

Advancements in Health Care Technology

◆ What is the current state of competition in health information technology markets serving institutional providers, health care professionals, patients, and payers?

Many payers have made significant investments in HIT to underpin payment and delivery reforms that transfer varying degrees of clinical risk to providers: health information exchange capabilities, data aggregation, care planning, patient stratification, social networking, etc. Payers are viewing HIT and data analytics as a significant differentiator.

◆ To what extent are information technology vendors and health care providers sharing patient health information? Are there significant impediments to the useful flow of patient health information to improve health care coordination and quality?

In contrast with increasing willingness among providers to share PHI with other providers, providers are not necessarily showing the same willingness to share data with payers. Generally payers have the infrastructure and incentives to use PHI for clinical analytics that would facilitate care coordination and quality improvement, but it is sometimes difficult and expensive for payers to get access to such data at scale. This is a significant impediment to health care improvements because reciprocal data flow is a critical and essential requirement.

◆ Do recent health care technology advancements raise standard-setting, network effects, or interoperability issues?

On the one hand, recent advances help improve interoperability, or at least facilitate data sharing — for example direct access, and more widespread ability to share Continuity of Care Documents. Use of new technology advancements such as natural language processing offers the potential to make use of unstructured data, though more investment is needed here to mature these solutions and make them clinically reliable.

On the other hand, some areas still lag such as provider offices that are heavily reliant on fax machines and handwritten notes – neither of which allow for data exchange in digitized, usable form. We need further investment in technologies that we can make use of spoken data -- dictation, capturing notes from live interactions, phone calls, etc. -- and in clinical data analytics (analytics for clinical insights that use as input a variety of clinical data and payer-based data such as claims) as well as data enrichment capabilities (such as inferential capabilities).

Moreover, an increasing trend among hospital systems to give physicians EHRs and access to data in the hospital systems' EHRs creates virtual networks of information sharing that not only cause alignment with the hospitals' outpatient clinics, but also create virtual, closed networks of information sharing, in turn creating closed networks of patient care. This not only limits where physicians want to refer patients, but it also makes it less likely that the hospital system will share its data with others – using clinical data sharing for competitive advantage.

◆ What has been the impact of health information technology advancements and policies on physicians and other caregivers?

Though more and more physicians are using EHRs, the lack of standardization is problematic because how and what is documented can vary greatly from clinician to clinician.