

# Retrospective Data Trends and National Benchmarks

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# Content outline

- I. Terminology and background
- II. Key results
- III. Drug type utilization
- IV. Specialty drug analysis
- V. Opioids
- VI. Medical marijuana
- VII. Book of business rankings





- Insured : any covered individual i.e. employee, spouse or child
- Certificate: the employee and the linked dependants
- Average age : average age of the insureds or the employees depending of the context
- Utilization: number of claims paid per certificate or insured depending of the context
- Eligible cost: the cost of the drug found eligible by TELUS Health.
   This measure does not take account of the deductible or co-insurance
- Average quantity: total submitted quantity divided by total number of scripts
- Unit cost: average eligible cost per script divided by the average quantity

#### Comparison with a specific group

- Results reflect the entire TELUS Health book of business (BoB)
- Results may differ significantly from plan to plan.
  The following elements have an important impact on the costs:
  - Plan coverage
  - Demographics :
    - Age distribution
    - Gender distribution
    - Number of dependants
  - Provincial distribution
  - Industry



#### Comparison with a specific group (cont.)

For renewal, the factors used by carriers are based on many other elements:

- Group experience
- The entire medical claims not only drugs (including hospital, paramedical, out-of-country, etc.)
- Higher volatility for a specific group compared to TELUS Health BoB
- Ageing of insured population
- Renewal is a prospective exercise, our analysis is retrospective

- Single-source brand –
   drug for which no generic exists
- Multi-source brand –
   one or more generics exist
- Generic –
   bioequivalent drug that is a copy of the innovator molecule



# Except if otherwise mentioned, data in this presentation is based on:

- Insured aged less than 65
- Costs are eligible costs, i.e. before deductible and co-payment





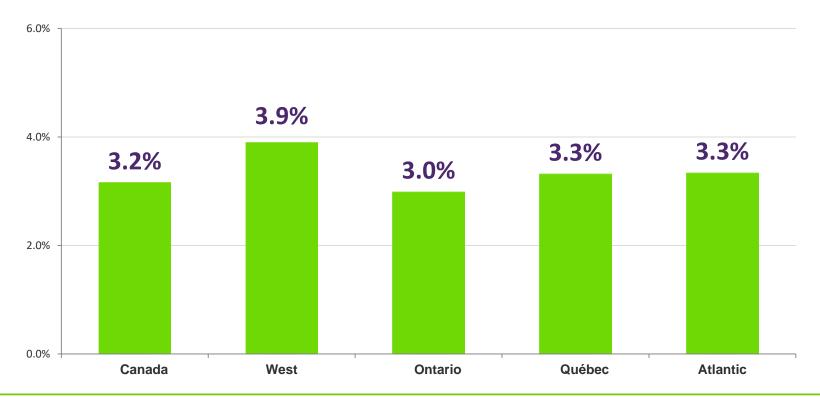
# Key results

	Canada	Québec	Ontario	Atlantic Canada	West
Eligible monthly cost per certificate	\$91.34	\$108.78	\$101.14	\$113.09	\$68.46
Eligible monthly cost per insured	\$38.49	\$51.00	\$40.33	\$49.89	\$29.19
Average Rx eligible cost	\$71.77	\$58.50	\$81.20	\$79.74	\$67.66
Monthly utilisation per insured	0.54	0.87	0.50	0.63	0.43
Average unit cost	\$1.20	\$1.36	\$1.33	\$1.01	\$0.99
% generic (# of Rx)	62%	59%	63%	68%	64%
Employee average age	42.1	41.5	43.3	44.0	41.0



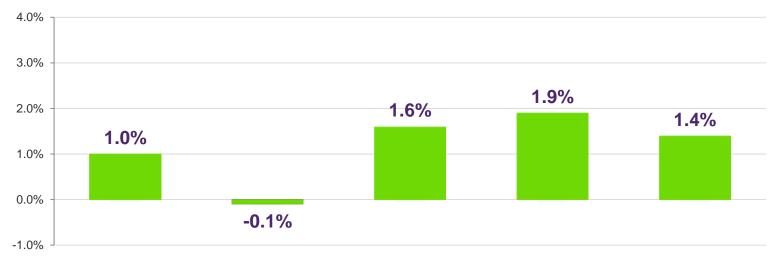
# Eligible cost change per Rx

2016 to 2017



# Change in monthly utilization per insured

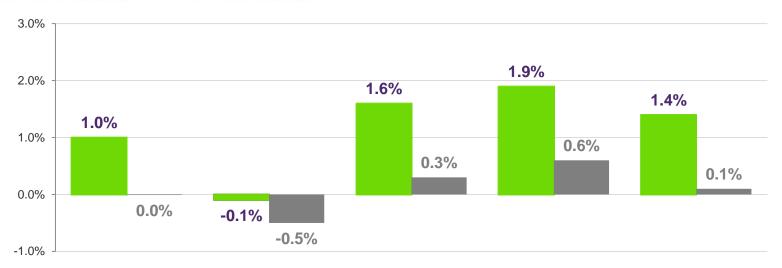
2016 to 2017



	Canada	West	Ontario	Québec	Atlantic	
	Average age of employee					
2017	42.1	41.0	43.3	41.5	44.0	
2016	42.1	40.8	43.3	41.4	44.0	



# Change in monthly utilization per insured and certificate 2016 to 2017

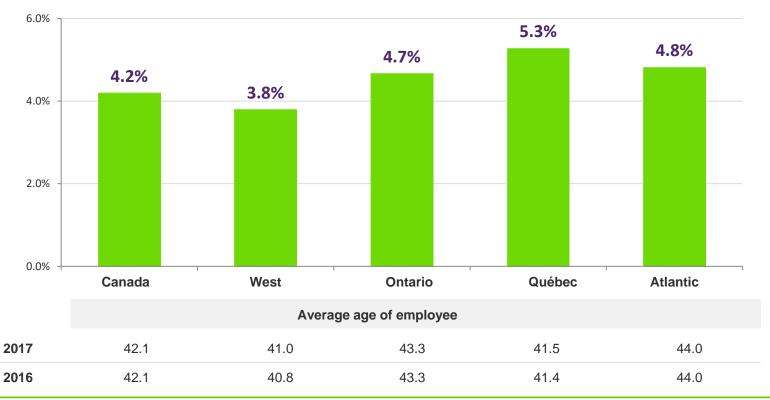


	Canada	West	Ontario	Québec	Atlantic
Average age of employee					
2017	42.1	41.0	43.3	41.5	44.0
2016	42.1	40.8	43.3	41.4	44.0



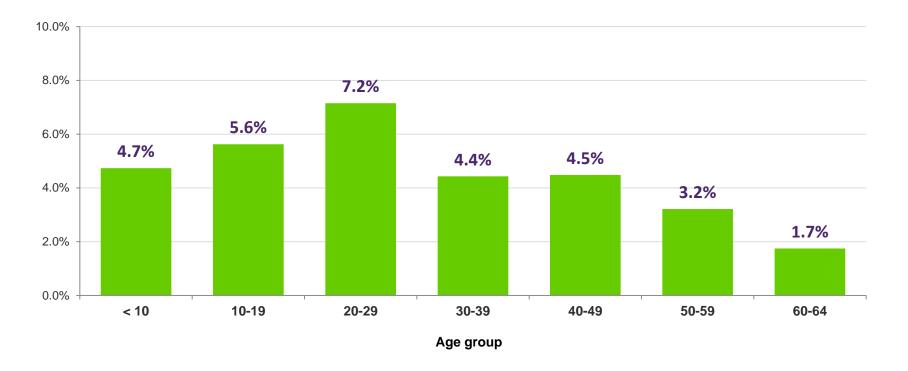
# Change in eligible monthly cost per insured

2016 to 2017



## Change in monthly cost per insured per age group

Ontario - 2016 to 2017





## Monthly cost per insured per age group

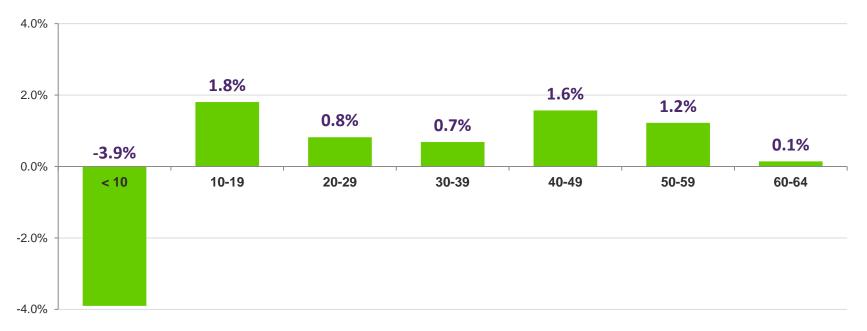
**Ontario** – 2017





#### Utilization change of insured by age group

Ontario - 2016 to 2017

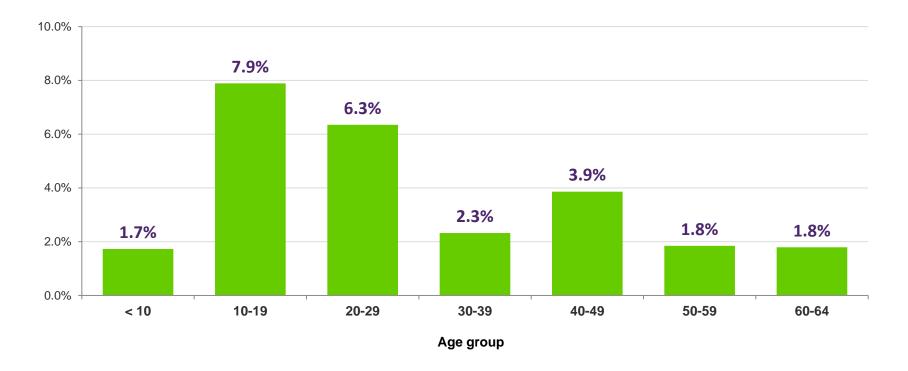


Age group



## Change in monthly cost per insured per age group

Western - 2016 to 2017





## Monthly cost per insured per age group

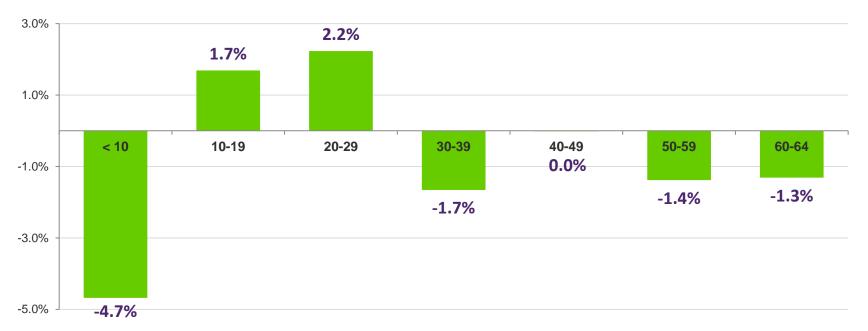
Western – 2017





## Utilization change of insured by age group

Western - 2016 to 2017



Age group



#### Monthly cost per insured per age group

Western – 2017





## Utilization change of insured by age group

Western - 2016 to 2017



Age group



#### Effect of OHIP+

#### Ontario claims for under 25

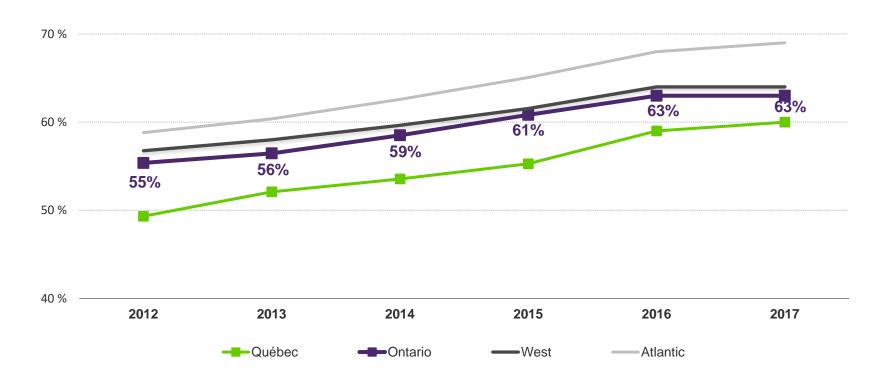
• Number of claims to private plans has been cut in half for this cohort





#### Generic utilization

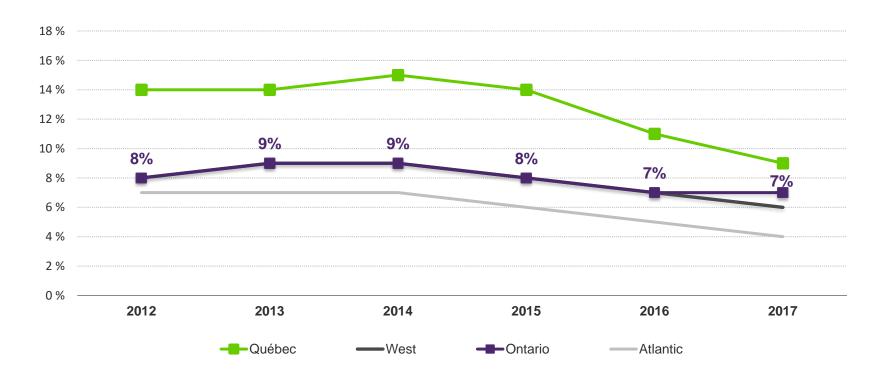
Per region – as % Rx





#### Multi-source brand utilization

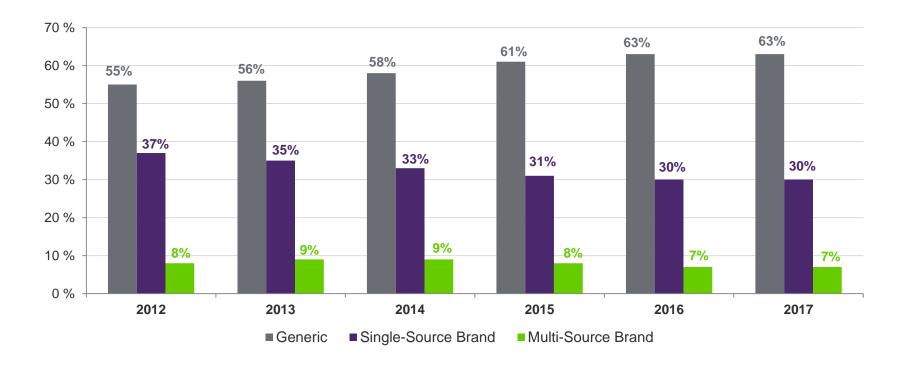
Per region – as % Rx





# Utilization percentage by type of drug

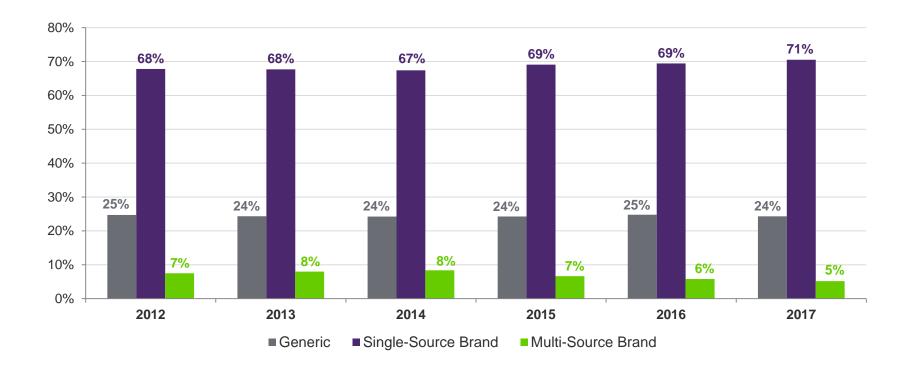
Ontario – # Rx





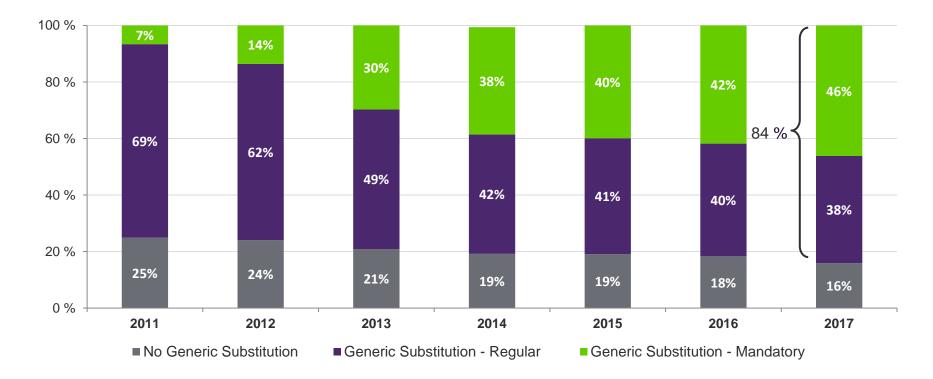
## Paid percentage by type of drug

Ontario – eligible amount





#### Ontario – # of insureds



Ontario - # of insureds vs # of groups

2017				
	Insureds	Groups		
Generic substitution - mandatory	84%	95%		
Generic substitution - regular	38%	12%		
No generic substitution	16%	5%		



#### Ontario vs Canada - # of insureds

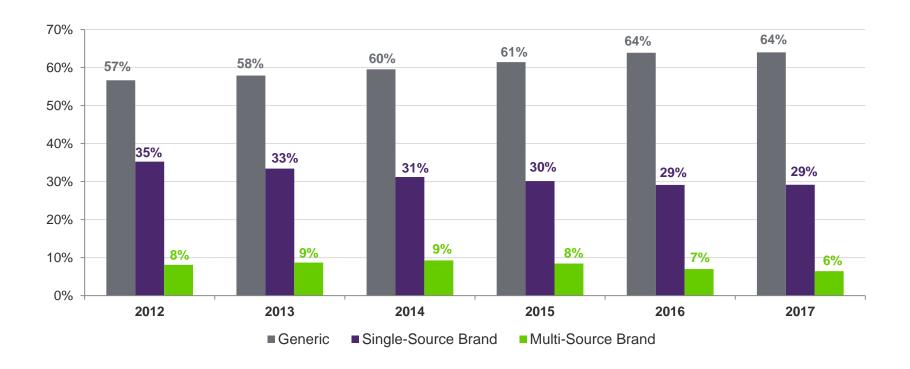
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	Ontario	Canada
Generic substitution (2016)	84% (82%)	84% (79%)
Generic substitution - regular	38%	35%
Generic substitution - mandatory	46%	49%



# Utilization percentage by type of drug

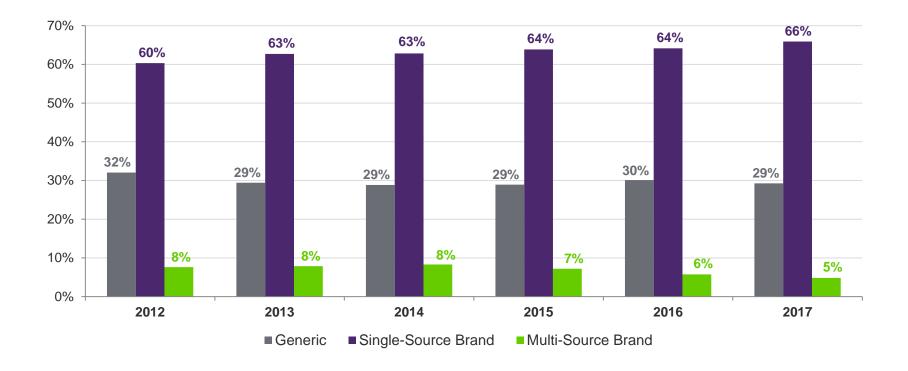
Western – # Rx





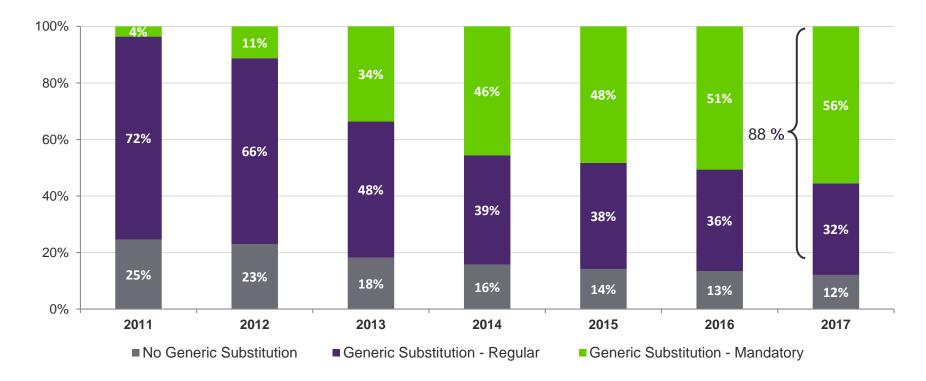
# Paid percentage by type of drug

Western – eligible amount





Western – # of insureds



Western - # of insureds vs # of groups

2017				
	Insureds	Groups		
Generic substitution - mandatory	56%	96%		
Generic substitution - regular	32%	8%		
No generic substitution	12%	4%		



#### Western vs Canada - # of insureds

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	Western	Canada
Generic substitution (2016)	88% (87%)	84% (79%)
Generic substitution - regular	36%	35%
Generic substitution - mandatory	51%	49%





# TELUS definition of "specialty" drug

A TELUS Health specialty drug is a drug that has a high cost based on a potential per patient amount exceeding \$10,000 per year Further characteristics of these drugs may include but are not limited to:

- Requires special medication delivery (e.g. special handling, preparation, administration, storage, or distribution)
- Requires complex treatment maintenance (e.g. complex disease, complex dosing, intensive monitoring & clinical management etc.)



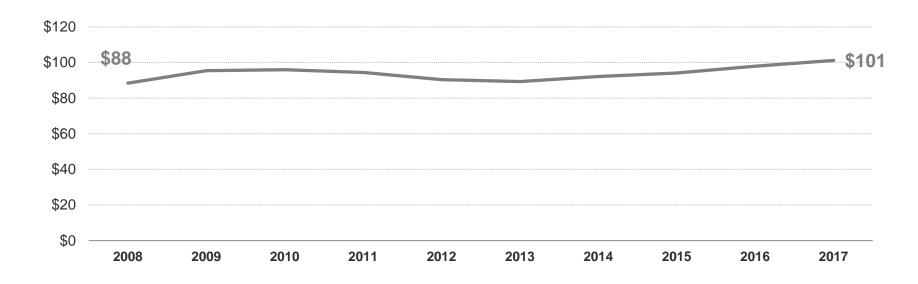
# Rising cost of specialty drugs

	Drug	Annual cost
1996	Betaseron	\$17,000
2016	Vimizim	\$675,000
2017	Strensiq	\$1,241,000



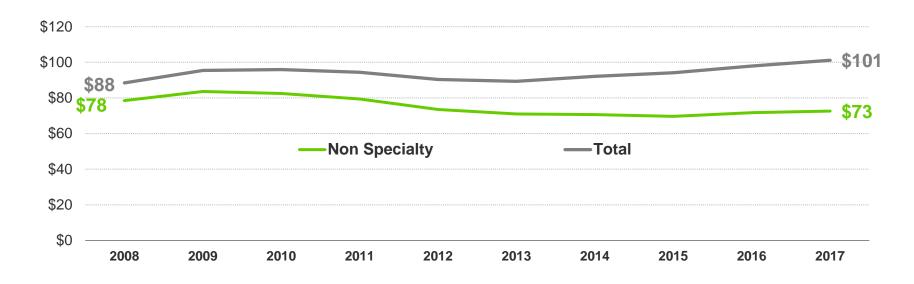
Ontario – less than 65 – monthly cost per certificate

The average cost of drugs increased by 1.5% per year over 9 years



#### Ontario – less than 65 – monthly cost per certificate

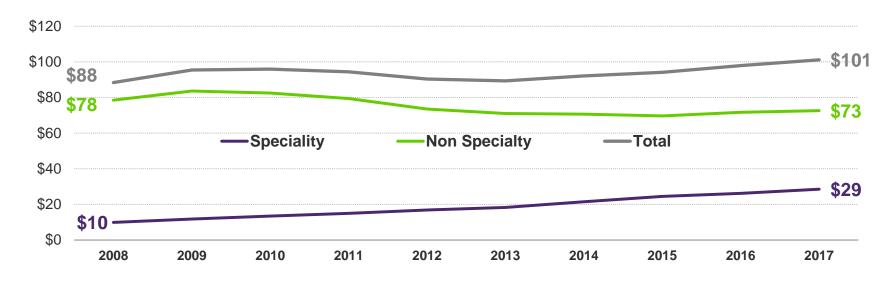
- The average cost of drugs increased by 1.5% per year over 9 years
- The average of cost of non-specialty drugs decreased by 0.9% per year over 9 years





#### Ontario – less than 65 – monthly cost per certificate

- The average cost of drugs increased by 1.5% per year over 9 years
- The average of cost of non-specialty drugs decreased by 0.9% per year over 9 years
- The average of cost of "speciality" drugs increased by 12.5% per year over 9 years





Ontario – less than 65 – monthly cost per certificate

 At this pace, the monthly cost per certificate of speciality drugs will surpass the non-specialty drugs within 8 years.





#### Ontario – less than 65 – monthly cost per certificate

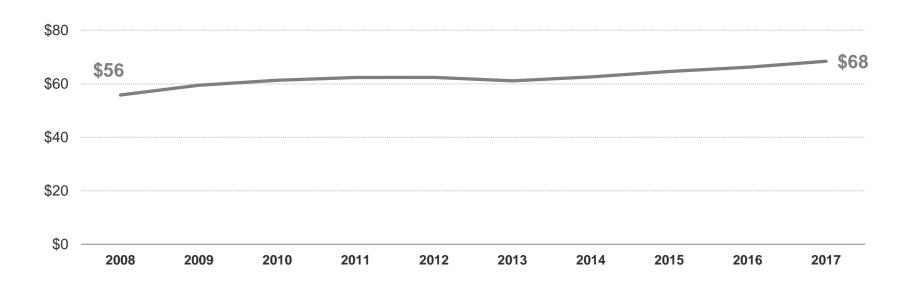
- At this pace, the monthly cost per certificate of speciality drugs will surpass the non-specialty drugs within 8 years
- and the monthly cost per certificate will have increased by almost 32%





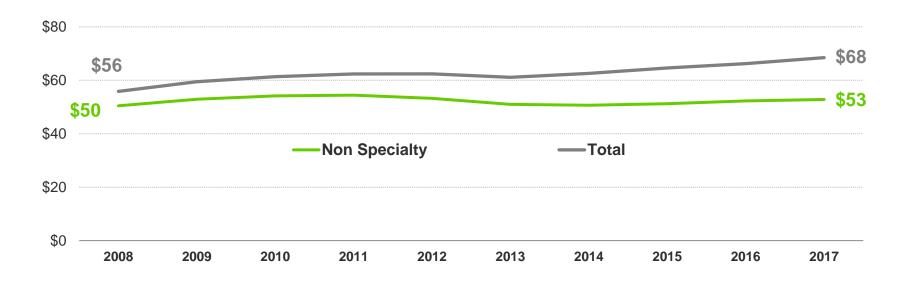
Western – less than 65 – monthly cost per certificate

The average cost of drugs increased by 2.3% per year over 9 years



#### Western – less than 65 – monthly cost per certificate

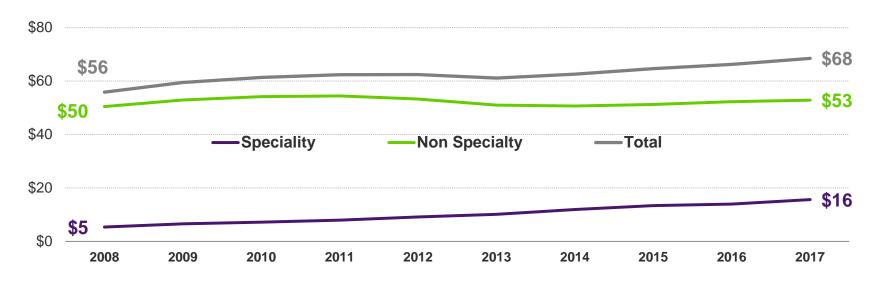
- The average cost of drugs increased by 2.3% per year over 9 years
- The average of cost of non-specialty drugs increased by 0.5% per year over 9 years





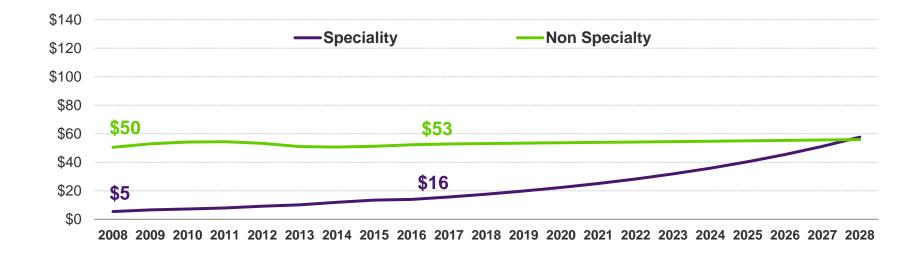
#### Western – less than 65 – monthly cost per certificate

- The average cost of drugs increased by 1.5% per year over 9 years
- The average of cost of non-specialty drugs decreased by 0.9% per year over 9 years
- The average of cost of specialty drugs increased by 12.6% per year over 9 years



Western – less than 65 – monthly cost per certificate

 At this pace, the monthly cost per certificate of specialty drugs will surpass the non-specialty drugs within 11 years.

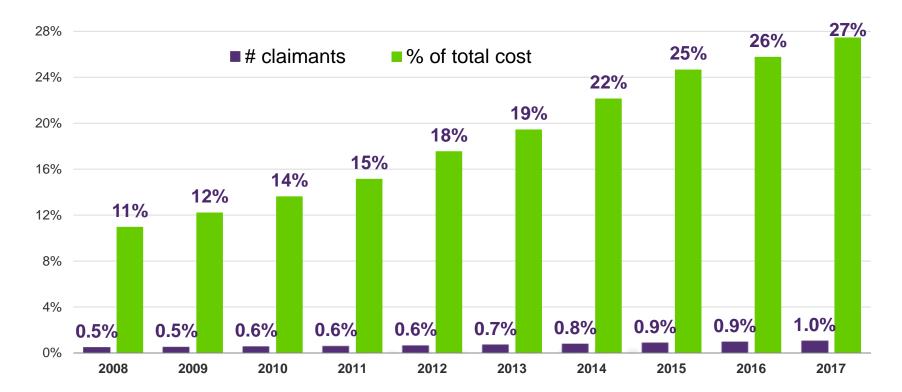


#### Western – less than 65 – monthly cost per certificate

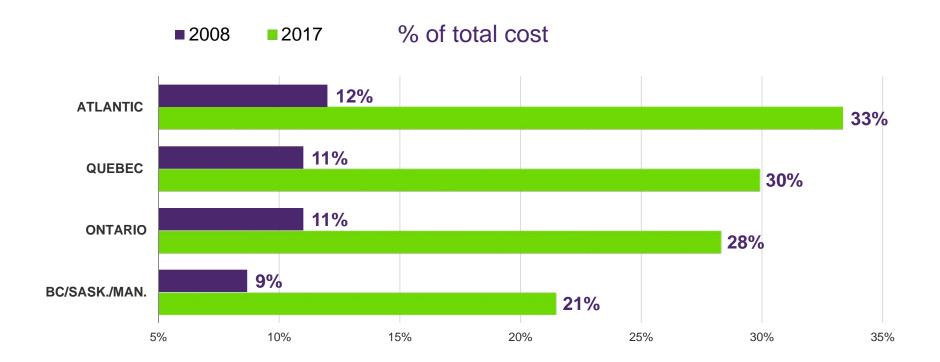
- At this pace, the monthly cost per certificate of specialty drugs will surpass the non-specialty drugs within 11 years.
- and the monthly cost per certificate will have increased by almost 66%



#### Canada - less than 65



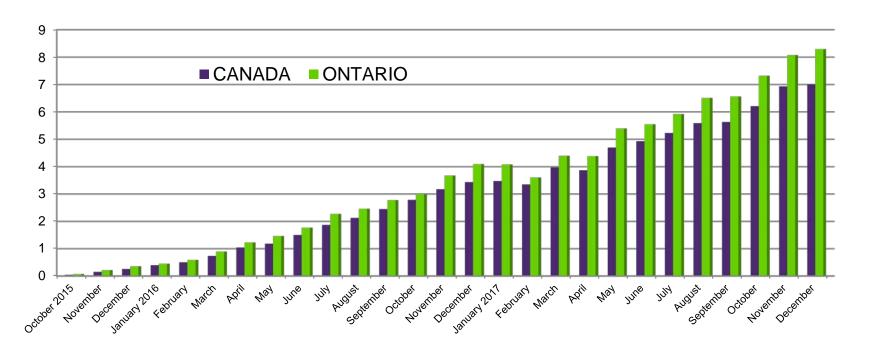
#### Canada - less than 65





### PCSK9 inhibitors (Repatha & Praluent)

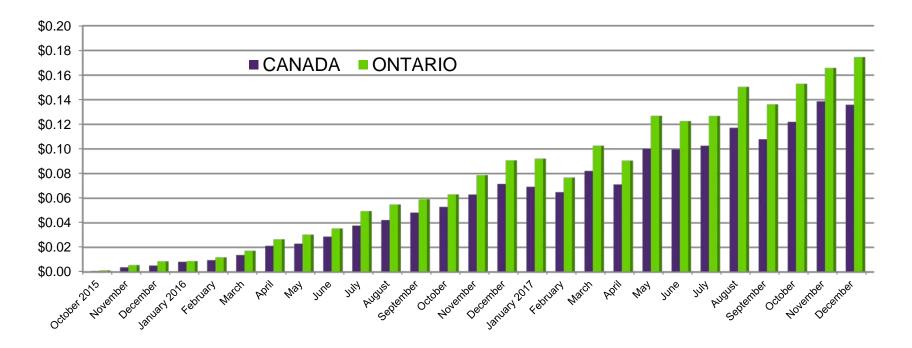
Claimants per 100,000 insured





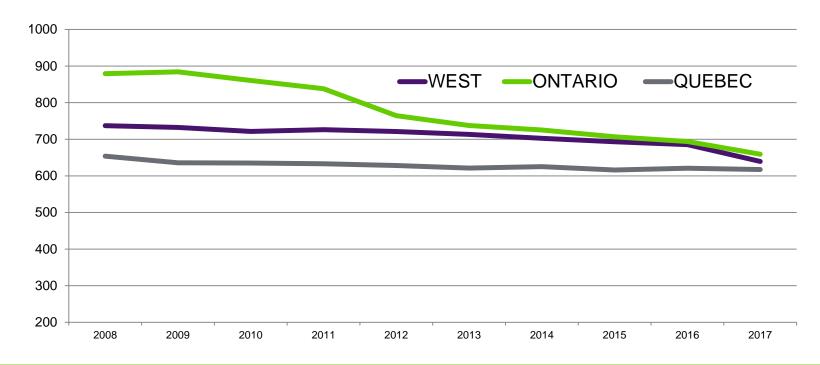
### PCSK9 inhibitors (Repatha & Praluent)

#### Monthly cost



# **Opioids**

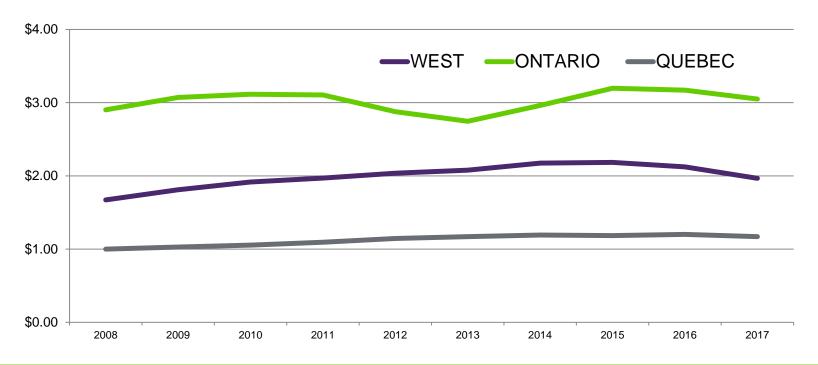
### Claimants per 100,000 insured





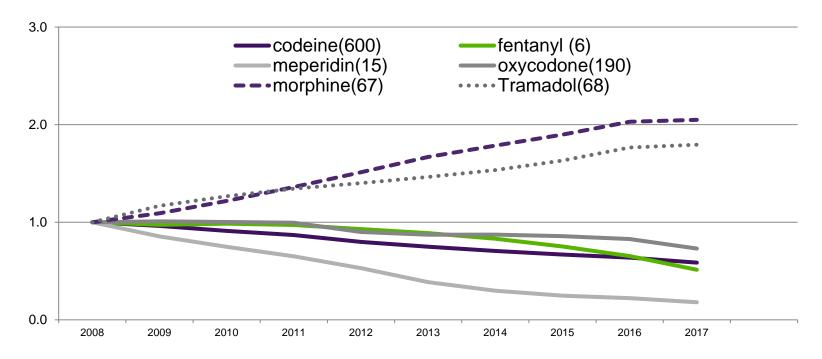
# Opioids

#### Monthly cost



# **Opioids**

#### Canada



Number in () is the number of claimants in 2008 per drug





# Expenses by Veterans Affairs Canada for medical cannabis

	# of patients	Total costs	Cost / patient
2008-2009	5	\$19,088	\$3,818
2009-2010	15	\$43,365	\$2,891
2010-2011	23	\$63,057	\$2,742
2011-2012	37	\$103,424	\$2,795
2012-2013	68	\$284,632	\$4,186
2013-2014	112	\$408,809	\$3,650
2014-2015	628	5,160,747	\$8,218
2015-2016	1,762	\$20,538,157	\$11,656
2016-2017	4,474	\$63,703,151	\$14,239





# Top 10 drug classes by adjudicated amount

Therapeutic class	Rank by total adjudicated amount		Percent of total adjudicated amount	
	2017	2016	2017	2016
Immunomodulators (includes RA, etc.)	1	1	11.7%	11.7%
Diabetes	2	2	9.1%	8.8%
Asthma	3	4	5.7%	5.6%
Skin disorders	4	5	5.3%	4.7%
Depression	5	3	5.3%	5.7%
Blood Pressure	6	6	4.3%	4.5%
Cancer	7	12	3.6%	3.0%
Antibiotics/Anti-infectives	8	7	3.6%	3.8%
Multiple Sclerosis	9	9	3.3%	3.3%
Ulcers	10	8	3.2%	3.6%
% of total adjudicated amount			55.1%	54.7%



# Top 10 products by adjudicated amount

Drug name	Rank by total adjudicated amount		Percent of total adjudicated amount	
	2017	2016	2017	2016
Remicade	1	1	4.9%	5.1%
Humira	2	2	4.1%	3.9%
Insulin	3	3	2.2%	2.3%
Stelara	4	7	1.5%	1.2%
Enbrel	5	4	1.4%	1.6%
Crestor	6	5	1.3%	1.3%
Nexium	7	6	1.0%	1.2%
Vyvanse	8	16	1.0%	0.9%
Symbicort	9	12	1.0%	1.0%
Concerta	10	8	1.0%	1.1%
% of total adjudicated amount			19.3%	19.5%



### Summary

- Costs continue to rise. Both increased utilization and increased cost per claim (inflation, drug mix) is driving upward trend.
- Newer, more advanced therapy specialty drugs will have an impact on future cost growth. How will Pan-Canadian Pharmaceutical Alliance (pCPA) negotiations on specialty drug costs impact private spending?
- Increasing generic substitution can ensure plan savings particularly given the regulated generic drug cost limits under the pCPA.
- Is your plan future-proofed? Ensure both traditional and evolving plan management strategies are considered.
- For plans with high distribution of Ontario claimants, OHIP+ will provide cost relief. Where can savings be reinvested in the program?
- The importance of keeping people healthy in addition to optimizing plan design, what pre-claim focus can you have to help bend the cost curve? Implementing programs that focus on nutrition, fitness, stress management, work-life balance, and making healthier lifestyle choices can help minimize both the direct and indirect costs associated with chronic disease.
- Monitor your specific plan risks regularly. You can't manage what you can't measure. Integrating data and being able to build a business case for investment in design change or wellness programming is necessary.

