Perspectives and Updates on
Health Care Information Technology

Biopharma Insights

HIT Perspectives

1 Achieving Patient-Specific
Price Transparency by
Unlocking EHR Data

2 Tapping Pharmacy
Infrastructure and Clinical
Services in a Changing World

3 Pulling Back the Covers on
Health Information Exchanges
Part 1: Understanding Where They've Been

**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

© 2020 Point-of-Care Partners, LLC

September 2020

Point•of•Care
PARTNERS | HEALTH IT
MANAGEMENT
CONSULTANTS

September 2020
HIT Perspectives

Part 1
Achieving Patient-Specific
Price Transparency by
Unlocking EHR Data

Part 2
Tapping Pharmacy Infrastructure and
Clinical Services in a Changing World

Part 3
Pulling Back the Covers on
Health Information Exchanges
*Part 1: Understanding Where
They've Been*

1 Achieving Patient-Specific Price Transparency by Unlocking EHR Data

By *Pooja Babbrah*, *Practice Lead, PBM Services*

Quick Summary:

- New use cases are driving change, including value-based care reimbursement models and COVID-19

- New kinds of patient-specific transparency leverage EHR data to benefit payers, providers and patients

- Issues related to data access and data sharing must be addressed so that transparency use cases can be reviewed and refined

Health care continues its mission to use data to increase transparency, lower costs, improve quality and enhance patient choice and satisfaction. Patient information in the electronic health record (EHR) is currently being leveraged to generate patient-specific information for the costs of drugs covered under a patient's drug benefit; the costs of drugs, devices and services covered under the patient's medical benefit; along with the status of patients' specialty medication prescriptions.

These twists on transparency are relatively new, owing to advances in technology and emerging use cases. Transparency has traditionally meant having providers inform patients about the procedures they offer and their associated prices. That trend is certainly alive and well. We see this most recently in the hospital transparency **final rule** from the Centers for Medicare and Medicaid Services (CMS). Beginning January 1, 2021,

hospitals must post payer-specific negotiated rates for 300 services online in a searchable and consumer-friendly manner. Armed with this information, CMS believes that patients can shop around for the best deal on a specific procedure; at the same time, this is expected to lower costs through competition.

New use cases are driving change.

This final rule arose as new use cases were emerging concerning the need for additional price transparency based on a patient's insurance coverage information available in the EHR. Two stand out.

The first is the increase in adoption of value-based care reimbursement models, which reward providers for improving quality and lowering costs. Several studies have found that having information on the costs of patient care helps guide physicians toward more cost-effective care with better outcomes. For example, a 2018 **study** found that having cost data was an influential factor in helping physicians select a particular therapy and physicians reported that they welcomed the information. The study also indicated that increased data access was directly related to improved outcomes, which hits at the heart of the value-based care model.

A second driver for increased transparency is responses to the coronavirus disease 2019 (COVID-19) crisis. Many Americans are feeling the financial squeeze caused by these responses to the pandemic. Many lost their incomes and health insurance, while countless businesses struggle to survive in the aftermath. According to one **survey**, many consumers will select care

**Perspectives and Updates on
Health Care Information Technology**

www.pocp.com

Point·of·Care
PARTNERS | HEALTH IT
MANAGEMENT
CONSULTANTS

© 2020 Point-of-Care Partners, LLC

More than ever, consumers need to know upfront about drug prices, payer requirements, pharmacy options and potential out-of-pocket costs.

differently in a post-COVID-19 world, with the need for higher quality, lower cost and more accessible care options at the top of everyone's list. In addition, adults increasingly are concerned about the costs of health care—more so than they were before COVID-19. Price transparency—especially on a patient-specific basis—will be a must have for both patients and providers going forward.

New kinds of patient-specific transparency. With the need for transparency now top of mind, the industry has responded with new ways to leverage EHR data that will be beneficial to payers, providers and patients. For example:

• **Drug prices.** The soaring cost of specialty medications and the increasing complexity of health benefits means that consumers are being asked to bear a larger share of the cost of their medications. Most don't know how that will affect their pocketbook. More than ever, consumers need to know upfront about **drug prices, payer requirements, pharmacy options** and potential **out-of-pocket costs**.

Until recently, prescribers had difficulty determining how much a drug would cost the patient out of pocket. This would lead to the patient often "abandoning" their prescription at the pharmacy counter because they couldn't afford the medication. The electronic prescribing industry responded by creating the real-time pharmacy benefit check (RTPBC). This tool provides

patient-specific information, based on their health plan, in real time as part of the electronic prescribing (ePrescribing) process in EHRs. This is expected to be a game changer for prescribers and patients, who can now work together at the point of care to identify and eliminate price barriers so patients can get affordable medications from the get-go. The RTPBC, or "real-time benefit tool" as the government refers to it, will be required for use by Medicare Part D beginning January 1, 2021. Private insurance companies are expected to follow suit.

• **Real-time transactions for medical benefit coverage.** The industry is making progress on electronic transactions related to medical benefit verification. The Da Vinci Project, a Health Level 7 Fast Healthcare Interoperability Resources (HL7 FHIR®) accelerator, is working on use cases related to real-time verification of medical benefit. These include coverage requirements discovery (CRD), documentation templates and rules (DTR), and prior authorization support (PAS). One immediate application of this is in the specialty pharmacy space. Roughly half of specialty prescriptions today are for drugs, devices and procedures covered under patients' medical benefit. These can also be a huge hit to consumers' pocketbooks if their costs are not known at the point of the prescribing. Implementation of a combination of these use cases in the ePrescribing workflow

Perspectives and Updates on
Health Care Information Technology

www.pocp.com

Point·of·Care
PARTNERS | HEALTH IT MANAGEMENT CONSULTANTS

© 2020 Point-of-Care Partners, LLC

would empower patients and their doctors to identify the most cost-effective, therapeutically appropriate course of treatment and help eliminate medication noncompliance because a prescription is too expensive.

• **Status of specialty medication prescriptions.** CVS Specialty has created a new service called **Specialty Expedite** for patients with complex medical conditions requiring specialty medications. The goal is to help patients with the often complicated and time-consuming process to obtain needed specialty medications and keep them updated on the status of their prescription. This process often takes weeks and involves obtaining permission from an insurance company through the prior authorization (PA) process and exchange of voluminous medical and other information between the patient's insurance company and provider. Specialty Expedite works by securely gathering appropriate patient information, including insurance, labwork and diagnosis codes via a doctor's EHR system instead of sharing it via fax. In addition, it will give patients the option of receiving real-time status updates via email or text so they can stay informed on the status of their

The industry is making progress on electronic transactions related to medical benefit verification.

prescriptions and any PA requirements. CVS expects this will help improve patient satisfaction, increase speed to therapy and reduce prescription abandonment.

Moving forward with transparency. Transparency is a hot topic and efforts are accelerating to improve patients' participation in their own health care. However, certain issues related to data access and data sharing must be addressed so that transparency use cases can be reviewed and refined.

• **Patient consent.** Patient consent has been a thorny issue since the early days of EHRs. In the beginning, it was a binary choice: opt in or opt out. Nevertheless, this was confusing because mechanisms varied among entities. Patients either didn't know these choices existed or didn't understand how they worked. Today, data sharing options and consent management are even more confusing. Now patients can share all or selected parts of their health record with various entities, such as providers and third-party application programming interface (API) developers. Who manages electronic consent is a critical issue. There are gaps in consent management for basic patient data, not to mention for durable powers of attorney and other documents essential to end-of-life care. Moreover, patient consent rules often vary by state.

Things get even more complicated in the case of sensitive health information, such as for behavioral health conditions. Much of these data cannot be shared under provisions of 42 CFR. Part 2 without the patient's direct knowledge and consent. While there has been movement toward updating this legislation, no changes have yet been made.

• **HIPAA.** The **Health Insurance Portability and Accountability Act Privacy Rule** permits, but does not require, covered health care entities to get patient consent before using or disclosing protected health information (PHI) for treatment, payment and health care operations. Entities can share PHI digitally or by phone fax, or mail. Although HIPAA does not require that health care entities offer patients a choice about the sharing of their PHI, many **entities and states have adopted policies or laws that require patient consent**.

While HIPAA can work together with more detailed privacy policies, the variations among states and other entities' consent policies can be confusing and difficult to understand for consumers. There is no one place an individual can go for

The world of transparency is rapidly evolving. Stakeholders especially must come together to address gaps in mechanisms and policies related to data access and data sharing, as well as create easy-to-understand, actionable policies and mechanisms for consumers.

an easy-to-understand explanation of which data-sharing and consent rules apply to them—and when. In addition, there are gaps for entities that are not covered under HIPAA, such as API developers. While APIs may be brought under HIPAA's privacy provisions, such as through business associate agreements, for example, they are a black box for consumers.

• **Health literacy.** Patients often lack understanding of the terminology involved with their clinical care, lab results and medication management. This makes it difficult for them to know what they are agreeing to when it comes to data access, data sharing and consents.

• **The digital divide.** The digital divide also presents challenges. Despite the widespread availability of broadband and Internet access, there still are pockets with limited or no connectivity. This means that certain segments of the population (such as the elderly, low income and rural populations) have limited access to wi-fi and Internet technologies. This restricts opportunities for them to access and share their personal health data and manage consents.

Strides are being made to address this by **federal** and **state** governments, accelerated in response to the COVID-19 crisis. That said, it will be some time before broadband access is ubiquitous across the country.

Conclusion. The world of transparency is rapidly evolving. Stakeholders especially must come together to address gaps in mechanisms and policies related to data access and data sharing, as well as create easy-to-understand, actionable policies and mechanisms for consumers. Want to know more? Reach out to me at **pooja.babbrah@pocp.com**. •

Perspectives and Updates on
Health Care Information Technology

www.pocp.com

Point·of·Care
PARTNERS | HEALTH IT MANAGEMENT CONSULTANTS

© 2020 Point-of-Care Partners, LLC

September 2020
HIT Perspectives

Part 1
Achieving Patient-Specific
Price Transparency by
Unlocking EHR Data

Part 2
Tapping Pharmacy Infrastructure and
Clinical Services in a Changing World

Part 3
Pulling Back the Covers on
Health Information Exchanges
*Part 1: Understanding Where
They've Been*

2 Tapping Pharmacy Infrastructure and Clinical Services in a Changing World

By **_Pooja Babbrah_**, *Practice Lead, PBM Services and*
      Phung Matthews, *PharmD*

Quick Summary:

- Drivers for pharmacists to provide community-wide clinical care services are coalescing

- Pharmacists' expanded roles include COVID-19 testing, vaccinations and treatment

- Health IT and Regulatory Changes are vital in enabling pharmacists to take on greater clinical roles

The role of pharmacists has been changing as health care evolves. For the past decade, pharmacists have been coming out from behind the counter to provide a wide range of services, such as becoming an integral part of care teams and saving lives and lowering costs through medication therapy management. More recently, pharmacists' roles have expanded to include more patient care and public health services, including administering vaccinations and performing tests for such conditions as streptococcal pharyngitis.
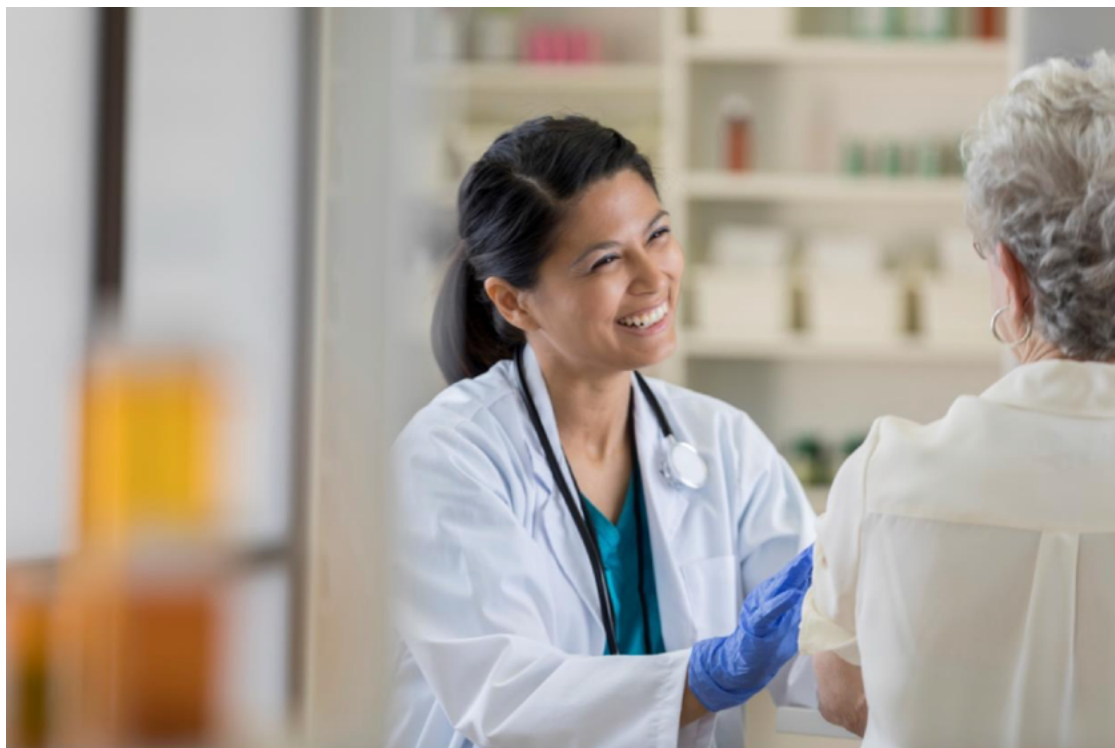
Now the coronavirus disease 2019 (COVID-19) pandemic has shined a light on how pharmacists and the pharmacy infrastructure require enhancements to effectively inform the patient's care team of services and medications administered in the pharmacy setting.

Drivers for change. Regulatory and operational transformations necessary for pharmacists to provide community-wide clinical care services have been under way for decades. Several drivers for change already existed before the pandemic hit. One was addressing the shortage of primary care physicians. In response, many states and regulatory boards have updated pharmacists' scope of practice to provide additional services. Examples include providing routine health services, such as immunizations and prescriptions for birth control, as well as expanded counseling related to medications and various health conditions.

Another driver was changes in the regulatory environment, such as Medicare allowing pharmacists to bill for management of chronic disease and transitional care. Then there was the impact of the changing health care environment, in which value-based care recognizes pharmacists' abilities to provide lower cost care (such as vaccinations), identification of gaps in care (such as subtherapeutic pharmaceutical care) and education of patients, all of which help to lower costs and improve outcomes.

All told, these and other changes in the roles of pharmacists

Perspectives and Updates on
Health Care Information Technology

www.pocp.com

Point·of·Care
PARTNERS | HEALTH IT
MANAGEMENT
CONSULTANTS

© 2020 Point-of-Care Partners, LLC

have been transformative. That said, the transition may not have gained traction as quickly as might have been expected or many would have liked. The size and scope of efforts related to the diagnosis and treatment of COVID-19 will accelerate and solidify the new roles of pharmacists.

Opportunities. Pharmacy has opportunities to improve patient outcomes in multiple areas. Some of these areas are well established while others are emerging.

- **COVID-19-focused roles.** Many roles for pharmacists have expanded in response to COVID-19. They include:

  - Testing Pharmacies have emerged as a convenient location for typically drive-through COVID-19 tests and will continue to be a focal point for handling the surge of COVID-19 testing needed when virus "hot spots" break out and when students go back to school en masse, for example.

  - Contact tracing. Pharmacists can help improve contact tracking by transmitting patient data to public health agencies.

  - Adverse events monitoring and reporting. The need to detect and report adverse events will take on increased importance during the COVID-19 era due to the rapid introduction of new vaccines and treatments. Pharmacists

"Giving pharmacists the authorization to order and administer COVID-19 tests to their patients means easier access to testing for Americans who need it. Pharmacists play a vital role in delivering convenient access to important public health services and information. The Trump Administration is pleased to give pharmacists the chance to play a bigger role in the COVID-19 response, alongside all of America's heroic health care workers." **Statement** issued by Health and Human Services Secretary Alex Azar on April 8, 2020

**Perspectives and Updates on
Health Care Information Technology**

www.pocp.com

Point·of·Care
PARTNERS | HEALTH IT MANAGEMENT CONSULTANTS

© 2020 Point-of-Care Partners, LLC

> Pharmacists will play an increasing overall role in patient care and maintaining access to care throughout the COVID-19 pandemic, serving as primary care extenders to help triage patients and monitor them for possible side effects.

already are a first line of defense in identifying adverse reactions. They will have new responsibilities to identify and report adverse events from novel treatments and vaccines to manufacturers, the Food and Drug Administration and public health authorities.

- **Vaccinations.** To be sure, pharmacists already were providing key routine immunizations for the flu, pneumonia and shingles. With COVID-19, pharmacies will be ramping up to provide wide-scale immunizations once a vaccine—or several—are approved and come to market. The American Pharmacists' Association (APhA) is one of the organizations advocating advancing pharmacists' clinical roles. It recently signed a **letter**, along with 12 other pharmacy organizations, urging the National Academies of Science, Engineering, and Medicine to prioritize the COVID-19 vaccination of pharmacists and pharmacy staff and to prominently include pharmacists in plans for the allocation and distribution of the COVID-19 vaccine. A national vaccination campaign will require pharmacists to prepare for the all-hands-on-deck efforts to immunize large segments of the population.

- **Treatment**. Pharmacy has been working for some time to integrate clinical models, from **pharmacogenetics to chronic care**. Large pharmacy chains are gearing up for

expanded clinical services. **Walgreens** announced plans to add primary care clinics in up to 700 locations. Pharmacists will play an increasing overall role in patient care and maintaining access to care throughout the COVID-19 pandemic, serving as primary care extenders to help triage patients and monitor them for possible side effects. Additionally, pharmacies may become locations for on-site administration of specialized COVID-19 treatment therapies, building on the capabilities that some have created for administration of certain specialty medications. At the same time, pharmacies will continue their crucial role in providing clinical services to help manage high-risk patients with chronic diseases, averting potential relapse or avoidable hospitalization. For example, a new **program** in Ohio will help relieve the strain on the state's health care system caused by COVID-19 by allowing community pharmacists to complement physician care efforts by helping to manage conditions such as diabetes and high blood pressure and preventing unnecessary hospitalizations.

Taking It to The Next Level: Critical Health IT and Regulatory Changes

A number of critical health information technology and

regulatory changes will be vital in enabling pharmacists to take on greater clinical roles and improving pharmacy's response to COVID-19. For example:

Interoperability challenges. While the pharmacy infrastructure is robust in and of itself, there are gaps and interoperability issues with connecting with other necessary health care partners. For example, the public health infrastructure is fragmented and not necessarily standards based. It tends to be underfunded and interventions are often reactionary. This makes it difficult to share needed clinical information, as well as report adverse events to public health officials. Health information exchanges have limited connectivity within and across geographic areas, and as such limit data exchange. Not only do these systems need remediation, greater interoperability and sustainability, but they should also integrate with pharmacy systems.

Patient matching is a significant interoperability challenge. There is no single way to identify patients across disparate systems. Legislation instituted a funding **ban** in 1999 that prevented the government from working with private groups to create a national patient identifier. To fill the void, stakeholders created one-off proxies or algorithms, which remain imprecise. According to a 2014 **report**, 7 of every 100 patient records are mismatched. The error rate is typically closer to 10% to 20% within a health care entity and 50% to 60% when entities exchange with each other.

The patient mismatch problem has come to a head again with the COVID-19 response. Patients receive care from disparate health care organizations (urgent cares, field hospitals, pharmacies, labs, payers and various types of providers) in various venues and even

There may be a beginning to the end of the problem. Six health care organizations have formed a national coalition, called PatientID Now, advocating legislation and regulations.

states. Many of these sites are outside of patients' normal health care channels, so their records (and advance directives) aren't available to their care team or pharmacies. This creates problems for the quality and safety of patient care, as well as for claims processing, adverse events reporting and contact tracing.

There may be a beginning to the end of the problem. Six health care organizations have formed a national coalition, called **PatientID Now**, advocating legislation and regulations. The message seems to have resonated with Congress, although efforts remain stalled. The House of Representatives recently **voted** to end the identifier funding ban, although the Senate declined appropriations in FY 2020 funding legislation. Even if a similar bill is passed by the Senate and eventually becomes law, it will take time to create a national patient identifier and for it to become adopted throughout the health care system.

Regulatory drivers. During COVID-19, as previously noted, the government acted with lightning speed to temporarily provide greater flexibility for pharmacist-administered COVID-19 testing. We expect federal and state governments will do the same for pharmacist-administered COVID-19 vaccinations, given the role pharmacists already hold administering flu shots. In addition, regulations concerning telehealth reimbursements and sites of administration have been eased or waived in response to COVID-19. Such waived restrictions should continue, as many policymakers, health care organizations and advocacy groups have noted.

Pharmacist Provider Status Is Key

In an important step, to the Centers for Medicare and Medicaid Services included pharmacists under Medicare Part B for the

Organizations such as APhA and the National Alliance of State Pharmacy Associations are working to tighten the gap between an individual state's scope of practice language vs what is being allowed at the federal level concerning recognition of the pharmacist to provide essential services and the ability to bill for them.

services they are now providing related to COVID-19. However, pharmacists and their patient care services are not included in key sections of the Social Security Act, which determines eligibility for health care programs such as **Medicare Part B**. Many state and private health plans often cite the omission from Medicare Part B as a reason for noncoverage for beneficiaries or lack of compensation of pharmacists for providing comprehensive, patient-centered care.

Organizations such as APhA and the National Alliance of State Pharmacy Associations are working to tighten the gap between an individual state's scope of practice language vs what is being allowed at the federal level concerning recognition of the pharmacist to provide essential services and the ability to bill for them. Their efforts and others are paying dividends. **In Ohio**, for example, Medicaid managed care companies are working with the Ohio Department of Medicaid to act on a 2019 law that recognizes pharmacists as providers in that state.

Additional solutions. Beyond the role for pharmacists in response to COVID-19, who else could help take care to the next level? Disrupters in the technology space are an obvious group, which will effect far-reaching changes. The groundwork for interoperability has been laid with requirements for application programming interfaces (APIs) using Health Level 7's FHIR (Fast Healthcare Interoperability Resources) standard. These APIs could be instrumental in adverse events reporting, connecting the dots between nontraditional health care and public health entities. Amazon and the Gates Foundation—always players to watch—recently **joined forces** with scientists to create home test kits for coronavirus. Presumably, these could be ordered through **Amazon's** new pharmacy service, which has an application under way for a trademark as Amazon Pharmacy. Amazon also sent Amazon Prime users information about its PillPack online medication fulfillment services and is working to get it covered by various insurance companies. Additionally, **Amazon** is establishing health care centers for its fulfillment center workers and their families, with 20 centers in five cities on the drawing board. They will provide a number of on-site and referral services. Examples include full-spectrum acute, chronic and preventive primary care; dispensing of prescription medications; vaccinations; behavioral health

services; physical therapy; chiropractic care; health coaching; and care navigation to specialty referral services.

The impact of existing pharmacy clinical services and infrastructure bolstered by nontraditional players such as Amazon should not be underestimated, both during and after the COVID-19 crisis. While other industries struggle to adjust and evolve, our health care system has many built-in resources and reserve capacity that can be deployed to aid in the ongoing response to the pandemic.

Looking ahead. The world is rapidly changing in response to COVID-19 and pharmacy is poised to be an important part of patient care outcomes. Let's work to bring it to the forefront. Reach out to us at **pooja.babbrah@pocp.com** or **phung. matthews@pocp.com**. •

September 2020
HIT Perspectives

Part 1
Achieving Patient-Specific
Price Transparency by
Unlocking EHR Data

Part 2
Tapping Pharmacy Infrastructure and
Clinical Services in a Changing World

Part 3
Pulling Back the Covers on
Health Information Exchanges
*Part 1: Understanding Where
They've Been*

③ Pulling Back the Covers on Health Information Exchanges
Part 1: Understanding Where They've Been

By **Michael Solomon**, PhD, MBA, Practice Lead, eCare Management
and **Ken Kleinberg**, Innovative Technologies Practice Lea

Quick Summary:

- HIEs are needed more than ever before to address immediate needs like public health data exchange and patient access

- Years of government drivers and financial infusions brought HIEs to where we are today

- Business models, geographic and governance differences and varied technology platforms led to sustainability issues for some HIEs

Recent seismic events in the health care system have put the spotlight once again on health information exchanges (HIEs). Now more than ever before, HIEs are needed to address such immediate needs as the exchange of public health data stemming from the coronavirus disease 2019 (COVID-19) pandemic and the shift to give patients wider access to their data and control over its use.

HIEs received considerable attention (and funding) during the major advancement of electronic health records (EHRs) through the federal Health Information Technology for Economic and Clinical Health (HITECH) Act more than a decade ago. Even back then, HIEs were viewed as a means to plug interoperability gaps

and help enable the electronic exchange of health information primarily among providers (including hospitals and ambulatory practices, labs and other health care entities) within localities, states and geographic regions. Since then, HIEs have had a lot of ups and downs. Many were absorbed/merged by more successful HIEs, went out of business or faced an uncertain future.

Today, HIEs are definitely back on the radar after 20+ years of effort and investments. Let's take a brief look at where HIEs have been so we can better understand their current state and outlook for the future, which will be covered in the next issue of *HIT Perspectives*.

A long but bumpy ride. The first iteration of what we today call HIEs were developed in the 1990s as community health information networks (CHINs) or community health management information systems (CHMISs), two competing models that evolved as the Internet was emerging and constrained by lack of digitized data. The first government-level push for HIEs occurred in a 2004 **initiative** to transform health through technology. At the time, they were called regional health information organizations (RHIOs). They gradually grew in number, but progress was uneven.

With the passage of **HITECH** in 2009, CHINs, CHMISs and RHIOs were rebranded as HIEs. HITECH gave HIEs a financial shot in the arm. Fifty-six grants totaling $564 million were awarded to states and localities to create RHIOs. HITECH also created meaningful use to incentivize EHR adoption and

**Perspectives and Updates on
Health Care Information Technology**

www.pocp.com

Point-of-Care
PARTNERS | HEALTH IT MANAGEMENT CONSULTANTS
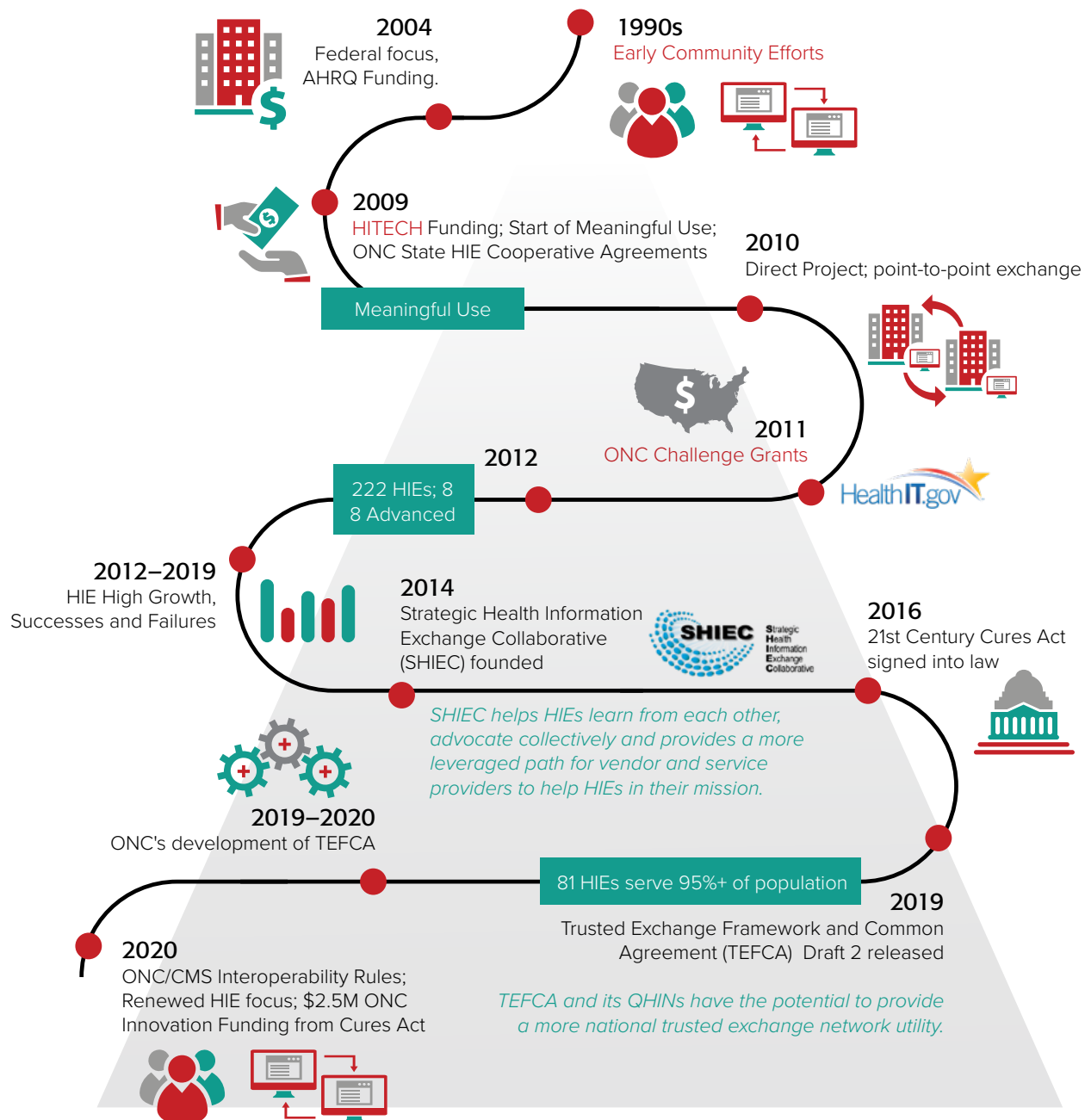
© 2020 Point-of-Care Partners, LLC

established the Office of the National Coordinator for Health Information Technology (ONC). The aforementioned grants were awarded by ONC, which followed up in 2011 with an additional $16 million to 10 state organizations through its **Challenge Grants** program for HIEs.

This financial infusion paid off. In 2012, the eHealth Initiative **reported** 222 HIEs across the United States (US), of which 88

were advanced initiatives, meaning they had reached operating, sustaining or innovating phases. These efforts ultimately brought us to where we are today – 81 HIEs serving more than 95% of the US population according to the **Strategic Health Information Exchange Collaborative (SHIEC)**.

These early HIE efforts and recent drivers are shown below.

The Evolution of Health Information Exchanges (HIEs)

2004
Federal focus, AHRQ Funding.

1990s
Early Community Efforts

2009
HITECH Funding; Start of Meaningful Use; ONC State HIE Cooperative Agreements

2010
Direct Project; point-to-point exchange

Meaningful Use

2011
ONC Challenge Grants

2012
222 HIEs; 88 Advanced

2012–2019
HIE High Growth, Successes and Failures

2014
Strategic Health Information Exchange Collaborative (SHIEC) founded

2016
21st Century Cures Act signed into law

SHIEC helps HIEs learn from each other, advocate collectively and provides a more leveraged path for vendor and service providers to help HIEs in their mission.

2019–2020
ONC's development of TEFCA

81 HIEs serve 95%+ of population

2019
Trusted Exchange Framework and Common Agreement (TEFCA) Draft 2 released

2020
ONC/CMS Interoperability Rules; Renewed HIE focus; $2.5M ONC Innovation Funding from Cures Act

TEFCA and its QHINs have the potential to provide a more national trusted exchange network utility.

Unraveling sustainability issues. Seven years after the initial federal cash infusion, some of the original HIEs are still going strong. But why did others become unsustainable? The grants to some organizations were not enough to keep many HIEs afloat. Business models (who paid and how much) didn't always ensure sustainability, especially for HIEs that were privately funded. There were geographic and governance differences, with some states having multiple HIEs. Technology platforms and "standards" varied, as well as the ability to exchange specific types of data and data elements. Was it the HIEs' role to provide value-added services, such as data transformation and analytics, or was their primary role to just exchange information "as is"? Many were ahead of their time, but their service areas lacked interoperable technologies and connections to providers. Support by providers, payers and EHR vendors has been all over the map, from minimal to all in.

As a result of these and other issues, several HIEs merged, others went out of business and many struggled to survive. For example, Connecticut is on its fourth go-round to create a statewide HIE, following a decade-long implementation effort running up a tab of more than $20 million.

In addition, HIEs lost prominence in discussions about data exchange—being eclipsed by the focus on and importance of EHRs and their interoperability. Epic exemplifies this by providing its clients a widely used interoperability capability between its systems that can also be used to connect to other EHRs.

Despite their ups and downs and rumors of their overall demise, HIEs are still a key part of the health care landscape. There are many bright spots, including:

- Delaware Health Information Network. **DHIN** went live in 2007 and rapidly became the *first* operational statewide HIE in the nation. Today, DHIN serves all acute care hospitals in Delaware, along with major laboratories and radiology facilities. Most medical providers in the state participate. Nearly 2.9 million patient records are stored in its community health record. DHIN also operates a statewide health care claims database that collects data from Medicare, Medicaid and several large commercial payers.

- **The Indiana HIE** is one of the nation's oldest, with roots going back 30 years. Today, it exchanges data on 16 million patients with 117 hospitals, 18,486 practices and 51,688 providers. It is one of the HIEs maintaining a COVID-19 pandemic dashboard.

- **MiHIN**, Michigan's Health Information Network, has been serving the data exchange needs of providers statewide for the past decade. With the 2019 integration of the Great Lakes Health Connect HIE as a wholly owned subsidiary, MiHIN continues to expand its reach and portfolio of services. By the end of that year, more than 150 organizations were exchanging data across the network, and 138K+ providers were represented in the statewide health directory. MiHIN has also rapidly responded to the pandemic, releasing a catalog of reports for providers and government organizations to aid in the tracking of admissions and discharges (COVID and non-COVID) in emergency departments and inpatient facilities.

- **Nebraska Health Information Initiative** (NEHII) is a statewide HIE connecting 3 hospitals, 186 ambulatory and 212 post-acute care facilities, and 4 million patients. NEHII, in cooperation with the state's Department of Health & Human Services, launched COVID-19 data monitoring services to help providers and government agencies track test results, inpatient bed availability and medical supply needs. It was the first HIE to achieve National Committee for Quality Assurance (NCQA) accreditation.

Other successful HIEs with bright long-term prospects include the **Chesapeake Regional Information System for our Patients (CRISP)**, the HIE for Maryland and the District of Columbia; **San Diego Health Connect**; the **West Virginia Health Information Network**; **Health Current**, the HIE for the state of Arizona; and the large number of HIEs in New York under the **Statewide Health Information Network of New York (SHIN-NY)**.

With the wind behind their back, HIEs are picking up momentum once again. In the next issue of *HIT Perspectives*, we will look at where HIEs stand today and their challenges and opportunities for the future. In the meantime, reach out to us at **michael.solomon@pocp.com** and **ken.kleinberg@pocp.com** with questions. •