize metrics and incentive structures across all payers in the state in order to send a strong market signal about statewide priorities as well as reduce the administrative burden to the participating providers.*

Taskforce members highlighted the potential opportunities of the CMS Medicare EHR Demonstration project begun in 2008. Through this project, CMS will provide enhanced payments to participating Medicare practices based on their use of certified EHR functionalities. Upcoming phases will be based on performance on clinical quality measures, with an added bonus each year based on the degree to which the practice improved its operations through the use of EHR.¹¹ Through this initiative CMS may provide up to \$50,000 for a practice that applies to convert to EMRs and that participates in this initiative. States can build upon demonstrations being developed by Medicare for the broader set of practices that provide healthcare within the state.

In 2008 the state of Louisiana allocated \$3.5 million in its annual budget to design a program to align with this initiative. The state was chosen as one of the Medicare pilot states to participate in the EHR Demonstration. It will allocate the funding through the Medicaid program where it will provide enhanced reimbursement for participating Medicaid providers in addition to the Medicare providers participating in the demonstration. Taskforce members cited this approach as an important means to leverage and align State Medicaid dollars with Medicare initiatives (Recommendation 15.0).

Where possible, states should simultaneously implement and align incentive structures with not only the federal government but also with private payers. Although few private payers have demonstrated public support for HIT and electronic HIE efforts to date, the alignment of state government and private sector payers was viewed as essential to wide-spread adoption and use of standards-based HIT systems such as EHRs. The Taskforce therefore recommended the alignment of incentives and performance measures to incentivize adoption (Recommendation 16.0).

Recommendation 17.0: *States should consider leveraging cross-agency resources to develop innovative incentives to stimulate consumer demand for higher quality care that is achievable through the use of standards-based HIT systems. States could, for example, provide incentives to their state-covered populations by subsidizing medication costs, expanding benefits (such as one allowed for Medicaid through the Deficit Reduction Act of 2005), or contributing to state employees' health savings accounts (HSAs).*

The Taskforce, in reviewing the range of incentive options available, suggested that in addition to provider incentives, states also use incentives to drive consumer demand for standards-based HIT and electronic HIE adoption and use. State programs could provide consumers, choosing providers who use standards-based interoperable HIT systems, with specific incentives such as subsidized medication co-pays, expanded covered services as allowed through Medicaid and the flexibility allowed by the Deficit Reduction Act of 2005, and contributions to HSAs. These incentives would further drive consumer awareness of the importance of HIT and electronic HIE and empower consumers to influence provider adoption.

Recommendation 18.0: *As providers enroll in Medicaid, states should consider asking providers to indicate whether or not they utilize interoperable, standards-based EHRs. If providers have such systems, state Medicaid could lessen the controls and reduce administrative requirements for provider participation in the state Medicaid program. Medicaid could consider offering longer re-enrollment cycles, reduced prior authorization and retrospective review of their claims, and faster payment cycles as incentives.*

This recommendation stemmed from the Taskforce discussions supporting a statewide HIT and electronic HIE assessment as expressed in Recommendations 1.0 and 4.0. For providers enrolled in state Medicaid programs, there are a number of additional administrative requirements that go beyond the requirements placed upon them by commercial payers. These administrative burdens, compounded by less than commercial reimbursement rates, have resulted in decreasing provider enrollment rates in some states.¹² The Taskforce agreed that Medicaid agencies could reduce some of the administrative burdens on enrolled providers who use interoperable, standards-based EHRs to provide incentives both for providers to remain in the program and to adopt new technologies. Specific incentives including offering providers longer periods between re-enrollment in the Medicaid program, reductions in the procedural and pharmaceutical prior authorization requirements, and faster reimbursement cycles.

Category 5: Require Adoption and Use of HIT

Recommendation 19.0: *States should direct their publicly funded health programs to incorporate in their procurement process (for state-based grants and contracts) a requirement for the adoption and use of standards-based, interoperable HIT systems. When awarding grants and/or contracts, states could also consider giving preference to provider partnership or pooling efforts to jointly purchase standards-based HIT systems.*

The Taskforce recognized that the contracting process was one of the most effective ways to drive the used of standards-based interoperable HIT systems. States, due to their level of contracting through Medicaid, public health and state employee health programs, have significant leverage with contactors to influence the technologies in use. The Taskforce recommended, based on the examples presented during their deliberations by the states of

Georgia and Minnesota, that all relevant state-based contracts and grants require that the contractor use standards-based interoperable HIT systems and that when awarding such contracts, states should give preference to partnership efforts.

Recommendation 20.0: *When promoting standards-based HIT adoption and use, states should consider developing time-limited, voluntary incentive programs that eventually become a state requirement.*

Building upon Taskforce Recommendation 14.0, the Taskforce suggested as states develop voluntary incentive programs tied to the use of standards-based HIT systems that they consider the potential for the incentives to become state requirements over time. The Minnesota Smart Buy Alliance is an example where the State mandated the use of HIT systems.¹³ Although not without its challenges, representatives of the Smart Buy Alliance point to its success in driving HIT adoption statewide. The Taskforce recognized that in some states requirements may not be feasible due to state rules and stakeholder perspectives. However, due to the significant purchasing power of states, and the significant dollars spent on health care, many Taskforce members expressed their support for requirements.

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