



Trends in medication management: A case study

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#HealthBenefitsTrends



Terminology and background

Insured: any covered dual i.e. employee, spouse or child

Certificate: the employee and the linked dependants

Average age: average age of the insureds

Utilization: number of claims paid per certificate or insured depending on the context

Eligible cost: the cost of the drug considered eligible by TELUS Health. This measure does not take into account any cost sharing (deductible, co-insurance)



Terminology and background

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



Terminology and background

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



Top 10 drug classes by eligible amount

Therapeutic class	Rank by total eligible amount		Percent of total eligible amount	
	2019	2018	2019	2018
Rheumatoid arthritis	1	1	12.1%	12.1%
Diabetes	2	2	10.6%	10.0%
Skin disorders	3	3	6.9%	6.1%
Asthma	4	4	5.6%	5.6%
Depression	5	5	5.1%	5.1%
Cancer	6	6	4.1%	3.9%
Add / narcolepsy	7	9	3.9%	3.4%
Multiple sclerosis	8	8	3.6%	3.6%
Blood pressure	9	7	3.3%	3.8%
Antibiotics / anti-infectives	10	10	2.9%	3.1%
% of total eligible amount			60.8%	58.8%



Portrait of a diabetic

Drugs don't claim themselves.

View of what these members look like.

- What does an average diabetic look like?
- How does their medication regimen contribute to the cost ?
- How this category also influences other categories
- Understand the cost impact of a diabetic member



Methodology

Extract claimants within the diabetes category

- Each claimant that made a claim from this category in 2019
- Extract all paid claims for this list of individuals
- Claimant level view

Data cleansing

- Removed any cardholder/DIN combination for which there was only 1 claim submitted for the specific DIN during the year

Distinct medications

- Considered as count of unique molecule, not unique DIN



Methodology

Adherence

- Medication Possession Ratio (MPR) value
 - $\text{Total Days Supply} / (\text{Last Fill Date} - \text{First Fill Date} + \text{Last Fill Days' Supply})$

Data considers all diabetic categories Type 1, Type 2 and Gestational as 1 homogeneous group



Diabetes – Coles notes



Diabetes

Disease in which your body either can't produce insulin or properly use the insulin it produces

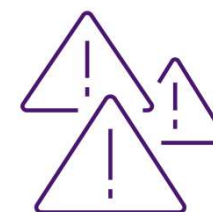


Progressive condition



Goal - optimum glycemic control (A1C)

Guidelines suggest A1C target within 3-6 months



Significant risk factors

High risk for cardiovascular and microvascular complications

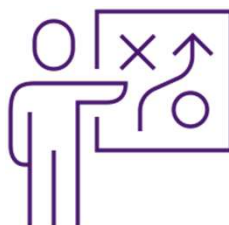


Diabetes – Coles notes



Polypharmacy

Multiple medications and mechanisms of action for diabetic and risk factor management



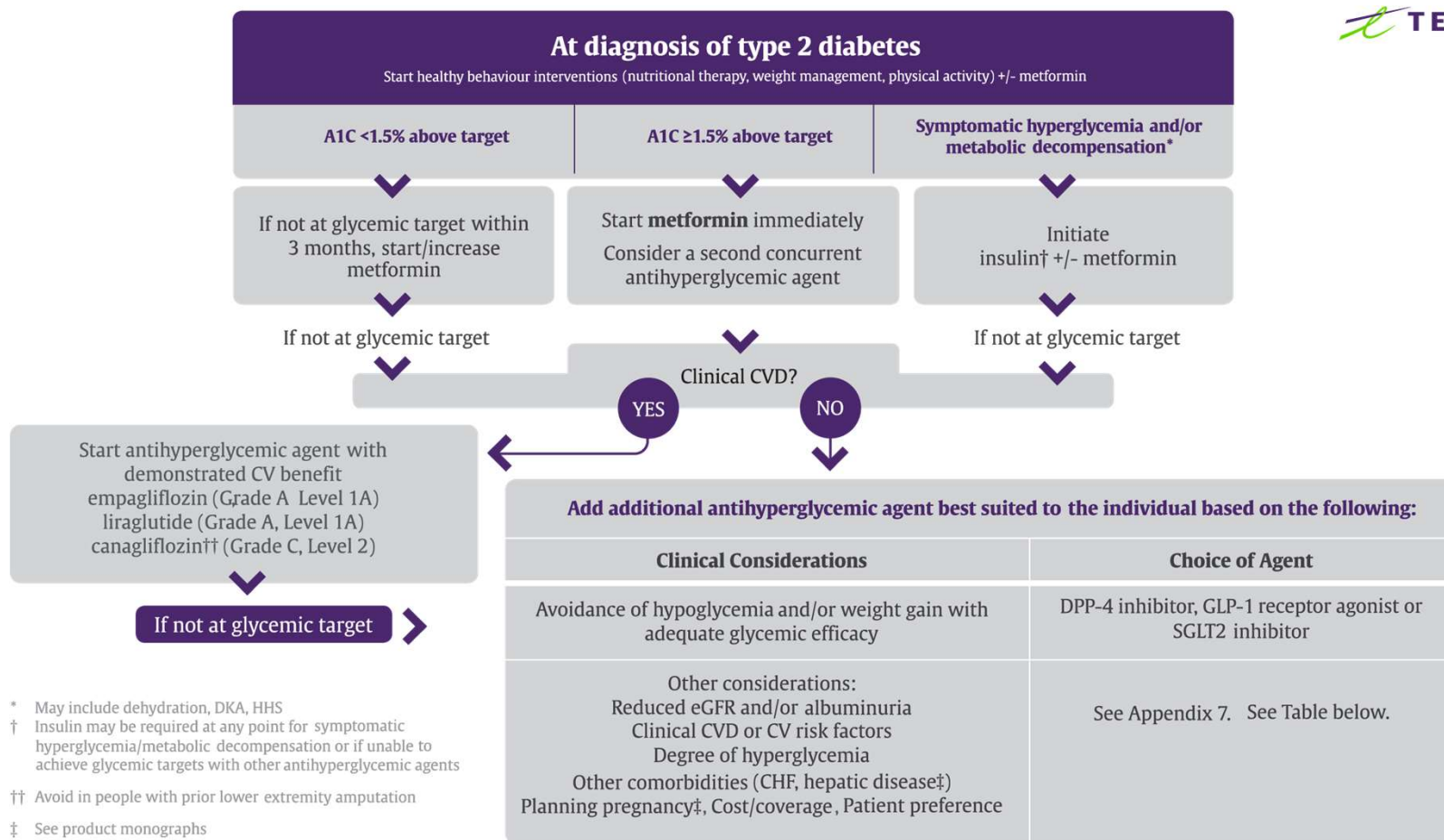
Defined treatment pathway and guidelines



Mix of medications available to treat

DPP4, GLP1, SGLT2





* May include dehydration, DKA, HHS

† Insulin may be required at any point for symptomatic hyperglycemia/metabolic decompensation or if unable to achieve glycemic targets with other antihyperglycemic agents

‡ Avoid in people with prior lower extremity amputation

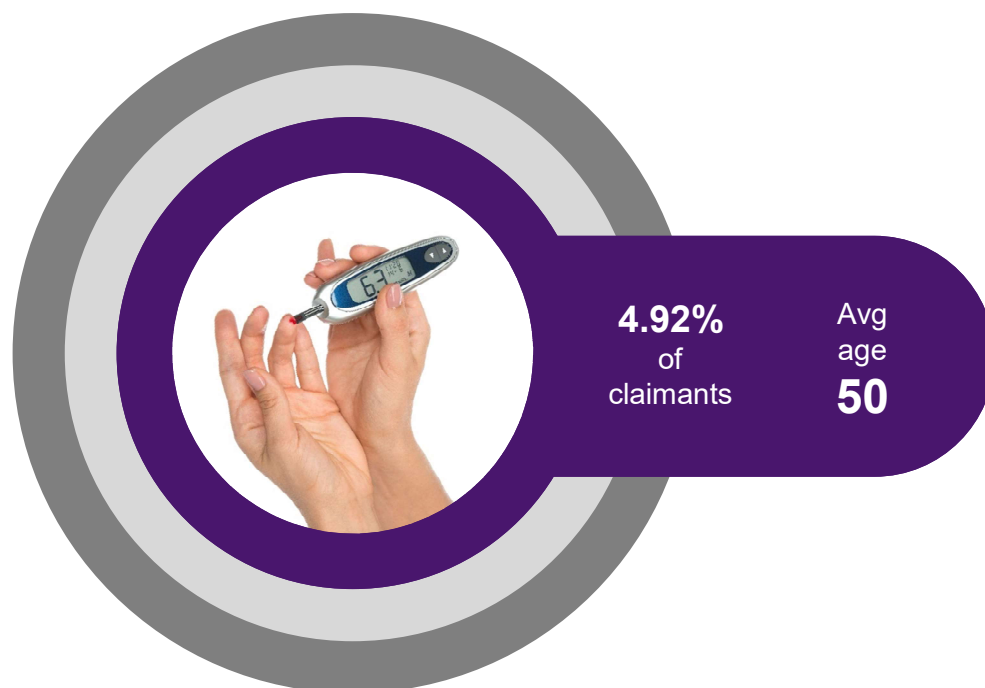
‡ See product monographs

<http://guidelines.diabetes.ca/cpg/chapter13>

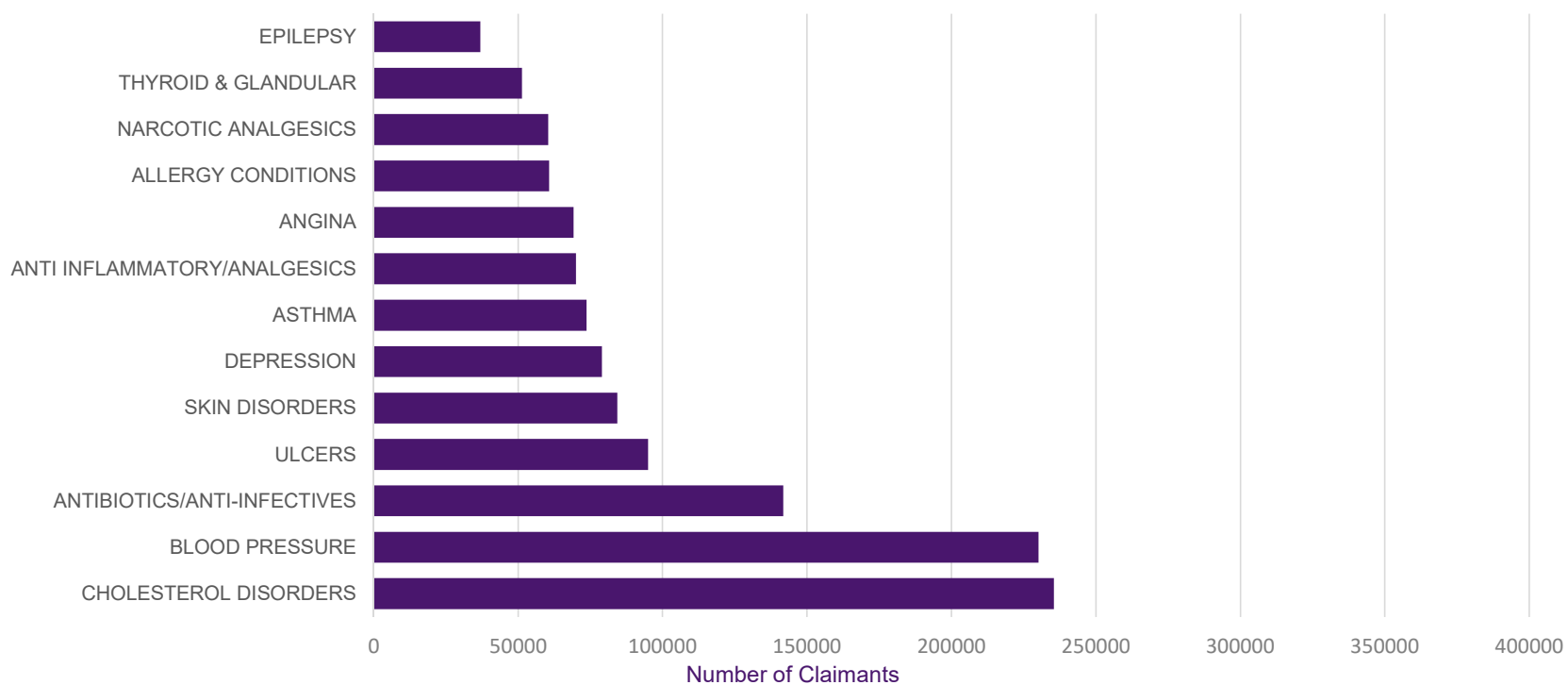
TELUS Proprietary



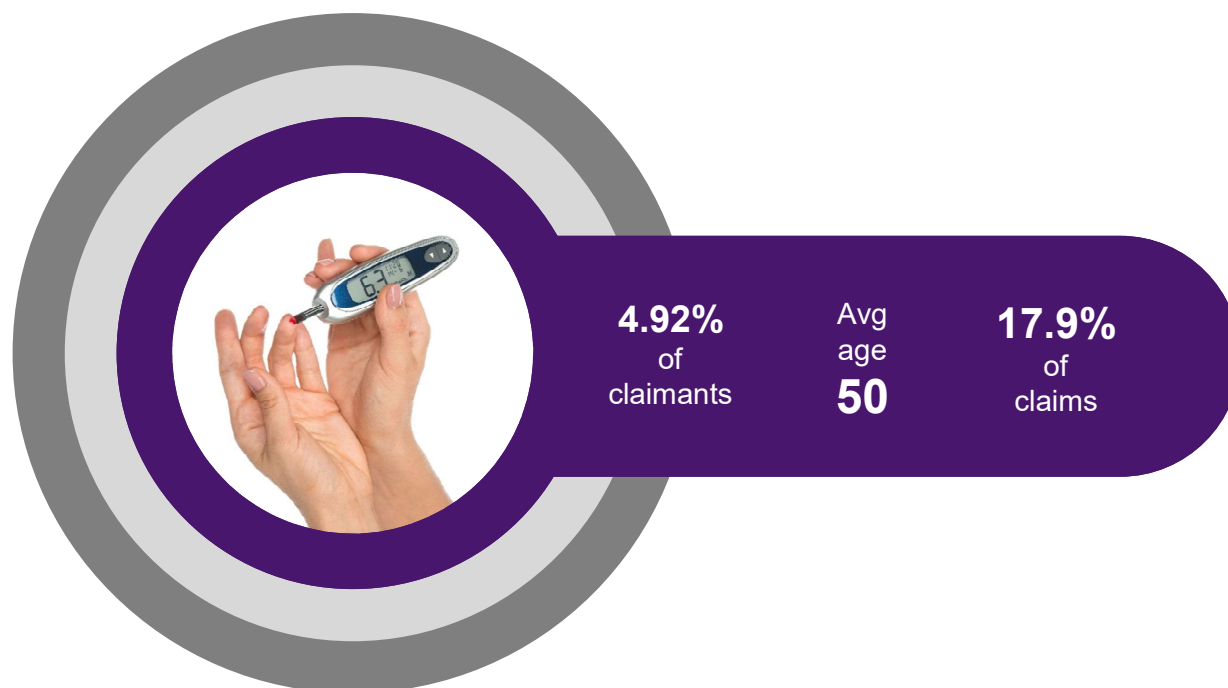
Portrait of a diabetic



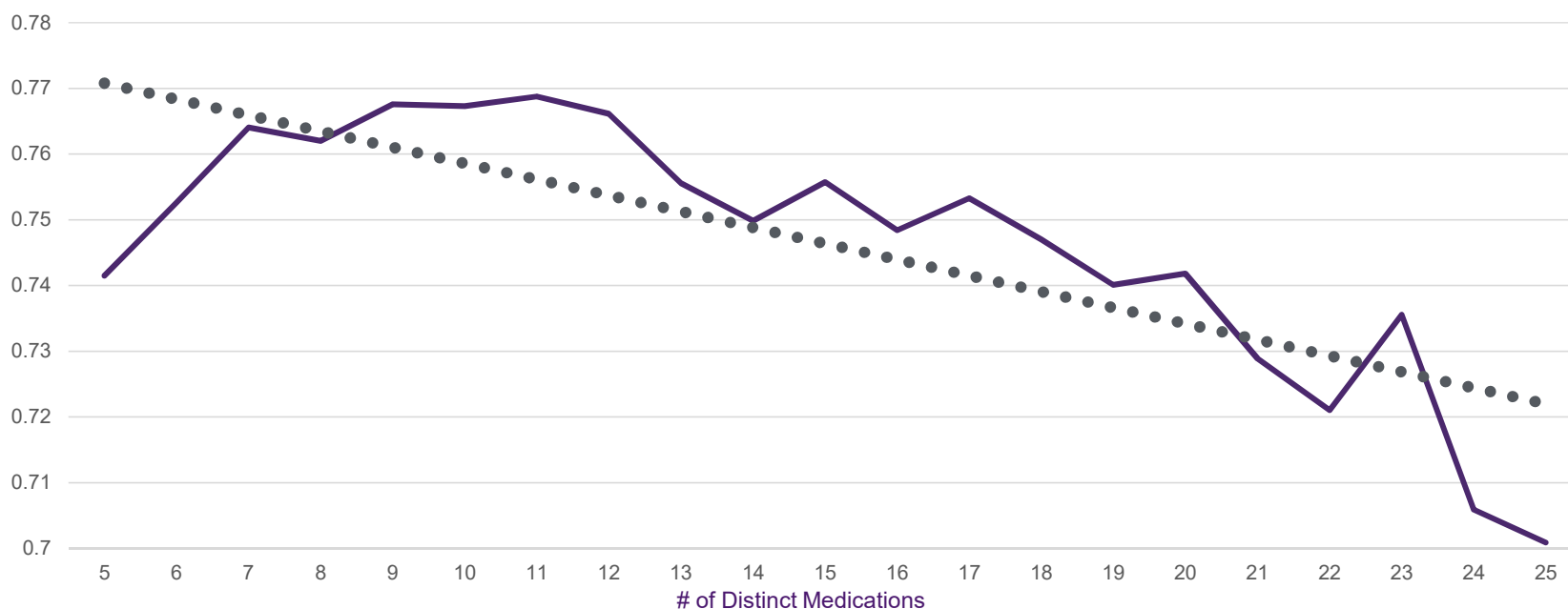
Medication mix



Portrait of a diabetic



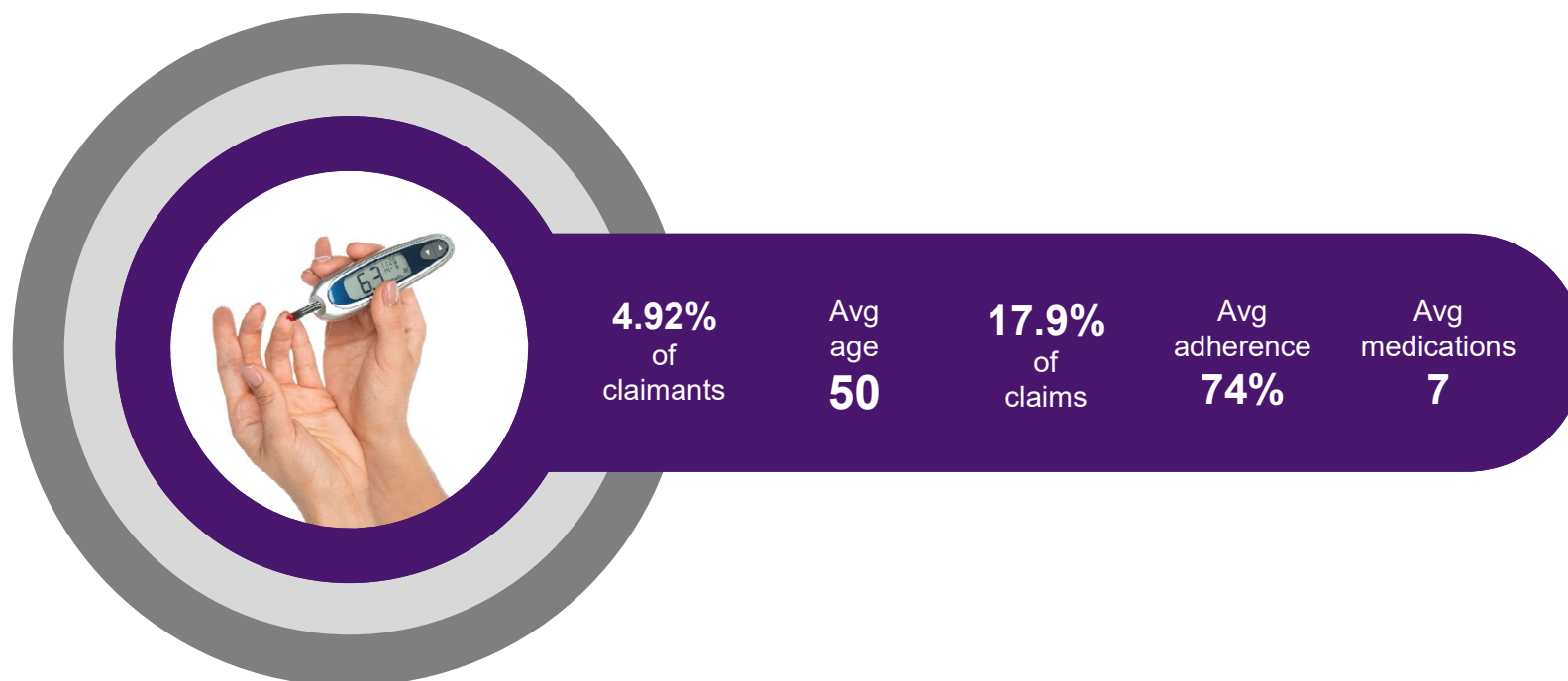
Adherence trend for diabetics



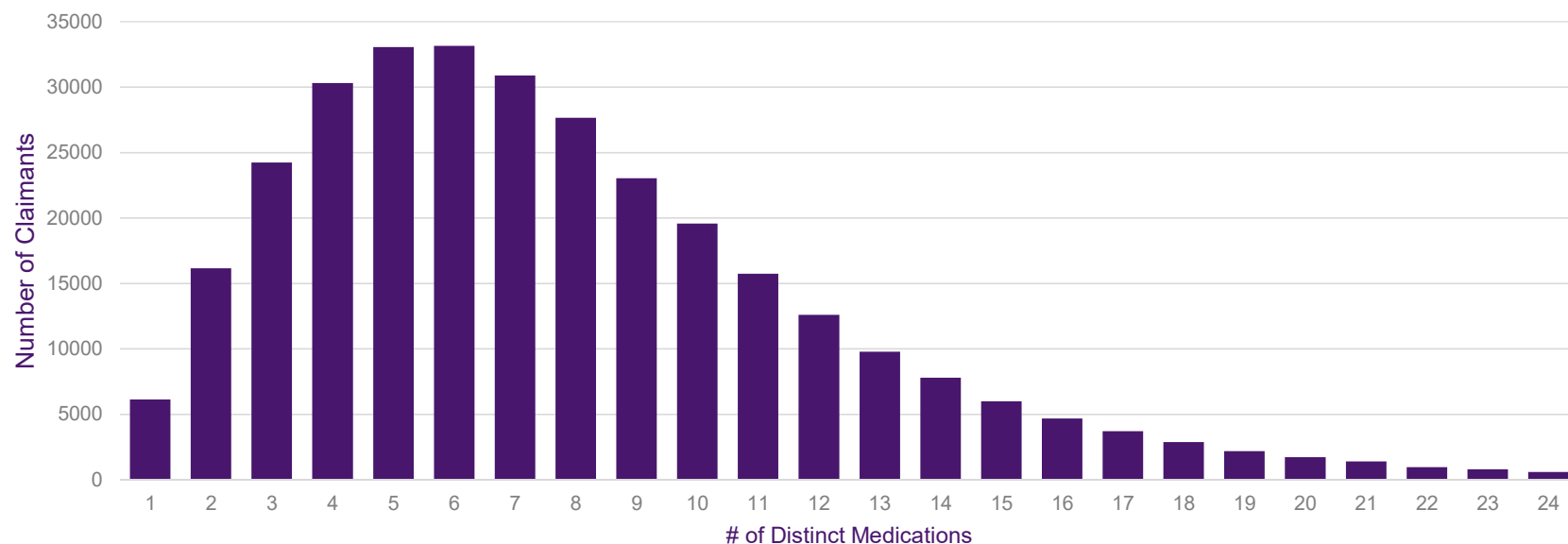
* Non-adherent is based on a patient with a Medication Possession Ratio of less than 0.8
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 TELUS Proprietary



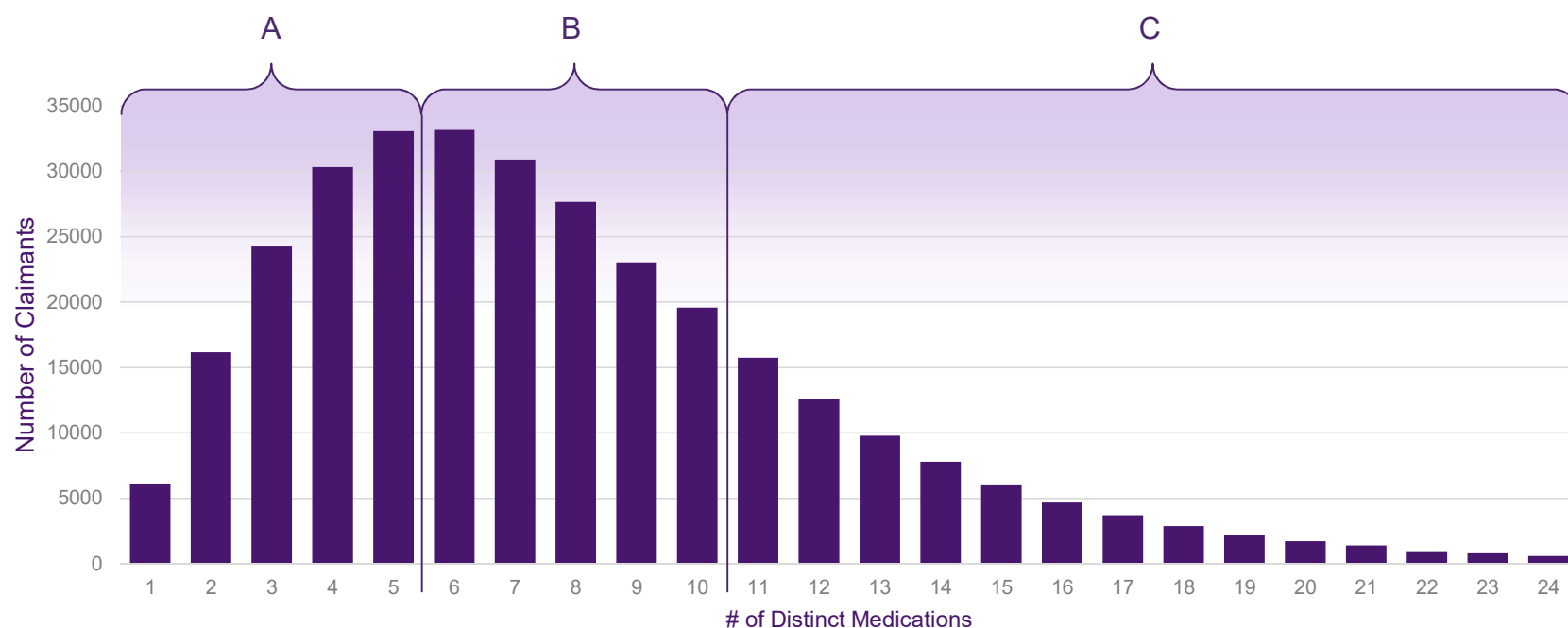
Portrait of a diabetic



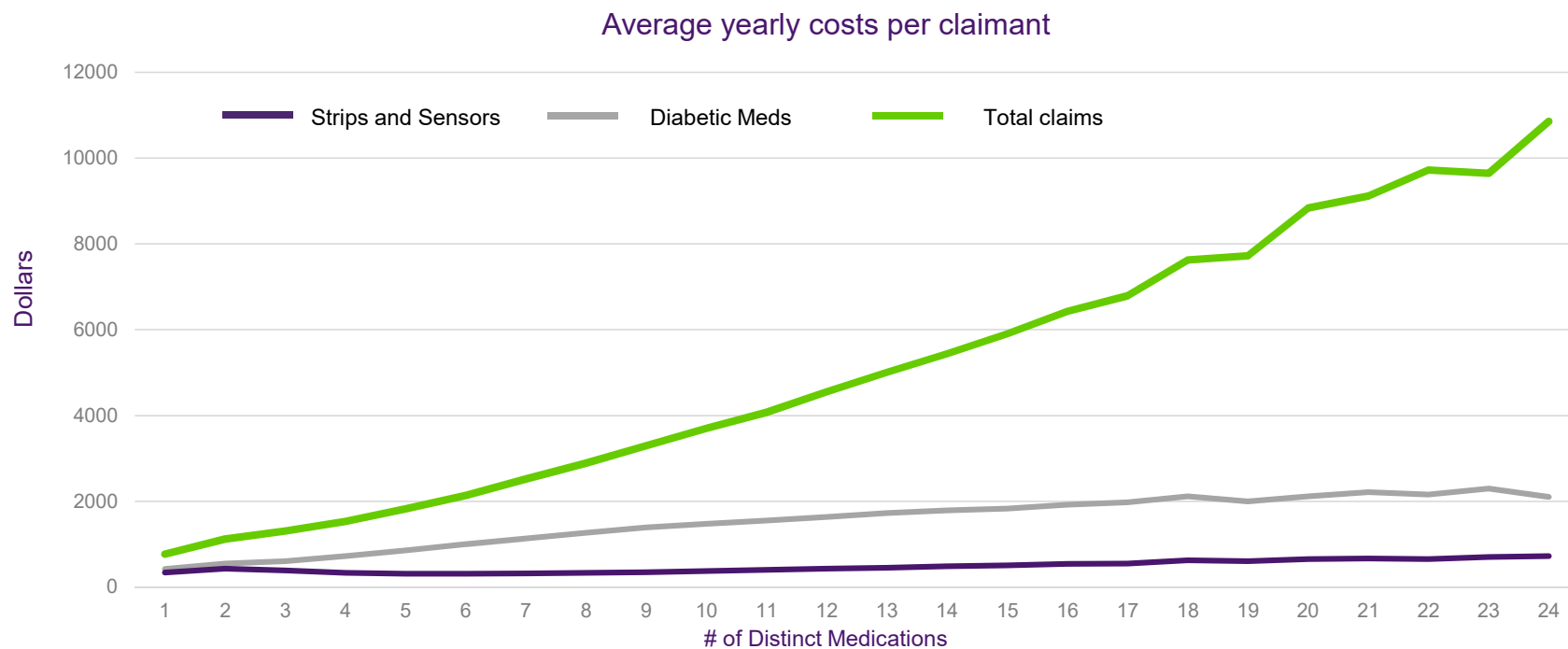
Claimant distribution



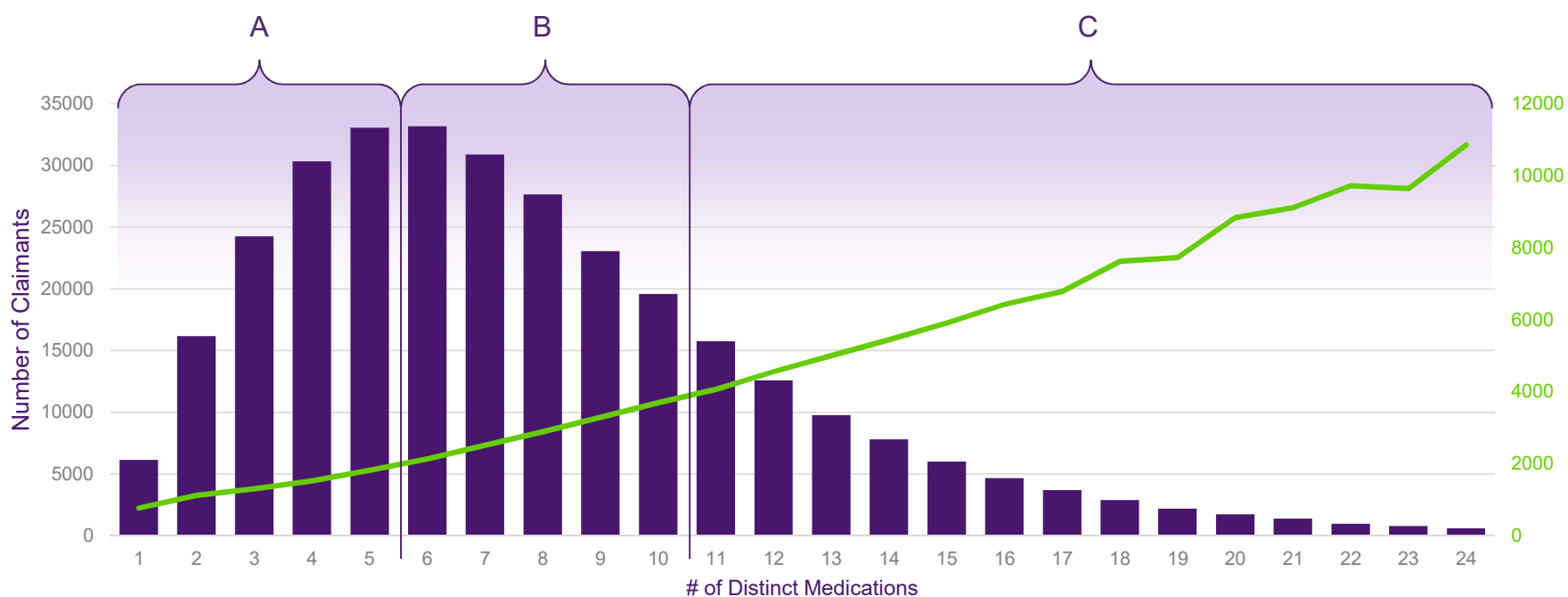
Claimant distribution



Annual cost breakdown

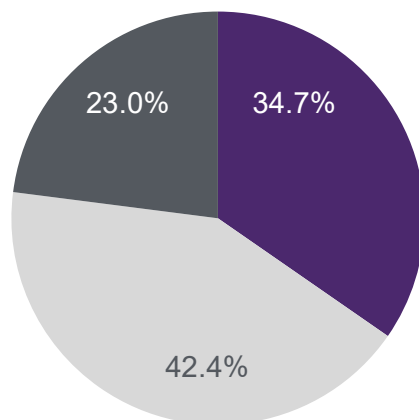


Claimant distribution and costs

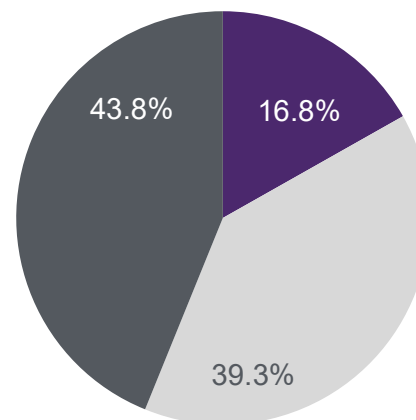


Claimant distribution

% Diabetic claimants



% Diabetic Eligible



A : 1 – 5 meds



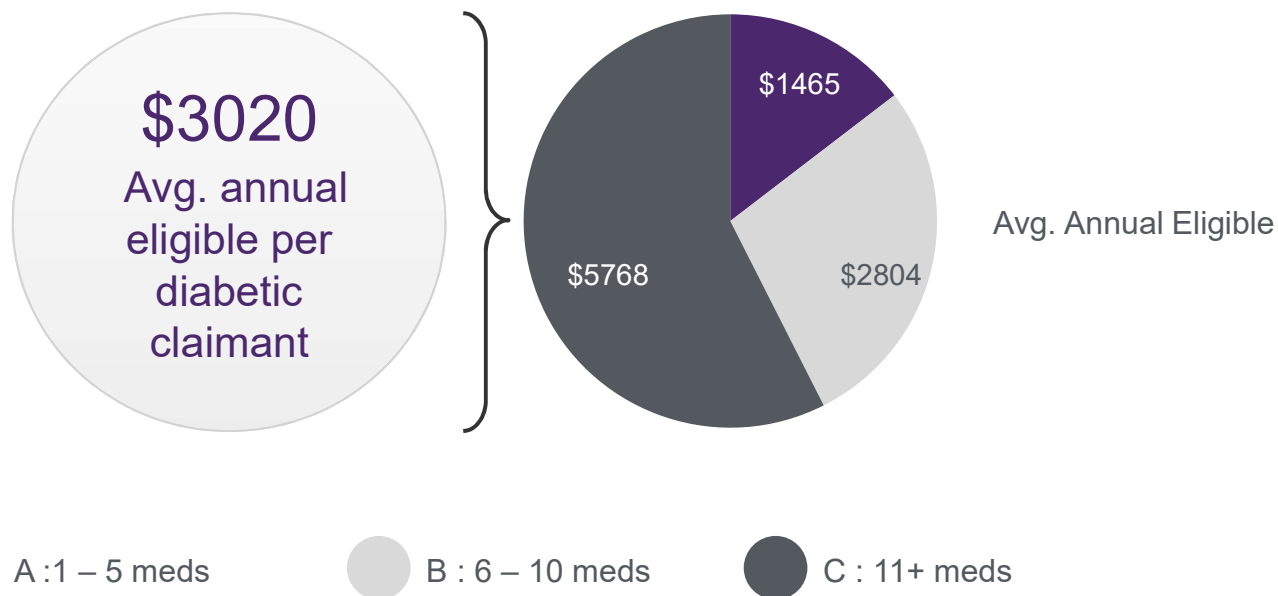
B : 6 – 10 meds



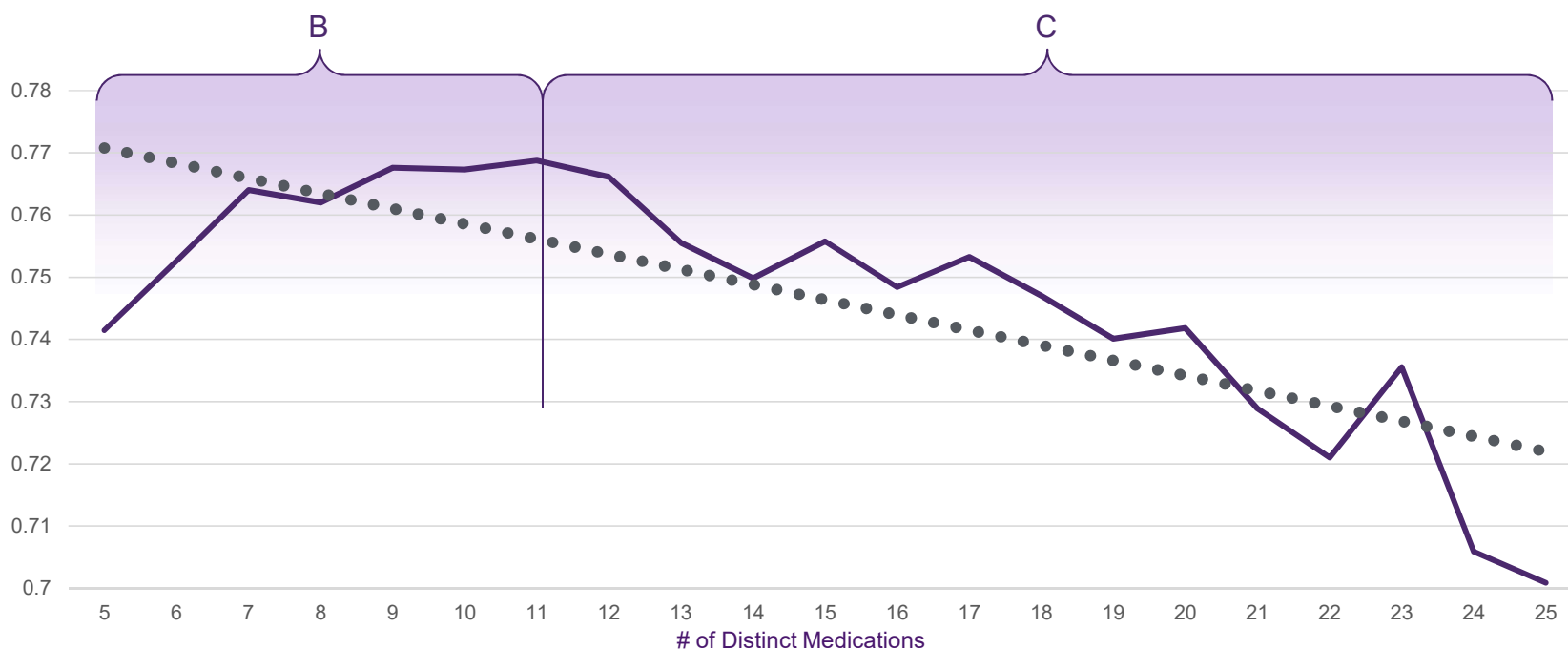
C : 11+ meds



Claimant distribution



Adherence groupings

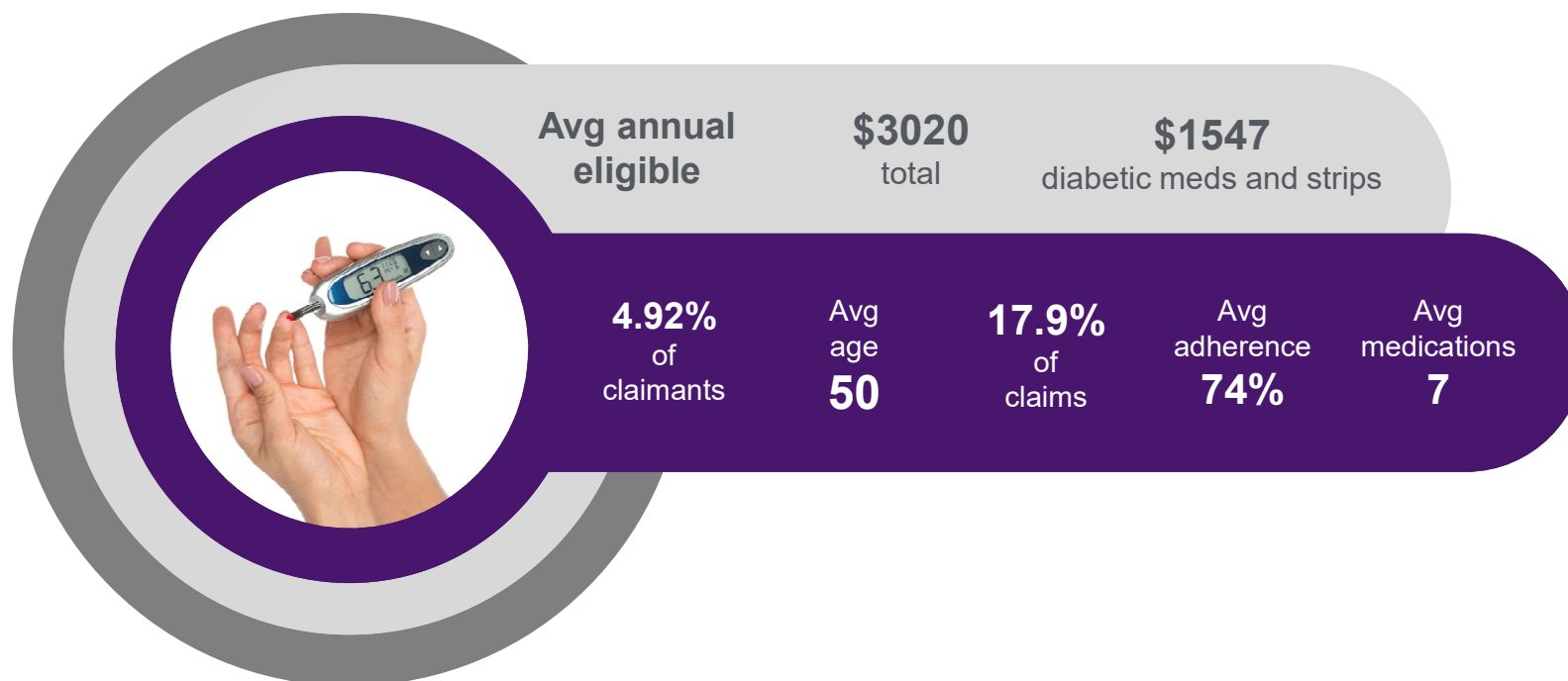


* Non-adherent is based on a patient with a Medication Possession Ratio of less than 0.8
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TELUS Proprietary

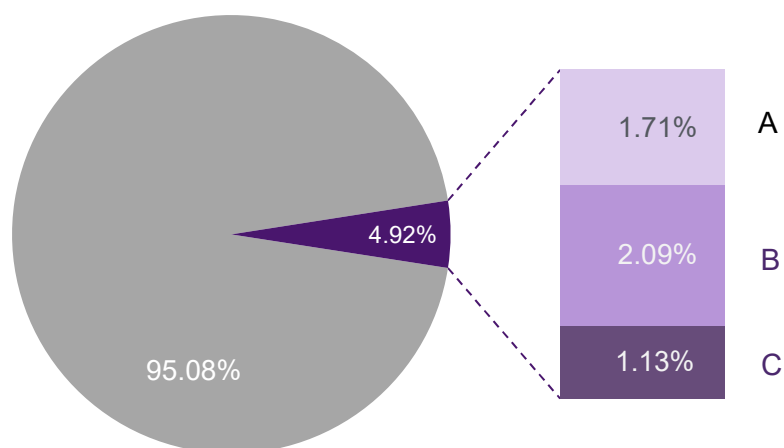


Portrait of a diabetic

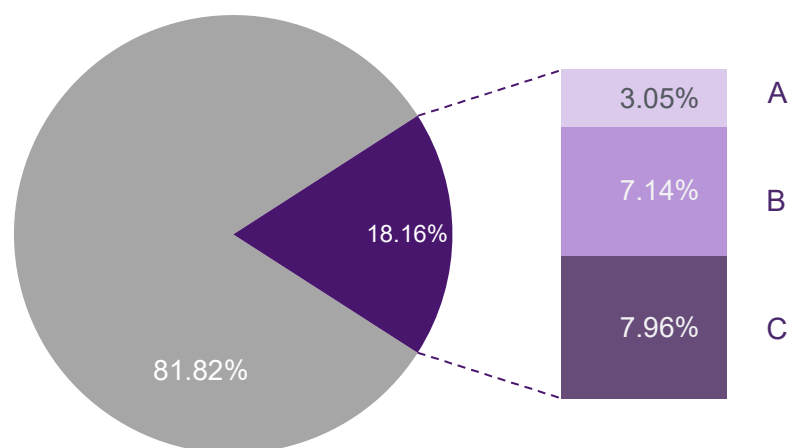


Diabetic against book of business

Claimants



Eligible

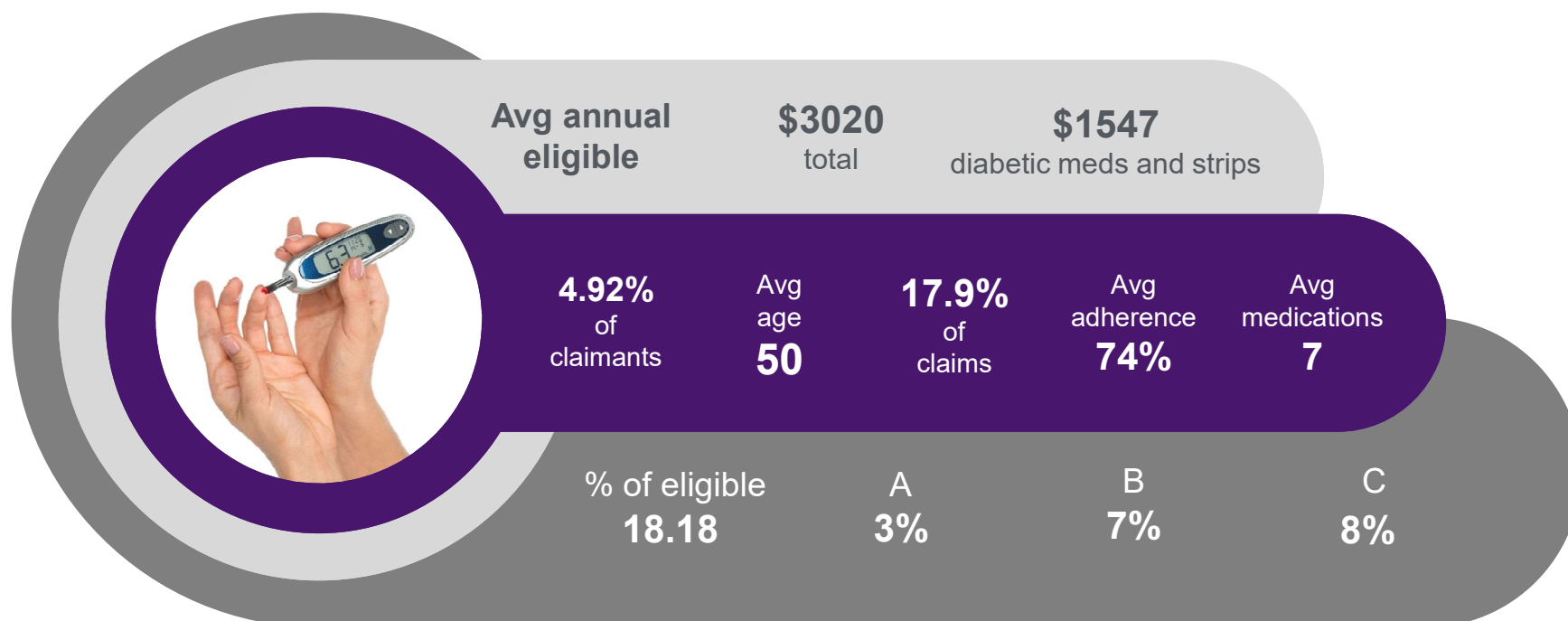


Diabetic vs diabetes class

	% claimants	% BoB eligible
Diabetes class	4.92%	10.6%
Diabetics	4.92%	18.18%



Portrait of a diabetic



Opportunities to manage costs

Managed formularies

PLA

Step therapy

Biosimilars



Dispense fee limits

Blood glucose test
strip limits

Prior authorisation



Portrait of a diabetic



What about the member?

Key messages

Healthy behaviour interventions should be initiated
in people newly diagnosed with type 2 diabetes



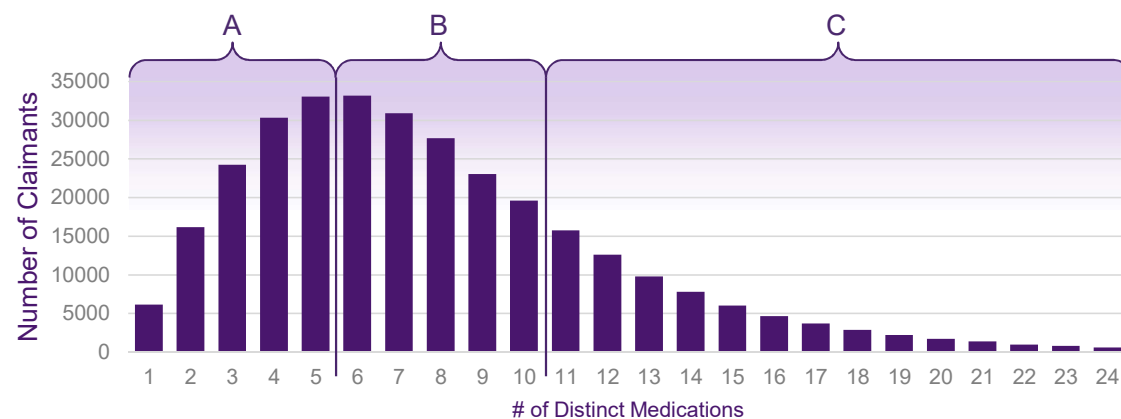
What about the member?

Key Themes

Healthy behaviour interventions should be initiated in people newly diagnosed with type 2 diabetes.

When and how

Education and Lifestyle: Diabetic educators, dietician, exercise,
Behavioural modification: wellness, adherence/persistence.



What about the member?



Pharmacy Partnerships



Alternative Strategies



Case management approach

Targeted interventions with elements of virtual care and online health coaching



Considerations



**Costs of intervention
relative to volume**



**Time to progression vs
ROI calculations**



**Role of the payer
vs healthcare
system**



Since 2015

A number of new therapies to support the treatment of diabetes. Notables include:

- Jardiance
- Ozempic
- Trulicity
- Basaglar

Diabetics	% claimants	% eligible
2019	4.92%	18.18%
2015	4.18%	16.02%



Pipeline

Rybelsus – currently under review by Health Canada:

- Oral tablet in category with previously injectable formulations
- Target : June 2020

Pipeline allocation to diabetes is relatively small in comparison to other categories:

- Entrants to crowded categories
- New dosage forms of insulin
- New mechanisms of action



Summary

- Diabetics as a population responsible for 18.18% of the eligible costs in 2019
- Diabetic control and associated risk factors often require multiple medications to get to target
- Majority of costs driven by non diabetic medications
- Adherence is poor in this population, worsening as the medication load increases
- Prevention, early intervention and managing the patient vs plan design controls to manage the costs and progression of the disease





Questions?



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Top 10 products by eligible amount

Drug product	Rank by total eligible amount		Percent of total eligible amount	
	2019	2018	2019	2018
Remicade	1	1	4.7%	4.7%
Humira	2	2	4.5%	4.5%
Stelara	3	4	2.0%	1.8%
Insulin	4	3	1.5%	1.8%
Vyvanse	5	8	1.3%	1.0%
Concerta	6	6	1.3%	1.2%
Freestyle Libre	7	40	1.0%	0.5%
Enbrel	8	5	1.0%	1.3%
Symbicort	9	9	1.0%	1.0%
Crestor	10	7	1.0%	1.1%
% of total eligible amount			19.3%	18.9%

