

## Pharmacists without Access to the EHR: Practicing with One Hand Tied Behind Our Backs

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### Abstract

*Pharmacists are the most accessible healthcare professionals to the public, yet have the least amount of information from the electronic health record available to them. This lack of information makes ensuring that patients are receiving proper medications and monitoring for efficacy and safety a challenge, if not impossible in some situations. Having access to a national electronic health record would provide pharmacists with this needed information to truly engage with prescribers as fellow clinical experts in the field. Sharing prescription information for non-controlled substances would also decrease the likelihood of a patient receiving duplicative therapy from two prescribers or pharmacies that may not know what the other is doing. There are already examples of successful national data sharing including the Prescription Drug Monitoring Program for controlled substances as well as the Veterans Affairs healthcare system. Therefore, our profession needs to push for nationwide access to patient electronic health records, which includes all healthcare providers. This will facilitate the inclusion of pharmacists in the optimization of the care of patients who need our expertise in managing their medication regimens as well as build better relationships with prescribing providers.*

There is an adage in oncology that goes “No meat, no treat” which means that oncologists refuse to treat a suspected cancer without having adequate information to make a diagnosis and treatment plan. Yet, in pharmacies across the United States, the exact opposite happens. A prescription is sent to a pharmacy and the pharmacist is supposed to dispense the prescription safely and efficiently. The only information available to the pharmacist is the information in the prescription and any previous information in the pharmacy computer system (ie, demographics, insurance, prescriptions previously filled at the pharmacy). Healthcare providers that see established patients would be aghast at the lack of information available to community pharmacists to make decisions with a patient. Yet, this is accepted as the standard of care for community pharmacies across the United States. The lack of information is partly because the United States of America does not have a national EHR. The World Health Organization reports that >50% of upper-middle- and high-income countries had adopted a national EHR by 2016.<sup>1</sup> The report also noted that 72% of World Health Organization member states with a national EHR reported integration of the information system with pharmacy. The current system in the US results in providers who can transmit prescriptions to pharmacies, but pharmacists having no reasonable means of having all of the needed electronic health record (EHR) data to verify the appropriateness of the prescription. Previous data suggests that 39% of medication therapy management (MTM) visits or consults could be completed without contacting the patient or prescriber if the pharmacist simply had access to the EHR to view the progress notes, diagnoses, labs, and allergies.<sup>2</sup>

The United States has examples of successful closed-loop systems including the Veterans Affairs (VA) and Kaiser Permanente. The VA has shown the benefits of being able to take care of patients inside of a system where all of the healthcare providers have equal access to the information in a patient’s electronic health record (EHR).<sup>3</sup> Kaiser is an example of a private closed-loop system in the US and has been able to demonstrate its efficiency when compared to the National Health Service in England, another closed-loop system.<sup>4,5</sup> The vast majority of Americans are in open healthcare systems where they have the freedom to choose any medical provider they want regardless of whether that provider has access to the patient’s previous medical history. These open systems require more proactive coordination of care to help optimize the safety and efficacy of both non-pharmacologic and pharmacologic treatment and monitoring plans. There are numerous reports in the literature about failures in the transitions of care as well as their associated costs and outcomes.<sup>6-8</sup> This has led to a greater emphasis of involving pharmacists in transitions of care to try to minimize the risk of miscommunications (or a lack of communication) that can occur when a patient is transitioning from one setting to another.<sup>9-11</sup>

Community pharmacists are consistently recognized as the most accessible professional in healthcare.<sup>12</sup> Why are these valuable professionals denied access to the patient’s health record? How can a pharmacist reasonably ascertain that a prescription is appropriate for a patient without knowledge of a diagnosis or indication? Time is lost by providers, pharmacists, and possibly patients when pharmacists present interventions that are not accurate or information in the EHR alters the original recommendation.<sup>13</sup> A previous study has shown that 25% of drug therapy problems (DTP) are invalid upon pharmacist EHR review. Of the recommendations that were viewed as valid, EHR review influenced the confidence level of 45% of the interventions.<sup>14</sup>

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It is easy to point the finger at the numerous EHR platforms available for medical practices to use. However, these practices have no issues in being able to e-prescribe a prescription with any pharmacy in the country and e-prescriptions represented 80% of all prescriptions filled in 2019.<sup>15</sup> Pharmacies are privy to and routinely employ the use of the Prescription Monitoring Program (PMP) for their state regardless of whether they are a chain or an independent. The National Association of Boards of Pharmacy's PMP InterConnect program allows pharmacies to connect to any of the 48 states that are participants.<sup>16</sup> Access to relevant lab values, such as an INR or serum creatinine (SCr) could help pharmacists make clinical judgements about the proper dosage of medications, appropriateness, and other factors that promote the goals of therapy. In addition, the benefits of the pharmacist having EHR access can yield fruitful results on diabetes and transition of care outcomes (Table 1).<sup>17-19</sup> So, technological issues can be overcome if giving all providers equal access to a patient's medical record is viewed as a priority.

Many states allow or compensate community pharmacists for patient care activities that do not involve drug dispensing, including medication therapy management, collaborative practice agreements, and vaccine administration.<sup>20,21</sup> Pharmacists are also a valuable resource in helping with medication reconciliation as well as an assessment of a patient's allergy history.<sup>22-25</sup> The patient often has to get this information back to their Primary Care Provider to ensure their EHR is updated. Specialty physician groups also need a mechanism to be able to send patient data back and forth with a patient's PCP if both physicians are not in the same medical group. Similarly, pharmacists may not know what other prescriptions for non-controlled substances a patient has at other pharmacies. This lack of information is concerning in terms of both safety and potential for medication misuse. Other areas where patient data is likely to fall through the cracks include retail clinics, urgent care visits, and the purchase of non-prescription medications or herbals.

There are some potential concerns associated with the implementation of a national EHR. First and foremost, there would be concerns about patient confidentiality and/or data breaches. However, we could learn from the experience in Australia as well as other countries that have implemented a national EHR. As of 2019, only 10% of Australians have opted out of their national EHR.<sup>26</sup> There are also examples in the United States of national access to patient records within a given company (ie, VA, Kaiser, chain pharmacies). Kansas is a specific example of a state that utilizes a health interface that has empowered community pharmacists to help decrease hospital readmissions.<sup>27</sup>

Federal protections of the network, as well as stiffer federal penalties for breaches of confidentiality, would be needed. An efficient way to authorize access to a patient's EHR is needed to help be a safeguard. Furthermore, non-prescription drugs and

herbals would still not be captured at the purchase level if they were not purchased at a pharmacy. Getting this information at the purchase level would require linking credit or debit card purchases. This approach still might not be linked with the correct patient[s] taking them and would not capture cash purchases.

Community pharmacies are a key healthcare resource in America, but community pharmacists have been practicing with one hand tied behind their backs for too long. It is time for these valuable healthcare providers to have access to make more informed decisions to help optimize the safety and effectiveness of the treatment plan for their patients. Having EHR access would allow pharmacists to build better relationships with prescribing providers and offer even better recommendations based on a more complete view of the patient's history. A national EHR is a necessary step to help minimize the issues with transitions in care and to allow all healthcare providers access to the same information to make informed decisions with their patients.

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**Table 1. Pharmacists collaborations with EHR access and outcomes**

<b>Authors</b>	<b>Type of EHR Platform</b>	<b>Outcomes/Conclusion</b>	<b>Location/Clinic type</b>
Bacci JL and Berenbrok L	Health Information Exchange (HIE)--nonintegrated secure online-based platform (based in pharmacy)	Improved facilitation TOC services/ HIE integration in community pharmacy is feasible and extends the access to the patient's clinical data and enhances pharmacist patient care services	Independent pharmacy and East Tennessee Health Information Network
Keller ME et al.	EHR access via a secured device (based in pharmacy)	Several CP provided MTM service with access to read and document in EHR/EHR access by community pharmacists led to improved patient encounters and more effective communication among health care professionals	Supermarket pharmacy/local physician
Synder JM et al.	EHR access (based in practitioner office)	The collaboration between a community pharmacist and primary care clinic led to improved adherence to guideline-directed diabetes care/Access to electronic medical records was necessary for pharmacist recommendations and communication.	Grocery store chain/Primary care clinic in a large academic medical center