

Submission for Panel #1 Meaningful Use Workgroup Hearing, May 13, 2011

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Criteria for Meaningful Use EHR incentives are appropriately oriented to primary care practice. Ultimately, improved information flow in transitions of care from true interoperability will facilitate enhanced care quality, efficiency and reduced costs, as well as improving care coordination and patient engagement

Data Exchange for Referrals

Fostering a system of transitions of care and coordination of care that can improve outcomes for patients requires that the specialist not be treated as a black box. Different situations of care transfers require different information. This foundation for outlining the needed information transfers involved in closed loop referrals for PCP-specialist even outside the formal PCMH is described in the ACP Position Paper on the specialist as Patient Centered Medical Home Neighbor. The paper describes a well defined relationship between PCP and specialist, one that considers the needs and preferences of the patient. .

The Standards & Interoperability Framework initiative around transitions of care is developing standards for the appropriate data that should accompany the patient referred to a specialist and identifying the data standards that are most appropriate for those data elements. Consideration is given to the importance of avoiding data overload and to enable the selection of the needed data elements in the creation of the clinical summary document sent to the specialist. The second and third years of medical school are spent learning to construct a document with every available piece of data about a patient. The remainder of a medical career is spent learning to construct a document that contains only relevant and important information, because the decision making process that leads to optimum care for patients is obstructed and often misdirected by information overload.

The minimum dataset required by the allergy specialist in a referral relationship includes that core dataset that has been identified by the Clinical Information Model Sub-workgroup of the S&I Transitions of Care initiative: Demographics, Active Problem List, Reconciled Active Medication List, Active Allergy/Intolerances List. Additional important elements in this transition of care would be the reason for referral, any expectations or limitations for management, including patient preferences (e.g. assume management of a specified condition until resolution), and relevant diagnostic test results, and histories.

The minimum dataset required of a specialist to return with a consultation summary would again include the now modified core data set including any update of the data elements (e.g. Active problem List including diagnoses added by the specialist, and reconciled active medication list including meds added and *not* including those stopped by the specialist), and results of diagnostic tests and procedures performed, and treatment recommendations.

These information exchanges between PCP and specialist are consistent with the idealized case in a paper based environment, but offer the potential for substantial improvement in this closed loop

transition of care. It is critical for physician adoption of this new technology that the creation of these documents be incorporated into existing workflow. That the documents be created from within the EHR from the patient record, and that both PCP and specialist have the ability to select the relevant data elements beyond the core data elements, add appropriate narrative, and push the document to the other care setting where it can be consumed by the receiving EHR system.

Creation of these documents within the EHR and the electronic exchange of documents should represent a paradigm shift in the information exchange of closed loop referrals. The same, of course would be true for other transition of care environments, such as hospital discharges or admissions. Because of the time lag inherent in generation and transcription of paper documents, and the routing of these documents to the patient record, it has often been the case that patient encounters occur out of sync with the information flow meant to support them.

Longitudinal Care Plans, Data Capture and Patient Reported Outcomes

An important element of the Standards and Interoperability Framework Transitions of Care initiative is the creation of a standard for a care plan document. This document will correspond to the concept of a holistic care plan for complex and high risk patients which is part of the Patient Centered Medical Home model. The PCP is typically the keeper of this holistic care plan. To enable optimum care coordination, transitions of care must include an interoperable exchange of the elements of such a care plan. The elements that represent specific patient instructions on hospital discharge and elements that represent recommendations and patient instructions or education provided by a specialist need to be interoperably exchanged between hospital, PCP, and specialists EHR systems.

Patient engagement, patient education and instruction, and the enablement of self-management are mainstays of the practice of allergy. This is particularly the case in chronic asthma, recognized as one of the prevalent chronic diseases where there is opportunity for improved outcomes and more efficient care. The allergy community has fostered programs to train and certify asthma educators, individuals with demonstrated competency and knowledge in patient education for self management.

Patient education and instruction in self management are recognized core competencies in the management of other disorders seen in allergy practice, including environmental allergies, seasonal allergies, medication allergies and adverse reactions and food allergies and adverse reactions.

As a corollary to the exchange of care plan elements between EHR systems, there is a need to create interoperable exchange of care plan elements, including self-management plans and instructions, between EHR and PHR so that patients will have an enduring copy of such plans. Ideally this would be linked in the PHR to patient self-reporting of outcomes and status, ultimately linked to interactive self-management decision support in the PHR, as well as health related social networking tools, if the patient so desires.

The Asthma Management Plan for those with chronic asthma is an integral part of allergy practices. For those with persistent asthma, it typically includes self monitoring with assessment of symptom frequency and interference with activity and in some cases, home peak flow monitoring to provide an

objective assessment of disease activity for family members and other caregivers. For those with episodic asthma, the care plan is primarily an crisis action plan when symptoms occur, but early intervention and preparedness are important opportunities for improved outcomes that distinguish allergy specialists and are an important factor in results of published studies showing dramatic differences in asthma outcomes with management by specialists. Monitoring and appropriate adjustment of asthma management plans are based on self monitoring of symptoms, quality of life survey instruments, home peak flow measurement, in office pulmonary functions, and charting of medication use including rescue medications.

Patient reported outcomes and status, particularly with respect to limitation of activities, lifestyle adaptations and medication use are a mainstay of outcomes metrics and disease monitoring in allergy practice. There are indeed few objective measurements and easily measured pulmonary functions are not helpful for routine monitoring in all but the most severe asthmatics. Various quality of life survey instruments and symptom score instruments based on a combination of medication use and symptoms are used, but none have been widely adopted for routine use. Most allergists employ less formal routines of customary inquires about these factors at the time of an office encounter. Ideally, web services that provide a standardized and interoperable input and output that could be linked to PHR systems and EHR systems would have the potential to improve management of allergic and asthmatic patients and support comparative effectiveness studies. The standards to be identified by the Standards and Interoperability Framework Transitions of Care initiative are needed to enable such innovations.

The potential to improve outcomes and patient engagement in allergy practices as well as other specialties is great, if the interoperability being enabled by the Standards and Interoperability Framework Transitions of Care initiative is adopted by EHR systems and PHR systems. Achieving this long term goal of improved outcomes requires defining the needed standards, data elements, and appropriate EHR-centered workflows with a clinical and patient centered focus, rather than a focus on technology and existing infrastructure.

Problem List and Medication List Reconciliation

The contribution of the allergist to reconciliation of the problem list is typically to resolve tentative diagnoses or mis-attributions of symptoms with a final diagnosis of “allergy to”, adverse reaction to, or otherwise identify triggers of symptoms, whether allergic or non-allergic. This refinement of a working diagnosis to the more specific is very often the basis of treatment recommendations and recommendations for self-management plans. Self management in the allergy realm very often involves avoidance, which requires that patients have understanding and guidance about what and how to avoid. The potential for interoperability between EHR and PHR would again be great in order to convey these instructions and guidance.

Medication reconciliation in the allergy practice typically involves review of the medication list to assure that no current medications potentially increase symptoms or potentially have adverse effect on disease activity, such as beta blockers in asthma and anaphylaxis. Review of appropriate use of medications: Confusion of rescue inhalers with controller inhalers is common in the asthma population.

Inappropriate or ineffective inhaler technique; studies have shown a majority of physicians and other healthcare workers cannot themselves demonstrate appropriate inhaler use. Adherence to appropriate medication use, particularly use of asthma maintenance medications, is a very significant factor in outcomes in control of asthma. The interoperable exchange of medication lists, as enabled by the Standards and Interoperability Framework Transitions of Care initiative, would greatly facilitate the communication of these important, even critical, medication reconciliations to the PCP and to the patient via visit summary and PHR.

Although not called out as an issue in this panel on care transitions, the reconciliation of the Allergy List is a very important process in the practice of allergy. There is ongoing concern in the allergist community about the lack of standards and discrete data capture of allergies and adverse reactions to medications, foods, and environmental substances. The failure of many systems to capture the provenance of this data, becomes an even more significant problem when this data is converted to a “list” and is exchanged between systems. On these lists, “My mother said when I was 5 years old my pediatrician said I would die if I got penicillin again”, is coded exactly the same as, “I was in the ICU last week with anaphylaxis 15 minutes after a penicillin injection”. Reference is made to the “Active Allergy List”, but very few systems have the functionality to make an allergy inactive, let alone remove it from the list.

Assessment of Care Coordination

The allergist community has not developed evidence based quality measures of care coordination per se. However, the American Academy of Allergy, Asthma and Immunology has developed Asthma IQ, a web based application to assess physician performance in management of asthma. This tool is developed from the evidence based 2007 Expert Panel Report Asthma Diagnosis and Treatment Guidelines. This CDS system allows physicians to enter de-identified patient data from their practice, receive treatment guidance based on these guidelines, and includes links to appropriate sections of the guidelines.

The American Academy of Allergy, Asthma and Immunology is working with the American College of Physicians’ Workgroup on the Medical Home Neighbor project to create opportunities to engage the PCP and the specialist in ways that will improve patient outcomes. These efforts should allow the creation of metrics around care coordination.

The American Academy of Allergy, Asthma and Immunology has also published consensus guidelines for appropriate referral to the allergy specialist for diagnosis and treatment of a variety of disorders related to allergic diseases and asthma. These guidelines can form the basis of CDS for coordination of care around evidence based evaluation and treatment by allergy specialists.