

# Overcoming Medication Adherence Issues using **surescripts**<sup>®</sup>

## Benefits of Accurate & Efficient E-prescription

### Problem Statement

One of the most common causes for non-adherence to prescribed medications by patients is the inability to afford them. Non-consumption invariably results in poor health outcomes – throwing the system that is constantly striving to leverage technology for better care delivery clearly out of gear. Price transparency is such a critical factor. Knowing what a patient can afford, before prescribing, is highly relevant in identifying the most appropriate therapy – one that will draw adherence. And to arrive at that, physicians need access to information on eligibility, drug formulary and costing. Combining these with prior authorization equips physicians to take the most appropriate course of action. **But, it is the lack of availability of information at the time of prescribing that is the biggest hurdle.**

Surescripts is an organization committed to the cause of addressing this issue, of providing physicians with actionable patient intelligence, through a health information network it has been building and strengthening over the years. The network comprises of electronic health records (EHRs), pharmacy benefit managers, pharmacies and clinicians, plus an increasing number of health plans, long-term and post-acute care organizations and specialty pharmacy organizations. Hospitals and clinicians can integrate with this network through the EHRs they use, and draw on the benefits to increase patient safety, reduce cost and improve quality of care.

### Solution

So if you have an EHR system that needs to be integrated with Surescripts and are **looking for a software development partner** who can enable this without disrupting your existing workflows and in a seamless manner, Mindfire Solutions can help you with it. We have successfully enabled many of our clients to achieve this and pass on the benefits to their patients, running their concerns with utmost efficiency and taking a step towards offering care that is integrated and connected.

We offer customized solutions in developing

- **Standalone APIs which hospitals/clinicians can integrate with their EHRs**
- **Components that can be directly plugged into the EHRs that we can build from scratch**

Through our solutions, we ensure that all the required messaging protocols are followed and validations done.

## The Components:

The comprehensive solution that we develop to integrate hospitals/clinics with Surescripts comprises of a number of modules. Each module performs a standalone function that forms a key constituent of the overall solution.

They are as follows:

1. Physician Registration
2. Pharmacy Directory Download
3. Electronic Prescription
  - New Rx
  - Refill Rx
  - Refill Response
4. Patient Benefit
  - Eligibility Check
  - Medication history
  - Formulary Check



We will now delve into the details to explain each of the major components within. The understanding here is that the clinic under consideration is part of the Surescripts network.

### Physician Registration

Physicians need to register themselves to Surescripts to be able to use the messaging services provided by the Surescripts. The registration process can be done from the Surescripts admin portal. We provide a way to automate the registration process instead.

### Pharmacy Directory Download

Pharmacy directory needs to be downloaded by a prescriber into the system, only then can it send prescriptions to identified pharmacies. There are APIs meant for downloading the directory. There are 2 kinds of downloads – Full and Partial (Nightly). With the full download, the entire database is downloaded and subsequent updates to it in terms of modifications, deletions or additions happen through the partial or nightly updates which happen on a daily basis. We offer a window service (.exe file) that is run on the server that facilitates the download of the directories from Surescripts.





## Electronic Prescription

The overall workflow involves 2 major entities, the prescriber and the pharmacy. And every request that is exchanged between them passes through Surescripts. Depending upon its type, each request has its Source details, Destination details and Medication details.

### New Rx Flow:

After the course of treatment has been finalized, the physician sends the prescription data to a pharmacy through Surescripts. To enable this, the EHR that is used in the clinic makes use of APIs and follows the required protocols, for e.g. XML and EDIFACT, to transfer the request. Surescripts exposes an API to accept all such requests and on its part first ascertains that a given request being sent is from registered vendor, and upon confirmation, sends an acknowledgement back to the corresponding prescriber. Post that, it shares the required details with the concerned pharmacy, getting the information from the destination field of the request, from where the patient later collects his medicines.

### Refill Rx & Response:

In the event of running out of medicines, the patient goes to the pharmacy and a refill request gets initiated from the pharmacy to the concerned physician seeking approval. This refill request is again routed through Surescripts. To make it work, the EHR of the prescriber exposes an API to accept such requests. The physician verifies the request and can take any of the following recourses: approve without change, reject, and approve with modifications. The physician then sends the response back to the pharmacy to take the necessary action.



## Eligibility Check

Elegibility request is sent by a prescriber to Surescripts. The information that is sent includes the patient's name along with some demographic information. The information that they get back includes some or all of the following information from each PBM/payer that covers the patient.

- Health Plan Number/Name
- Cardholder ID
- Relationship Code
- Group Number, Group Name
- Formulary ID
- Alternative List ID
- Coverage List ID
- Copay List ID
- BIN
- PCN
- Type of Prescription Benefit: Pharmacy and/or Mail Order
- Specialty Pharmacy
- Long Term Care (LTC)
- PBM Name
- ParticipantID
- Service Type
- and many more.....



## Medication History

After a patient's eligibility has been determined, this transaction is used to retrieve a listing of dispensed medications that were either paid for by a patient's PBM or were dispensed at a pharmacy. The prescriber sends a Medication History request for a patient to Surescripts. The request is routed to the appropriate PBM for processing.

- Medication History fill request
- Medication history PBM(pharmacy benefit manager) request

There is a need to send two messages to get both types of medication history. One contains information for fill data from the pharmacy. The other contains the PBM identifier indicating it is requesting history from the PBM.

In the request that is sent, the information provided include prescriber details, patient demographic information and few others obtained from the corresponding eligibility response for e.g. PBM ids, Card holder details, Group id to get patient medication history details. And in response, the information that is received includes the medical history - an account of all medical events and problems a person has experienced in the past as well as experiencing in the present. It essentially contains patient Drug details Like (Drug name, strength, Doses, Quantity, Days supply and many more)



## Formulary Details

A formulary is a list of prescription drugs that are covered by a specific health care plan. A formulary can contain both branded as well as generic drugs. (They have the same active ingredients, and the manufacturing and packaging must pass the same quality standards. The U.S. Food and Drug Administration (FDA) requires generic drugs to have the same performance and quality as the branded ones. Cost is the main difference between generic and brand name prescription drugs.) Patients pay co-pay amounts on formulary drugs. If a drug is not on the list, the patient is required to pay much more, up to the full cost of the drug. Every health care plan has a defined list of acceptable drugs and co-pay prices.

During the prescribing process, provider vendor systems typically use the information retrieved through the Formulary and Benefit Data Load service to inform prescribers of the following:

- Drugs that the patient's benefit plan considers to be "on formulary" (Formulary Status), and alternative medications for those which are not preferred (Alternatives)
- Limitations that may impact whether the patient's benefit will cover a drug being considered (Coverage)
- The copay for one drug option versus another.

During the prescribing process, the physician views patient formulary and benefit information within the POC application to verify whether or not a particular medication is on the patient's formulary and is covered under the patient's plan. If not, the prescriber can view "preferred" alternative drugs within that medication's therapeutic class.

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We use patient's Formulary ID, Alternatives ID, Coverage ID, and Copay ID from eligibility response to get patient formulary details. We use First data bank (FDB) to get the drug details and use WebDAV directory to get Formulary and Benefit Data. Later we use them to get the

1. Drug type
2. Formulary Status
3. Copay Information
  - o Drug Specific Copay
  - o Summary Level Copay
4. Coverage Information
  - o Gender Limit
  - o Text Message
  - o Resource Link
  - o Step Therapy
  - o Product Exclusion
  - o Prior authorization
  - o Product Exclusion
5. Alternative Medication
  - o Payer Specified Alternative
  - o Therapeutic Alternative



- **Formulary Status** : We determine the status as one of Unknown, Non-Formulary, On Formulary/Non-Preferred g or On Formulary/Preferred.
- **Copay Information** : Here we get the copay type, Tier, Max Tier, Pharmacy Type, Percentage Copay, Flat copay, Max/Min copay, Days Supply, Out of packet range etc..
- **Coverage Information** : Here we get Coverage Type and other details like for e.g. for a age limit coverage we get the max age limit, for Gender, we get the gender details and so on..
- **Alternative Medication** : Here we get the alternate medication details for payer specific and therapeutical alternative, and the doses, Calculate the formulary status.

