

## GOeVISIT SMARTEXAM – ROI

Artificial intelligence enables SmartExam to lead the pack with the highest documented ROI by virtue of:

1. Cost – By far the lowest PEPM
2. Time saved and absenteeism avoided
3. Proven reduction of 43% in user drug plan spending

### LOW PEPM

For the minimum of 1,000 guaranteed certificates, the table below illustrates an ROI of 2.33 at the highest PEPM – as the PEPM declines with increasing guaranteed certificates, the ROI will increase.

### TIME SAVED, ABSENTEEISM AVOIDED

Any wait time to access a virtual care (VC) service rapidly erodes or negates any ROI. By way of example: A plan member who awakens at 6:00 AM with symptoms of a urinary tract infection will first seek out the fastest access to care followed by convenience.

# Single Plan Members	1,000	25,000
PEPM	\$1.07	\$0.73
Cost/Yr	\$12,840	\$219,000
Utilization	8.3%	
# Users/Year	83	2,075
Uses/Year/User	3.6	
Total Uses/Year	299	7,470
Hours Saved/Use	4	
Total Hours Saved/Yr	1,195	29,880
Average Salary Cost/Hour	\$25	
Total Salary Cost Saved/Yr	\$29,880	\$747,000
<b>ROI (Salary cost saved)</b>	<b>2.33</b>	<b>3.41</b>

An unknown wait time to access a telemedicine (TM) physician may cause the plan member to forego use of the service in favour of a traditional in-person assessment, which will likely mean a complete day away from work.

With 24/7/365 instant access to SmartExam, this plan member will be diagnosed by 6:30, able to pick up their antibiotics and be at work by 8:30, avoiding an unscheduled absenteeism event.

While SmartExam reduces plan member time spent travelling to and being seen by a physician, the time saved will generally be taken as a scheduled sick day, thereby mitigating any hard cost savings. In considering VC as a benefit, plan sponsors will alone decide on how to attribute time savings.

### REDUCED DRUG PLAN SPENDING

SmartExam is the only virtual care platform in Canada based on artificial intelligence and evidence-based care. This evidence-based care results in a 43% reduction of prescriptions for users versus traditional visits and a far greater reduction compared to physician-based TM providers as per the Rand Institute CalPERS study.

**CalPERS<sup>1</sup>** – Showed a \$45 per year, per user cost increase for respiratory conditions due to a higher rate of prescription of broad-spectrum antibiotics<sup>2</sup> by TM physicians versus in-person care (83.3% versus 72.1%).

According to the 2019 Telus report, in 2018 antibiotics accounted for over 40% of the total number of prescription medication claims and between 3.2% and 4.5% of dollar claims between 2014 and 2018<sup>3</sup>.

**Antibiotic Over-Prescribing** – This is a growing global problem leading to increasing antibiotic resistance and should concern all plan sponsors. In one study, 46% of 509,534 antibiotic prescriptions, given to 279,169 patients by 2,413 out-patients clinicians, did not follow evidence-based medicine guidelines<sup>4,5</sup>.

<sup>1</sup> Access and Quality of Care in Direct-to-Consumer Telemedicine, Rand Institute,

<sup>2</sup> Ibid

<sup>3</sup> 2019 TELUS Health Drug Data Trends & National Benchmarks

<sup>4</sup> Infectious Diseases Society of America October 5, 2018, <https://www.sciencedaily.com/releases/2018/10/181005141911.htm>

<sup>5</sup> Over prescribing of antibiotics for acute respiratory tract infections; a qualitative study to explore Irish general practitioners' <https://bmcfampract.biomedcentral.com/track/pdf/10.1186/s12875-019-0917-8>

Antibiotic Prescribing & Evidence-Based Care	Telemedicine	Walk In	Primary Care
# Visits	4,604	38,408	485,201
% of Visits treated with antibiotics	52%	42%	31%
% Increase antibiotic prescriptions versus baseline	68%	35%	Baseline
Adherence to evidence-based guidelines	59%	67%	78%
% Decreased adherence to evidence-based guidelines versus baseline	24%	14%	Baseline

In another study, TM physicians prescribed 68% more antibiotics with a 24% decrease in adherence to evidence-based medicine guidelines compared to the baseline of primary care practices<sup>6</sup>.

**PPI Over-Prescribing** – It has also been shown that 25-70% of the prescriptions for Proton Pump Inhibitors, used to treat gastric reflux, do not follow evidence-based guidelines<sup>7</sup>.

**Corticosteroids for Childhood Asthma** – In one study, 80% of prescriptions of oral steroids for children with asthma did not follow evidence-based guidelines<sup>8</sup>.

### SUMMARY - SmartExam ROI

**Time Saved** – As discussed, while the unscheduled time saved due to medical issues is real, most users will still take all their allotted and scheduled sick days. Nevertheless, these scheduled sick days are far less disruptive than unscheduled, random sick days.

**Prescription Medication Costs** – Canadian TM providers talk in vague and general terms about their ability to reduce the cost of prescription medications through their affiliated mail order pharmacy. However, plan members have by and large not adopted this option. For TM-type issues, users prefer the same day convenience of their local pharmacy, while those with multiple medications for chronic conditions are reliant, in today’s world of 10-minute doctor appointments, on the professional advice and knowledge of their pharmacist.

Thus, the only real metric of importance is the reduction in number of prescriptions. Understandably, TM providers have no hard data on this, while all of the scientific literature shows an increased number of prescriptions in TM.

SmartExam’s documented 43% reduction in the number of outpatient prescriptions compared to traditional in-person visits (even greater compared to TM) represents real and tangible ROI, in addition to time saved and lower prescription medication costs via their (or your) affiliated network.

ROI – SmartExam (1,000 covered lives)	
Measured reduction in prescriptions	43%
Average annual claims cost/claimant <sup>9</sup>	\$747
Potential theoretical savings	\$321
# Claims reduced/1,000 members	\$321,000
Potential savings @ 8% utilization	\$25,680
ROI prescription reductions	2.00
ROI salary savings	2.33
<b>Total ROI</b>	<b>4.33</b>

While no one expects 100% utilization of any plan member benefit, this key feature of SmartExam, unequalled and unavailable elsewhere, should be heavily promoted to plan sponsors and plan members, who are collectively more and more aware of the health impact of over-prescription as well as the direct and indirect costs.

### CONCLUSION

For plan sponsors, hours saved, lowest in industry PEPM pricing, a 43% reduction in number of prescriptions enabled by the evidence-based capabilities of SmartExam’s artificial intelligence and healthcare professional insight, brings an ROI that is unmatched by the competition and by far the highest in the industry.

For plan members, SmartExam brings convenience, time savings and, most importantly, far higher evidence-based quality of care, fewer non-medically justified medications, leading to fewer medication side effects and adverse drug reactions.

<sup>6</sup> <https://www.nih.gov/news-events/news-releases/physicians-may-overprescribe-antibiotics-children-during-telemedicine-visits>

<sup>7</sup> Overprescribing proton pump inhibitors - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2174763/>

<sup>8</sup> Oral Corticosteroid Prescribing for Children With Asthma in a Medicaid Managed Care Program, [Farber HJ](#)<sup>1,2,3</sup>, [Silveira EA](#)<sup>4</sup>, [Vicere DR](#)<sup>4</sup>, [Kothari VD](#)<sup>2</sup>, [Giardino AP](#)<sup>2</sup>. <https://www.ncbi.nlm.nih.gov/pubmed/28557753>

<sup>9</sup> 2019 TELUS Health Drug Data Trends & National Benchmarks