

Editorial **Comments**

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Hitting a Moving Target: Toward a Compliance-driven Patient Record

C. FRANK STARMER, PHD

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Patients receive care in a variety of treatment facilities. With each patient, every treatment event generates two pieces of information: a **clinical record** (notes, orders, and results generated by and for practitioners) and a **billing record**. The two are processed separately (most often in parallel; at times, serially). Integrating them yields the **patient record**. Current technology is based on the unintegrated historic record. Only when the patient leaves a treatment facility do a number of people/software systems start the reconciliation process—matching clinical information from the clinical record with charge information from the billing record to meet the requirements of Federal agencies and third-party payers. Incomplete compliance, discovered only after discharge, is difficult or impossible to resolve.

The absence of a coherent and integrated (whether physical or virtual) patient record introduces prob-

lems with both compliance and adaptation. It seems that with each blink of an agency, new “simplifications” (e.g., HIPAA) introduce new compliance requirements and move the target faced by clinical information managers. In part, the actual problem is that the granularity of available clinical information, in the absence of a fully detailed EMR, forces regulators and third party payers to ask for rapidly changing incomplete “data abstraction” snapshots of the patient’s clinical state to justify billing, quality, and reimbursement. Ideally, the availability of complete and standardized EMR-based and compliance-driven patient records would allow regulators and payers to “electronically biopsy” patient records with arbitrary algorithms that would verify compliance. In an imperfect world, this is not possible; therefore, legacy systems are updated to address these new demands, but the rate of updates seems to be less than the blinking rate. It is not difficult to project five years into the future and note that the mix of requirements associated with linking clinical data with billing data will likely be dominated by compliance issues.

From where I sit, it seems that, in the short to intermediate term, while we do not have comprehensive, standardized EMR systems in use, we need to shift

Affiliations of the authors: Medical University of South Carolina, Charleston, South Carolina.

Correspondence and reprints: C. Frank Starmer, Medical University of South Carolina, Charleston, SC 29425; e-mail: <starmerf@musc.edu>.

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the focus of informatics community away from the **clinical record** and replace it with a focus on the integrated **patient record**, a repository of all patient-specific information. On the technical side, this requires a single repository (either virtual or physical) that contains charge data, clinical data, and compliance rules. On the cultural side, this requires a commingling of all members of the health care team, including clinical and financial workers. This approach is the only available strategy to build a substrate for real-time reconciliation of compliance-related issues—specifically for maintaining compliance between charge and clinical data.

A few groups have taken the lead in integrating reminder information into the patient care process—a proof of concept of the utility of a single **patient record**. McDonald and colleagues¹ demonstrated the increase in use of preventive procedures by simply making reminder information electronically accessible. Geissbuhler and Miller^{2,3} and Starmer and colleagues⁴ altered reimbursement rates by integrated reimbursement-related reminders into the WizOrder clinician order entry and decision support system. The path explored by these groups is clear: there are important opportunities afforded by moving to a more homogeneous management of traditional clinical and new compliance-driven data. These groups have set the stage for developing and exploring real time tests of reimbursement compliance, that of integrating order entry with tests of medical necessity rules.

The commercial systems that I am aware of have an adaptation time of 6–18 months (from purchase to operational function), whereas the federal and insurance company blinking rates have a change frequency

measured in weeks. New medical necessity rules are rapidly appearing and vary from state to state. Its highly unlikely that any single vendor can afford to continue to build closed systems that do not admit to institution-specific adaptations (in contrast to configuration) that provide care providers with a seamlessly integrated instrument that facilitates both patient care and compliance. Consequently the non-compliance-related loss of revenues simply associated with the response time of the industry is unacceptable.

The challenge for the informatics community is to begin to shift its focus to strategies that parallel that of the open-source software movement,⁵ where tools for integration, adaptation, synchronization among many contributors; and rapid deployment become commonplace. Our collective challenge is to demonstrate that we are developing integration tools that permit real time shots at a moving target, in this case, developing a compliance-driven patient record.

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