

Prescribing trends of direct acting antivirals (DAAs) for the treatment of hepatitis C in Ontario, Canada

Background

- Chronic hepatitis C virus (HCV) infection affects over 250,000 Canadians and accounts for more years of life lost than any other infectious disease in the country.
- In 2012, direct acting antivirals (DAAs) were approved for the treatment of HCV in Canada and with cure rates greater than 95%, the growing use of these agents has been associated with declining HCV-related hospital admissions.
- Given the changing reimbursement mechanisms and treatment guidelines, it is important to understand the characteristics of individuals prescribed DAAs and the specialty of prescribing physicians.

Reimbursement mechanisms and treatment guidelines for DAAs have changed on three occasions since 2012, including:

- Initial coverage through the exceptional access program (EAP) in April 2015,
- A subsequent move to the general formulary as limited use in February 2017, and
- The inclusion of newer agents on the formulary in February 2018.

What did we investigate?

Characteristics of individuals who were prescribed DAAs and prescribing physicians' specialties in Ontario between 2012 and 2018.

How was the study conducted?

- We conducted a repeated cross-sectional study examining prescription DAA claims reimbursed by the public drug program in Ontario between January 1, 2012 and December 31, 2018.
- Results were reported overall and by prescriber speciality for each quarter during the study period.
- A secondary analysis described the characteristics of individuals who received a publicly-funded DAA prescription in 2018, including demographic information, long-term care home status, major comorbidities, and past opioid exposure.

Key points

- The rate of DAAs reimbursed by the Ontario Public Drug Programs experienced rapid and sustained growth that strongly correlated to changes in reimbursement, novel treatments, and treatment criteria over the 6-year study period.
- The majority of DAA recipients received their prescriptions from specialty prescribers.

For more information

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This project was completed in collaboration with the Toronto Community Hep C Program.

What did we find?

- Between January 1, 2012 and December 31, 2018, there were 27,116 individuals who received a publicly-funded DAA prescription.

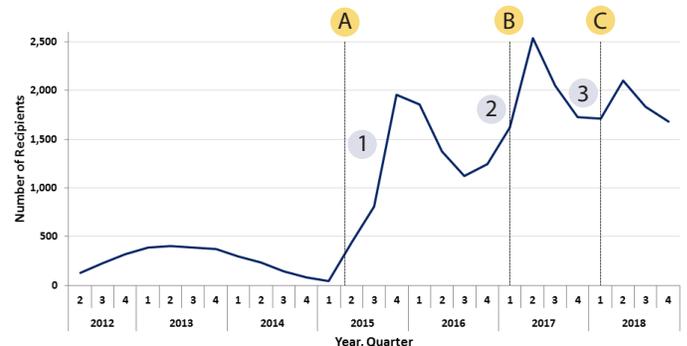


Figure 1: DAA dispensing among public drug beneficiaries from 2012 to 2018, by quarter

- There was a sharp increase in dispensing subsequent to the inclusion of DAAs in the EAP in Q2-2015, peaking at 1,956 in Q4-2015.
- DAA recipients then steadily declined until this trend reversed in Q4-2016, again peaking at 2,539 recipients in Q2-2017 following the transition of DAAs to the general formulary.
- Subsequently, the number of DAA recipients again declined, excluding a peak of 2,101 recipients in Q2-2018 following the addition of newer DAA agents on the formulary.

- Nearly half (n=12,521; 46.2%) of all DAAs were prescribed by gastroenterologists and hepatologists, followed by infectious disease specialists (n=5,292; 19.5%), other specialties (n=4,714; 17.4%), and general practitioners (n=2,481; 9.1%).
- In 2018, there were 5,538 individuals who received a publicly-funded DAA prescription. The majority of these individuals were above the age of 50 (59.8%), male (63.8%), resided in an urban area (88.8%), or belonged to the lowest two neighborhood income quintiles (63.8%).
- Among DAA recipients in 2018, 55.2% also had a mental health diagnosis and 28.7% were receiving OAT.

Recommendations

Policymakers

- Policymakers should consider strategies to expand access to community-based models of care, which may be better equipped to provide the comprehensive and flexible support required by some HCV patients, compared to specialist care providers.

Healthcare professionals

- Healthcare professionals are encouraged to seek educational training to increase their capacity to better address the needs of complex clients and ensure successful treatment outcomes.