

Angela Rocchi¹ Robert Bick² 1- Athena Research Inc. 2- CanCertainty

Take Home Cancer Drugs (THCD)

- Oral pills are THCD.
- > 3X more cancer patients are treated with THCD than IV drugs.
- The majority of new cancer drugs are THCD, not IV.
- THCD are not an oral version of an IV drug. They are different chemicals that are often the first-line choice of therapy for many cancers.

Who Pays for Cancer Drugs in Ontario?

- IV drugs: 100% funded, for 100% of Ontarians by MOHLTC.
- THCD: it depends!

MOHLTC: ~60% of Ontarians, with varying patient copays

- seniors 65+ (with small patient copayment + deductible)
- social assistance (with small patient copayment + deductible)
- <25 (with NO copayment/deductible) – effective January 1 2018
- Trillium Drug Plan (TDP) for those with high drug costs (>4% total household net income – with 4% deductible)

The remaining ~40% of Ontarians rely on private drugs plans (with varying patient copays, typically 20%) if available, and self-fund otherwise (especially if costs are < 4% of net household income).

MOHLTC Current Expenditures (2015/16)

\$344M for IV cancer drugs

100% of Ontarians who required IV cancer drugs were funded by the MOHLTC, with 100% coverage (no deductible, no copayment, no out of pocket cost).

\$371M for take home cancer drugs (THCD)

Only about 60% of Ontarians who required THCD were funded by the MOHLTC, with varying levels of copayment, deductible, out of pocket expense.

Ontario Could Pay for THCDs: Two Options

- First Dollar Coverage
- Closing the Gaps

Option #1: First Dollar Coverage

- It is estimated by CCO that \$200M is currently paid by private insurance.
- The rest is borne by other sources, mostly individual patients: through private insurance co-pays and deductibles, and costs below the threshold for Trillium.
- MOHLTC has suggested that the budget for THCD could go up by 40% over the current \$375M (+\$250M). Assumption: Gov't would assume the current costs paid by private insurance + copays/deductibles + Trillium deductibles.
- The assumption is flawed, as demonstrated with OHIP+ budget impact modeling
- Private drug plans include more drugs, for more types of patients, and with fewer restrictions, than public plans.
 - ~50% of private insurance claim costs might not be eligible for public coverage (as estimated for OHIP+ patients).
- Public drug plans negotiate discounted prices not available to private plans, so private costs are higher.
- Public drug plans have rigid generic substitution requirements (Private plans pay for more “brand”).
- \$200M in current private insurance costs would likely commute \$100M in public costs.
 - Deduct costs already committed for < 25 (OHIP+).
- Estimated additional cost to fully fund THCD for all Ontarians: **\$142M.**

Option #2: Closing the Gaps

- What if Ontario only ‘closed the gap’
 - Private insurance remains in the mix.
 - Trillium is extended to **all** patient out of pocket costs with no deductible/co-payment.
 - Patients are *out of pocket* \$0 as is the case for IV drugs.
- This could cost the \$50M estimated to be the current patient *out of pocket* expenses
 - Deduct costs already committed for OHIP+
- Estimated additional cost to eliminate patient borne costs of THCD for all Ontarians : **\$42.5M**

Cost Efficiencies and Offsets

Potential savings could be realized by streamlining two divergent systems into one.

Reduce/eliminate mark-ups. Dispensing THCDs through cancer clinic pharmacies (vs community pharmacies) could eliminate the 6-8% mark-up currently paid to community pharmacists on expensive cancer drugs. (Estimated at \$26M in 2013).

Reduce wastage. THCDs in many provinces are dispensed through community pharmacy...which may have only a few patients (or one patient) on any specific cancer medication. Typically they dispense all inventory. As dose changes or discontinuations are very common in cancer treatment, the result is a high amount of drug wastage, **estimated to be in the 10% range.** Cancer clinic pharmacies have volumes of patients, and can dispense smaller, weekly amounts to these patients who frequently have dose changes or discontinuations.

Include THCDs in CPOE systems. Most jurisdictions have Computerized Physician Order Entry (CPOE) systems in place to support improved patient safety, decrease costs, and improve compliance with treatment guidelines. From 2006 to 2011, it is estimated that Ontario's CPOE System prevented 8,500 adverse drug events, 5,000 physician office visits, 750 hospitalizations, 57 deaths, and saved millions in annual health-care costs. **BUT Only for patients receiving IV Drugs.** Patients requiring THCDs are (currently) subject to significant safety challenges, and health systems are subject to significant annual costs (physician office visits, hospitalizations etc).

Assumptions

- Utilizing the existing Ontario Drug Benefit Formulary ONLY – the list of THCD currently funded for 65+, social assistance, < 25, TDP.
- Assumes per-patient THCD costs are the same across all ages.
- Limited data exist in the public domain, especially for private insurance costs.
- OHIP+ covers ~1,000 new cancer cases/year in Ontario < 25
- Estimate accuracy could be improved by analysing data
 - THCD costs by patient age (using the MOHLTC social assistance, 65+, TDP datasets)
 - Mean per-patient out of pocket expense in TDP