

# *The MEARIE Conference*

*June 15, 2016*

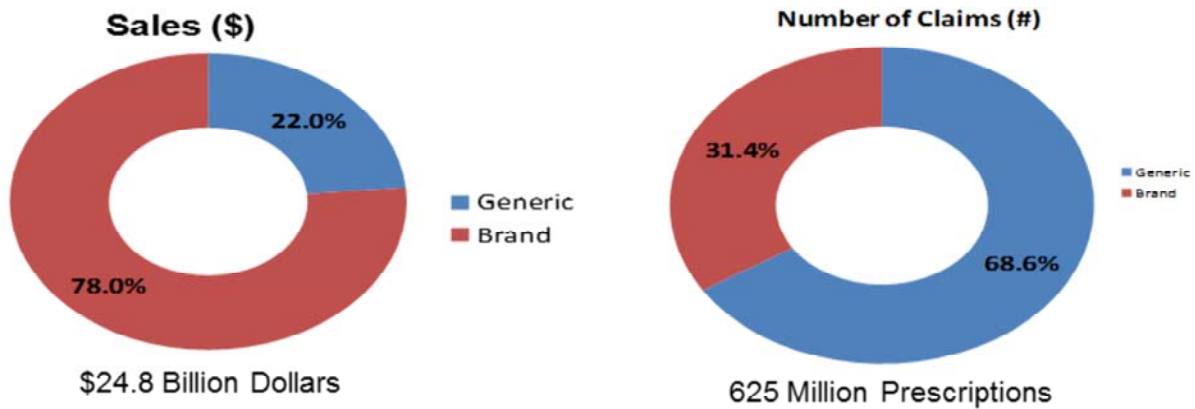
*A look at drug spending and drug plan  
management in Canada*

THE  
**Great-West Life**  
ASSURANCE  COMPANY

## Outline

1. Drug trend landscape in Canada
2. A look at drug experience in the private sector
3. Managing drug spending in the current environment

## 2015 Canadian Drug Spending



Source: IMS Brogan

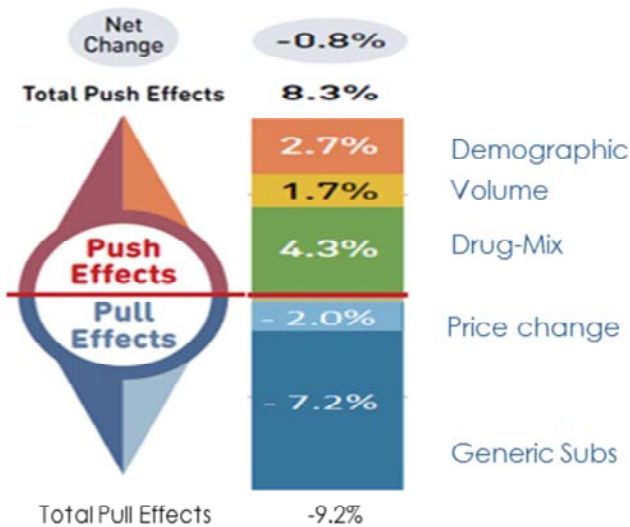
In 2014 there were 599 million prescriptions filled in Canada at a cost of \$23.3 billion. 77.4% was spent on a brand name drug and 22.6% on a generic drug. Even though generics represent only 22.6% of costs, they represent 67.1% of claims.

With over 400 million prescriptions filled for generic drugs in 2014 and taken by millions of Canadians there is clear evidence that generic drugs are safe and effective medications.

## Canadian Healthcare Spending

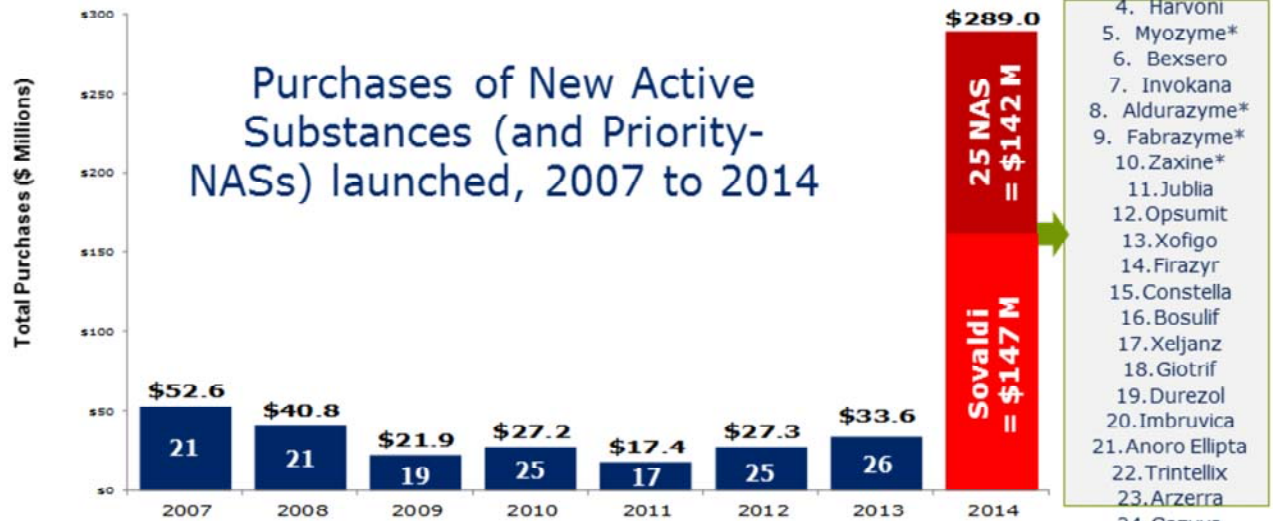
- 2015 forecasted splits of overall private/public spending on healthcare are heavily weighted towards the public sector, mostly as a result of physician and hospital spending:
  - Public sector spending = 70.7%
  - Private sector spending = 29.3%
- When we consider drugs only, spending is more heavily weighted towards the private sector:
  - Public sector spending = 36.6%
  - Private sector spending = 63.4%

## The “push-pull” drug spending effect



- Although net growth in drug spending has been low in recent years because of the “pull effect” of increased generic substitution and generic price reductions.
- In the coming years, the cost drivers behind the “push effect” are expected to pose a challenge to the sustainability of both public and private drug plans, for example, in 2014:
  - Spending on high cost biologics grew by 10.4%;
  - Spending on high cost oncology drugs grew by 12.3%.

# 2014: An unprecedented year for new product launches in the United States



Note: Number inside each bar represents the number of products launched in that respective year.  
 \* Products launched prior to 2014 but their sales dollars were added to the 2014 new product launches.  
 Source: IMS Brogan. Canadian Drug Stores and Hospital Purchases. MAT December 2014

## New Drugs Coming to Canada

Drug Name	Use	Expected Release in Canada	Other Comment	Estimated Annual / Treatment Cost (U.S.)	Treatment Frequency
<b>Praluent</b>	Cholesterol	*Health Canada has not yet indicated whether it will approve its drug for the Canadian market.	PCSK9 inhibitors	\$14,600	one injection every 2 weeks
<b>Daklinza</b>	Hepatitis C	Approved in August 2015 Market available 2017	Can use with Sovaldi to treat Genotype 1, 2 or 3. yields cure rates of up to 100%	\$63,000	Once Daily (duration 12-24 weeks)
<b>Orkambi</b>	Cystic Fibrosis	Approved in January 2016	Significantly improve condition	\$259,000	Daily
<b>Bosatria</b>	Asthma	Approved in December 2015	Maintenance Treatment	\$32,500	Monthly

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Recovery of liver function possible  
Reduction of incidence of HCC (cirrhosis)

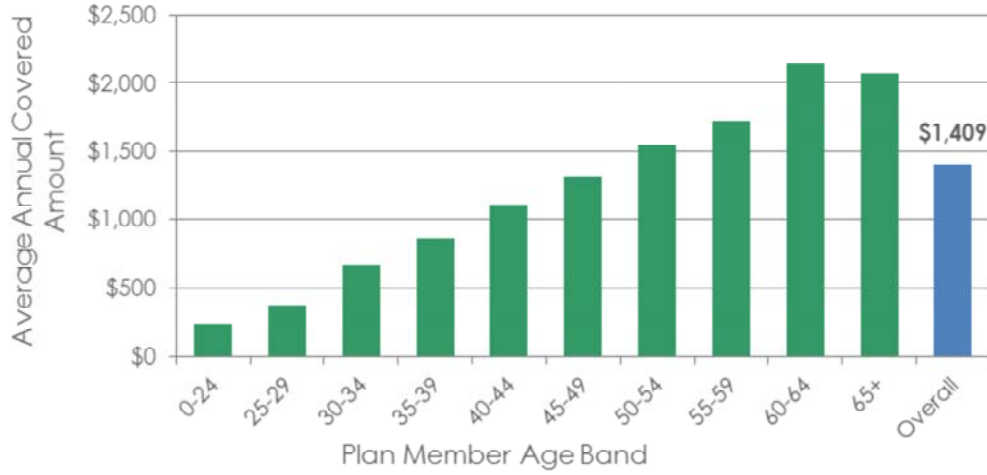
Not biologic drugs and not injectible drugs

# Drug Experience in the Private Sector




DRUG TRENDS: AVERAGE AMOUNTS PER PLAN MEMBER


# Average Covered Amount by Age



Male:  
\$1,489



Female:  
\$1,303



DRUG TRENDS: TOP THERAPEUTIC CLASSIFICATIONS

## Top 10 Therapeutic Classifications 2010 vs. 2015

2010 Rank	Therapeutic Class	% Total Paid Cost	2015 Rank	Therapeutic Class	% Total Paid Cost
1	Blood Pressure	9.9%	1	Biologic Disease-Modifiers*	9.4%
2	Cholesterol Disorders	9.3%	2	Diabetes	8.1%
3	Depression	6.9%	3	Blood Pressure	7.3%
4	Diabetes	6.5%	4	Depression	6.1%
5	Biologic Disease-Modifiers*	6.4%	5	Cholesterol Disorders	5.0%
6	Gastrointestinal/Ulcers	6.1%	6	Ulcers	4.4%
7	Antibiotics	4.0%	7	Viral Infections/Hepatitis	3.9%
8	Skin Disorders	3.6%	8	Skin Disorders	3.8%
9	Anti Inflammatory	2.9%	9	Cancer	3.7%
10	Narcotic Analgesics	2.8%	10	Narcotic Analgesics	2.9%
Top 10 Total		58.4%	Top 10 Total		54.5%

2015 Source: Great-West Life Data, July '14 to June '15

2010 Source: Great-West Life Data, Jan '10 to Dec '10

- Biologic Disease-Modifiers are drugs that are used mainly to treat Rheumatoid Arthritis, Crohn's Disease and Psoriasis. In GroupNet reporting, "Biologic Disease-Modifiers" are represented as "Rheumatoid Arthritis" only.

DRUG TRENDS: TOP THERAPEUTIC CLASSIFICATIONS

# Impact of Age on Top Therapeutic Classifications by Counts of Scripts

Ages 0-24	% of Total Counts of Scripts	Ages 40-44	% of Total Counts of Scripts	Ages 60-64	% of Total Counts of Scripts
Antibiotics / Anti-infectives	18.3%	Depression	12.3%	Blood Pressure	19.2%
Birth Control	12.8%	Blood Pressure	7.8%	Cholesterol Disorders	10.7%
Skin Disorders	10.6%	Narcotic Analgesics	7.7%	Diabetes	8.7%
Asthma/Allergies	7.3%	Antibiotics/ Anti-infectives	7.3%	Depression	6.4%
Cerebral Stimulant	6.8%	Anti Inflammatory/ Analgesics	4.8%	Anti Inflammatory/ Analgesics	5.3%

DRUG TRENDS: TOP THERAPEUTIC CLASSIFICATIONS



# Impact of Age on Top 5 Therapeutic Classifications by Paid Amounts

Ages 0-24	% of Total Paid Amount	Ages 40-44	% of Total Paid Amount	Ages 60-64	% of Total Paid Amount
Cerebral Stimulant	11.4%	Biologic Disease-Modifiers*	14.5%	Diabetes	10.5%
Biologic Disease-Modifiers*	10.5%	Depression	9.2%	Blood Pressure	10.1%
Skin Disorders	9.2%	Multiple Sclerosis	5.6%	Cholesterol Disorders	7.8%
Birth Control	9.0%	Diabetes	5.3%	Biologic Disease-Modifiers*	6.8%
Antibiotics / Anti-infectives	8.9%	Skin Disorders	4.5%	Viral Infections / Hepatitis	6.2%

Source: Great-West Life 2014-2015 Data

DRUG TRENDS: TOP THERAPEUTIC CLASSIFICATIONS

## Claiming Patterns by Age and Gender

		Ages 25-29		Ages 55-59	
	Rank	Therapeutic Class	% Total Paid Cost	Therapeutic Class	% Total Paid Cost
	1	Biologic Disease-Modifiers*	19.5%	Diabetes	11.4%
	2	Depression	6.8%	Blood Pressure	10.3%
	3	Skin Disorders	6.2%	Viral Infections / Hepatitis	9.1%
	4	Diabetes	6.1%	Cholesterol Disorders	8.3%
	5	Narcotic Analgesics	5.0%	Biologic Disease-Modifiers*	8.3%
	Rank	Therapeutic Class	% Total Paid Cost	Therapeutic Class	% Total Paid Cost
	1	Birth Control	21.4%	Biologic Disease-Modifiers*	9.3%
	2	Skin Disorders	7.3%	Depression	8.5%
	3	Depression	7.0%	Diabetes	8.0%
	4	Biologic Disease-Modifiers*	6.7%	Blood Pressure	7.6%
	5	Antibiotics/Anti-infectives	4.3%	Gastrointestinal/Ulcers	5.3%

DRUG TRENDS: SPECIALTY MEDICATIONS

## Total spending by specialty drug

On the GWL block in 2015, the Top 10 most costly Specialty drugs were:



2015 Rank	Drug Name	% Total Covered Cost
1	Remicade	4.1%
2	Humira	2.7%
3	Harvoni	1.7%
4	Enbrel	1.3%
5	Neulasta	0.6%
6	Copaxone	0.5%
7	Botox	0.5%
8	Xolair	0.5%
9	Lucentis	0.4%
10	Soliris	0.4%
Top 10 Total		12.8%

Source: Great-West Life 2015 Data

DRUG TRENDS: SPECIALTY MEDICATIONS

## Average amount per claimant

On the GWL block in Ontario, the most expensive Specialty medications on a per-claimant basis are:

2015 Rank	Drug Name	Average In-Year Covered Amount per Claimant
1	Elaprase	\$721,678
2	Vpriv	\$407,867
3	Soliris	\$371,838
4	Kalydeco	\$201,301
5	Myozyme	\$98,305
6	Juxtapid	\$97,132
7	Prolastin-C	\$96,388
8	Kuvan	\$90,417
9	Illaris	\$87,303
10	Harvoni	\$75,841

The highest-cost claimant for each of these 3 drugs claimed:

Elaprase: \$1,144,103

Vpriv: \$ 407,867

Soliris: \$ 680,475

Source: Great-West Life 2015 Data

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Vpriv – enzyme replacement treatment for Gaucher’s Disease (a genetic disorder in which glucocerebroside accumulates in cells and certain organs).

DRUG TRENDS:

## Drug Categorizations

Brand and Generic drugs

**Single Source Brand**– Drugs that do not have a generic equivalent available and are still covered by a patent

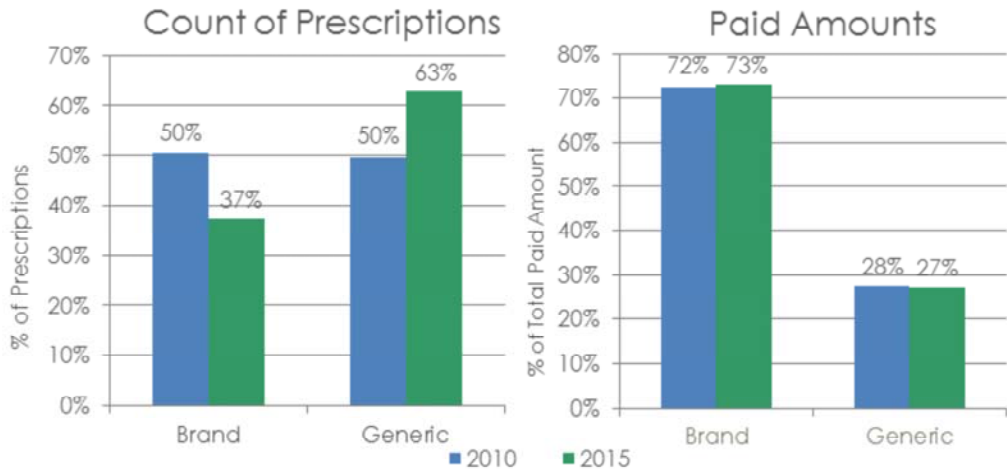
**Multi Source Brand** – Drugs that have a generic equivalent available in the market but are sold under a brand or trade name

**Generic** – Drugs that share the same active medicinal ingredient to the brand name version and are available to consumers once a patent has expired



DRUG TRENDS: BRAND/GENERIC DISTRIBUTION OF CLAIMS

# Paid Amount and Number of Prescriptions by Brand/Generic



2015 Average Paid Amounts per

- Brand: \$87
- Generic: \$19

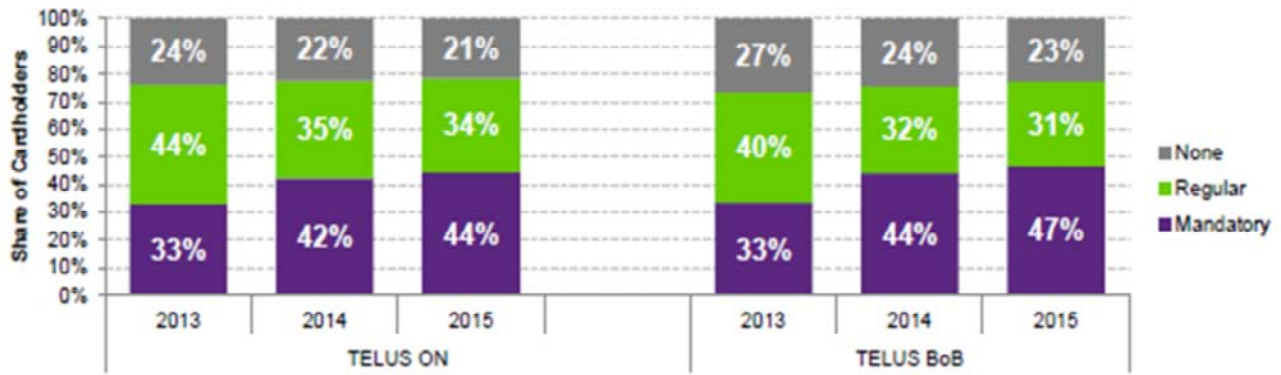
2015 Source: Great-West Life Data, July '14 to June '15  
2010 Source: Great-West Life Data, Jan '10 to Dec '10

## Generic Substitution Administration

- Generic substitution plans pay up to “lowest cost alternative (LCA)”.
- 4 types of plans:
  1. No generic substitution – pays brand if prescribed
  2. Regular generic substitution – pays LCA unless “no substitution” written
  3. Enhanced or mandatory generic substitution – pays LCA unless medical evidence is provided - “brand request form
  4. Generics only – brand is delisted if generic is available

# Generic Substitution Administration

## Cardholders with Generic Substitution



## Generic Substitution Savings

Rx for claimants 30 to 50 years old		
Generic Substitution Rule	\$	% vs no substitution
No generic substitution	\$81.74	Na
Regular	\$81.11	-0.7%
Mandatory	\$76.15	-6.8%

# Generic Substitution Uptake

Factors Impacting Generic Uptake:

- Brand marketing tactics to maintain market share after patents expire:
  - Physician detailing
  - No substitutions
  - Brand coupon card
- Physician prescribing behaviour:
  - Brand preference
- Drug plan / formulary management and drug plan controls:
  - Public
  - Private

# Brand Coupon Cards

Brand manufacturer coupon cards exist for two reasons:

1. To maintain profits of brand pharmaceutical companies in the face of generic competition
  2. To mine physician, pharmacy and patient level data
- Initiate patients on brand therapy with the promise to pay any differential between the cost of the brand and the cost of the generic

Consequences:

- Influence prescribing / dispensing activities, and alter patient behaviour
- Create inefficient pharmacy operations and administration
- Serve as a marketing and data collection tool
- Promoted as cost neutral, brand manufacturer coupon cards increase drug plan spending and threaten the long term sustainability and affordability of drug plans in Canada

## Brand Coupon Cards

DRUG PLAN DESCRIPTION	PRIMARY PLAN PAYS	SPOUSAL PLAN PAYS	COUPON CARD PAYS	COUPON PAYS DIFFERENCE? BRAND VS. GENERIC	INCREMENTAL COST TO PLAN
<b>OPEN PRESCRIPTION PLAN, OR "NO SUBSTITUTION" CLAIMS</b>					
Single Coverage	\$100		\$0.00	NO	\$75.00
Family Coverage	\$100		\$0.00	NO	\$75.00
<b>MANDATORY GENERIC SUBSTITUTION / LOWEST COST ALTERNATIVE PLAN</b>					
Single Coverage	\$25		\$75.00	YES	\$0.00
Family Coverage	\$25	\$25	\$50.00	YES	\$25.00

## Subsequent Entry Biologics or Biosimilars

A significant number of biologic medicines will lose patent protection in the next few years allowing competitors to enter the market.

These competitors are called Subsequent Entry Biologics (SEBs) or are also known as "biosimilars"

- In a 2010 Letter from Health Canada to Provincial Drug Plans, stressed that SEBs are not "generic" biologics
- Approval of a SEB is not a declaration of pharmaceutical or therapeutic equivalence to the reference biologic drug
- Biosimilar vs. Bioequivalent – pharmacist CANNOT substitute



## Subsequent Entry Biologics or Biosimilars

There are 4 SEB's currently available in Canada:

Brand Drug	SEB Drug	SEB approval date	SEB Price Discount
Genotropin	Omnitrope	4/20/2009	25.54%
Remicade	Inflectra	1/15/2014	46.84%
Lantus	Basaglar	9/1/2015	15.00%
Neupogen	Grasofil	12/7/2015	16.67%

## Subsequent Entry Biologics or Biosimilars

In 2015 Telus adjudicated \$703 million for biologic drugs representing 19% of total eligible drug costs and 2.6% of claims.

New SEB's coming to Canada:

Brand Drug	Earliest Patent Expiry	Last Patent Expiry	Potential SEB Entry	*Brand % of Telus total paid in 2015
Enbrel		Feb 2023	Summer 2016	3.00%
Humira	Feb 2017	April 2025	Feb 2017	5.95%
Neulasta		July 2024	2017 or later	1.12%
Epex		May 2015	2017 or later	N/A
Lucentis	March 2016	April 2018	April 2018	1.13%
Erbitux		March 2016	2017	N/A
Herceptin	August 2017	May 2021	August 2017 or later	N/A
Avastin	April 2018	April 2018	April 2018	0.15%
Rituxan	June 2018	August 2020	June 2018	0.15%

11.49%

## Subsequent Entry Biologics or Biosimilars

New cost management strategies are required and various approaches will need be considered such as:

**Substitution** – similar to generic substitution but with SEB drugs. Because the drugs are not interchangeable this would require physician approval.

**Step therapy** – require plan member to try SEB first then step to brand reference drug if necessary. This strategy can only be applied to new prescriptions for members not already on a biologic drug. What about existing claimants?

**Reference pricing** – pay up to the lowest cost drug, plan member takes any drug and pays difference if taking higher cost drug

**Private listing agreement (PLA)** – sign a confidential price deal with a manufacturer. The PLA may be with the originator drug or with the SEB manufacturer.

## Subsequent Entry Biologics or Biosimilars

Cost management strategies will need to be conducted at the carrier level. Very difficult for individual plan sponsors to make their own arrangements.

Market will be flooded with new SEB drugs in the coming months and years, new strategies will be required.

How do we move forward?

## Moving Forward – where do you focus?

Generic Substitution is the minimum standard all plans should adopt

\$18 vs. \$100 for the same health outcome!



## Moving Forward – where do you focus?

High cost specialty drug management: It's not about eliminating drugs!

- Rigorous prior authorization and step therapy
- Health case management
- Specialty pharmacy network
- SEB strategies







DRUG TRENDS:

## Chronic Drug Spending

- 56% of covered drug costs are for maintenance medications used to treat chronic disease
- Claimants of diabetes, blood pressure, or depression drugs have a higher average total cost than other claimants
- These are the three conditions that can most readily be targeted through wellness programming.

## Drug Costs Associated with Diabetes

Diabetes is the #2 Therapeutic Classification on the GWL block by amount paid.

The average total covered amount is higher for individuals who claimed diabetic drugs. This is due to the cost of diabetes drugs themselves and to increased spending on non-diabetic drugs.

		Average Cost per Claimant	Average # of Scripts per Claimant	Average Cost per Script
Individuals who claimed Diabetic Drugs	Diabetic Drugs	\$970	12	\$79
	"Other" Drugs	\$1,694	34	\$50
	Total	\$2,664	46	\$58
GWL Block	Total	\$948	15	\$62

Source: Great-West Life 2014-2015 Data

DRUG TRENDS: DRUG COSTS PER CLAIMANT

## Drug Costs Associated with Blood Pressure

Blood Pressure is the #3 Therapeutic Classification on the GWL block by amount paid.

The average total covered cost is higher for individuals who claimed blood pressure drugs. This is due to the cost of blood pressure drugs themselves and to increased spending on "other" drugs.



		Average Cost per Claimant	Average # of Scripts per Claimant	Average Cost per Script
Individuals who claimed Blood Pressure Drugs	Blood Pressure Drugs	\$307	9	\$32
	"Other" Drugs	\$1,512	25	\$61
	Total	\$1,818	34	\$53
GWL Block	Total	\$948	15	\$62

Source: Great-West Life 2014-2015 Data

DRUG TRENDS: DRUG COSTS PER CLAIMANT

## Drug Costs Associated with Depression

Depression is the #4 Therapeutic Classification on the GWL block by amount paid.

The average total covered cost is higher for individuals who claimed depression drugs. This is due to the cost of depression drugs themselves *and* to increased spending on "other" drugs.



		Average Cost per Claimant	Average # of Scripts per Claimant	Average Cost per Script
Individuals who claimed Depression Drugs	Depression Drugs	\$360	7	\$49
	"Other" Drugs	\$1,451	26	\$56
	Total	\$1,811	33	\$55
GWL Block	Total	\$948	15	\$62

Source: Great-West Life 2014-2015 Data

## Moving Forward

- Drug spending is on the rise and sustainability is an issue for most plans
- Drug plans are an investment in the health and productivity of employees, it is important to be strategic about balancing cost and health
- Drug plans can be sustainable through strategies that manage both cost and health outcomes – generic substitution, high cost specialty drug management and health and wellness programs