

# Perspectives and Updates on Health Care Information Technology

## HIT Perspectives Biopharma Insights •

- 1** **Part 1:** Drug Benefit Cost Information at the Point of ePrescribing: What Lies Ahead
- 2** **Part 2:** Trends to Watch in 2018
- 3** **Part 3:** Virtual Visits: Now Coming to Homes, Doctors and Pharmacies

Point-of-Care Partners helps Life Science and Biopharmaceutical companies develop EHR and Health IT strategies to increase product adoption, drive growth, and help their healthcare customers succeed in the world of value based care.

**Contact Information**  
**Brian Bamberger**  
*Practice Lead, Life Sciences*  
brian.bamberger@pocp.com  
info@pocp.com

© 2018 Point-of-Care Partners, LLC

February 2018



# 1 Part 1: Drug Benefit Cost Information at the Point of ePrescribing: What Lies Ahead



By **Brian Bamberger**, Life Sciences Practice Lead

Cost information from a patient's drug benefit is needed at the point of electronic prescribing (ePrescribing)—especially in light of the growing focus on medication adherence due to patient noncompliance with their drug regimens. High out-of-pocket costs are a main reason why roughly half of the 3.2 billion prescriptions dispensed annually are not taken as prescribed; that number is even lower for patients with chronic conditions. Lack of affordability can lead to prescription abandonment and noncompliance, which results in as much as \$289 billion a year in unnecessary deaths, needless hospitalizations and preventable doctor visits.

Despite its usefulness, drug cost data for patients usually are not available to the physician at the point of ePrescribing through use of an electronic health record (EHR). That is changing with the advent of the real-time benefit check (RTBC).

**ePrescribing Today.** Today's ePrescribing systems have the ability to perform formulary and benefit (F&B) checks. While the information is useful, it is not as complete, accurate or timely as a clinician would like. For example:

- Formulary data currently are not patient specific and are displayed only at the plan level
- Data quality is problematic. Insurance plan data (such as for health maintenance organizations and preferred provider organizations) are often not reflected in what is displayed in the ePrescribing formulary data. This creates an information disconnect for coverage and out-of-pocket cost information.
- F&B files for ePrescribing are static and provide a "snapshot" of benefits. This means they cannot give the prescriber indi-

vidualized patient benefit and cost-sharing information at a specific point in time, such as at the point of care.

**The Solution: The RTBC.** The RTBC is viewed as a solution to the problem because it provides up-to-date information directly from the payer or pharmacy benefit manager (PBM), as opposed to static files. The RTBC provides real-time information about patient-specific, out-of-pocket costs for a medication (including specific amounts for copays, coinsurance and deductibles); alternative pharmacy pricing, such as for a 90-day supply; and which pharmacy will be most cost effective in light of a patient's insurance coverage and available pharmacy benefit. If the prescription is denied, the RTBC can help the prescriber determine if alternatives, prior authorization or step therapy are required and whether coverage limits would come into play.

All of this adds up to a win-win for payers, prescribers, patients and pharmaceutical manufacturers. It should help the prescriber identify the most cost-effective medication at the point of ePrescribing, thus improving the chances for medication adherence. Use of the RTBC can help create a cleaner prescription, which will improve speed to therapy and reduce patient frustration at the pharmacy. It will also help patients make more informed decisions concerning their care, which fits with the current push toward patient-centered care models. RTBC use should also eliminate calls from providers to pharmacies and manufacturers, improve patient relations as well as increase patient access to specific medications.

**The RTBC Today.** The RTBC is emerging from of its infancy, though current formulary and benefit checks should continue well into the future. Two versions of the RTBC are coming onboard. One is based on the National Council for Prescription

Drug Programs (NCPDP) SCRIPT standard, which PBMs and payers have not yet integrated at the appropriate point in their claims adjudication process. The second uses a modification of the NCPDP Telecommunications D.0 standard, which will require significant development and cost for integration into EHRs. The ePrescribing industry currently is moving forward with a third, hybrid standard.

The need for better formulary data, coupled with ever-improving clinical decisions, means that payers and EHRs are likely to put RTBC development into their product road maps sooner rather than later. The RTBC is a sophisticated component that will help improve patient health and safety as well as lower costs. That has appeal to payers moving toward value-based care models, which should provide impetus to adoption.

That said, some improvements are still needed to make the RTBC an even more useful tool for prescribers and pharmaceutical manufacturers. For example, manufacturer copay assistance and

specialty pharmacy information need to be combined to understand true patient cost. A wider view of alternatives also is needed to help alert prescribers to the most appropriate, cost-effective therapies. That is because the RTBC only indicates medication alternatives as determined by a patient's PBM and does not consider the full class of medications.

It is also worth noting that RTBC is not a replacement for formulary data. There is still a need for baseline data for prescriber selection. The prescriber only sees RTBC after a prescription is fully entered. Formulary information is available at the time of drug selection, usually quite a number of 'clicks' before an RTBC request can be sent. •

*Point-of-Care Partners is working at the forefront of RTBI standards and adoption. We have been closely monitoring their development over the past few years. I'd be happy to bring you up to date. Drop me a line at [brian.bamberger@pocp.com](mailto:brian.bamberger@pocp.com).*



# 2

## Part 2: Trends to Watch in 2018



By **Brian Bamberger**, *Life Sciences Practice Lead*

By all accounts, 2017 was a busy year for health care organizations, health information technology vendors and others. We expect that hard work will continue — if not accelerate — in 2018 to address the myriad business and legislative requirements facing the health care system. With that in mind, here are the top trends to watch in 2018.

- 1. Biosimilars.** The federal government and states will continue their efforts to establish the needed infrastructure for approval and adoption of biologics and biosimilars. The Food and Drug Administration (FDA) **issued guidance** on new naming conventions. The new changeover in names applies to both newly licensed biologics and biosimilars, and will also be applied retrospectively to biologics already on the market. Understandably, stakeholders are concerned about associated costs and burden of implementation and are raising their concerns to the FDA, which might tweak its guidance in response. There also is a need to capture patient information and outcomes in electronic health records (EHRs) for pharmacovigilance purposes as biologics come onboard.
- 2. Blockchain.** Blockchain is health care's latest bright, shiny object, meaning it will continue to attract attention in 2018. A data structure that can be time stamped and signed using a private key to prevent tampering, some people may know blockchain as the technology underlying the online currency Bitcoin. Despite the apparent — and possibly premature — enthusiasm by payers, many questions surround the use of blockchain in health care.
- 3. EPCS.** Electronic prescribing of controlled substances (EPCS) will experience an accelerated uptick in adoption, which will also increase controlled substance prescription volume. Providers are finally beginning to invest in and use EPCS infrastructure because 1) use of EPCS relates to required quality reporting targets for Medicare and other payers and 2) a growing number of states are requiring EPCS to fight the opioid epidemic. That said, vendors will have to be nimble to adapt to rapidly changing state EPCS requirements, which vary across states. These include controlled substance prescribing limits and adding new data elements, such as diagnosis, onto prescriptions.
- 4. Electronic prior authorization (ePA).** An increasing number of drugs — especially specialty medications needed for the rising number of chronic illnesses — require prior authorization (PA). ePA is poised to take off in 2018, in part because of implementations involving the ability of many EHRs and pharmacy benefit managers to accept and exchange basic information for PAs. As pharmacy moves to become instrumental in the care process in 2018, new use cases will arise. For example, pharmacists will become more involved in ePA for long-term care patients.
- 5. Fast Healthcare Interoperability Resources (FHIR).** FHIR is one of the latest in the Health Level 7 (HL7) family of standards. It underpins the accelerating movement toward open, standardized application programming interfaces (APIs). Providers and pharmaceutical companies are considering how to use innovative APIs to communicate with patients and partners. Increased adoption of FHIR-based APIs is expected in 2018. FHIR also is becoming key to Internet-based information exchange networks. FHIR is also being considered for the transport of data for specialty pharmacy enrollment, which is part of efforts to automate specialty pharmacy (see below). FHIR is in the background of Apple's new initiative to include clinical and other patient data on its iPhone.
- 6. Medication adherence.** Poor medication adherence is partially responsible for avoidable hospital admissions, and 33% to 69% of all medication-related hospital admissions at



a cost of about \$100 billion per year. To be sure, medication noncompliance is a long-standing issue. Now we have reached an inflection point where technology, value-based care and concerns about the costs of chronic illness are converging to meaningfully address the problem. This will require the ability to mine EHR data to identify noncompliant patients and provide information about costs, gaps in care and outcomes.

**7. Prescription drug monitoring programs (PDMPs).** In response to the ongoing opioid epidemic, states will continue to enact legislation mandating that prescribers and pharmacists consult PDMPs before controlled substance prescriptions are written and the drugs dispensed. PDMPs are independent, state-run databases of controlled substance prescriptions that now exist in all states and the District of Columbia. Efforts will accelerate to integrate PDMP data into prescriber workflows in EHRs, which also is a growing legislative requirement by states.

**8. Real-time benefit check (RTBC).** Intense interest will continue in 2018 around the RTBC. In contrast to current formulary and benefit information provided to electronic prescribers, the RTBC provides real-time information at the patient level, which is pulled directly from the payer. It allows the prescriber to see patient-specific condition management programs (such as Prior Authorization and step therapy), true out-of-pocket costs for a medication (specific copay/coinsurance amount) and specific deductible information.

**[Read more about virtual visits in this issue of BioPharma Insights.]**

**9. Specialty pharmacy automation.** The industry will continue working on automating specialty prescribing in 2018, with focus on the specialty enrollment process. These efforts build on standards and implementations for electronic prescribing as well as complement the work under way to automate other aspects of specialty pharmacy. Stakeholders are coming together to identify additional or enhanced standards to support enrollment and other aspects of specialty pharmacy automation. HL7's FHIR is likely to become the standard of choice to extract relevant patient administrative and clinical data from EHRs. NCPDP's Specialty Electronic Prescribing Task Group is looking at how new data elements that are useful for the enrollment process can be incorporated into the SCRIPT standard. These include, for example, additional patient contact and demographic information, diagnosis, lab values, height and weight.

**10. Virtual visits.** Stakeholders will continue to jump on the virtual visit (aka telehealth) bandwagon in 2018. Myriad efforts are under way to implement and pay for such services by the Department of Veterans Affairs, Medicare, Medicaid and private payers. Pharmacies will ramp up use of virtual visits as part of a strategic move to offer more direct patient care. However, critics wonder if potential cost savings and consumer acceptance and satisfaction will actually materialize at expected levels. **[Read more about virtual visits in this issue of BioPharma Insights.] •**

*Interested in what else is in store for 2018? I'd be happy to share my thoughts. Reach out to me at [brian.bamberger@pocp.com](mailto:brian.bamberger@pocp.com).*

# 3 Part 3: Virtual Visits: Now Coming to Homes, Doctors and Pharmacies



By **Jocelyn Keegan**, Senior Consultant

One of the biggest trends for 2018 is virtual visits, in which patients receive remote diagnosis and treatment. These can be done through a variety of arrangements, including kiosks at pharmacies connected to some of the nation's finest medical centers or video visits at home from specialists through use of computers or mobile phones. Use of virtual visits is growing rapidly, so it is important to understand their impact and opportunity for pharmaceutical manufacturers.

Long seen as some future state, the use of "telehealth" by innovative organizations continues to grow and mature. As tools and business models have evolved, their use is accelerating beyond connecting to a limited number of patients in rural areas. Major payers, including Anthem, Aetna and United Health Group, now routinely pay for virtual visits for traditional medical care. Early adopters of virtual medicine like **Kaiser Permanente** are now seeing more patients remotely than in brick-and-mortar offices. In 2015, 52% of patient transactions at Kaiser Permanente were conducted online, by virtual visits or through the health system's apps. In the public sector, the Department of Veterans Affairs (VA) is leading the way with one of the nation's largest virtual visit programs, which served 700,000 veterans in 2016. **Through VA Telehealth**, veterans can virtually access some 50 clinical specialties, from dermatology to intensive care. Both public and private payers are looking to virtual visits to increase access to mental health services. Certainly, this year's flu season is causing hospitals and practices to look for ways to increase the volume of visits and lower the risk of flu spreading by patients traveling to office or emergency room (ER) visits.

**Drivers for virtual visits.** There are many drivers for why virtual visits have become so popular. They include:

- **Costs of care.** The **average virtual visit** costs around \$40, in contrast to \$125 for an in-person office visit. In addition, virtual visits are expected to reduce costs of care,

hospitalizations and ER visits for chronic illnesses, especially diabetes. Diabetes is one of the most common chronic illnesses, with treatment costs significantly higher for other diseases. Moreover, **government statistics** show that complications from diabetes result in 7.1 million hospitalizations and 14.2 million emergency department visits each year. The vast majority are considered preventable.

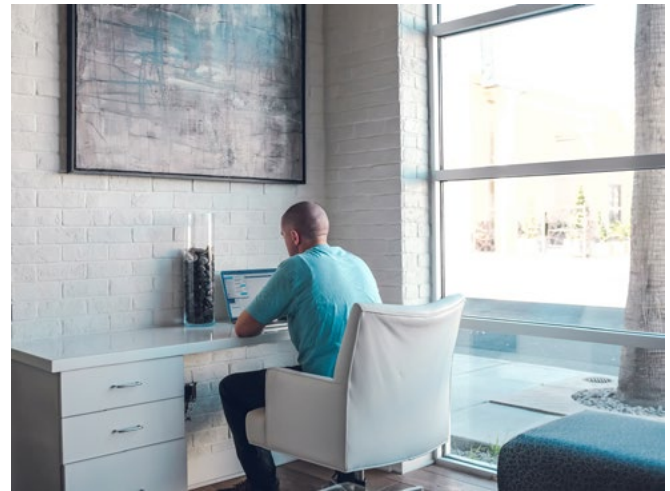
- **Scarcity of physicians.** The doctor shortage is real. The United States **could lack between** 46,000 and 90,000 physicians by 2025. The biggest gap is for primary care doctors. There also is an inequitable geographic distribution of physicians (particularly specialists), with rural areas hit the hardest
- **Strategic adoption by pharmacies.** Pharmacies are ramping up use of virtual visits as part of a strategic move to offer more direct patient care in clinics and pharmacies. For example, New York-Presbyterian (NYP) and Walgreens are teaming up to provide remote access to NYP physicians on Walgreens' website and kiosks at certain Duane Reade drugstores in New York City. **CVS similarly** is exploring direct-to-consumer virtual visit opportunities. Virtual visits are perceived as a way to create competitive advantage, as well as bring patients into stores.
- **Physician payment penalties.** Because many hospitalizations and ER visits are preventable, payers—particularly Medicare—are reducing reimbursements for readmissions. This is driving providers to adopt virtual visits to prevent readmissions and related payment penalties. In addition, the move toward value-based care also can negatively affect reimbursements if providers do not meet outcomes and other quality targets. Providers are responding, **with over half investing** in virtual visits to improve patient outcomes.
- **Expanded access to care.** The explosion in electronic technologies has created a wide availability of options for vir-

tual visits. Now virtual visits can be done just about anywhere and anytime through kiosks, tablets, mobile devices and other applications. Virtual visits also can add expert capacity across healthcare systems and individual providers.

- **Global use is expanding.** Money talks and the investment in domestic and global telehealth is quite revealing. Virtual visits are here to stay. They are becoming a mainstay of care in all parts of the world. In 2015, the global telehealth market was **valued around \$18 billion**, but is expected to hit over \$40 billion by 2021. Domestic spending on telehealth should account for **nearly a quarter** of the total.

**Leveraging virtual visits.** Pharmaceutical companies are just beginning to evaluate the impact of virtual visits across practice settings. It will be imperative to understand how to leverage the new care setting to gain a competitive edge or risk losing market share. Emerging opportunities include:

- **Facilitating clinical trials.** Virtual visits can help identify patients who may be candidates for clinical trials. They can enhance recruitment by making it easier for patients to participate and not have to travel long-distance several times a year to visit a trial sponsor. This can be especially important for patients with rare diseases, whose small populations tend to be scattered geographically. Virtual visits also can help monitor patients and provide more frequent and accurate data to facilitate research.
- **Going “beyond the pill.”** Just about everyone in health-care is being pushed to show that their goods and services provide value. Pharmaceutical companies are no exception. Both payers and consumers want medications to provide value in the form of improved outcomes. Virtual visits can help provide data and feedback to assist in outcomes measurement.
- **Getting in sync with changing medical practice.** The practice of medicine is changing, with a huge assist from technology. Virtual visits are changing the mix of the care team by providing remote access to specialists. It’s not only physicians who are participating; it’s also midlevel practitioners, such as nurse practitioners and physician assistants, and pharmacists. Pharmaceutical companies must understand the technology because it is guiding decisions in the identification, treatment and follow-up with patients by a host of new health care providers.



- **Outreach to high risk patients for adherence and drug review.** Under value-based care contracts, practices and care teams need to focus scarce resources on identifying patients across their practice for potential shifts in regimen, or react to signals that patients are not adherent. The ability to schedule a virtual review with a patient makes many more complex programs within cost and time reach for practice staff focused on care coordination and care management.
- **Connecting with patients.** Technology, along with such government requirements as meaningful use, are enabling patients to become more active and self-directive in their care. In fact, consumers are becoming more involved in designing their treatment and therapeutic options. As a result, pharmaceutical companies need to develop digital engagement strategies to connect with patients to increase targeted services and products—as well as to develop and maintain brand loyalty. “B2C”—or business to consumer—will become a new acronym and business model for brand teams. ●

*It is clear that virtual visits are rapidly becoming part of the new healthcare landscape—even though there are issues related to adoption, reimbursement and legalities that must be sorted through to smooth the transition. Point-of-Care Partners has done a deep dive on what that looks like, as well as opportunities and gaps. In our work we are looking at the support payers and pharmaceutical companies can provide to assist practices in developing their pathways for virtual visits. We think virtual visits will be an important technology growth area for pharmaceutical companies to consider especially with regard to treatment of chronic conditions. Let me know if you want to learn more. You can reach me at [jocelyn.keegan@pocp.com](mailto:jocelyn.keegan@pocp.com).*