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HIECC Meeting
Comments on Proposed HIE Services
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Information Is The Best Medicine™

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Christine Nye
Executive Director, Florida Health Information and Policy Center
Agency for Health Care Administration
2727 Mahan Drive
Tallahassee, FL 32308

Dear Director Nye,

We appreciate this opportunity to provide comments on the Florida Center for Health Information and Policy Analysis's proposal for health information exchange services. ActiveHealth Management, as you are aware, is a provider of advanced clinical decision support (CDS) technology and care management services for patients on behalf of doctors and hospitals, health information exchange/health information organizations as well as large employers and health insurance companies. Our advanced CDS solution, "Care Engine", delivers millions of care alerts (or "Care Considerations") to providers nationally to support them in their efforts to develop, optimize and manage their patients' care plans using well established evidence based standards. Within Florida alone, ActiveHealth Management delivered more than 450,000 care considerations to providers in 2008.

With respect to the draft proposal, we wish to begin by strongly endorsing the Florida Center's goal of improving patient quality of care with services to:

- Reduce avoidable errors due to lack of information
- Speedier delivery of results to clinician
- Enable better data integration for clinical decision support
- Improve sharing patient health info during transitions in care

Moreover, these objectives are fully consistent with the Stage I care goals that have been laid out in the recently released proposed rule from the Centers for Medicare and Medicaid Services and the Office of the National Coordinator regarding the administration of the Medicare and Medicaid incentive program for the adoption of electronic health records (EHRs). We share your view that the deployment of health information exchange (HIE) delivered services such as real-time clinical messaging, the use of "patient look-up services (or "patient registries") and the integrated use of quality tools such as clinical decision support alerts and quality reporting will effectively help Florida's providers meet early and later stage "meaningful use" criteria.

ActiveHealth Management has a clinical development strategy which is fully aligned with the functional capabilities outlined within the proposal. Our approach to delivering clinical technology and associated services emphasizes the critical role of the patient and clinician in receiving and sharing critical health care information in a manner that produces care continuity and overall outcomes. Moreover, we fully recognize that we will fall short of our shared

objectives if we simply automate physician practices with current EHRs that will result only in moving our health care system from one that relied on voluminous, disconnected stacks of paper records to a system reliant on voluminous, disconnected electronic information. Connectivity to “smart HIE networks” that can apply clinical analytics and put information into an appropriate and actionable clinical context for physicians is an optimal path to realizing the value we all want in our health care system.

In achieving that value through the use of federal stimulus funds, the state is well served to orient its overall HIE plan to ensure providers are able to meet high standards with respect to “meaningful use” expectations. This will better ensure the State’s ability to compete for those limited funds under the American Recovery and Reinvestment Act. Accordingly, we would offer the following observations with respect to the State’s proposal as it pertains to the core aspects of EHR use, health information exchange (HIE) service adoption and the “meaningful use” standard by which providers are to be ultimately measured against and rewarded.

Recommendation to embrace a state-wide strategy for the use of advanced Clinical Decision Support as part of HIE development in Florida

Advanced CDS Defined

Among the capabilities required to ensure optimized patient outcomes, *advanced* clinical decision support (CDS) is one of the most essential. While no specific standard for CDS is defined yet under the federal statute, we encourage the State to adopt a high standard for CDS functionality and performance – a standard commensurate with the significant investment and aspirations within the stimulus statute. By *advanced* CDS, we refer to just such a standard. In short, this entails real time analysis of aggregated patient data by evidence-based medicine and safety standards. The output is specific patient-centered guidance on optimizing preventive, diagnostic, and treatment related aspects of care. More specifically, advanced CDS is a capability that has already been proven to improve quality and cost of care but goes beyond the capabilities resident in EHR systems today in several important ways:

- **Use of a broad set of patient data.** Advanced CDS makes full use of clinical data, including lab values and patient-reported data, to ensure precision in alerting and to minimize false-positive alerts to physicians and patients.
- **Patient and physician specificity.** Alerts generated by the systems should be truly patient-specific and actionable based on the clinical profile of the patient. In addition, they should be targeted to the provider best positioned to act on the information.
- **Sophisticated clinical rules.** The clinical rules at the foundation of the CDS system should be designed with sophistication that mirrors the real complexities of patient physiology and care delivery. This includes validation logic to ensure that messages are directed at patients who really have the relevant conditions, and exclusionary logic to prevent alerts for patients for whom an exception applies (e.g., a normally recommended medication is contraindicated because of a different condition the patient has).
- **Complementary messaging to patients.** In addition to physician messaging, the patient should receive complementary, consumer-friendly messages encouraging a dialogue with the physician related to the specific alerts.
- **Dynamic use of new information.** The CDS capability should incorporate feedback from providers and use that feedback in subsequent analyses. For example, if a physician indicates that a patient has an allergy to a certain medication, future alerts should not recommend that medication. Similarly, if a patient provides health information through a PHR or other engagement mechanism, that information should be reflected in subsequent analysis of that patient's clinical data.
- **Demonstrated outcomes.** Again, the CDS system should have a track record of achieving clinical and financial outcomes.

Meaningfully Using Advanced CDS

The most effective way Florida's providers will meet the expected quality and value gains that are expected in the health IT portions of the stimulus statute (which also underpin the associated efficiencies and savings assumption embodied in the President's broader health reform budget analysis) will be through the use of advanced clinical decision support technology as described in the definition above.

In determining the "meaningful use" of functionalities such as decision support, the key issue is that providers should demonstrate not only that they viewed the available data and CDS alerts but also that, in a verifiable way, they took appropriate action. Specifically, there should be evidence that they either acted on the alert (e.g., stopped a medication, added a medication, ordered a diagnostic or screening test) or that they provide appropriate feedback that the alert is not appropriate (e.g., patient allergic or intolerant to a suggested medication).

In further developing mechanisms to help assess "meaningful use", and consistent with its goals of fostering better care coordination, the Florida Center should closely examine how incentives tied to EHR use can be linked to the scoring criteria applied by the NCQA for the recognition of "medical homes". Many commercial payers have already endorsed the NCQA recognition standards as part of their pay-for-performance initiatives. In particular, the Florida Center should consider how the application of these scoring criteria help to assess how providers are "meaningfully using" capabilities such as clinical decision support to embed quality care processes to provide effective coordinated patient care with the goal of achieving better overall outcomes.

The necessary sophisticated decision support functionalities are not embedded in current certified EHR products

Several current certified EHR products have limited clinical decision support capabilities embedded in their logic. To date however, such EHRs have had a very poor record of adoption by the providers. The 2008 survey of physicians published in the *New England Journal of Medicine*¹ showed that 4% of physicians had adopted "fully functional" EHRs which would include capabilities like clinical decision support. What has limited the utility of these tools has been that most current EHRs are not built to exchange data with other provider EHR systems unless connected through a HIE. Consequently, they are not able to incorporate data from multiple sources (e.g., discharge summaries from hospital, physician practice based EHR data, PBM data, lab data, patient derived data from a PHR or Disease Management system) and have relatively unsophisticated clinical logic capabilities. The net result is that they have relatively limited CDS capabilities with relatively high false positive messaging rates.

Deploying Advanced CDS as an HIE service connected to provider EHR systems can be done today

¹ The *New England Journal of Medicine*, "National Survey on Physician Adoption of Electronic Health Records," July 2008

To encourage the optimal use of EHRs to produce better quality and value outcomes, providers should be required to use more robust clinical decision support tools that are available and used now in the current market which are connected to HIEs and linked to the providers' EHR workflow. By using this more advanced functionality providers have the advantage of gaining access to a complete data profile on their patient from multiple sources that include EHRs, labs, pharmacy, patient reported data (from a PHR), as well as diagnostic and procedural claims. Equally important is that these more advanced clinical decision support solutions contain the inclusion/exclusion rules that make their decision making logic reliable and accurate by reducing "false positive" care alerts to providers.

The Florida Center should additionally assess the clinical literature available on advanced CDS. Building on the 2003 Institute of Medicine's report calling for the expanded adoption of clinical decision support, it is worth noting that this advanced level of functionality has undergone further rigorous assessment of its effectiveness as a solution to both improve quality outcomes and provide economic value. In 2005 the results of a randomized, controlled clinical study using advanced clinical decision support was published in the American Journal of Managed Care². Advanced clinical decision support was used to assess and analyze complete patient data profiles for those in the study group and then produce care considerations for their physicians when gaps or issues in care were identified. The use of the technology and the subsequent actions on the care alerts by their physicians produced a reduction in patient hospitalizations of 8% and a savings in charges of more than \$8 per member, per month (PMPM). Additionally, in 2008 a follow up study³ was published which further validated this study finding that the use of advanced clinical decision support with care alerts reduced overall charges by 6% with charge savings in excess of \$21 PMPM. We have separately attached the study for your consideration.

After years of use by employers and health insurance companies, this approach to deploying a robust clinical decision support capability across a community of providers is being employed now by a number of health information exchanges and integrated provider delivery systems across the country. In particular, the Florida Center should look to the work now underway with Vanderbilt University where alerts from an advanced CDS are combined with the clinical data within their EMR system and then integrated into their electronic messaging and workflow across their clinical provider teams (including nurse intermediaries and physicians). Since the implementation of this model, Vanderbilt has improved compliance to evidence-based care considerations among its physicians by 15%.

Another innovative and efficient strategy to deliver more advanced CDS capabilities to a community of providers has been the approach adopted by the Brooklyn Healthcare Information Exchange (BHIX) and the provider groups affiliated with the Maimonides

² The American Journal of Managed Care, "Using a Claims Data-Based Sentinel System to Improve Compliance With Clinical Guidelines: Results of a Randomized Prospective Study," 2005;11:93-102.

³ The Journal of Health Economics, "Information Technology and Medical Missteps: Evidence From a Randomized Trial," 2008; 585-60.

Hospital. Through a grant from the State of New York, they are deploying the integrated use of Personal Health Records, Electronic Health Records and centrally hosted advanced clinical decision support for the patient population served in the Brooklyn region. In addition, they are using the technology to deploy an Advanced Medical Home model for selected high-cost chronic patient populations.

Again, we appreciate the opportunity to share these perspectives on the application of value-added services like advanced CDS through state or local health information exchanges. We stand ready to work with the Florida Center as it advances it's HIE services proposal and evaluates and prepares other stimulus-related plans. We welcome any opportunity in the near future to meet with you and other members of the state's Health Information Exchange Coordinating Committee to further discuss the potential role our advanced CDS and other care management services may offer the patients and providers within Florida.

Warm regards,

Lori Evans
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ActiveHealth Management – Provider Solutions