ePrescribing's Bright Future for Improving Patient Outcomes and Access to New Therapies

Tony Schueth
CEO & Managing Partner
Point-of-Care Partners, LLC

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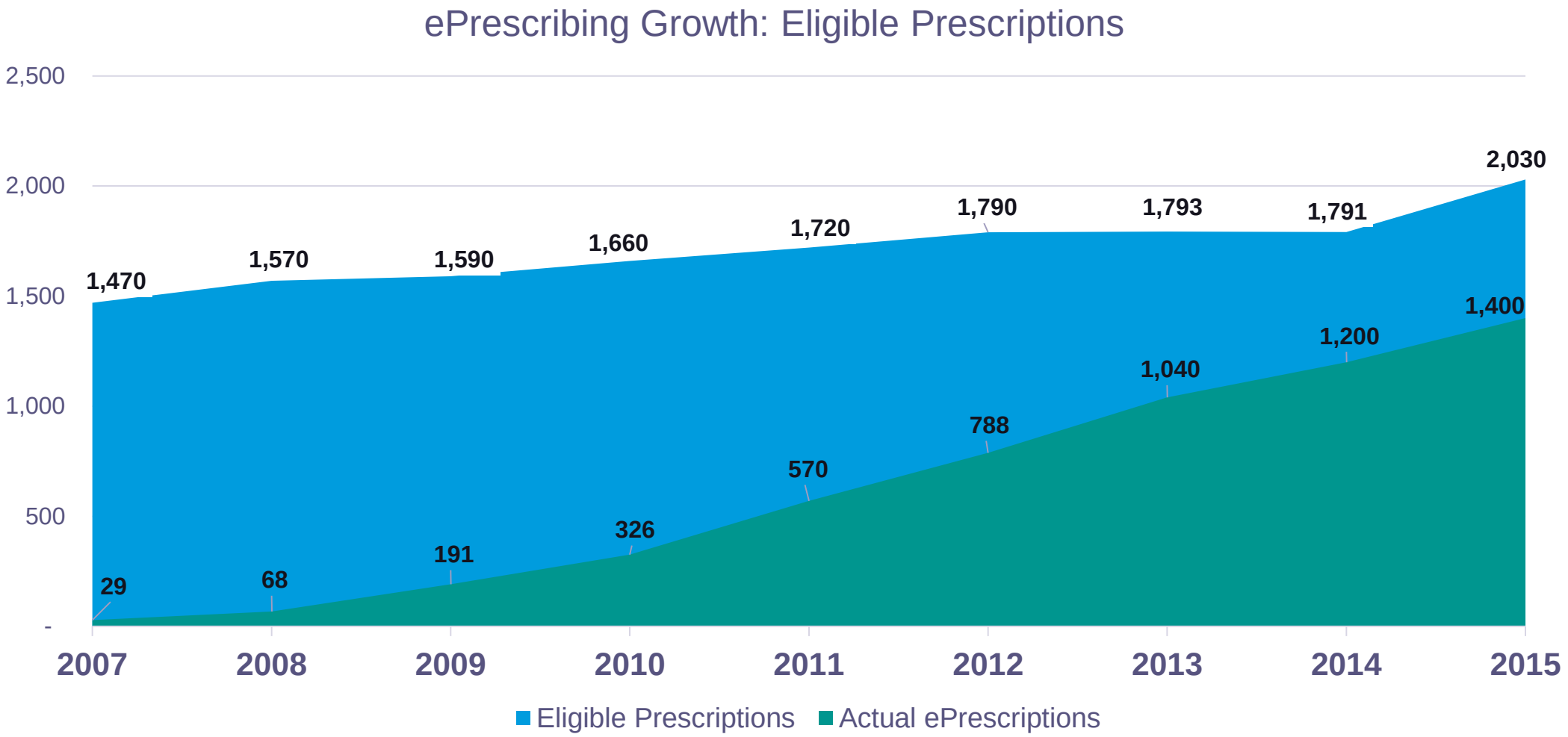
Agenda

- Where Are We Today?
- What Are the Gaps?
- How Does ePrescribing Work Today?
- Where Are We Going?

Volume Growth

(In Millions)



Source: Surescripts

Leveraging the ePrescribing Infrastructure

83%

Office-Based Physicians Use Any EHR*

700

EHRs Enabled

More than 700 EHRs enabled for ePrescribing

95%

Pharmacies Enabled for ePrescribing**

58%

Prescribers Utilizing Electronic Prescribing**

*HealthIT.Gov
**Surescripts

We Have Saved Lives, Averted Permanent Disability and Prevented Health Care Costs

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	2006 Study Model	2014 Extrapolated Data
Number of ePrescriptions	1,833,254	1,200,000,000
Number of Drug-Drug Interaction Alerts	279,476	182,937,662
Number of ePrescribers	2,321	1,519,266
Number of Unique Drug-Drug Interactions (assume 47.6% of Total DDI alerts are unique based on study assumptions)	133,051	87,091,696
Prevented Adverse Events per Year		
Serious	49	32,074
Significant	125	81,822
Minor	228	149,243
All	402	263,139
Prevented Injuries		
Death	3	1,964
Permanent Disability	14	9,164
Temporary Disability (<1yr)	31	20,292
Symptoms Lasting >= 30 Days	14	9,164
Symptoms Lasting < 30 Days	272	178,044
Abnormal Laboratory Results	68	44,511
All	402	263,139
Prevented Health Costs		
Hospitalization	$349,651	$228,872,377
Emergency Department Visit	$14,630	$9,576,414
Office Visit with New Medicine	$25,197	$16,493,296
Office Visit without New Medicine	$13,141	$8,601,754
Total	$402,619	383,543,841
Savings per Clinician		
Projected Savings per Clinician	$173	$113,241

263K
Adverse Events Prevented

1,964
Patient Deaths Prevented

$383M
In Prevented Health Costs

Source: SN Weingart et al., An Empirical Model to Estimate the Potential Impact of Medication Safety Alerts on Patient Safety, Health Care Utilization, and Cost in Ambulatory Care, 2009;169(16):1465-1473, Electronic Prescribing: Improving the Efficiency and Accuracy of Prescribing in the Ambulatory Care Setting by Amber Porterfield, MS; Kate Engelbert, MS; and Alberto Coustasse, DrPH, MD, MBA, AHIMA; Surescripts National Progress Report, 2014; POCP Analysis

Prescriber Satisfaction

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ePrescribing

Studies Demonstrate:

- Improves Quality of Care, Patient Safety and Medication Adherence
- Improves Patient Satisfaction
- Saves Time (82%)

JAMIA 2015
The American Journal of Pharmacy Benefits • March/April 2011
Surescripts and CDC

EHRs

Mixed Opinions:

- Negatively impacts productivity; lengthens workdays
- Enhances overall patient care (74%)

Electronic Health Record Use a Bitter Pill for Many Physicians
HealthIT.gov

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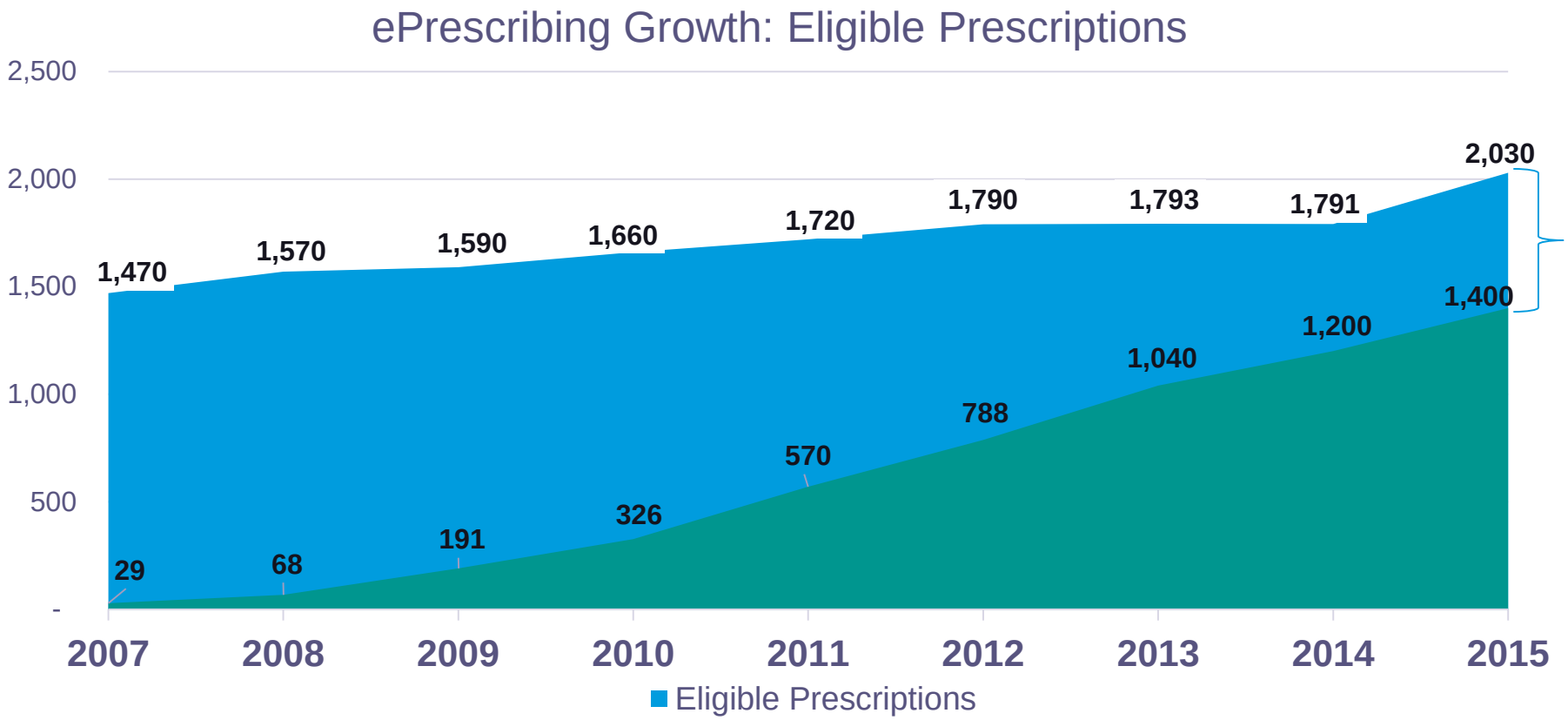
Gaps

Gaps – What's Not being ePrescribed

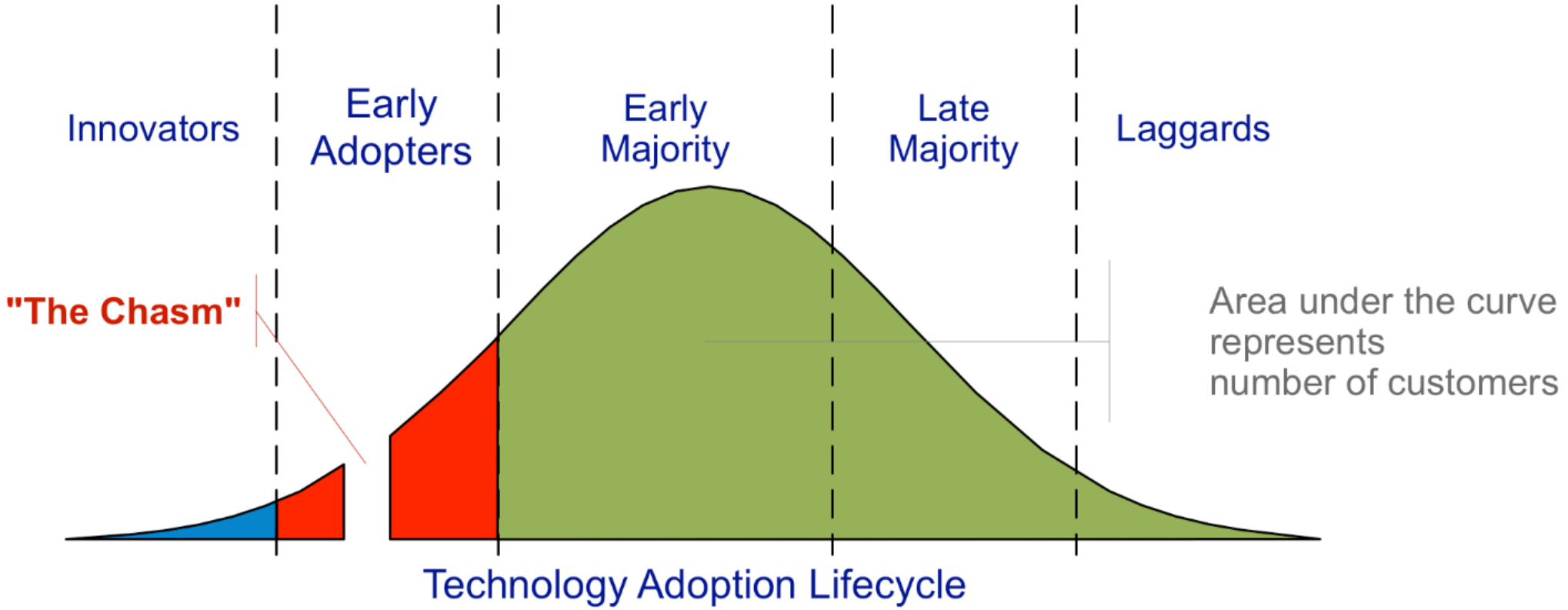
(In Millions)



- Rxs from Laggards
- Renewals
- Controlled Substances
- Dental eRxs
- Discharge Medications
- Specialty eRxs
- Long-term, Post-Acute Care

Source: Surescripts

Trailing the Pack



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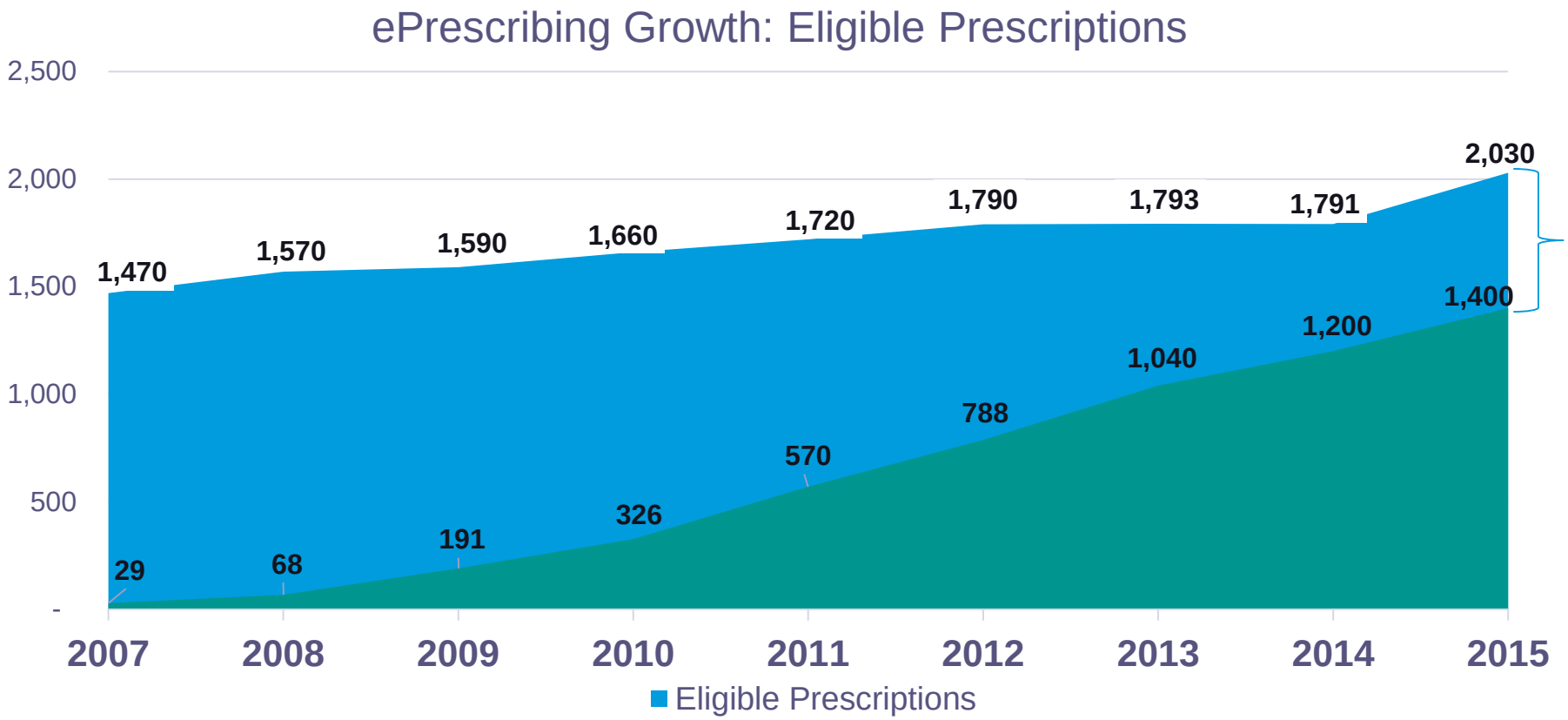

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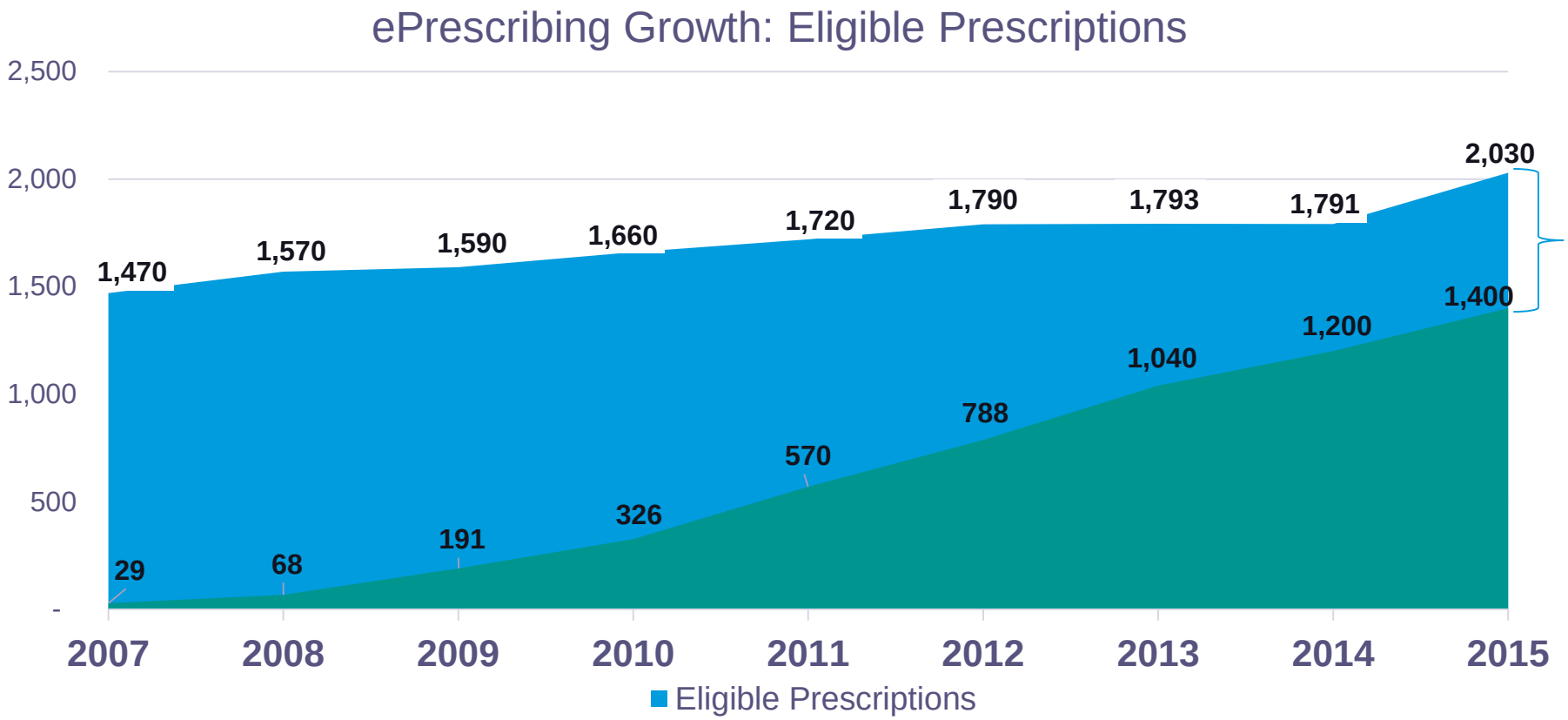

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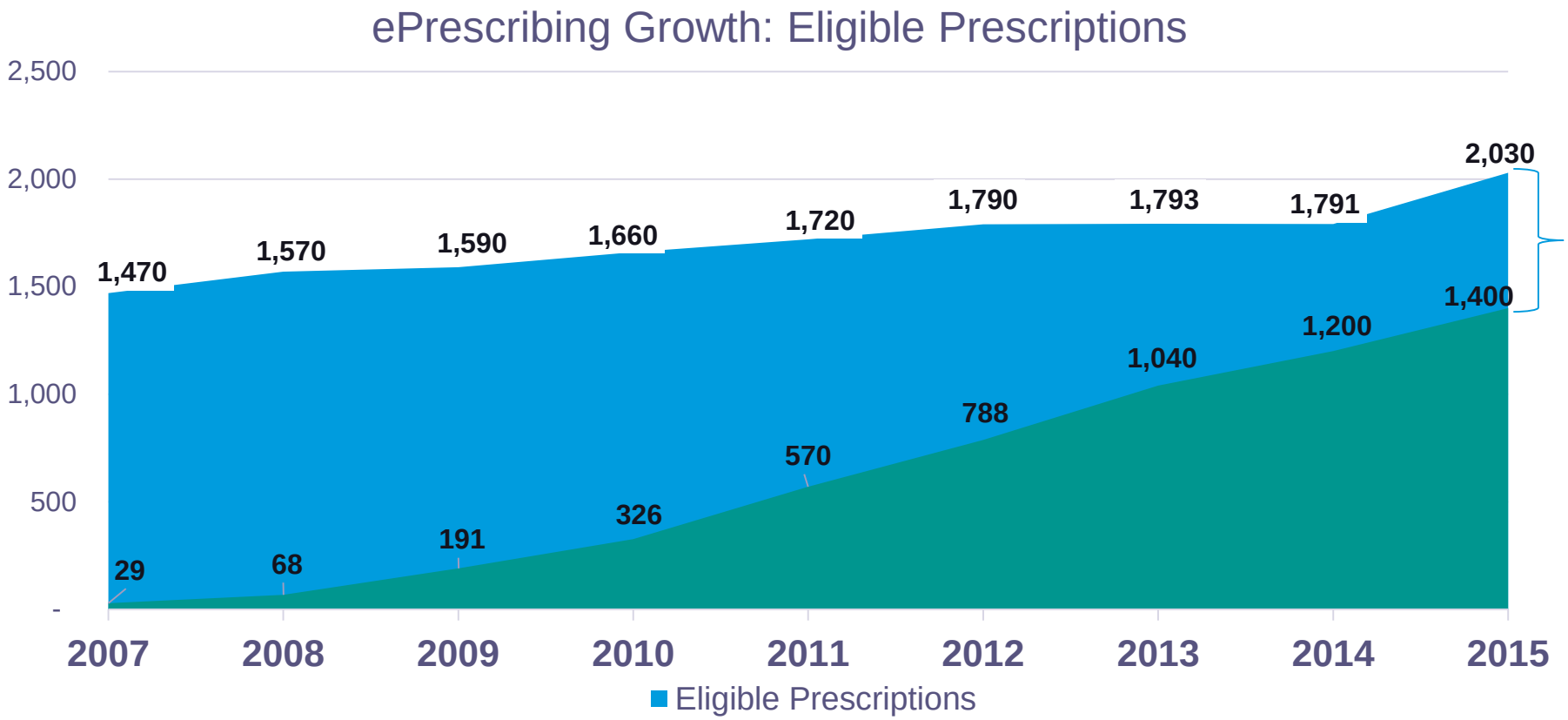

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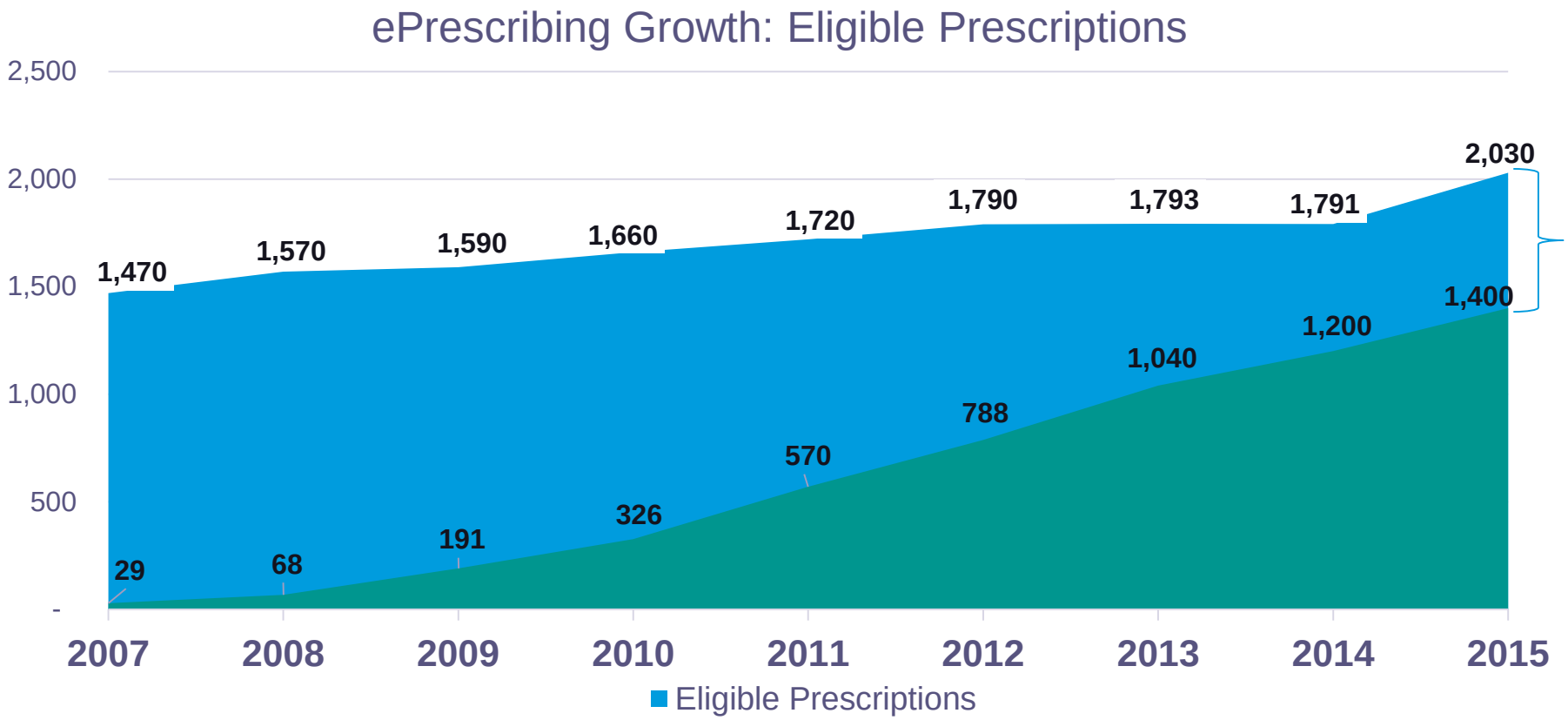

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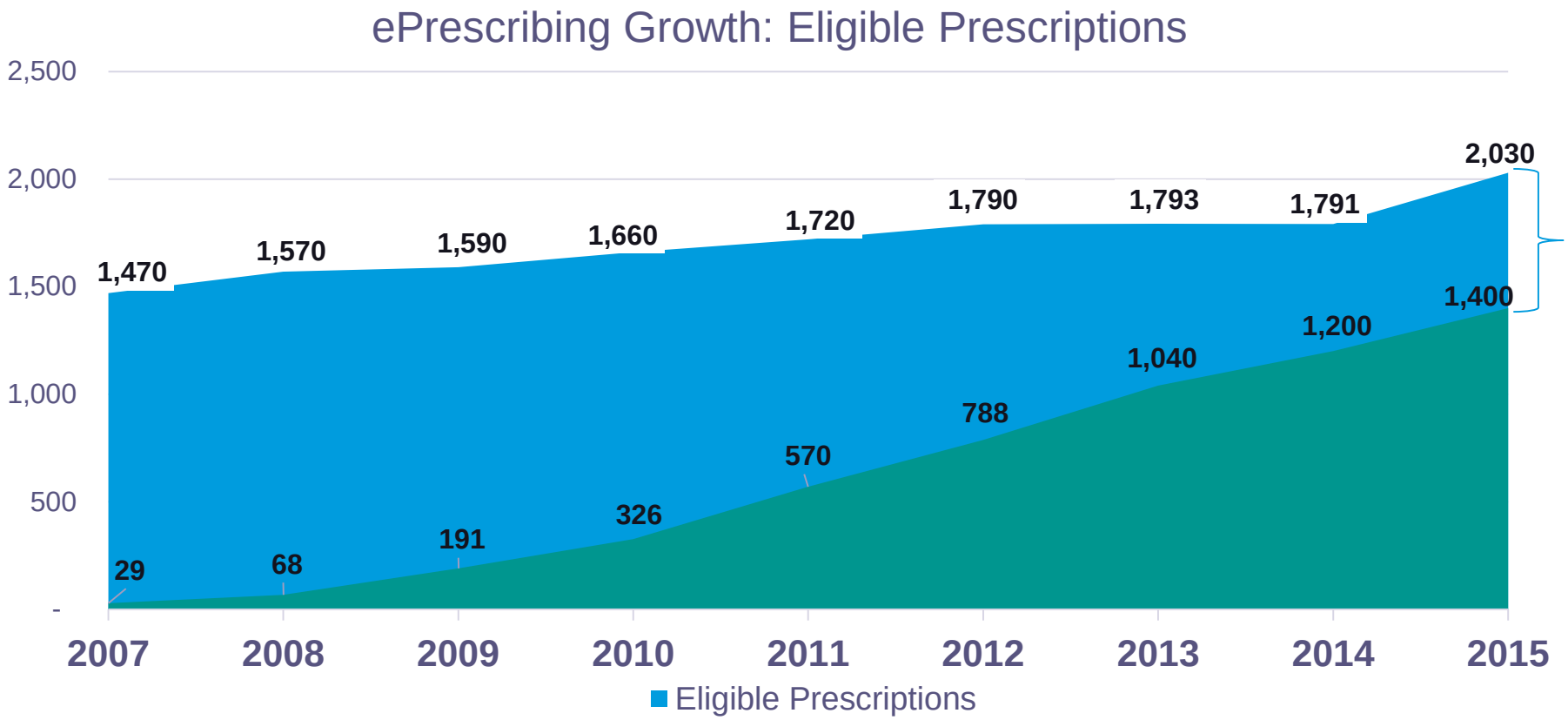

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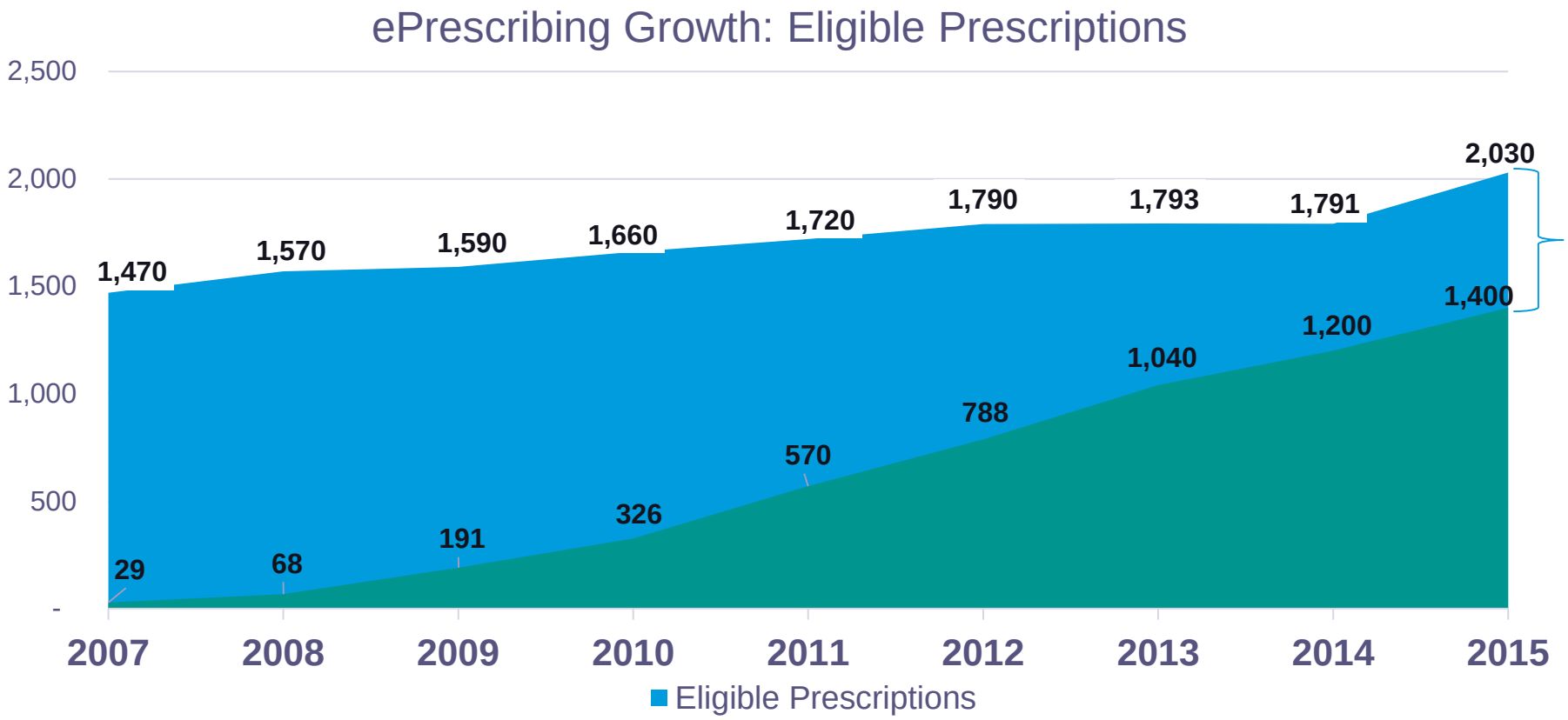

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- **Long-term, Post-Acute Care**

Source: Surescripts

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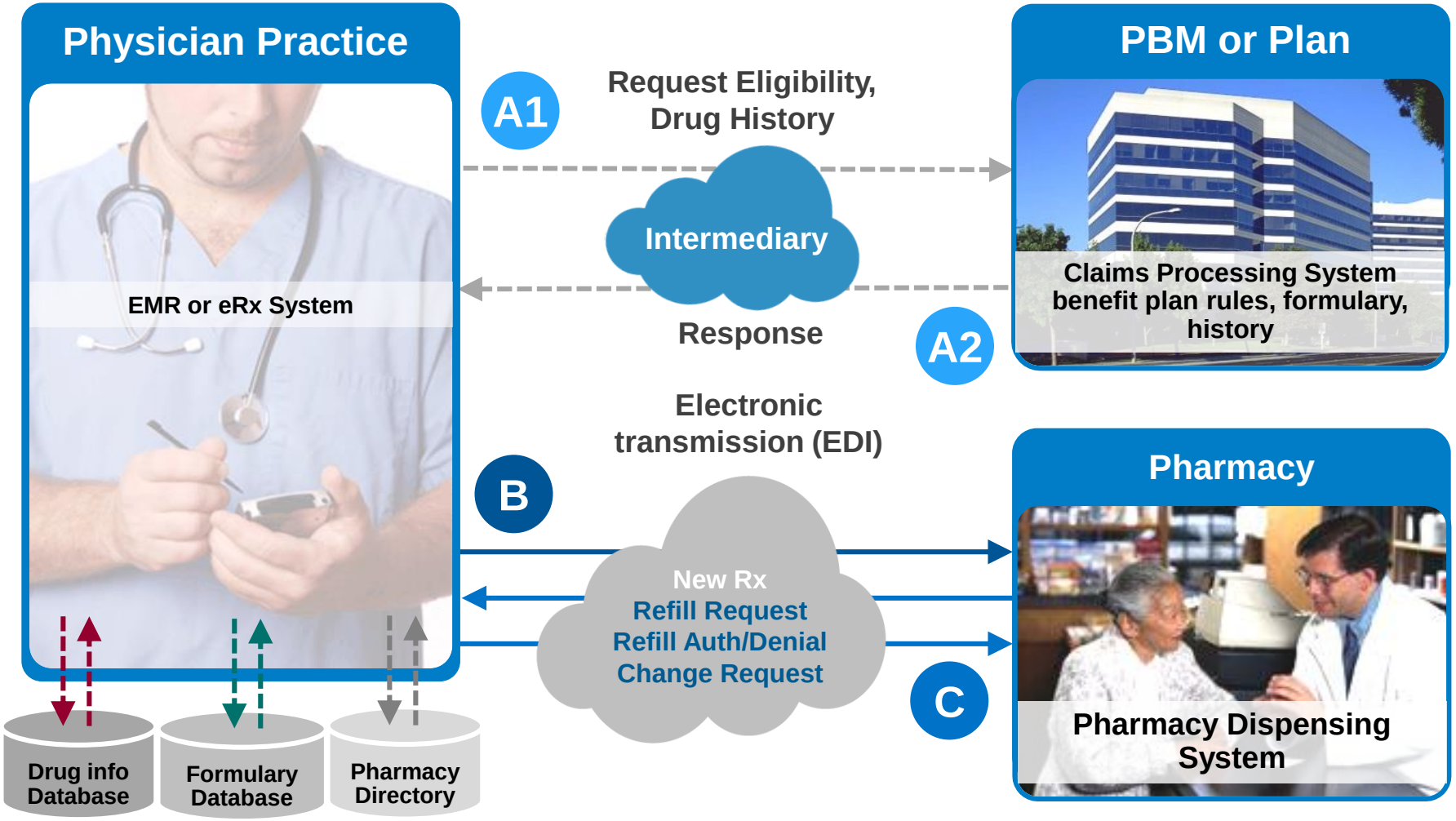
How Does ePrescribing Work Today?

Current ePrescribing Flow



Writing an Electronic Prescription

- Products are selected by alphabetic search
- NDC code is not used
- Prescribers select the components of the prescription from pre-defined drop down lists

Product

Strength/Dosage

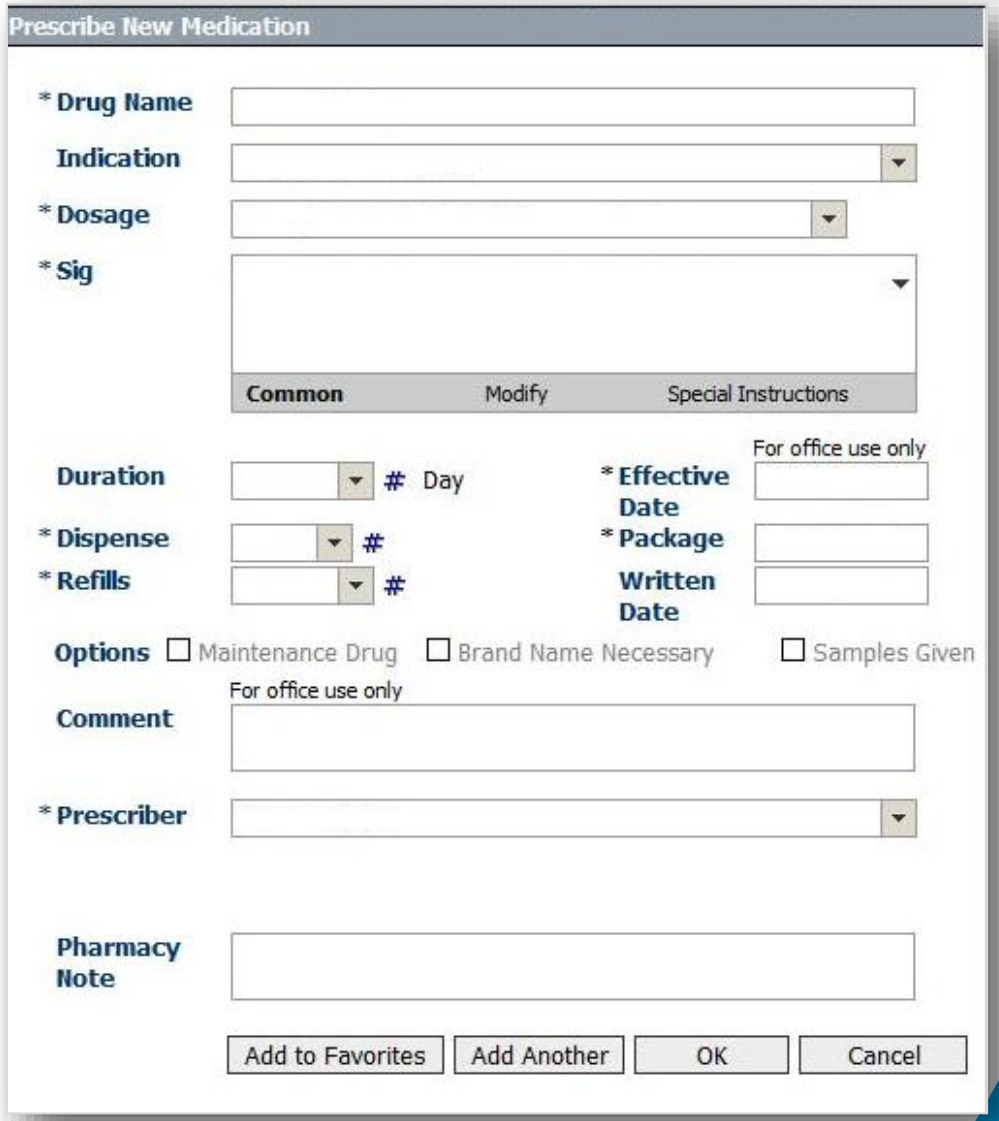
Instructions (SIG)

Quantity

Refills

Dispense as Written

Comment to Pharmacist



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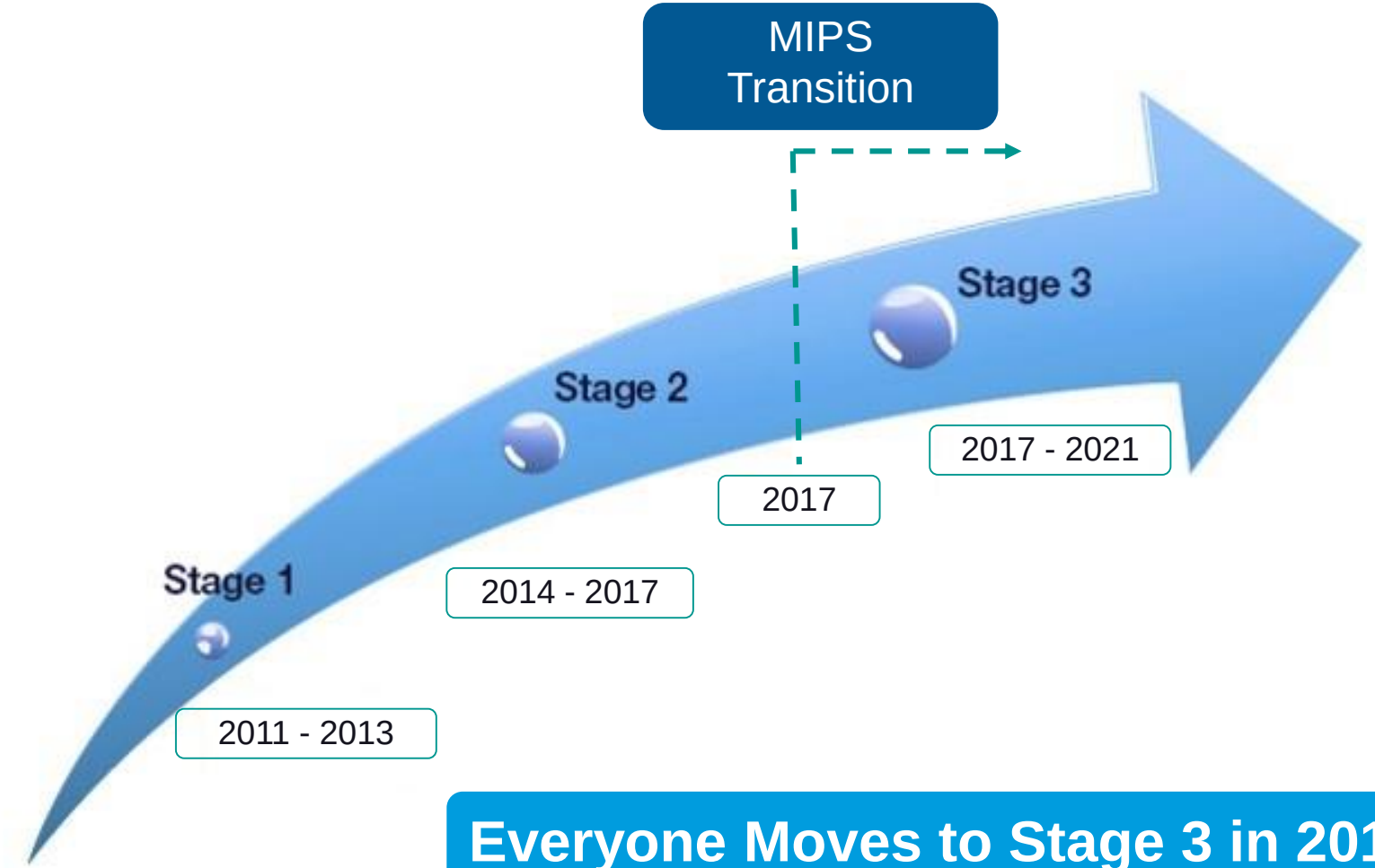
Where Are We Going?

- MU/MACRA/ACI
- States Issues
- Specialty Pharmacy Impact on Drug Trend

The Evolution of Meaningful Use



Everyone Moves to Stage 3 in 2018

EHR Certification

- **Now part of the Advancing Care Information (ACI) Program**
- **EHRs will need to support the functionalities of NCPDP SCRIPT 10.6**
- **Other Components of Certification:**
  - Diagnosis (reason for prescription)
  - Metric Unit of Measure for oral liquids (i.e. mL)

EHRs must support these transactions

Currently widely used:

- Create new prescriptions (NEWRX)
- Refill prescriptions (REFREQ, REFRES)
- Request and receive medication history information (RXHREQ, RXHRES)

Not widely used:

- Change prescriptions (RXCHG, CHGRES)
- Cancel prescriptions (CANRX, CANRES)
- Receive fill status notifications (RXFILL)

A Closer Look at ACI Scoring

Base score comprised of six customizable objectives and accounts for half of ACI score:

- Protect Patient Health Information using a risk analysis (mandatory)
- Electronic Prescribing
- Public Health and Clinical Data Registry Reporting
  - Immunization registry reporting is mandatory; other registry reporting is optional
- Health Information Exchange
- Coordination of Care Through Patient Engagement
- Patient Electronic Access
- More flexible reporting e.g. 90-day period for attestations and calendar year reporting

Performance Score: Up to 80 points. Selection from 3 objectives: electronic patient access, coordination of care through patient engagement, and health information exchange.

Public Health Registry Bonus Point. Immunization registry reporting is required. A bonus point can be earned for reporting to other public health registries.

All scores add to achieve the total ACI score

- Possible points: 131
- Maximum points awarded with a 100 point ACI score with loss of points for not meeting the 100-point threshold.

Trends Driving State Legislative Action

- **Opiate Addiction Crisis**
  - 30,000 Americans died in 2014, quadrupled since 2000
  - Often begins with legitimate prescriptions following surgery or injury
  - States are moving rapidly to legislate changes to address the problem

- **Advent of Biologics and now Biosimilars**
  - FDA recently approved the 2nd Biosimilar product
  - Biosimilars are not equivalent to the reference drug
  - FDA must identify it to be “interchangeable”
  - Prescribers need to be aware when substitutions are made so outcomes and side effects may be monitored
- **Expansion of Mid-Level Prescribers**
  - Prescriptive authority and supervisory rules are changing
- **Push for greater interoperability and communication between pharmacies and prescribers**

Opiate Addiction Crisis

Prescription Drug Monitoring Programs and impact on EHRs

- **49 states have PDMPs that collect controlled substance dispensing data from pharmacies and in-office prescribers**
  - Provide access to prescribers, pharmacies, and typically law enforcement
  - Helps to prevent “doctor shopping”
  - Identifies top prescribers of controlled substances
  - Building on the success, states are stepping up the requirements for usage
- **19 states now require prescribers to access the PDMP prior to prescribing certain CS drugs**
  - Several others have active legislation in the works
- **Some states are mandating interoperability between the EHR and PDMP to facilitate access**
  - Even without mandate, prescribers will need access within EHR workflows
- **1 state has mandated that ALL prescriptions will be reported to PDMP by January 2018**
  - Inclusive of non-controlled substances, and cash prescriptions
  - Will provide a much more complete Medication History that typically provided by payers

Opiate Addiction Crisis

Other Impacts on EHRs and ePrescribing

- **EPCS Mandates**
  - 2 states have mandates in place (New York and Minnesota)
  - 3 have proposed legislation, and others are rumored to be contemplating a mandate
- **Prescribing Limits for Opiates**
  - Many states are more strict than DEA on expiration and days supply limits
  - 1 state just passed a significant 7 days supply limit on many opiate prescriptions
    - Requires *pharmacy to notify prescriber* if lesser amount is dispensed
    - EHR must receive and store patient's "Non Opiate Directive Form"
  - Another governor just announced a plan to put quantity and days supply limits on opiates

Prescription Drug Monitoring Programs

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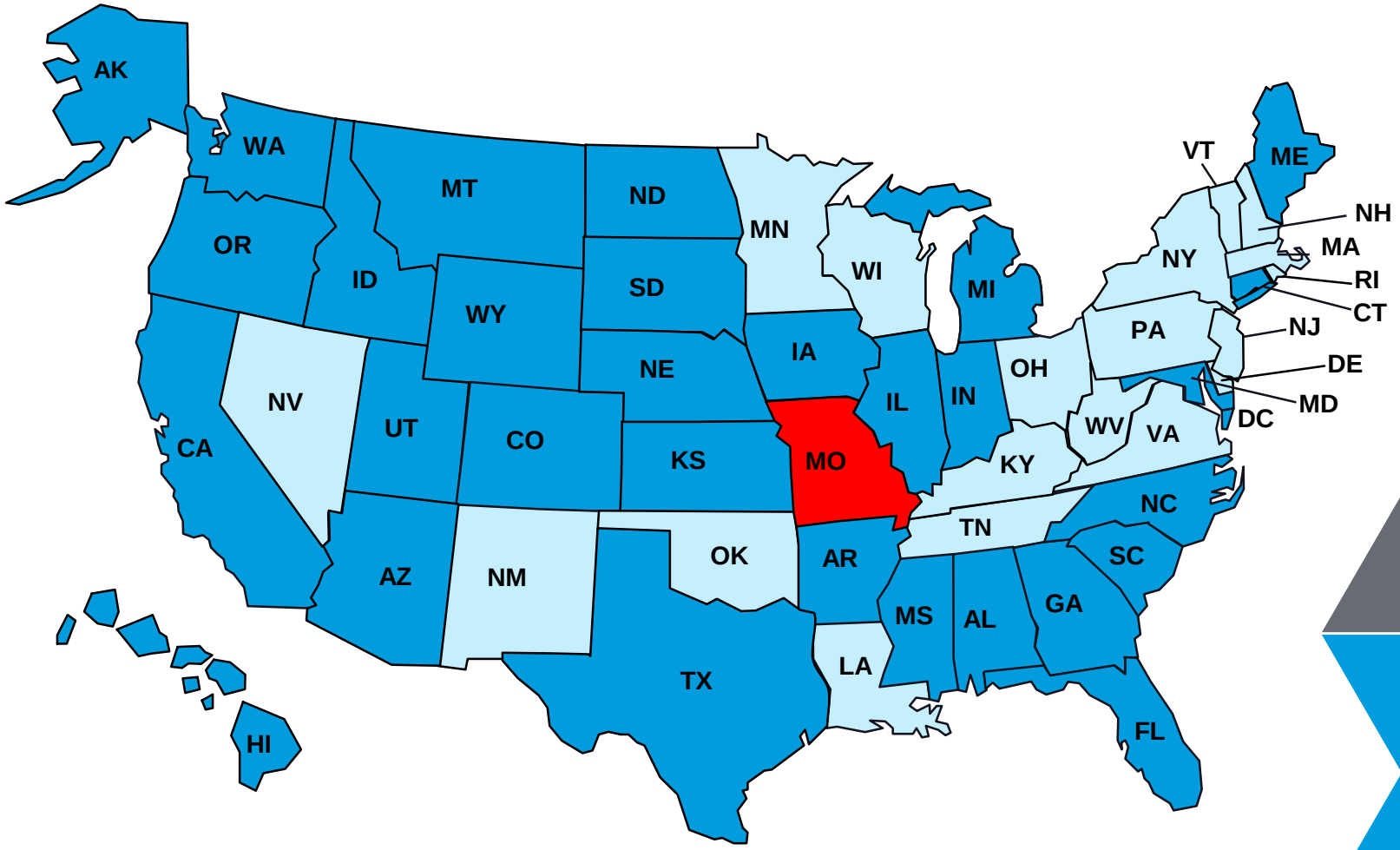
All states except MO have a PDMP database to monitor controlled substance prescriptions

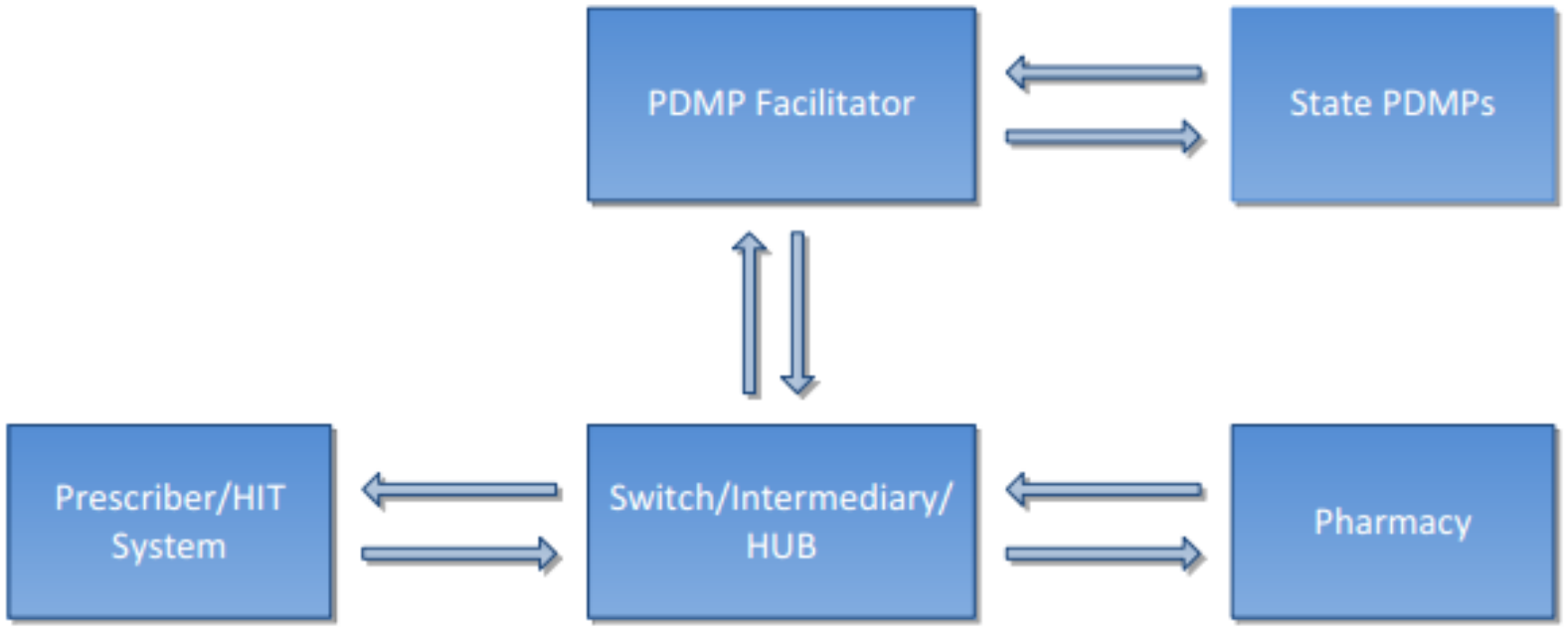
19 States + Guam require prescriber to check PDMP before prescribing a controlled substance



Checking PDMP is challenging because access is not embedded into the ePrescribing workflow of the EHR

NCPDP Proposed Flow for PDMP Transactions

NCPDP PDMP Transaction Flow



A national PDMP solution is a key strategic initiative for NCPDP in 2016. The proposed solution would allow all states to adopt a minimal data set and standard transaction to submit data to a national repository.

I-STOP March 27, 2016 ePrescribing mandate

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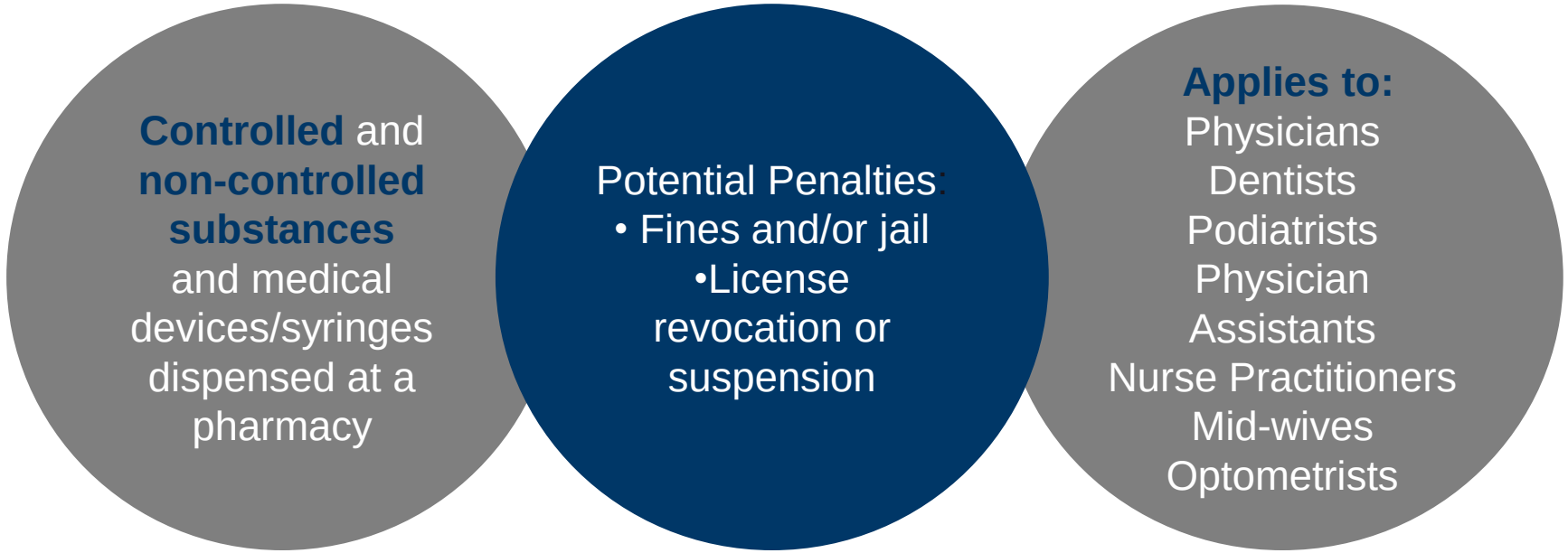
Requires all prescriptions issued in in New York to be transmitted electronically (with limited exceptions).



Prescribers are still required to check the New York State prescription monitoring program registry before prescribing a controlled substance in compliance with earlier I-STOP regulations.

Exemptions to March 27th Mandate

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Veterinarians

ePrescribing not available due to temporary electrical or technological failure

Prescription will be dispensed at a pharmacy outside of New York State

Prescriber has a waiver*

eRx cannot be issued timely and delay would adversely affect patient's medical condition

Rx for controlled substance cannot exceed 5 day supply

The Commissioner of Health may grant a waiver, not to exceed 1-year, for economic hardship, technological limitation or other exceptional circumstance.
Bill introduced **3/9/16** exempts prescribers who write no more than 25 prescriptions a year.
Prescribers must apply for waiver yearly, note in patient's record each time exemption is used and terminate certification if he/she exceeds 25 prescriptions.

HTTP://WWW.HEALTH.NY.GOV/PROFESSIONALS/NARCOTIC/ELECTRONIC_PRESCRIBING/WAIVER.HTM
NY ASSEMBLY BILL A09335

I-STOP Impact

New York is leading the nation in the enablement of electronic prescribing of controlled substances (EPCS)

- 77% of prescribers are active ePrescribers, compared to 60% nationally
- 58% of prescribers are enabled for EPCS, compared to 9% nationally
- 98% of pharmacies engaged in ePrescribing are capable of receiving EPCS prescriptions

EPCS Enablement

- March NY EPCS transaction volume = 1.134 million
  - By comparison, EPCS transactions for NY in November 2014 = ~8,000 EPCS prescriptions
  - Equates to 40% of all U.S. EPCS prescriptions
- Software vendors serving 99% of New York prescribers are certified for EPCS
- Doctor shopping is down 90% since I-STOP went into effect in August 2013**
- As of May 1, 2016: 5,300 waiver requests granted

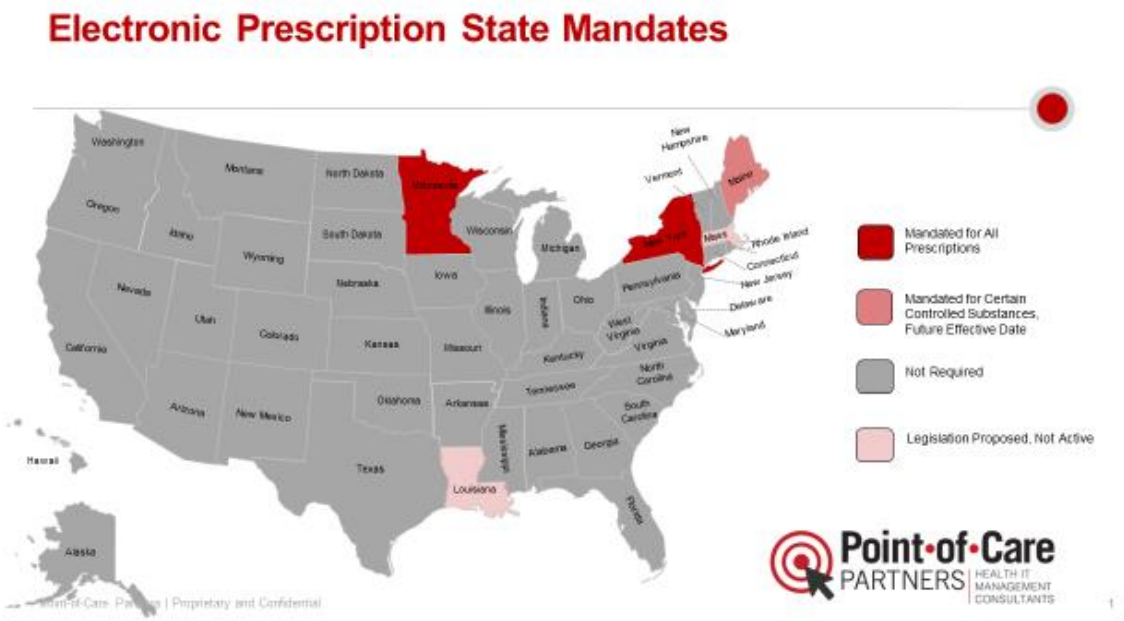
Main Opioid Legislation Update:

- Signed on 4/19/16; Similar to iSTOP
- Mandates prescribers (and sometimes pharmacist) to check state PDMP database
- Requires EPCS for opioid prescriptions starting 7/1/17

Sources: Surescripts, **A.G. Schneiderman,

Eyes on New York

- **More states are expected to follow New York's lead to address the nationwide opiate abuse crisis**
  - 2 new states introduced legislation in 2016 to mandate EPCS
  - More states are requiring prescribers to access the PDMP before prescribing, and 2 have passed laws requiring interoperability between the PDMP and EHRs
  - Nebraska is making the bold move of requiring ALL prescriptions to be submitted to the PDMP effective January 2018
  - Massachusetts new opiate law requires new forms of communication between pharmacy and prescriber
  - At least two other states are rumored to be considering I-STOP-like legislation
- **These mandates will dramatically advance progress toward providing truly complete medication histories to clinicians**



Expanding Face of ePrescribing

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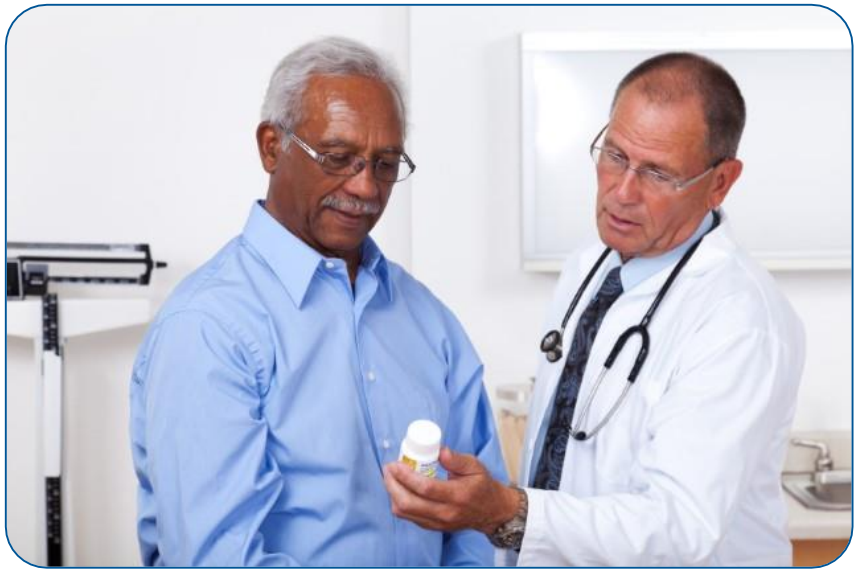
Prescribers

- Multi-Specialty Physicians
- Dentists
- Podiatrists
- Physician Assistants and Nurse Practitioners
- Clinical Nurse Specialists
- Clinical Psychiatrists
- Mid-Wives
- Ophthalmologists

Settings

- Solo/Group Practices
- HMO/Other Health Care Corp
- Hospital or Academic Health Centers
- Community Health Centers

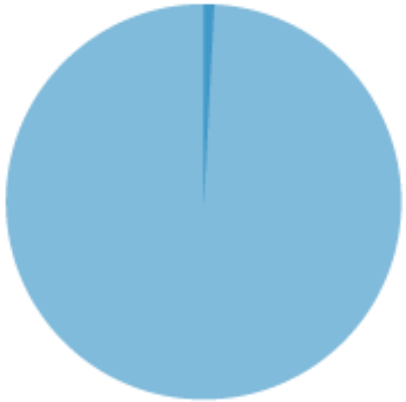


Growth of Pharmacy Specialty Spend

Specialty Drugs

- Used to treat chronic catastrophic illnesses like multiple sclerosis, hepatitis C & rheumatoid arthritis
- Often injected or infused
- Costly

2015



>2% of Rxs written for Specialty Drugs

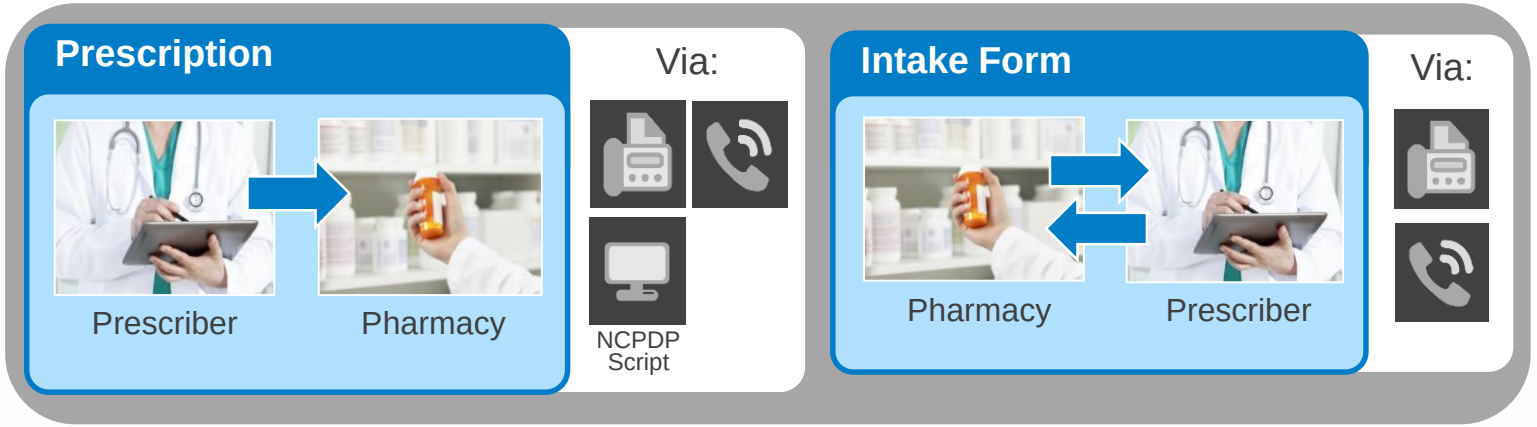
37% or more of Pharmacy Plan Costs

By 2019

Nearly 50% of Pharmacy Plan Costs

Source: Express Scripts Lab

Specialty ePrescribing



The prescriber doesn't know which pharmacies are part of the limited distribution network(s).

Data required to ultimately dispense a specialty medication is not included in the original prescription; in fact, SCRIPT may not even have the fields to accommodate.

There is no standard definition of specialty, so no specialty medications are flagged leading to specialty drugs being prescribed in the same manner as non-specialty.

The process requires coordination between the pharmacy and prescriber, and there are no transactions that facilitate status updates or such coordination.

ePrescribing Incentives

- **Meaningful Use as we know it today is evolving to a Merit-based Incentive Payment Systems (MIPS)**
  - While the structure of MIPS is different than MU, most of the requirements of MU will still apply
  - MIPS starts in 2019, **based on performance in 2017**
  - CMS has said that “TBD” MU Stage 3 measures will qualify for MIPS in 2017 and 2018
  - MU Stage 3 requires ePrescribing for 50% of eligible prescriptions

A single MIPS composite performance score will factor in performance in 4 weighted performance categories that will drive reimbursement levels:

- Quality (30%)
- Resource use (30%)
- Clinical practice improvement (15%)
- Meaningful use of certified EHR technology (25%)

Indications-Based ePrescribing

- **Renewed focus on inclusion of medication-indication on electronic prescription**
- **The Agency for Healthcare Research and Quality (AHRQ) funding for multi-year project to design, build and test prototype of indications-enabled CPOE system**
  - Year 1 (completed): Convened stakeholder expert panels
  - Year 2 (in process): Design and Build working prototype
  - Year 3 (2017): Test prototype and provide recommendations and lessons learned from pilot project
- **More information: http://chainonline.org/research-tools/improving-hit-prescribing-safety/**

Project Overview

AHRQ has funded the Brigham and Women's Hospital (BWH) Center for Patient Safety Research and the Massachusetts College of Pharmacy (MCPHSU) to lead a multi-year project to improve HIT prescribing safety by redesigning computerized prescriber order entry (CPOE) to incorporate a medication indication into the prescription order.

Thank You

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