

DATA LINKAGE FOR SURVEILLANCE OF NEWLY ACQUIRED HEPATITIS C INFECTIONS IN QUEENSLAND: EARLY FINDINGS AND IMPLICATIONS FOR POLICY AND PRACTICE

Authors:

DAMIN SI¹, JONATHAN MALO^{1,2}, M. XIMENA TOLOSA¹, JOHN MARQUESS¹, STEPHEN LAMBERT¹

¹Queensland Department of Health, Brisbane, Australia, ²University of Queensland, Brisbane, Australia.

Background/Approach:

Hepatitis C virus (HCV) infection is nationally notifiable with infections classified as newly acquired (infected <24 months prior to onset) or unspecified. Newly acquired infections are important for understanding current epidemiology and recent HCV transmission patterns. However, systematic identification of newly acquired HCV infections can be challenging and resource-intensive. In 2016–2017, the use of data linkage to identify newly acquired HCV infections in Queensland was explored and implemented.

Analysis/Argument:

A weekly data linkage process commenced in 2017 to match notified HCV cases with negative HCV antibody test results performed by Queensland public laboratories within 24 months prior to onset. Individuals with elevated alanine transaminase levels (over 10 times the upper reference limit) within 8 weeks before diagnosis were also classified as newly acquired if the diagnosing practitioner cannot identify an alternative explanation. This approach was also applied retrospectively to identify newly acquired HCV cases during 2011–2016. Prospectively identified newly acquired cases without any clear risk factors for infection were followed up to determine the likely source of infection.

Outcome/Results:

There was a continued increase in the number and proportion of newly acquired HCV cases in Queensland, from 211 cases (9% of the total) in 2011 to 505 cases (23%) in 2020. Prisoners accounted for 38% of newly acquired cases in 2011, with an ongoing increase to 69% in 2020. Of 1,695 newly acquired cases notified during 2017–2020, 63% were among prisoners, with a further 12% reporting injecting drug use.

Conclusions/Applications:

Data linkage is an efficient method to identify newly acquired HCV infections for public health surveillance. At present, the majority of newly acquired HCV infections are identified in the prison population. Prisoners should be a priority group for increasing testing, use of direct acting antiviral treatment, and accompanying interventions to prevent HCV infection and re-infection.

Disclosure of Interest Statement:

This work is supported by Queensland Department of Health.