

Perspectives and Updates on  
Health Care Information Technology

# HIT Perspectives

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## About the Newsletter

*HIT Perspectives* is published by Point-of-Care Partners. Individuals at the leading management consulting firm assist healthcare organizations in the evaluation, development and implementation of winning health information management strategies in a rapidly evolving electronic world. The team of accomplished healthcare consultants, core services and methodologies are focused on positioning organizations for success in the integrated, data-driven world of value-based care.

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# 1 Part 1: Breaking Through Barriers to Advancing Electronic Prior Authorization



By **Jocelyn Keegan**, Payer Practice Lead,  
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*Physician offices spend 853 hours a year completing PAs (2017 AMA Survey)*

Prior authorization (PA) is at the top of national interest and debate... at the nexus of decisions we are making as an industry and society regarding what care and therapy to provide, including the most advanced care, as well as how much it should cost and how much of it patients can afford.

While many wish PA would go away altogether, that's probably not realistic in the short to mid-term because payers see PA as an effective tool for utilization management. Electronic prior authorization (ePA) is reaching an inflection point where automation will likely take some of the sting out of the process. As more data flow, the opportunity may arise for payers to reevaluate their current PA requirements so as to reduce the number of treatments requiring it. For the purposes of this article, however, the focus will be on ways to move ePA forward.

As an industry, we have made progress advancing ePA. However, its adoption beyond the pharmacy benefit for retail drugs has been minimal. As conveyed in our **recent industry report**, in order to move ePA adoption levels to meaningful levels for specialty and complex therapies covered under

both the pharmacy and medical benefits, numerous misconceptions and gaps must be addressed. Some key areas include:

- Organizations should understand that ePA is a multitransactional process **that has evolved with distinct processes and standards for therapies covered under the pharmacy and medical benefits**. Many industry stakeholders – including regulators – have mistakenly held a **monolithic view of ePA**, impeding progress.
- Payers will need to invest in **streamlining** and combining how pharmacy and medical claims are processed, as well as increasing the **accuracy** of PA flags and information. Providers and their EHR vendors will need to adopt more modern approaches to extract information from their systems to support ePA.
- Stakeholders should understand that **PAs may be reduced but will not be eliminated** by value-based contracts or use of the real-time pharmacy benefit check (RTPBC). The RTPBC is a new transaction that provides real-time information about the cost of a prescription – and if PA is required – at the point of electronic prescribing. In conjunction with ePA, the RTPBC will help prescribers identify the lowest cost medications covered by a patient's prescription drug benefit.
- One of the main drivers of PA is the rising use of expensive and complex **specialty medications**. Although only 1% of prescriptions are for specialty drugs, they account for a third (rising to half) of pharmacy plan costs, with many requiring PA. Organizations should focus on **addressing ePA for specialty meds**, where the most immediate and real opportunities lie. Examples of opportunities include the National Council for Prescription Drug Programs' recently established Specialty Work Group that is addressing the gaps that exist in specialty meds electronic prescribing (ePrescribing) and the HL7-based Da Vinci Project Coverage Requirements Discovery, which is a FHIR-based API that enables care delivery organizations and providers to query payers in real-time to

find relevant guidance prior to care delivery to increase efficient delivery of care and corresponding payment.

- Organizations should adopt the Point-of-Care Partners (POCP) **ePA maturity model** of increasingly sophisticated digital processes, information extraction/exchange and automated decision making to assist with utilization management success and moving in the direction of converged and value-based models.

**To be sure, there is much more to the ePA story than we can cover in this article. [Learn more](#)** with POCP's newly released, in-depth report on ePA. It offers health care stakeholders an independent analysis of the market, realistic maturity models and technical frameworks, a profile of what vendors and service companies are currently doing in ePA, and actionable advice and predictions so they can arm themselves with the information needed to plan strategically and meet their goals. In particular, it analyzes the use of new and transformative Da Vinci Project use cases, supported by the Centers for Medicare and Medicaid Services, built around Fast Healthcare Interoperability Resources open application program interfaces.

The report leverages our unique perspective and relationships in the market with payers, providers and their vendors. POCP experts drew on their extensive experience with ePA, ePrescribing, medication management and transactions in support of value-based care, together with industry interviews, to craft this compelling report. It's our most extensive research report to date, with 40+ diagrams and tables, profiles of 40+ vendors in the ePA arena, and 90+ references. •

*To learn more about ePA and POCP consulting services, visit the [POCP website](#) or contact [Jocelyn Keegan](#). To learn more about the ePA report or purchase it, visit its [download page](#) or contact [Ken Kleinberg](#).*

# 2

## Part 2: CDS Hooks Can Use FHIR APIs to Trigger Robust Decision Support in EHRs



By **Michael Burger**, EDI Practice Lead

# CDS HOOKS

Clinicians need a variety of timely information about individual patients, their condition and potential treatment options to develop cost-effective, high-quality care plans. To be sure, electronic health records (EHRs) already contain a lot of relevant information in the form of clinical decision support (CDS) to help guide decision making. However, EHRs designed primarily as documentation tools are challenged to offer sophisticated, precision decision support tools, especially in the face of constant advances in diagnoses and treatments. This challenge is being addressed by a new standards-based technology called CDS Hooks.

CDS Hooks are rapidly coming onstream as vendors build application programming interfaces (APIs) based on HL7's Fast Healthcare Interoperability Resources (FHIR) standard. FHIR has taken the industry by storm (a FHIR-storm!), fueled by mandated use by the federal government.

**How does CDS Hooks work?** The technical capability offered by CDS Hooks enables the creation of standard places within the EHR workflow where the EHR can issue a notification

that an event is happening. This notification can be received by an external application, which in turn can return pertinent information to the EHR, for display to the EHR user. In FHIR-speak, the information returned is a "card." Cards can be of three types:

- Information card: Conveys text that may be useful for the user
- Suggestion card: Provides suggestions
- App link card: Links to reference materials or apps

Development of CDS Hooks is just getting off the ground. Today there are eight "hooks," which have been defined as part of Version 1 of the standard:

- Patient View: When a patient is selected and his or her record opened
- Medication Prescribe: When a medication is being prescribed
- Order Review: When order(s) have been selected and are being reviewed
- Order Select: When order(s) are selected
- Order Sign: When order(s) are being signed





- Appointment Book: When an appointment is being scheduled
- Encounters Start: When a new-patient encounter begins
- Encounter Discharge: When a patient encounter is completed

A great example by which to visualize the way this technology works is in the context of prescription writing. The event of writing the prescription triggers a CDS Hook. The hook can be received by a patient engagement API. The API returns a suggestion card recommending that the patient be provided educational materials, enrollment into a support program and given an offer for copay assistance.

Because FHIR is an open-source standard, new hooks can be created by any interested party. So, while the list of hooks is rather short today, we expect it will grow dramatically as CDS Hooks becomes more widely adopted by EHR vendors.

Similar functionality has been part of health information technology for quite some time. In the mid-1980s, UNIX-based The Medical Manager software (a practice management solution) featured “Triggers,” which functioned in the same manner as

CDS Hooks do today. The key difference between the Triggers of yesteryear and CDS Hooks is that in the past, each EHR vendor decided what specific hooks would be applied and developed unique APIs around them. Today, there’s a common solution with a common platform.

**Looking to the future.** The beauty of CDS Hooks is that every vendor supports the same FHIR API and offers the same set of standardized hooks. In this manner, developers of decision support tools don’t need to write unique interfaces for each EHR, but rather can build to a single API that works with all.

As with any new technology, there are pros and cons. Providers are not generally receptive to decision support reminders because sometimes the information may not be pertinent or actionable. Too many interruptions lead to “alert fatigue,” a well-documented phenomenon in which providers simply click through the reminders without reading them or taking action.

Use of CDS Hooks partly addresses these concerns by enabling returned information to be specific to both the patient and stage of treatment. Better yet, it can be actionable to the clinician within the context of the EHR workflow. A well-designed implementation of CDS Hooks will enable software to remember when providers accept or reject cards so that information flows to the provider in a way that’s useful and usable.

Widespread adoption by EHR vendors of CDS Hooks creates an opportunity for innovative, complementary applications that supplement the core functionality of the EHR. With careful design to limit the possibility of alert fatigue, EHRs will be able to offer customers the advantages of a new clinical quality-enhancing functionality with limited development effort. Without a doubt, this is a win-win-win-win for providers, patients, EHR vendors and third-party software developers. •

*Point-of-Care Partners offers a wide range of consulting services specific to FHIR and CDS Hooks. Please contact me at [michael.burger@pocp.com](mailto:michael.burger@pocp.com) if your organization needs assistance in these areas.*

# 3

## Part 3: Five Trends Leading the Digital Transformation of Specialty Pharmacy



By **Pooja Babbar**, PBM Practice Lead



Specialty medications are changing health care, providing life-saving treatment options for patients with rare and chronic conditions. Commonly defined as high-cost, high-touch drugs, they often have special handling, dispensing, oversight and delivery requirements. In the past, much of that was handled through retail specialty pharmacies. However, the roles of specialty pharmacies and others involved in the fulfillment process are changing with the increased use and costs of specialty medications, the evolving health care landscape and new technologies

emerging to automate specialty pharmacy, streamline operations and improve speed to therapy.

So, what trends are influencing the specialty pharmacy of the future? Here are five to watch.

**1. Value-based arrangements target costs and quality.** Value-based delivery models, which reward providers for better managing costs, quality and health outcomes, have been springing up over the past few years. Similarly, value-

based frameworks and payment models are expected to expand to the specialty arena and, potentially, whole classes of drugs. For example, Novartis negotiated pay-for-performance agreements with insurers Aetna and Cigna for Entresto (sacubitril/valsartan), which is used to treat heart failure with reduced ejection fraction. Cigna will adjust payments according to patient hospitalization rates, while Aetna's payments will depend on whether real-world results are on track with those seen in clinical trials. This trend will require both manufacturers and payers to develop evidenced-based quality and outcomes measures, as well as new ways to report them.

**2. Increased vertical integration will impact fulfillment.** Expect to see the impact of vertical integration of pharmacy benefit managers (PBMs), specialty pharmacies and insurers. For example, Cigna recently joined forces with the PBM ExpressScripts, which had previously acquired specialty pharmacy Accredo. Why are payers interested in partnering with PBMs and specialty pharmacies? Those that have their own PBMs and specialty pharmacies see better access to health care and utilization data in real, or nearly real, time. This provides valuable information and insights that can lead to strategies for cutting costs and improving quality. It is difficult to manage costs of care without managing prescription spending, especially for expensive specialty medications. In addition, specialty prescription drug spending is rising as these drugs become more expensive. As a result, adding specialty pharmacy to the mix gives payers expanded capabilities to better manage costs for drugs covered under patients' pharmacy and medical benefits. Vertical integration also allows for increased controls for benefit management, including formulary exclusions, site of care management and increased utilization management.

**3. Integrated delivery networks will include specialty pharmacies.** Physicians and hospitals are increasingly merging to form integrated delivery networks (IDNs) as a way to reduce costs and improve outcomes, and are now beginning to include specialty pharmacies. By establishing their own specialty pharmacies internally, IDNs can leverage better control over drug selection and prescribing, patient care and outcomes. This results in better cost oversight and access to specialty pharmacy data, which can help providers target ways to improve quality of care and outcomes. Additionally, spe-

cialty pharmacies are often adjacent to the facilities where their patients receive care. This creates opportunities for face-to-face engagement with patients and providers, potentially improving adherence and satisfaction. This arrangement also provides more integrated care for complex, chronic conditions, which can close the gaps in care created when specialty pharmacies are not directly part of the care continuum.

**4. Emergence of new therapies will impact business models.** Expensive new specialty medications are coming to the marketplace. **According to one estimate**, 225 specialty-type medications will be available by 2025 — and they are likely to be expensive. For example, the Food and Drug Administration has **recently approved** a second gene treatment for infants with a rare condition called spinal muscular atrophy that has a price tag of \$2.5 million per dose.

These types of therapies will be gamechangers. Gene therapies are primarily handled in hospitals, in contrast to the usual sites of dispensing and administration for specialty medications that include physician offices, clinics and retail specialty pharmacies. This will impact the business models of payers and clinicians alike. For example, they will have to develop new cost and reimbursement structures, new types of clinical management and logistical support, and new patient education and follow-up mechanisms.

**5. New technologies will address patient, provider and payer pain points.** Specialty pharmacy is coming into the digital world with continued emphasis on computerizing its manual phone-and-fax processes. A key example is the National Council on Prescription Drug Programs' new Specialty Work Group working to identify pain points and transactions that delay the prescribing, enrollment, dispensing, care management, reporting and payment of specialty medications. These efforts build on electronic prescribing standards as well as complement the work under way to automate other aspects of specialty pharmacy. •

*Want to know more? Visit our [presentation library](#) for recent presentations focused on the trends described here or reach out to me at [pooja.babrab@pocp.com](mailto:pooja.babrab@pocp.com).*