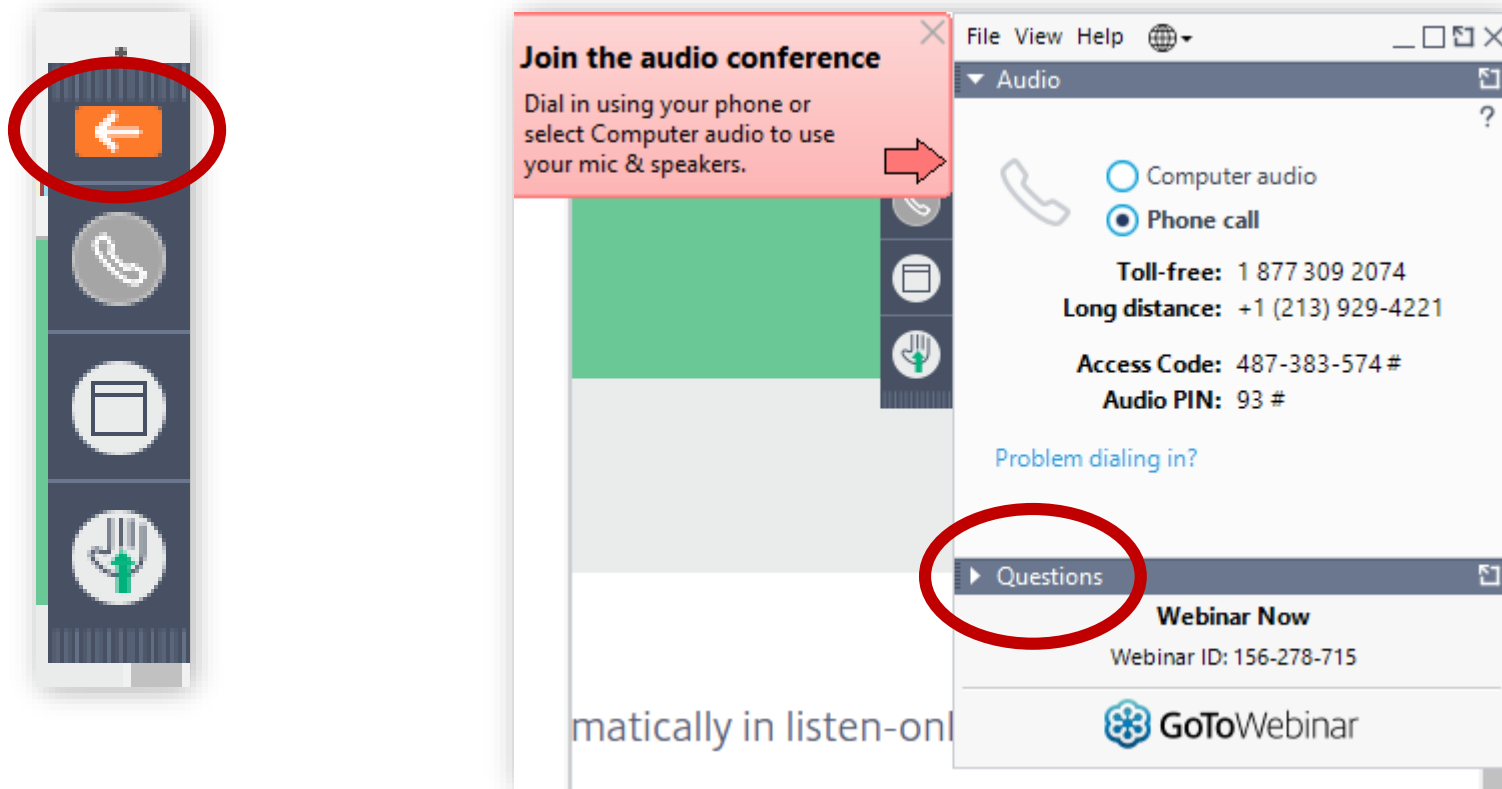


Health Technology Challenges and Opportunities Launching a Biosimilar

What Every Marketer Needs to Know

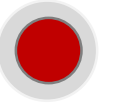


GoToWebinar Logistics



*Answer in Question Panel:
What is your biggest health IT challenge launching new drugs today?*

Speaker Introductions



Pooja Babbar



Point-of-Care Partners Practice Lead,
PBM Services

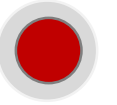
NCPDP Biologic and Biosimilar Access
and Traceability Task Group Leader

Craig Kemp



Point-of-Care Partners Senior
Consultant, Life Sciences

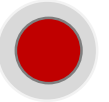
Agenda



- The Impact of Biologics in Today's Healthcare Environment
- The Biosimilar Market
 - How do Biosimilars differ from Biologics
 - Regulatory activities affecting ePrescribing of Biologics and Biosimilars
- Ordering and Prescribing Biosimilars in the EHR
- EHR Considerations for Brand Launch Plan

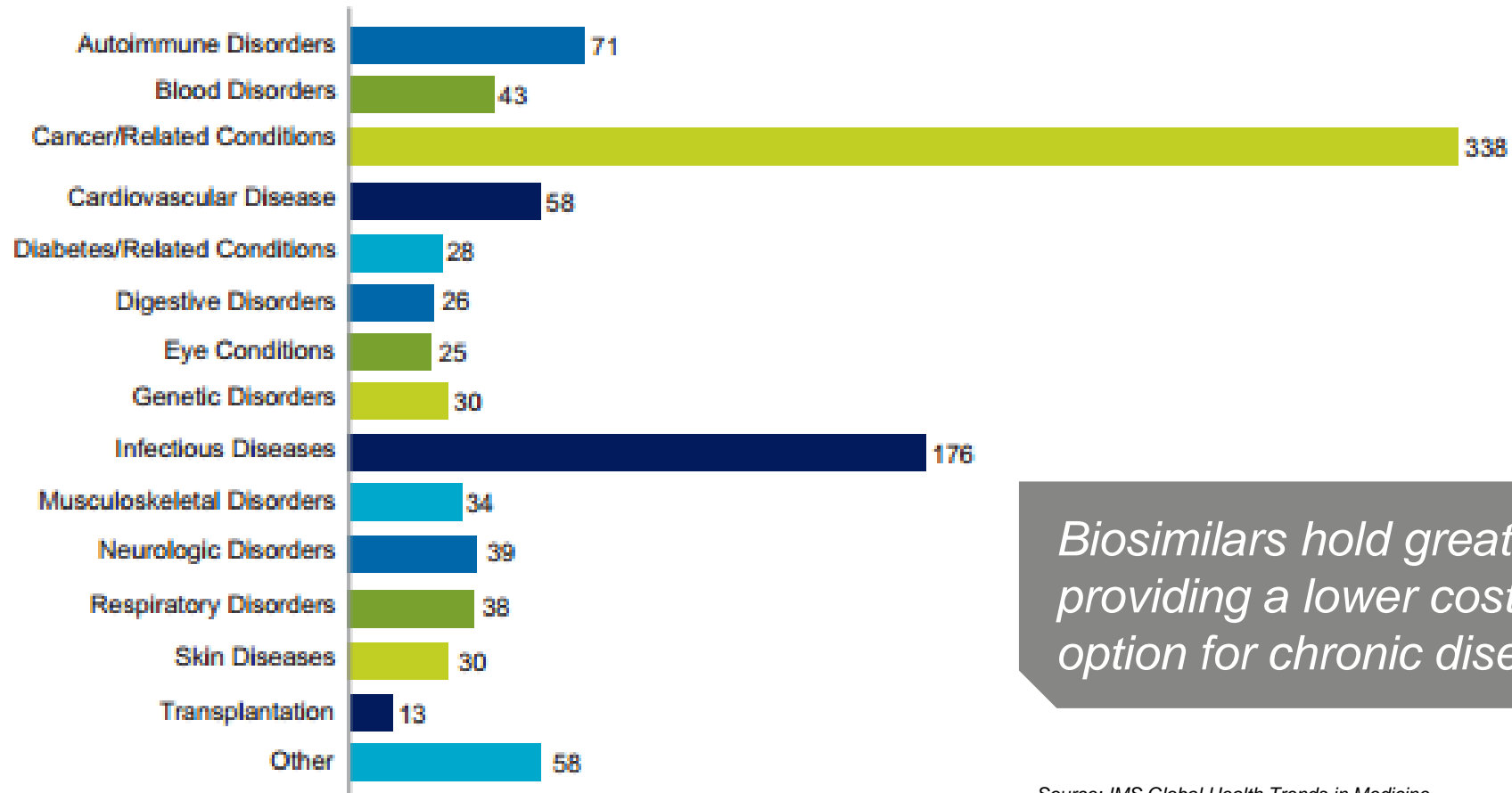
The Impact of Biologics in Today's Healthcare Environment

Why Are Biologics so Important?



Biologic Medicines in Development—by Therapeutic Category

Some medicines are listed in more than one category

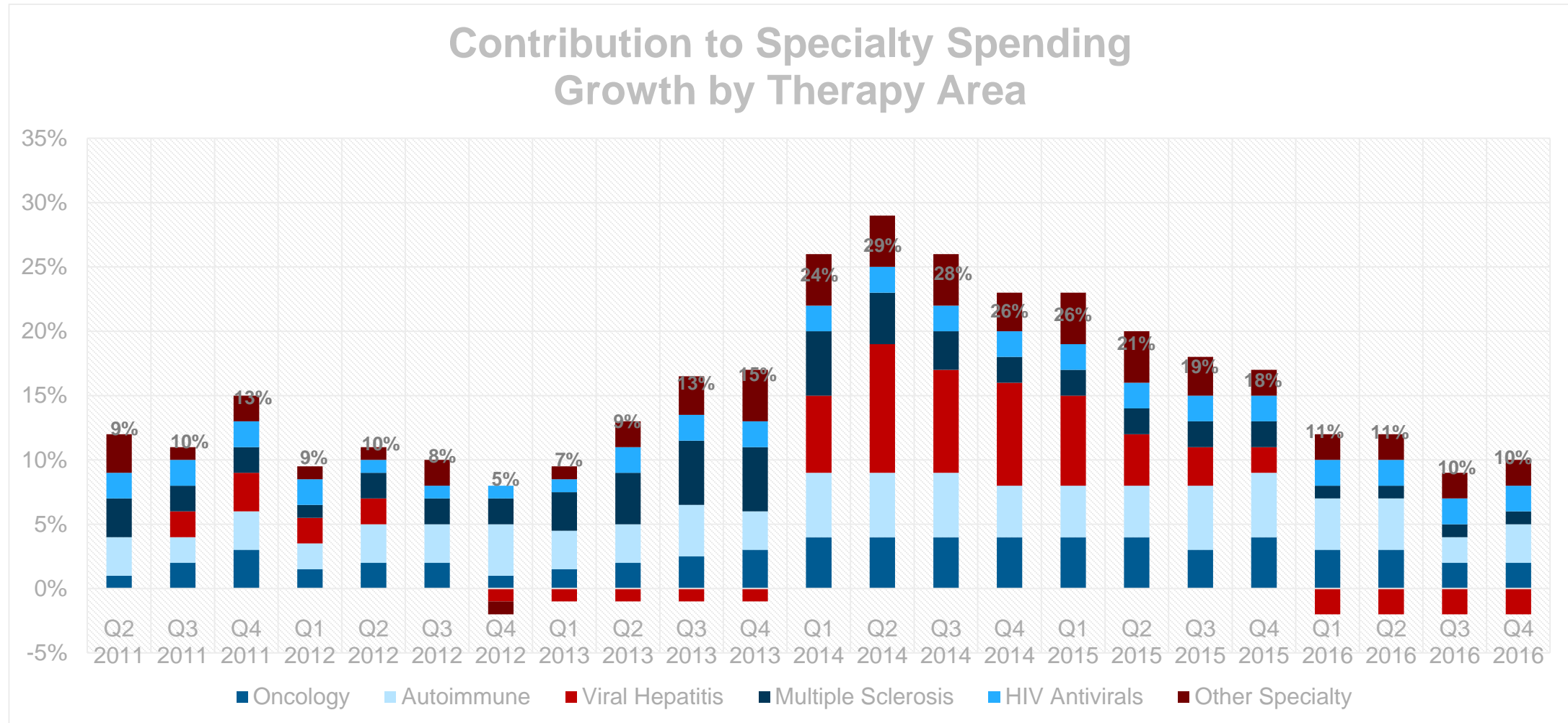


Biosimilars hold great promise for providing a lower cost treatment option for chronic diseases

Source: IMS Global Health Trends in Medicine

Growth of Pharmacy Specialty Spend

On average, specialty spending has been increasing at approximately 10% per year



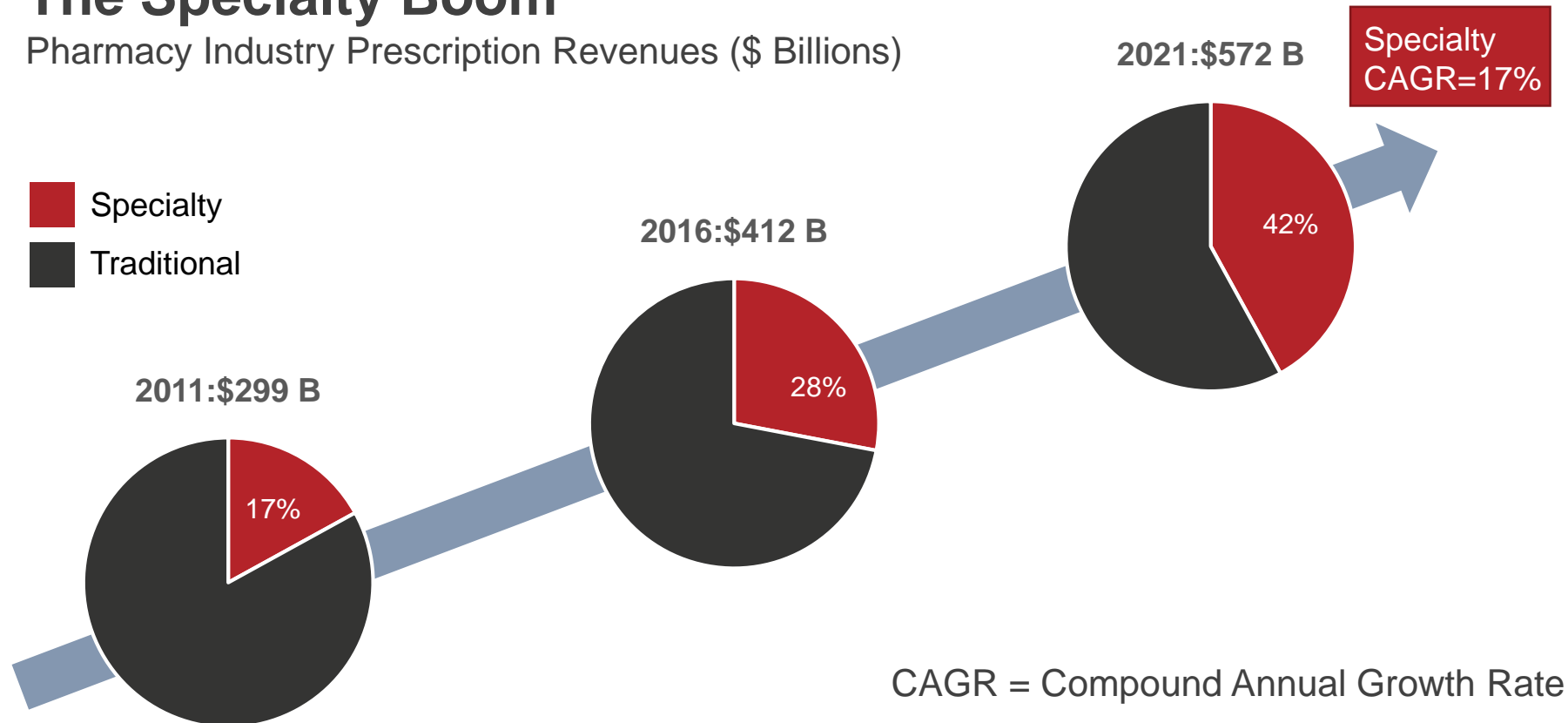
The Biologic Market is an Increasing Amount of the Total US Drug Spend

2017

The Specialty Boom

Pharmacy Industry Prescription Revenues (\$ Billions)

■ Specialty
■ Traditional



Source: The 2017 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers, Exhibit 66. Includes prescription revenues from retail, mail, long-term care, and specialty pharmacies.

The Biosimilar Market

Biologics: What are they?

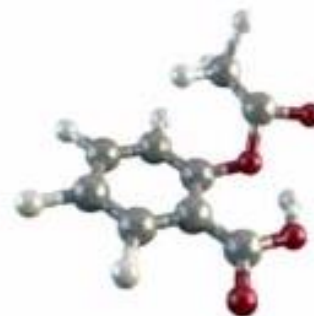
Biologics

- Very large, complex molecules or mixtures of molecules
- Manufactured in a living system such as a microorganism, or plant or animal cells; often produced using recombinant DNA technology
- Difficult, and sometimes impossible, to characterize a complex biologic by testing methods available in the laboratory, and some of the components of a finished biologic may be unknown

In contrast to most drugs that are chemically synthesized with known structures, most biologics are complex mixtures that are not easily identified or characterized.

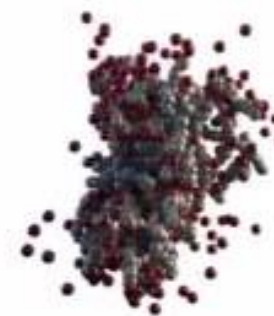
Source: Hospira: About Biologics; Presented at FDB Care Guidance Conference, 2016

SMALL MOLECULE DRUG



Aspirin
21 atoms

SMALL BIOLOGIC

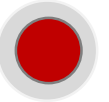


Human Growth Hormone
~ 3000 atoms

Conventional Medications

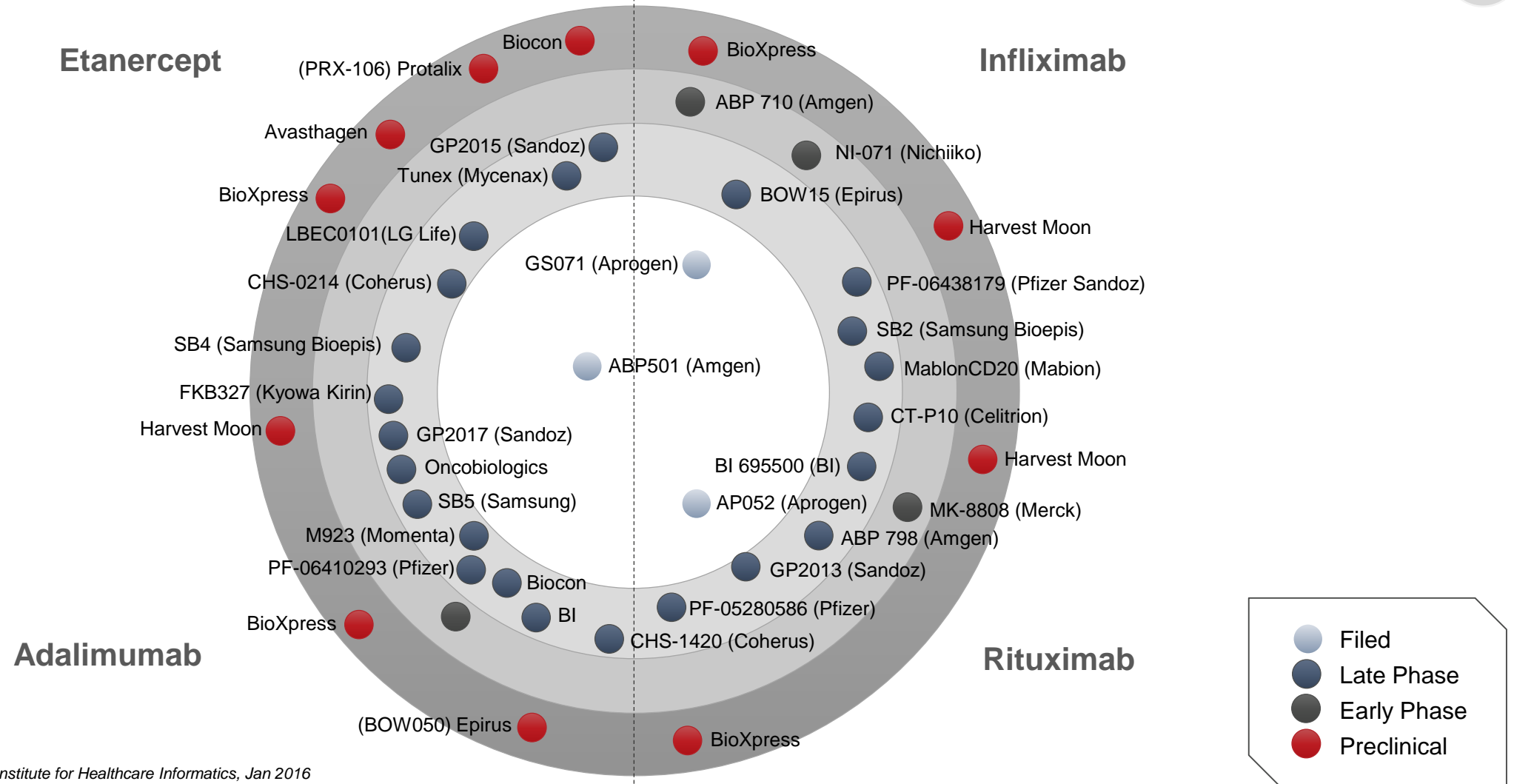
- Typically manufactured through chemical synthesis (made by combining specific chemical ingredients in an ordered process)
- Have well-defined chemical structures
- Finished drug can usually be analyzed in a laboratory to determine all its various components

Biosimilars: What are they?



	Generic Molecules	Biosimilars
Definition*	Generic equivalent . A drug that is no longer under patent protection, which may be produced by any manufacturer who follows good manufacturing protocols. Identical to the innovative original drug	A biopharmaceutical which is produced by a different manufacturer after the expiration of the patent and marketing exclusivity of an original innovative biological product (e.g., a therapeutic monoclonal antibody). Highly similar to original biologic.
Rules on Substitution	Interchangeable and therefore substitutable without prescription in all states (considered therapeutically equivalent) – Hatch-Waxman Act (1984)	Not always therapeutically equivalent and interchangeable (different active ingredient) 1. Biosimilars: analytical studies show product is “ highly similar ” 2. Interchangeable Biosimilar: Requires biosimilarity AND switching from original biologic does not impact safety or efficacy

A Wave of Biosimilars are Launching Over the Next Several Years



Source: IMS Health, IMS Institute for Healthcare Informatics, Jan 2016

Regulatory activities affecting ePrescribing of Biologics and Biosimilars



Biologic and Biosimilar Naming

- FDA final guidance on Non-Proprietary biologic product naming released January 2017
- Adds a 4-digit random suffix to end of name
- Requires name change for existing products on the market

Biologic and Biosimilar Substitution Communication

- Legislation in 32 states
- Notification of substitution must be sent to provider
- NCPDP eRx standards organization added category to RxFill standard to allow for electronic communication of substitution information

Biosimilar Interchangeability

- FDA Draft Guidance released January 2017
- Outlines what is required to demonstrate interchangeability of biosimilar including switching studies and presentation of the product (container closure system, delivery device, etc.)

FDA Final Rule on Biologic Naming: Jan, 2017

- An FDA-designated suffix be added to the nonproprietary biologic name
 - Suffix is composed of a random set of 4 lowercase letters
- Name change of existing reference and biosimilar products
 - Add suffix to the nonproprietary name

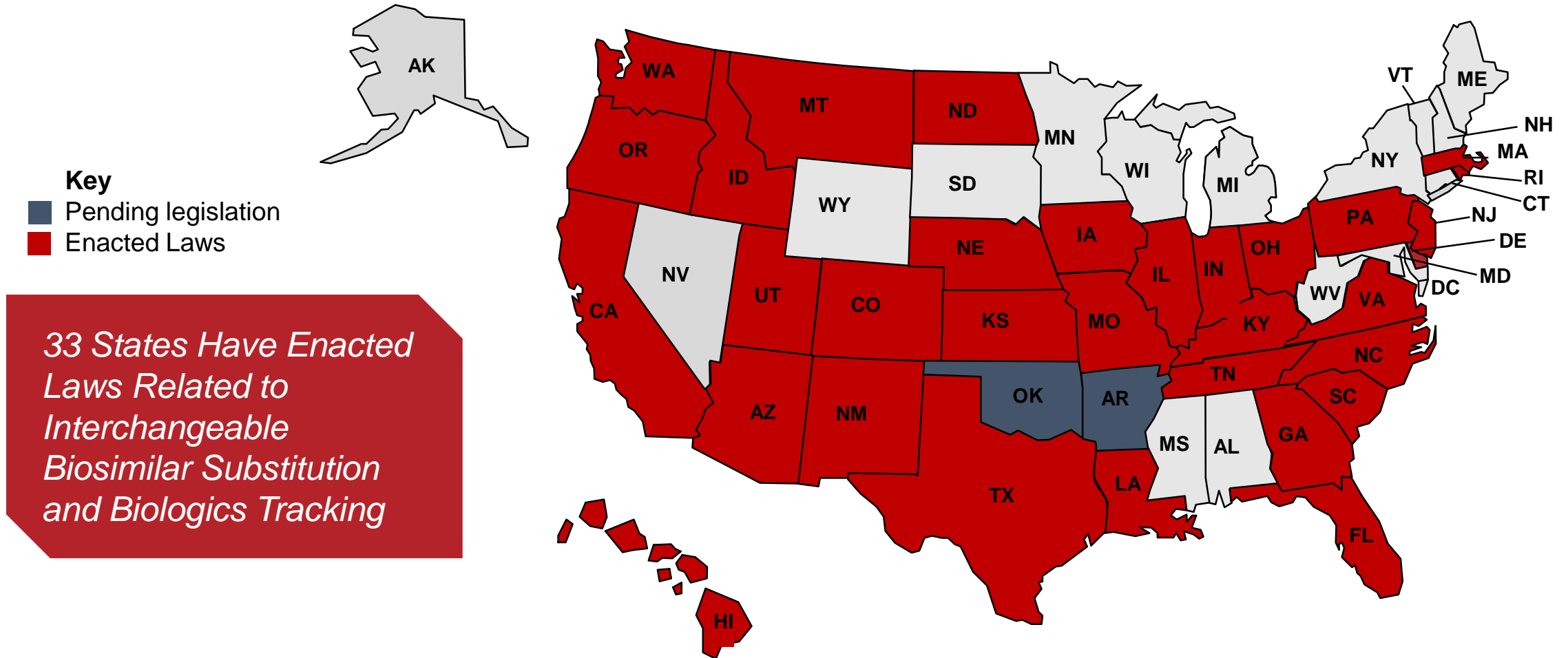
Example:

Nonproprietary name of reference product:
replicamab-cznm

Biosimilar of that product:
replicamab-hixf

*Ruling seeks to address 2 main issues:
Help prevent inadvertent substitution and
provide support for after-market safety
monitoring of all biologic products.*

Biologic and Biosimilar Substitution Notification



Source: ePrescribing State Law Review by Point-of-Care Partners June 14, 2017

Biologics and Biosimilars Substitution Communication: Key Provisions of Legislation and Standards Update



1. FDA Certified Interchangeability
 2. Patient Notification
 3. Prescriber's "Brand Medically Necessary" Blocks Substitution
 4. Pharmacy Records Must Be Retained
 5. Posted List of Interchangeables
 6. Price related provisions
 7. Other provisions
 1. Liability Protection
 2. Timeframe for communication
- NCPDP Biologics and Biosimilars Task Group Formed Sept, 2016
 - **Goal:** Evaluate existing NCPDP standards on viability for use as electronic communications from pharmacy to provider for biologic and biosimilar substitution
 - **DERF passed at NCPDP meeting, May 2017**
 - Will allow electronic communication of biologic and biosimilar substitution using RxFill

Interchangeability: FDA Draft Guidance



Interchangeability Draft Guidance: In Comment Period

Guidance on required testing and proof of interchangeability including switching studies and post-marketing data

- Biosimilarity requirements are met first
- Totality of evidence will be considered
- Data and information showing product can be expected to produce the same clinical result as the RP* in ALL of the RP's licensed conditions of use expected
- Seeking licensure for ALL RP's licensed conditions of use recommended
- Extrapolation is acceptable when justified
- Switching studies generally expected
- Presentation/s generally limited to those of the RP
- Post marketing safety monitoring may be required but is itself not sufficient

* RP = Reference Product

Biosimilar tracking for Adverse Drug Events



Passive surveillance system:
Relies on proactive reporting by
physicians and pharmacies



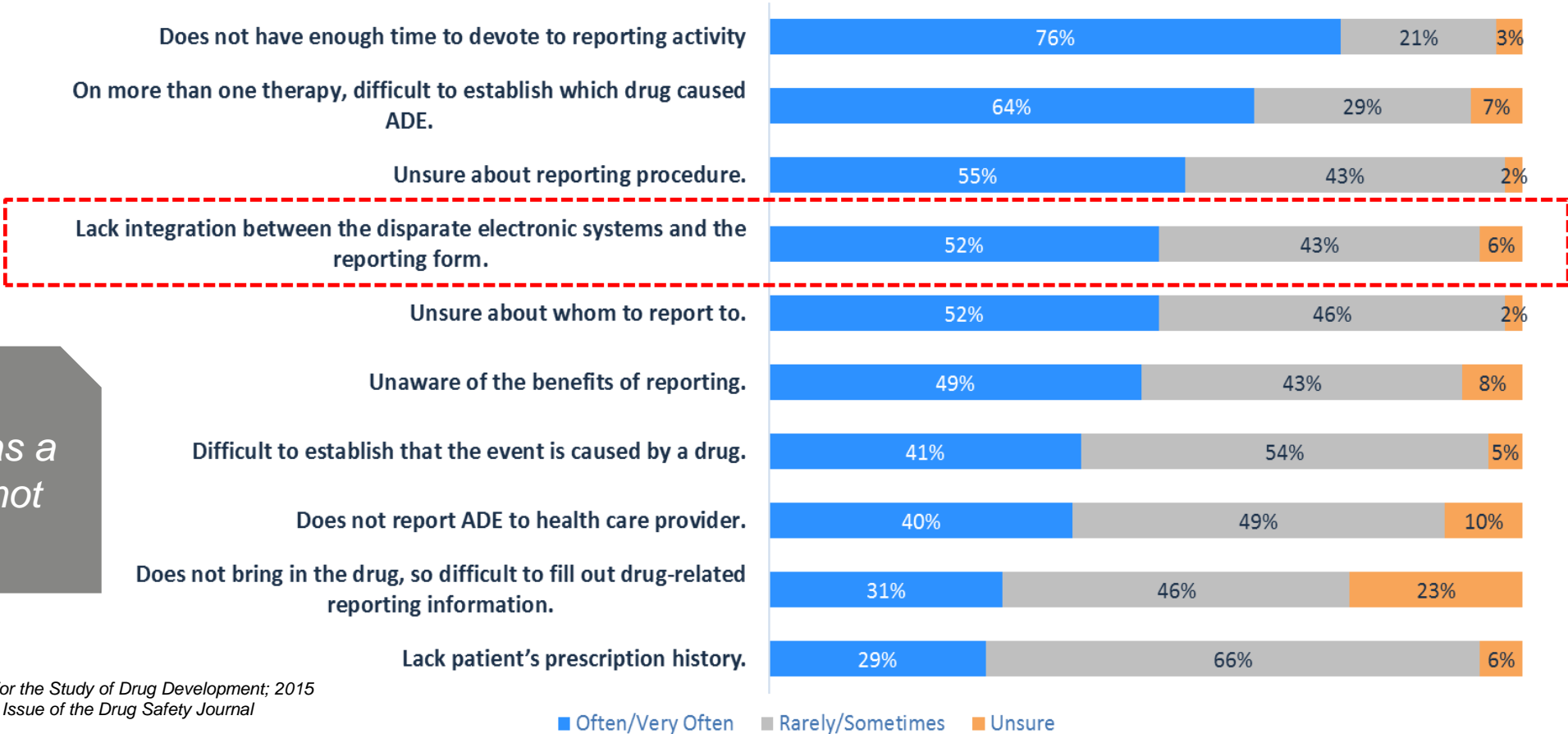
Active surveillance system:
Relies on retrospective analysis
of medical records at Sentinel-
affiliated sites and drug or
disease registries

Currently, there is no pending legislation or FDA guidance around tracking and reporting of ADEs, yet given the complex nature of biosimilars the ability to trace an ADE back to the originating product will be an important safety monitoring process

Research on Reason for not reporting ADEs



Question posed to Hospital Practitioners including MDs, Pharmacists and Nurses:
“Based on your experience, how often do each of these reasons prevent health care providers from reporting ADEs to the FDA or the manufacturer?” (n = 87)



Lack of system integration was cited as a significant reason for not reporting ADEs (52%)

Source: Results of study conducted by Tufts Center for the Study of Drug Development; 2015 and 2016. Recently published in the November, 2016 Issue of the Drug Safety Journal

Summary



- The Biologics market will continue to grow over the next several years
 - Numerous Biologics in development including Biosimilars
- Biosimilars offer great opportunity to increase access to medications and lower costs
- However, the complex nature of Biosimilars make substitution more complex than Generic medications
- Regulatory activities such as naming, substitution and adverse experience reporting are complex and still in development
- EHRs and ePrescribing technologies will need to adapt to make Biosimilars accessible and easy to prescribe

Ordering and Prescribing Biosimilars in the EHR

The EHR market continues to expand as most HCPs have integrated the technology into their practices



EHR systems are becoming the digital platforms where doctors practice: **>85% of physicians are ePrescribing** and **>80% of office-based physicians are using EHRs**

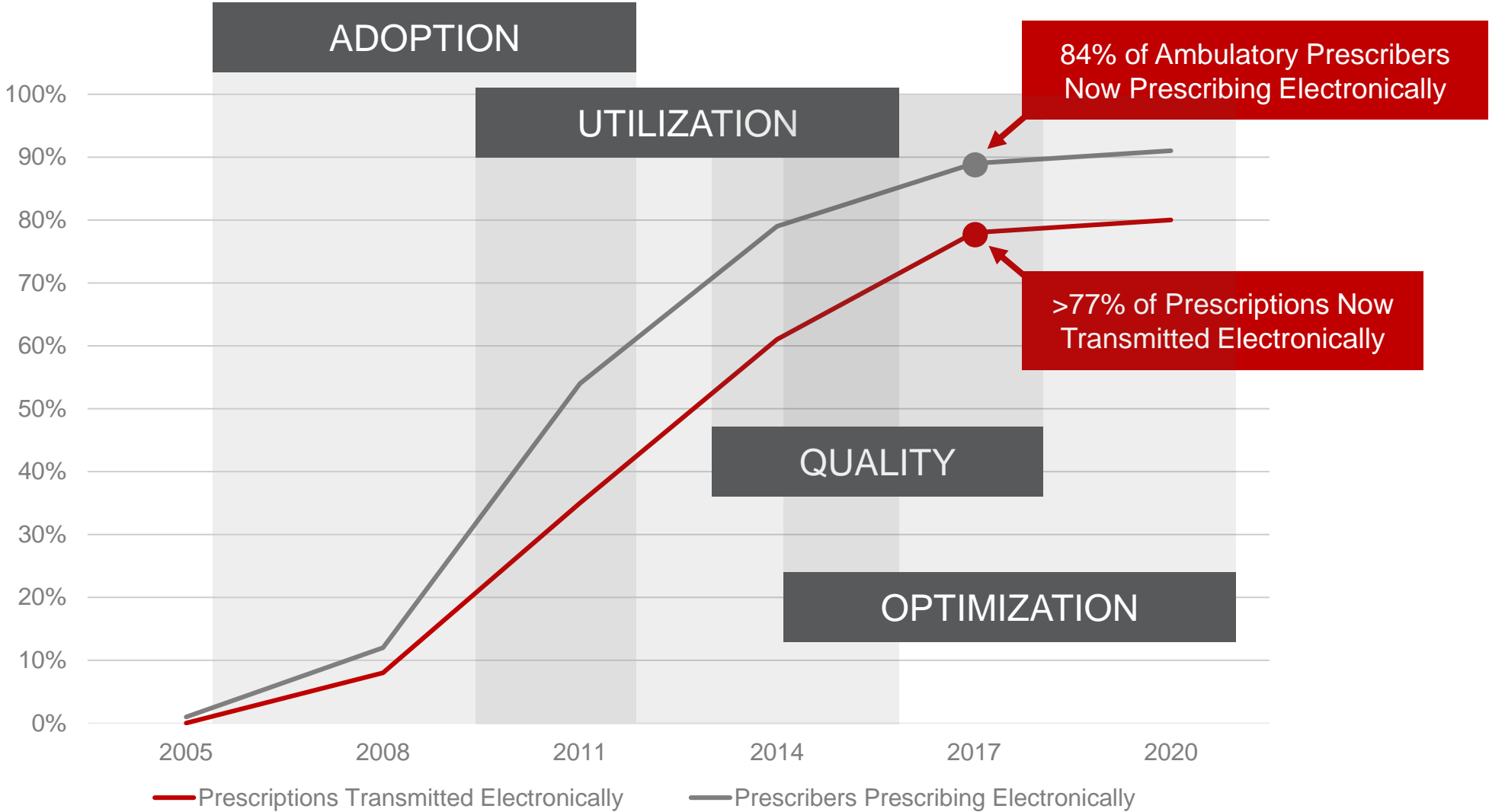


HCPs spend an average of **3.3 hours per day using EHR systems**, twice as long as on all other digital resources combined

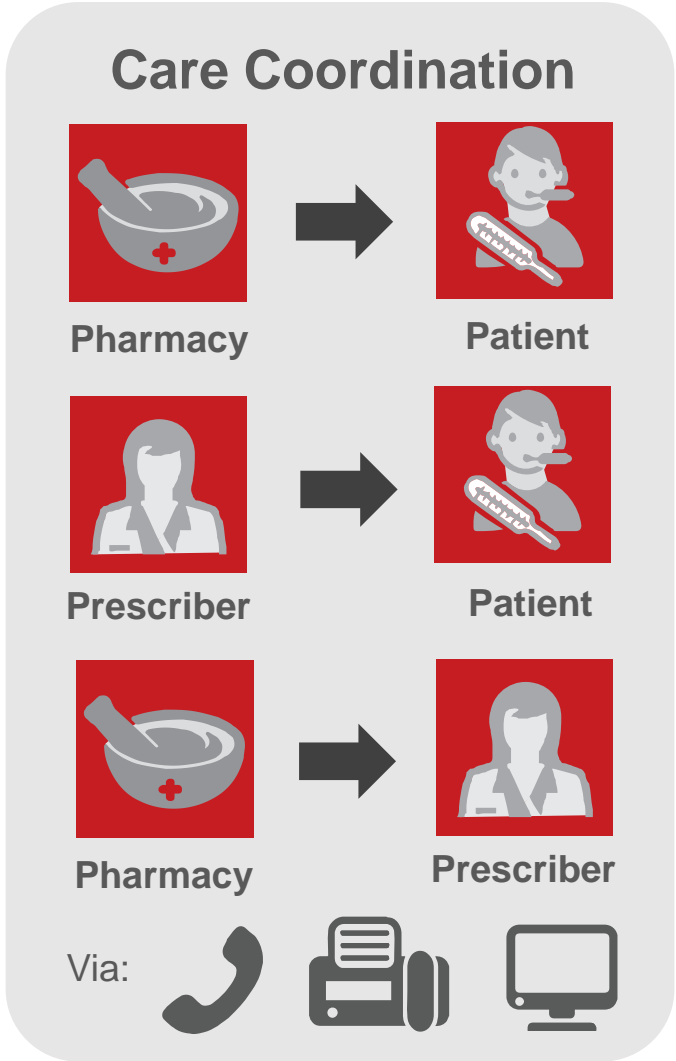
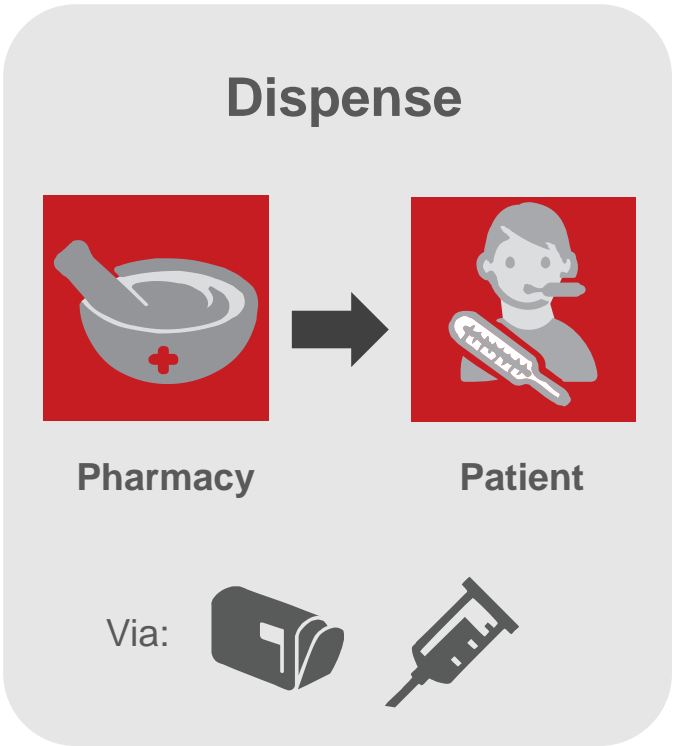
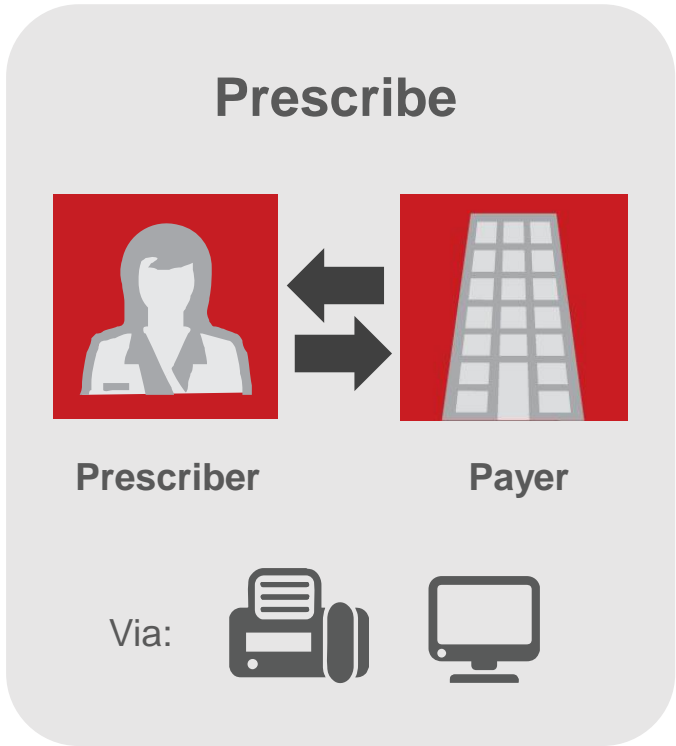


Opportunities exist to integrate utilization management tools within EHRs and ePrescribing workflow for **both specialty and non-specialty medications**

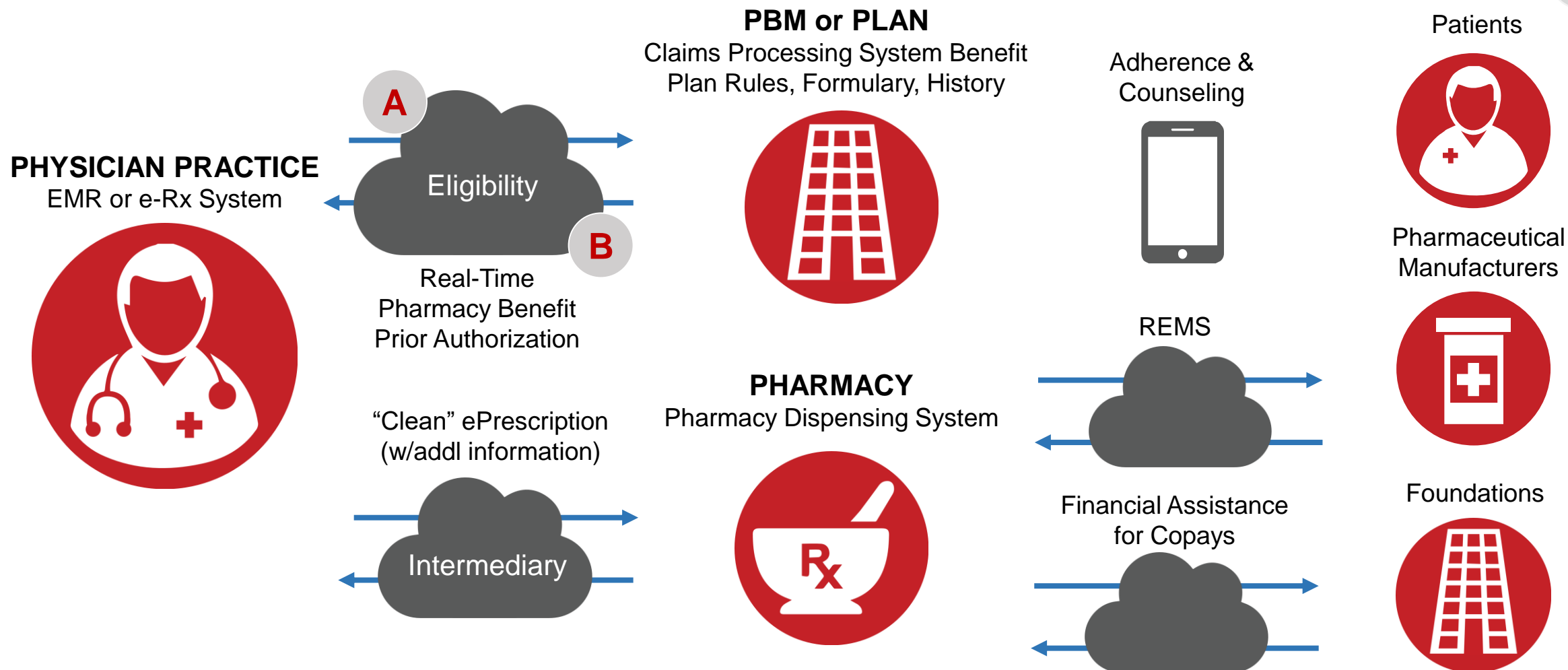
The Evolution of ePrescribing



There are multiple prescription transactions required to prescribe and administer a biosimilar



EHR technology is continually evolving to meet the information needs of HCPs and patients



EHRs now run the clinical workflow and the industry is rapidly evolving to meet the needs of HCPs



- Almost all HCPs who will prescribe Biosimilars are using EHRs to prescribe and administer specialty medications
- Multiple intermediaries and drug information databases collaborate to provide the necessary information and transactions
- The EHR and health technology market will evolve over the next several years to meet the needs of HCPs and patients

Understanding EHRs is critical to understanding the market and customer needs

EHR Considerations for a Biosimilar Launch

Every step in the biosimilar buying process flows through EHRs and health IT

- HCPs will only prescribe a biosimilar they can easily identify, prescribe and administer in their EHR
- A thorough understanding of the EHR clinical workflow and how it impacts the prescribing of a biosimilar is a critical to a successful launch

Steps in the Buying Process	Selected EHR and Health IT Function
Origination	<ul style="list-style-type: none">• Population Health• Patient Lists• Patient Outreach
Evaluation Diagnosis	<ul style="list-style-type: none">• Clinical Alerts• Clinical Decision Support
Treatment Choice	<ul style="list-style-type: none">• Clinical Quality Measures (eQMs)• Order Sets
Brand Choice	<ul style="list-style-type: none">• ePrescribing• Formulary Indicators• Favorites
Prescription Fulfillment	<ul style="list-style-type: none">• ePrior authorization• Prescription Drug Monitoring Programs
Compliance Adherence	<ul style="list-style-type: none">Clinical SummariesPatient PortalsElectronic Patient Education

Four customer needs must be met for a successful Biosimilar launch

- HCPs need to easily prescribe, order and administer a biosimilar in the EHR clinical workflow

1. Access in EHR

HCPs need to easily identify and prescribe a biosimilar in the EHR

2. Prescribing

HCPs need to understanding how to correctly prescribe a biosimilar

3. Patient Information

HCPs need MCO formularies and prior authorization requirements

4. Patient Engagement

HCPs need to engage and educate patients for successful treatment

Naming convention requires understanding how a biosimilar will appear in EHRs

Biosimilar must be available in EHRs to be prescribed

Product Naming should consider how product will be listed in ePrescribing systems

- All EHRs license a drug list from a Compendia Publisher
- HCPs will need to be able to identify a biosimilar and easily distinguish it from the reference biologic

Validating the Compendia have correctly listed a biosimilar and that it is easily identifiable to HCPs is critical to successful launch

1. Access in EHR

HCPs need to easily identify and prescribe a biosimilar in the EHR

Choose Medication		accu-	Search	Patient History	My History	All Meds
		Drug Name	Strength	Unit	Dosage Form	Route
<input type="radio"/>		Accu-Chek Active			Strip	In Vitro
<input type="radio"/>		Accu-Chek Active Glucose Cont			Liquid	In Vitro
<input type="radio"/>		Accu-Chek Aviva			Solution	In Vitro
<input type="radio"/>		Accu-Chek Aviva			Strip	In Vitro
<input type="radio"/>		Accu-Chek Aviva Plus			Strip	In Vitro
<input type="radio"/>		Accu-Chek Aviva Plus	w/Device		Kit	Does not apply
<input type="radio"/>		Accu-Chek Combo			Kit	Does not apply
<input type="radio"/>		Accu-Chek Comfort Curve			Solution	In Vitro
<input type="radio"/>		Accu-Chek Comfort Curve			Strip	In Vitro
<input type="radio"/>		Accu-Chek Comfort Curve Linear			Solution	In Vitro
<input type="radio"/>		Accu-Chek Compact			Strip	In Vitro
<input type="radio"/>		Accu-Chek Compact Blue Control			Liquid	In Vitro

The EHR clinical workflow depends on a biosimilar's site of administration, formulation and package configuration

Biosimilars administered by an HCP are ordered differently than a self-injected biosimilar

HCP administered biosimilars are covered in the patient's medical benefit and have different payment policies

Liquid formulations are more difficult to order

- Quantity selection options aren't obvious
- Conversion by prescriber may be necessary

It's important HCPs understand how to correctly prescribe a biosimilar

- Confusion can result in decreased conversion from the more familiar reference biologic

2. Prescribing

HCPs need to understand how to correctly prescribe a biosimilar

The screenshot shows a web-based prescribing interface. At the top, it displays 'XXXXXX 8500 UNIT/ML Oral Solution'. Below this is a section for 'ASSOCIATED DIAGNOSIS' with a search bar. The 'SIG*' (Signification) field contains the instruction: 'Take 1 ml (8,500 units) by mouth 3 times per day with each meal or snack mixed with water, milk or formula'. The 'DISPENSE*' section has a 'Quantity' field. The 'REFILLS*' section has a field with the value '0'. The 'MAX DAILY DOSE¹' section has an empty field. The 'SCRIPT DATE*' section has an empty field. The 'NOTE TO PHARMACY' section has a field with the text 'Add notes for the pharmacist'. The 'INTERNAL RX COMMENT¹' section has a field with the text 'Add comments'. The 'UNIT*' dropdown menu is open, showing options: 'Bottle', 'Box', 'Container' (highlighted), 'Each', 'Gram', 'Milligram', 'Milliliter', 'Package', 'Pint', and 'Unspecified'. The 'DAYS SUPPLY' section has a field with the text 'Dispense as written'.

Biosimilars will be subject to MCO cost controls such as formularies, step edits and prior authorizations

HCPs need to understand the patient's managed care formulary and payment policies

- Is the patient covered for a biosimilar
- Is a step edit and prior authorization required

EHRs display MCO formularies and policies within the clinical workflow

Its important to understand and educate HCPs on managing biosimilar MCO policies in the EHR

- Biosimilars are new; HCPs will need to be comfortable with MCO coverage before converting from a familiar reference biologic

3. Patient Information

HCPs need MCO formularies and prior authorization requirements

ePa Questions - Levenox PA Form

Please provide all information requested. Failure to complete this form in its entirety may result in delayed processing or an adverse determination for insufficient information

Patient: 11, 11
Medication: M2 Calcium
Requested by: Manager, Mr. System

Question: (2/9) Indicate whether the patient exhibits an inadequate response to treatment with at least a 30 day trial of any of the following medications (select all that apply)

Answer: ☒ Flovent

Additional Comments:

Name	Formulary Status
Product 1	<input checked="" type="checkbox"/> Preferred Level 3
Product 2	<input checked="" type="checkbox"/> Preferred Level 1
Product 3	<input checked="" type="checkbox"/> Preferred Level 1
Product 4	<input checked="" type="checkbox"/> On Formulary, Non-Preferred
Product 5	<input checked="" type="checkbox"/> Non Formulary
Product 6	<input type="checkbox"/> Unknown

☐ Asmanex
Additional Comments:

☐ Qvar

<< Discard & Start Over Save and Finish Later Next >>

Patients need to be educated and engaged to be successfully treated with a biosimilar

Patient education and engagement are now delivered through the EHR

HCPs need the ability to deliver patient education in the clinical workflow

Biosimilar manufacturers need to provide quality branded and unbranded materials with the ability to be delivered in the clinical workflow

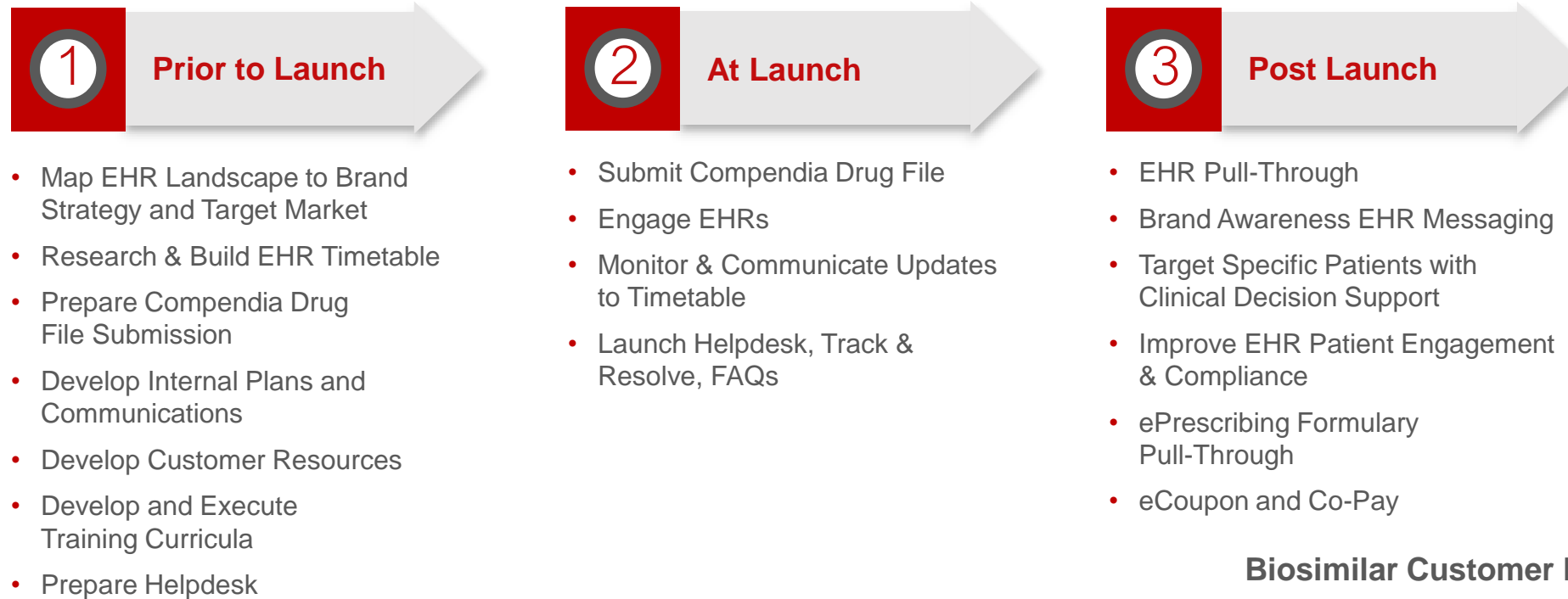
4. Patient Engagement

HCPs need to engage and educate patients for successful treatment

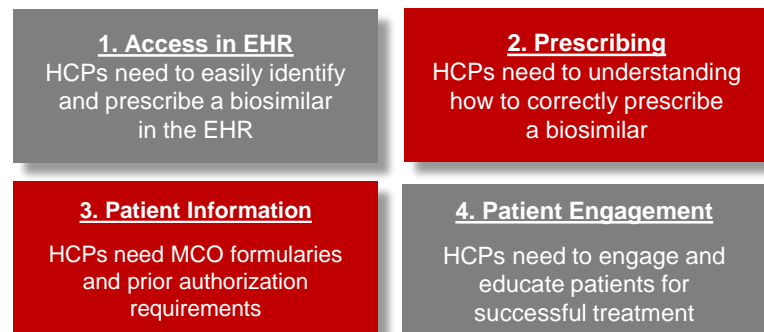
The screenshot displays a 'Medicare Wellness Recommendations for:' interface. It includes sections for 'Health Advice', 'Current Medications' (listing Macrobid and Lisinopril), and 'Weight Management' (showing a BMI of 22.6 kg/m²). A 'Patient Education' dialog box is open in the foreground, featuring a text input field with the placeholder 'Patient Education was published to portal for', a 'Browse' button, and 'OK' and 'Cancel' buttons. A red 'X' icon is visible in the top right corner of the dialog box.

A biosimilar EHR strategy that meets customer needs is executed in three phases

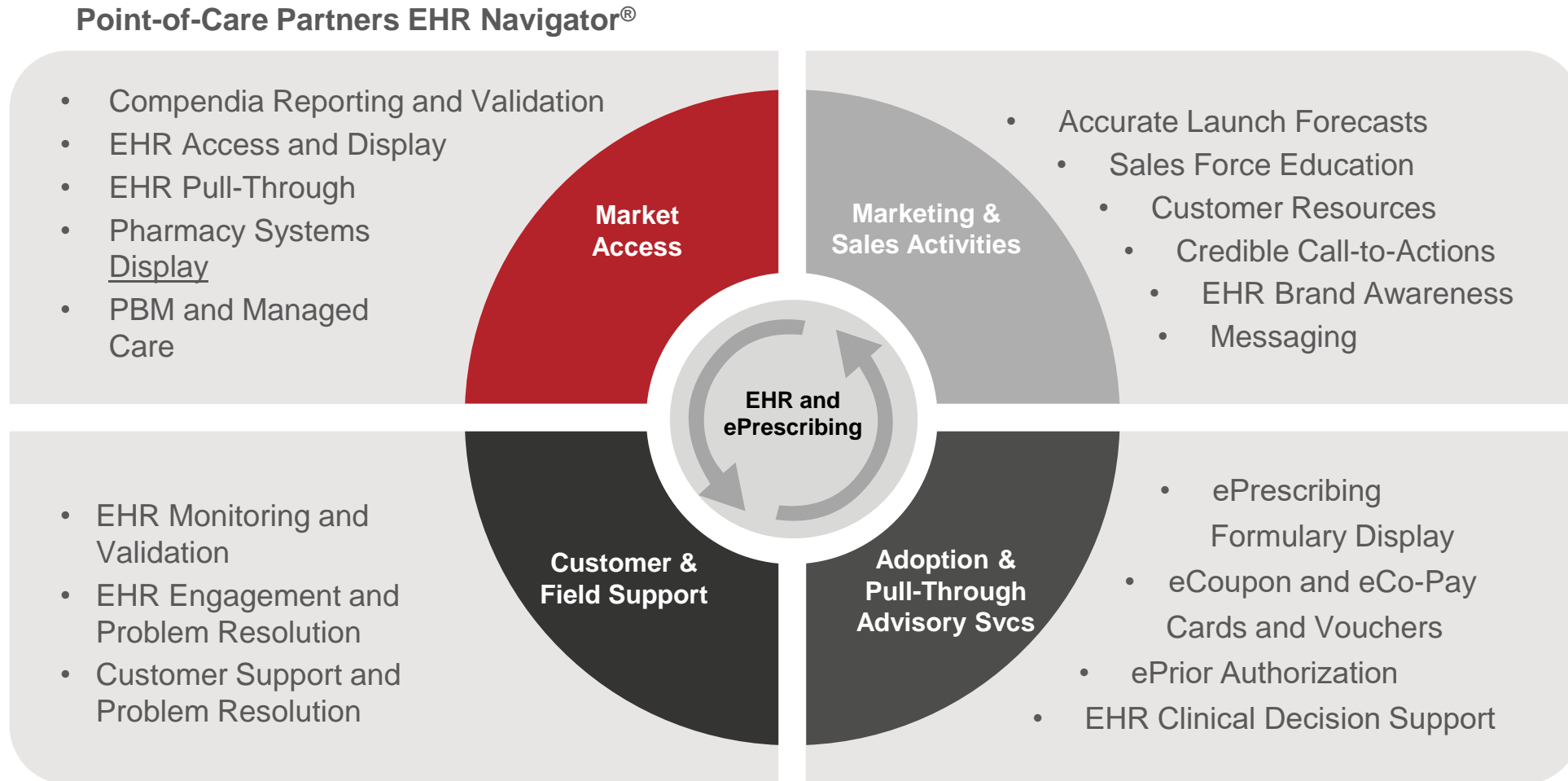
Point-of-Care Partners EHR Navigator®



Biosimilar Customer Needs



A comprehensive EHR engagement program is recommended for Biosimilar launch success



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