

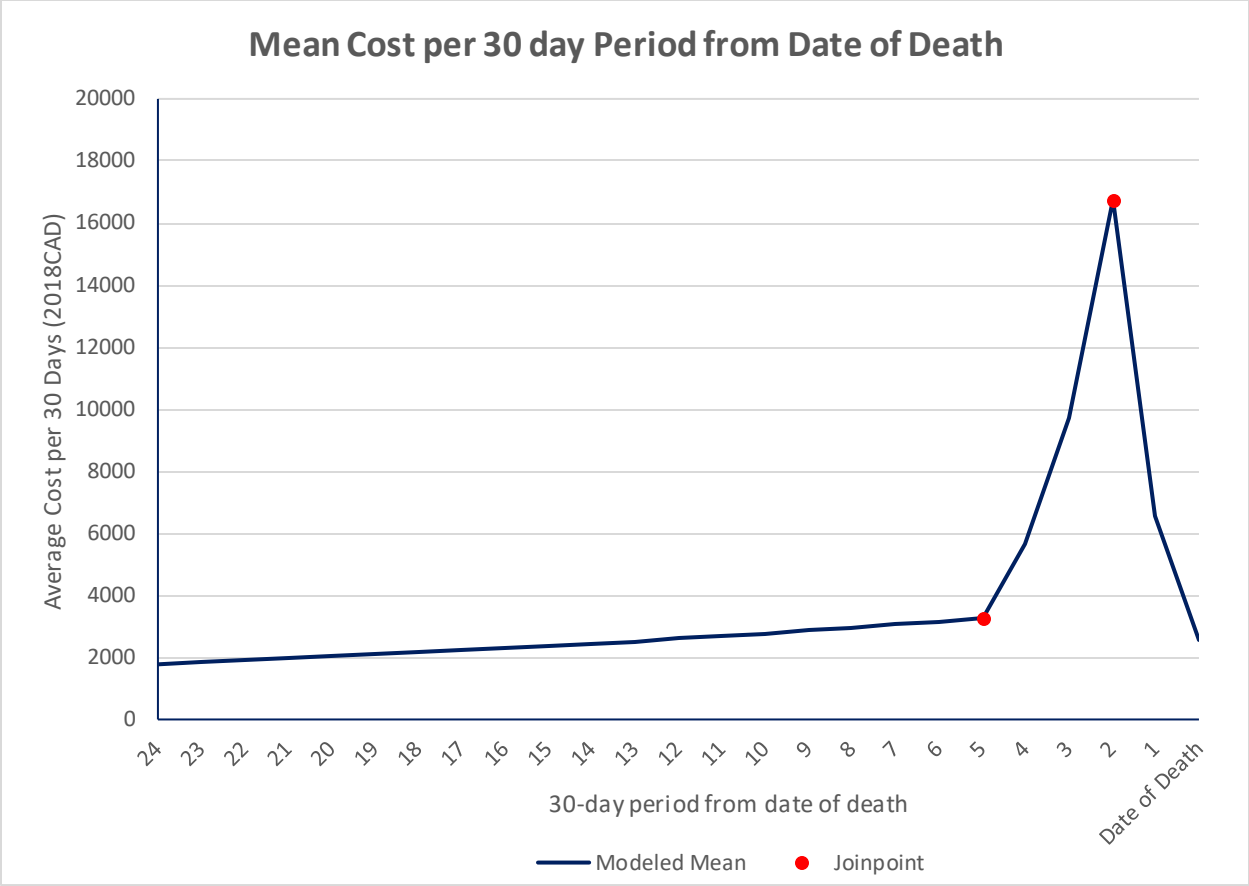
## **Appendix 3. Joinpoint Analyses**

### ***Joinpoint Analyses***

Joinpoint analyses and expert opinion were used to determine when the late and terminal phases start. As infected individuals can develop liver disease at different times there was not a single point of inflection following HCV diagnosis. Therefore, to capture phase start dates for the late and terminal phases we first worked backwards from date of death.

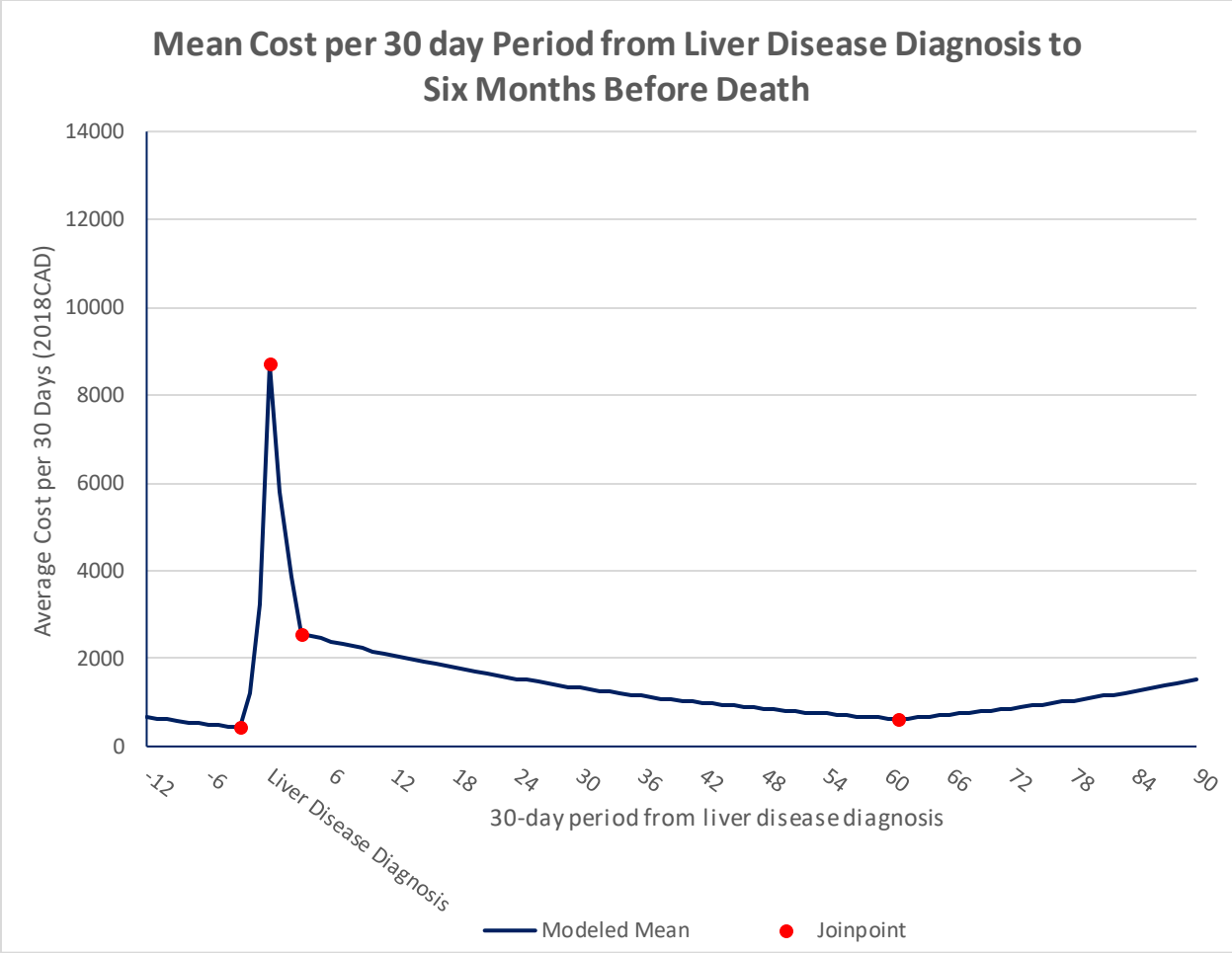
For terminal phase start, among those who died (N=333), monthly costs were examined up to two years prior to date of death (Figure S1). The joinpoint analysis resulted in two inflection points, one being approximately five months before date of death and the other at two months before date of death. The first inflection point, going forward in time was indicative of when costs tended to start to rise before death. Based on the first inflection point at five months before death, and guided by expert opinion, we chose six months prior to death as the starting point for the terminal phase.

To determine the late phase start, we performed a joinpoint analysis using 30-day cost data from patients who were diagnosed with advanced liver disease (either hepatocellular carcinoma, decompensated cirrhosis, or a liver transplant) and died (N=57). Mean 30-day costs were examined from a year prior to liver disease diagnosis, and patients were censored at six months prior to death. Joinpoint analysis resulted in four significant inflection points located at: three months prior to liver disease diagnosis, liver disease diagnosis, three months after liver disease diagnosis and 61 months after diagnosis (Figure S2). Based on the first inflection point and guided by expert opinion we chose three months prior to liver disease diagnosis as the starting point for late phase.



**Supplemental Figure S1. Mean costs per 30-day period in the two years before date of death.** Modeled mean consists of joinpoint regression results of the log linear trends in 30-day costs from those with a diagnosis of HCV infection and a date of death (N=333). A two joinpoint model was chosen using the traditional Bayesian Information Criteria (BIC) method. Costs are in 2018 Canadian Dollars.

Appendix 3, as supplied by the authors. Appendix to: Mendlowitz A, Bremner KE, Walker JD, et al. Health care costs associated with hepatitis C virus infection in First Nations populations in Ontario: a retrospective matched cohort study. *CMAJ Open* 2021. DOI:10.9778/cmajo.20200247. Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup.cmajca.



**Supplemental Figure S2. Mean costs per 30-day period from liver disease diagnosis until six months before death.** Modeled mean consists of joinpoint regression results of the log linear trends in 30-day costs from those with HCV infection who also had a diagnosis of either hepatocellular carcinoma, decompensated cirrhosis, or a liver transplant and died (N=57). Mean costs per 30 days were followed until 5 patients remained. A four joinpoint model was chosen using the traditional Bayesian Information Criteria (BIC) method. Costs are in 2018 Canadian Dollars.

Appendix 3, as supplied by the authors. Appendix to: Mendlowitz A, Bremner KE, Walker JD, et al. Health care costs associated with hepatitis C virus infection in First Nations populations in Ontario: a retrospective matched cohort study. *CMAJ Open* 2021. DOI:10.9778/cmajo.20200247. Copyright © 2021 The Author(s) or their employer(s). To receive this resource in an accessible format, please contact us at cmajgroup.cmajca.