



Prescriptions: Balancing Fraud and Flexibility

How blockchain can transform and modernize prescriptions management



HYPERLEDGER
Healthcare
SPECIAL INTEREST GROUP

Payer Subgroup

Current Workgroup Active Members

Payer Subgroup Meets

- **Every other Friday from 1:00 PM – 3:00 PM EST (It's the following Friday of the the Healthcare SIG Meeting)**
- **Next Meeting – July 3rd , 2020**

Wiki Page -

<https://wiki.hyperledger.org/display/HCSIG/HC-SIG+-+Payer+Subgroup>

Everyone is welcome to join and anyone can contribute



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Current State Prescriptions and Fraud

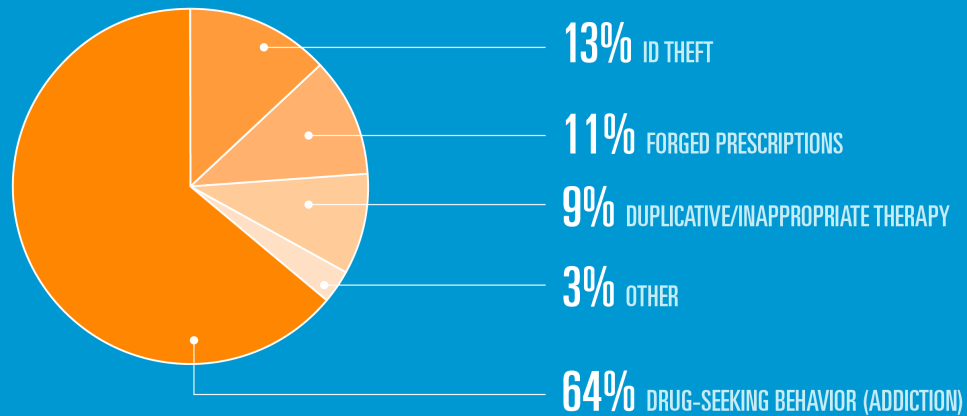
- **Prescription medication abuse is one of the greatest public health crises facing our nation today, tearing apart families, devastating communities and driving up medical costs.**
- **Some prescription fraud types**
 - **Doctor shopping and getting multiple prescriptions**
 - **Getting the same prescription too often or too soon**
 - **Automatically refilling** a prescription **when a patient did not request** a refill. Without the patient's knowledge, the pharmacy will then bill payer for prescriptions that patients never picked up.
 - **Duplicate Billing - Billing multiple payers** for the same prescription
 - **Phantom Prescriptions** - Billing for a forged or nonexistent prescription
 - **Diverting legal prescription medications** takes various forms. Prescriptions are gained by multiple presentations of forged documents, the use of prescription drug benefit cards for other than the rightful owner of the benefit, the use of the **benefit card to supply medications to a relative, a friend, or to buy favors with.**

“The retail value of prescription drugs filled annually in the United States exceeds \$300 billion with approximately”

Interesting facts

BREAKDOWN OF PRESCRIPTION DRUG FRAUD BY TYPE

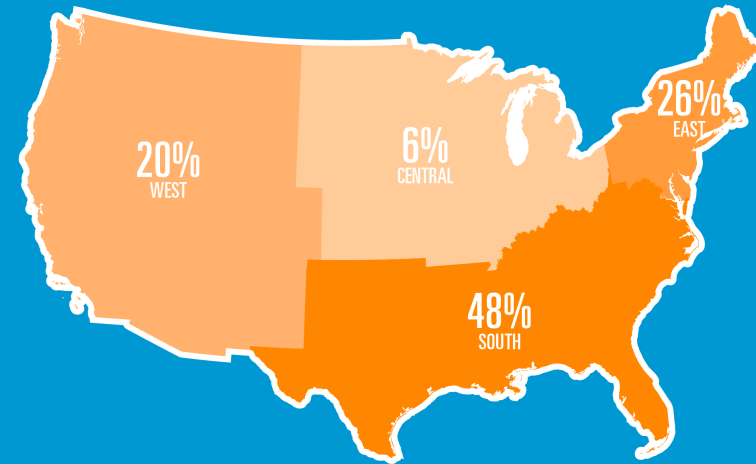
The greatest amount of fraud is contributed by **DRUG-SEEKING BEHAVIOR** such as addiction.



Express Scripts, "INFOGRAPHIC: Prescription Drug Fraud & Abuse," 2014.

PRESCRIPTION DRUG FRAUD BY REGION

The south contains the **MAJORITY OF PRESCRIPTION DRUG FRAUD** found in the United States



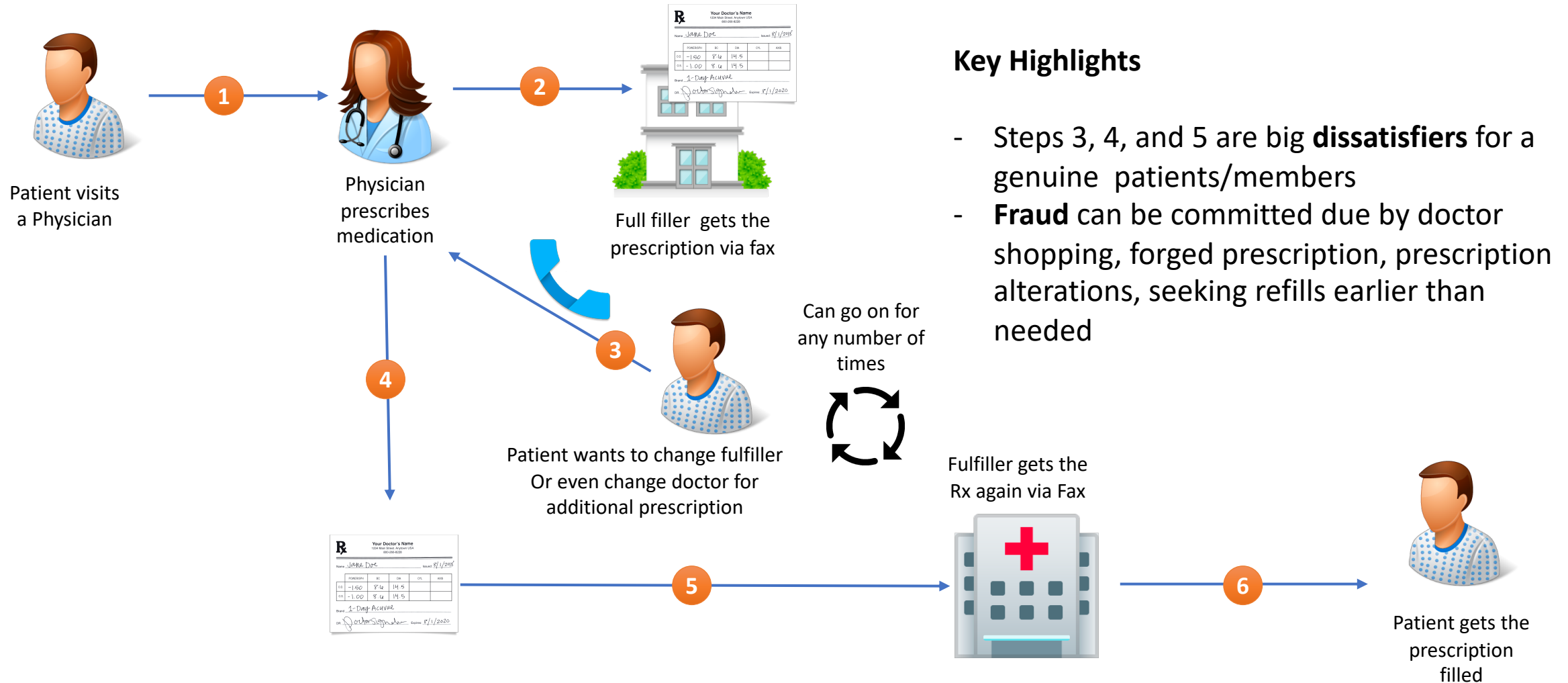
Express Scripts, "INFOGRAPHIC: Prescription Drug Fraud & Abuse," 2014.

[Source: - https://www.bcbs.com/the-health-of-america/articles/signs-of-prescription-medication-fraud-and-how-stop-it](https://www.bcbs.com/the-health-of-america/articles/signs-of-prescription-medication-fraud-and-how-stop-it)

All solutions are after the fact
analysis based

There are limited to no options in real time preventing some of this fraud

Prescription Management – Current State Business Viewpoint

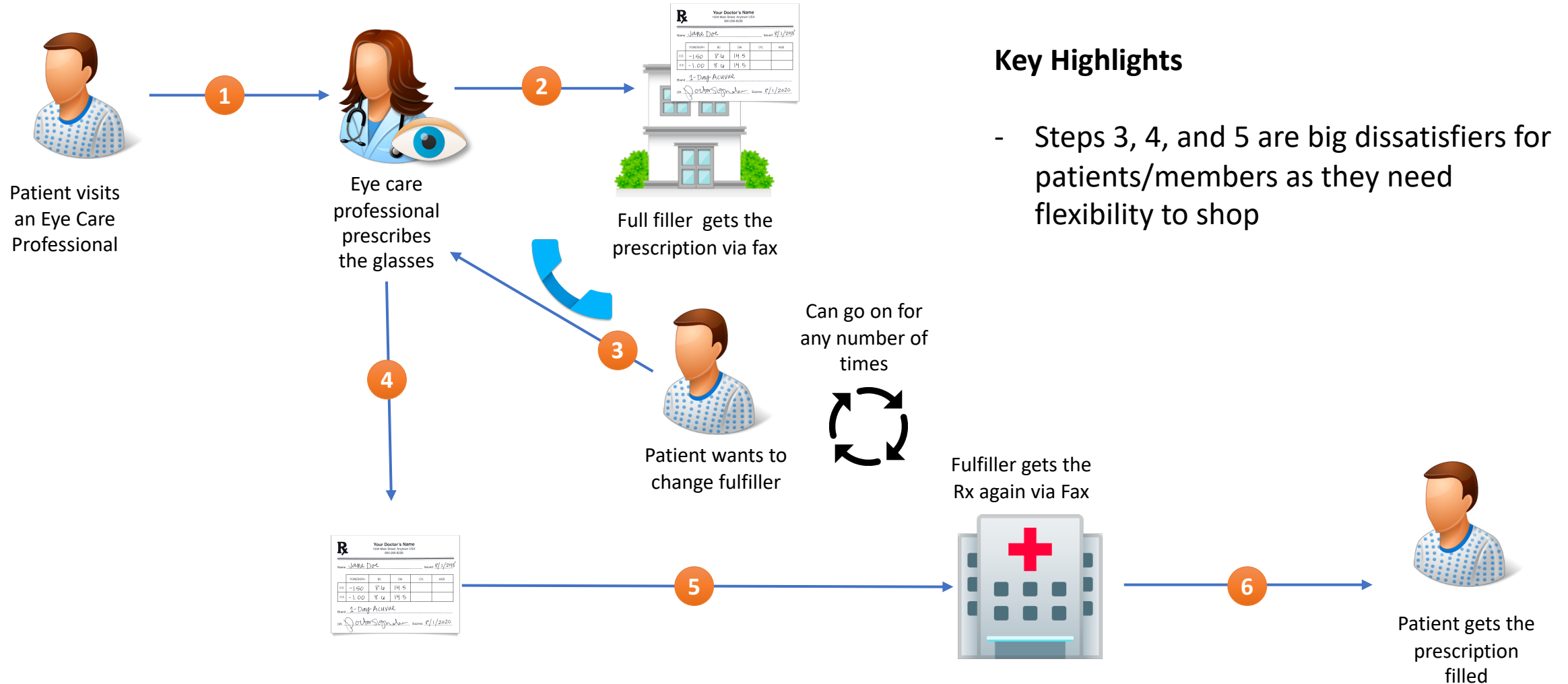


Key Highlights

- Steps 3, 4, and 5 are big **dissatisfiers** for a genuine patients/members
- **Fraud** can be committed due by doctor shopping, forged prescription, prescription alterations, seeking refills earlier than needed

Eye-ware Prescription Management – Current State

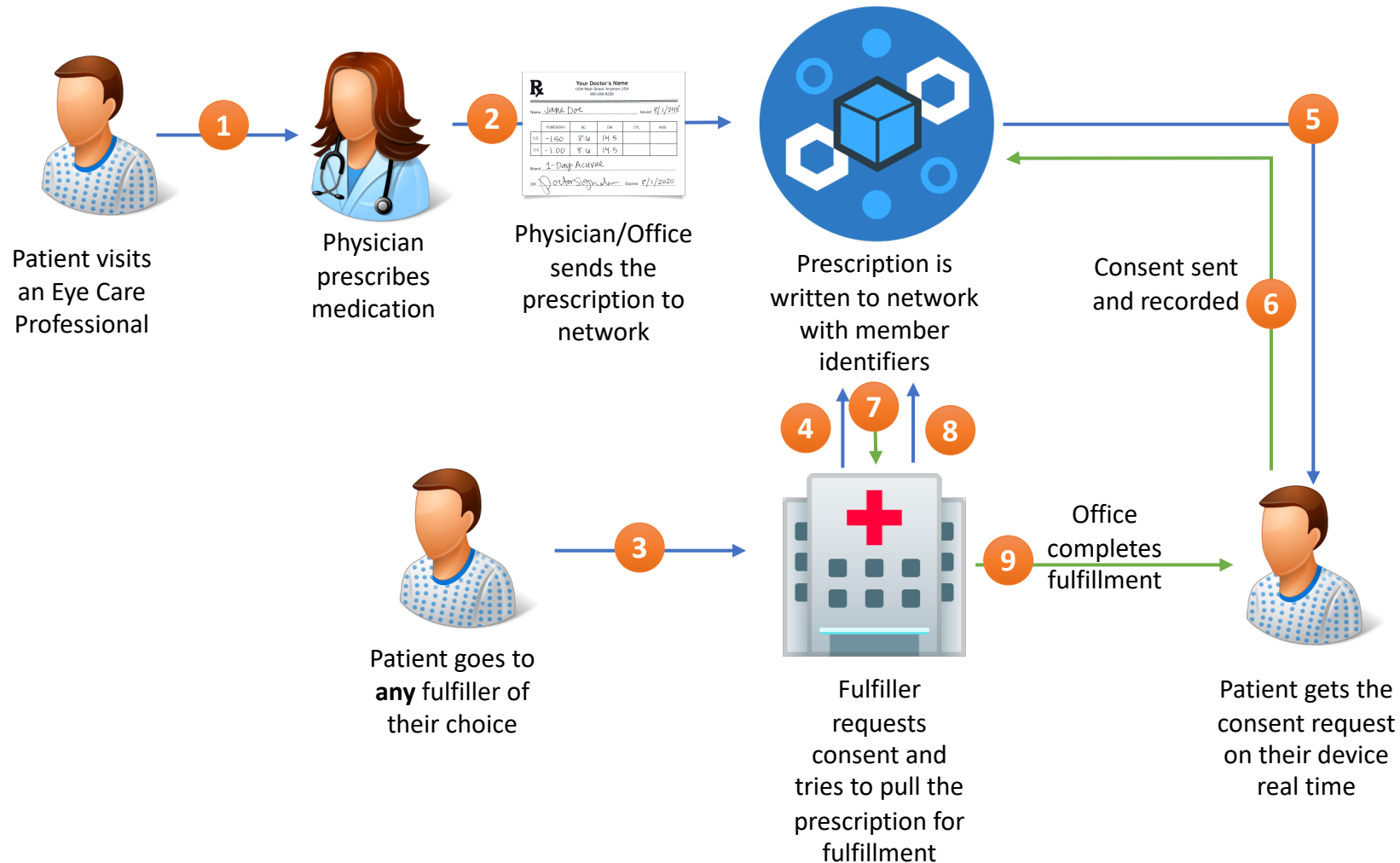
Business Viewpoint



Key Highlights

- Steps 3, 4, and 5 are big dissatisfiers for patients/members as they need flexibility to shop

Flexible Prescription Management Blockchain Viewpoint

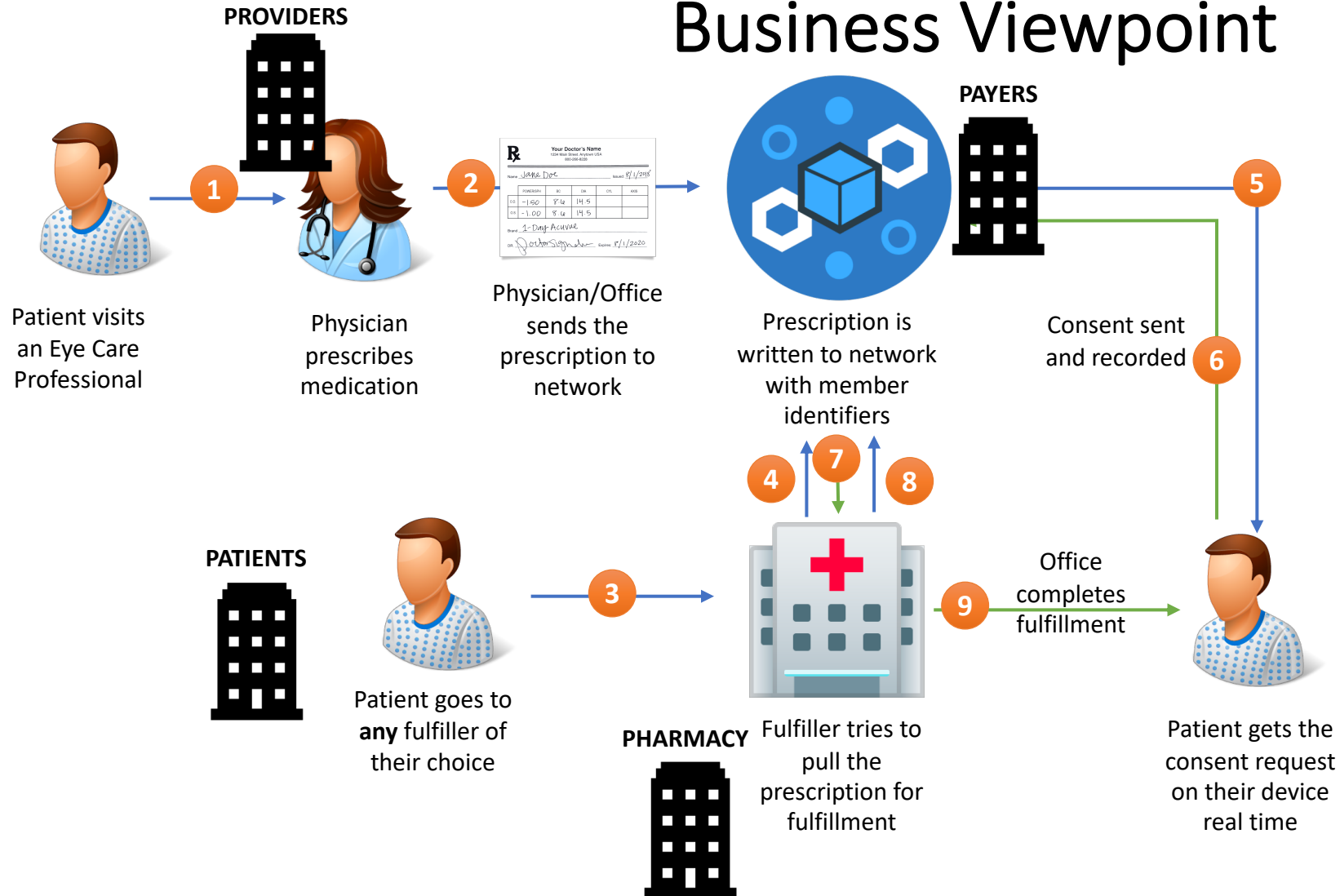


Key Highlights

- Steps 3, 4, and 5 on previous slide are big **dissatisfiers** for a genuine patients/members are eliminated in new process
- Patient has the flexibility to **use any fulfiller any time**
- **Fraud** can be prevented due to real time consent
- Once fulfilled, the prescription is marked fulfilled with notes from pharmacists

Flexible Prescription Management

Business Viewpoint



Participants

- 4 Org – 4 Peers
- For now one channel
- One chain code
- Users – provider, patient, pharma, payers

Assets

- Patient ID
- Provider ID (NPI)
- Pharmacy ID
- Prescription ID
 - Prescription DATA
- PAYER ID
- CONSENT – for Member

Functions

- Query
- Update

Various questions to be answered

- Who all will run the nodes for network - Payers, Providers, Pharmacy etc.
- What all data will be on chain and off chain
- How to manage identity – Single Identity across various payers or different identities for different payers
- Consent should be revocable
- Should all retrievals of prescription be alerted to the patient
- How to manage partial fulfillment

Current Resources & Deliverables

- Use Case Document – Work In Progress
 - <https://docs.google.com/document/d/1k8LDb5XuMoTDktQkB2PV0IXowjGws0ltco6QFpOvIAc/edit?usp=sharing>
- Payer Subgroup Wiki Page
 - <https://wiki.hyperledger.org/display/HCSIG/HC-SIG+--+Payer+Subgroup>
- Git Hub repo
 - <https://github.com/hyperledger-labs/modern-pharmacy-management>