

MedHxsm at a Glance

Overview

MedHx offers healthcare providers access to 12-months of medication history data to support home medication documentation, medication reconciliation, and e-prescribing workflows. Data is available from multiple trusted sources including:

- Surescripts (PBM claims and pharmacy system dispensing records from connected partners)
- DrFirst's proprietary sources:
 - Rcopia prescribing network containing data from over 324,000 healthcare providers and 270+ EHR partners¹
 - Retail pharmacy fill data
 - Hosted insurer/payer records
 - HIEs

MedHx's data feed paired with our patented SmartSigsm AI technology automates the medication reconciliation process by reducing the time medical staff spends on this critical data collection step by up to 80%². SmartSig and clinician oversight facilitates three main capabilities to support MedHx interoperability, including:

- Converting free-text medication sigs, such as drug dose, frequency, and duration, into clear, structured prescription data expressed in the nomenclature used by the client
- Inferring sig details when a source is not provided but other clinical details are present, and it is clinically appropriate to do so
- Bridging gaps between drug database compendia when sending and receiving systems are not aligned

This dynamic automation reduces unnecessary clicks, keystrokes, and the risk of an adverse drug event (ADE).

What is the Industry Challenge We Are Trying to Solve?

Clinicians need to know what medications the patient is taking at home to make safe and informed medical decisions regarding a patient's medications in either an inpatient or outpatient encounter.

To create a patient's home medication list, clinicians pull data from numerous sources, including available data feeds, calling local pharmacies, as well as interviewing the patient, family members, and caregivers.

Once this step is complete, the clinician must add the data to their organization's EHR system. Unfortunately, this time-consuming manual collection process is costly, labor intensive, and increases risk to patients.

Why Are We Solving This Challenge?

Medication Reconciliation (Med Rec) or the act of compiling a patient's home medication list is a Joint Commission national patient safety goal. This means clinicians are required to perform Med Rec at the time a patient arrives at their care setting, when they are admitted, and at the time of discharge. But there are times when a patient is admitted to a hospital before a med rec has been completed. If this happens, the healthcare providers treating the patient don't have a complete view of the medication history and may introduce a treatment that conflicts with the patient's drug therapy, or miss a complication caused by current therapy.

Although the emphasis on performing Med Rec occurs in the acute care environment (hospitals and health systems), it is also recommended to perform this process in ambulatory and outpatient care settings.

What Healthcare Segments Would Use Our Solution:

- All care segments

Application Details:

- Accessible via
 - EHR integrations with Epic, Cerner, Allscripts, and numerous ambulatory EHR vendors
 - Rcopia, our web-based e-prescribing platform, which is integrated in many major EHR systems, such as MEDITECH
 - iPrescribe, our mobile e-prescribing app
 - DrFirst Companion application, a stand-alone medication history feed

Quality Measures:

- The Joint Commission – National Patient Safety Goals
 - Health Care: Goal 3 – Improve the safety of using medications
 - [NPSG.03.04.01](#) – Labels all medications, medication containers, and other solutions on and off the sterile field in perioperative and other procedural settings

Part of Solution Group:

- Med Rec Excellence
- Pharmacy Data Sharing Program
- Medication Management
- Medication History

Recognition:

- Frost & Sullivan – [New Product Innovation Award 2020](#)
 - MedHx and SmartSig Medication Reconciliation

ROI:

- Via SmartSig
 - Reduce medication reconciliation clicks and keystrokes by 80%²
 - 92% free-text conversion comes from our SmartSig 2.0 analysis³
 - Fill in important medication history gaps by deducing up to 55% of missing sigs

Product Owners:

- Kunal Agarwal (Executive Leadership)
- Matt Moore (MedHx)
- David Sellars (SmartSuite)

Product Managers:

- Allan Smith (MedHx Platform)
- Darcee Harris (Product Specialist, EHR Integrations)

Subject Matter Experts:

- David Sellars
- Matt Moore
- Brad Block

Definitions:

Surescripts: An e-prescribing network that connects EHR systems to pharmacies and payors. It is one of our MedHx data sources, which we enhance with our additional data, and clean up to deliver MedHx services to our clients.

Sig: A Latin term which means “let it be labeled” – in basic terms it is the instructions given to the patient on how to take their medication. It typically includes the medication dose (e.g., “one”), the dose unit (e.g., “tablet”), the route (e.g., “by mouth”), and the frequency (e.g., “two times per day”).

Adverse Drug Event (ADE): An injury resulting from medical intervention related to a drug. This includes medication errors, adverse drug reactions, allergic reactions, and overdoses. ADEs can happen anywhere: in hospitals, long-term care settings, and outpatient settings.⁴

Pharmacy Data Sharing Program: A program designed to encourage community pharmacies to share their medication history data with DrFirst. Their information helps to close data gaps with fill dates, sig information, and prescription pick-up data.

The Joint Commission: A non-profit quality organization established in 1998 to provide “accreditation, consultation, publication and education programs” to help evaluate, demonstrate, and improve the quality of health care delivered across the globe.

Sources: (1) DrFirst’s prescribing network consists of over 67,000 physicians and 121,000 prescribers to enhance our total MedHx data set, (2) Internal study with LGH for a HIMSS Davies award application, (3) Based on DrFirst Customer Feedback, 2020, (4) Adverse Drug Events, U.S. Department of Health and Human Services, [Health.gov](https://www.hhs.gov/health/)

Ready to Test Yourself?

Check your MedHx knowledge by taking a short quiz. Your score is provided upon completing the test.

- [MedHx Test](#)