

# Toward Hepatitis C Elimination in Denmark: We "C" a Major Prevalence Decline, but Remaining Gaps to Reach WHO 2030 Goals Exist

Signe Freja Storgaard<sup>1,2</sup>

Anne Øvrehus, Sandra Dröse<sup>1,2</sup>, Inge Petersen<sup>1</sup>, Peer Brehm Christensen<sup>1,2</sup>

<sup>1</sup> Department of Infectious Diseases, Odense University Hospital, J. B. Winsloews Vej 4, Indgang 18 Penthouse 2. sal, DK-5000 Odense C, Denmark b <sup>2</sup> Research Unit for Infectious Diseases, University of Southern Denmark, Odense, Denmark.

### Hepatitis C can be eliminated

Direct Acting Antivirals (DAAs) make HCV curable.

### WHO targets for 2030

- 80% reduction in new infections
- 90% diagnostic coverage

#### **Trends in Denmark**

Prevalence declined from 0.38% (2007) to 0.21% (2016).

### DAAs without restriction since 2018 in Denmark

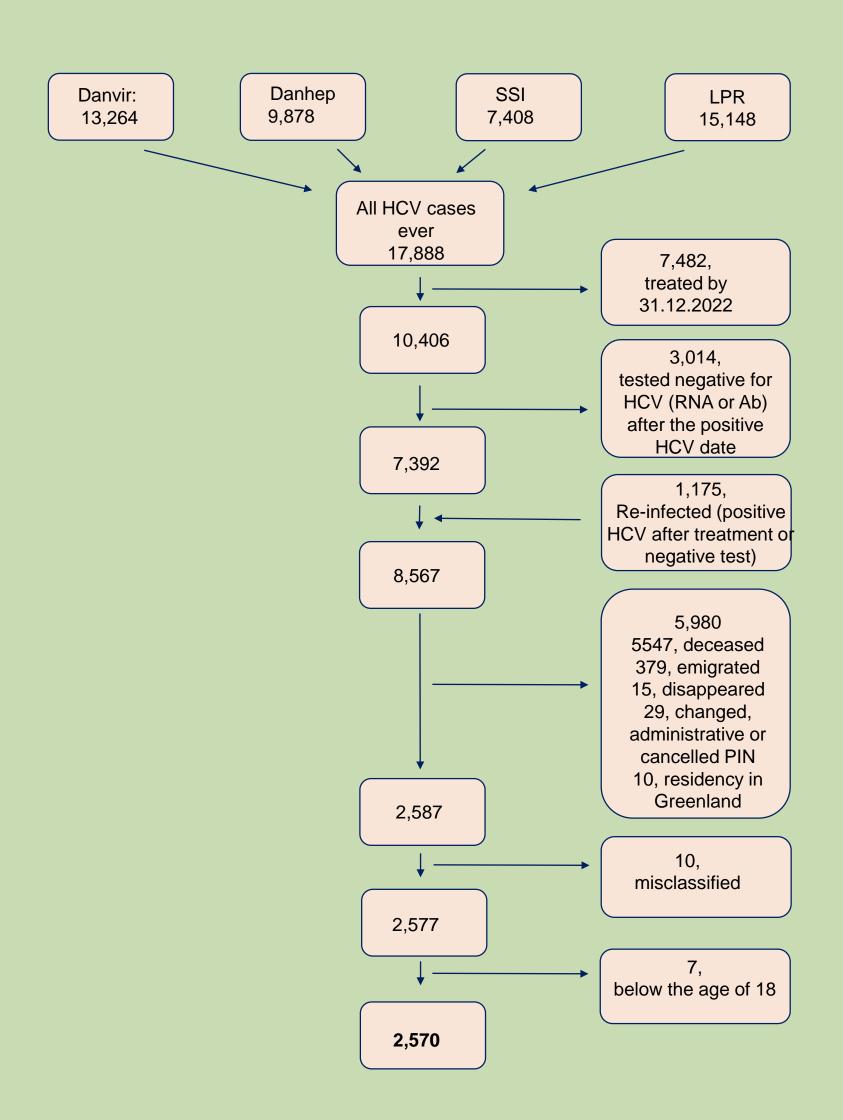
This enabled intensified outreach to test, diagnose, and treat HCV.

### The key question

What impact has this had on HCV prevalence in Denmark?

Closing this gap is critical for evaluating elimination progress and guiding future initiatives.

### Flowchart: The identified diagnosed population



Signe Freja Storgaard Signe.freja.storgaard.rsyd.dk Linked in : Signe Freja Storgaard

- Estimating HCV prevalence in Denmark by the end of 2022.
- Evaluating national progress toward WHO elimination targets.

## Methods

Diagnosed population: Consists of the individuals identified as diagnosed in the data sources. And the "hidden" population, estimate of individuals diagnosed but not recorded in any of the four registers (found by using Capture recapture analysis)

#### 4 data sources:

- Laboratory register
- Clinical register
- National Patient Register (LPR)
- Statens Serum Institut (SSI)

<u>Undiagnosed population:</u> Estimates based on multiple published and unpublished sources Data from outreach-testing initiatives reporting the diagnosed fraction of newly detected HCV cases

Identified diagnosed population, through the 4 registers: 2,570 HCV individuals

"Hidden" population from capture recapture analysis: 269 individuals (95% CI: 154–470)

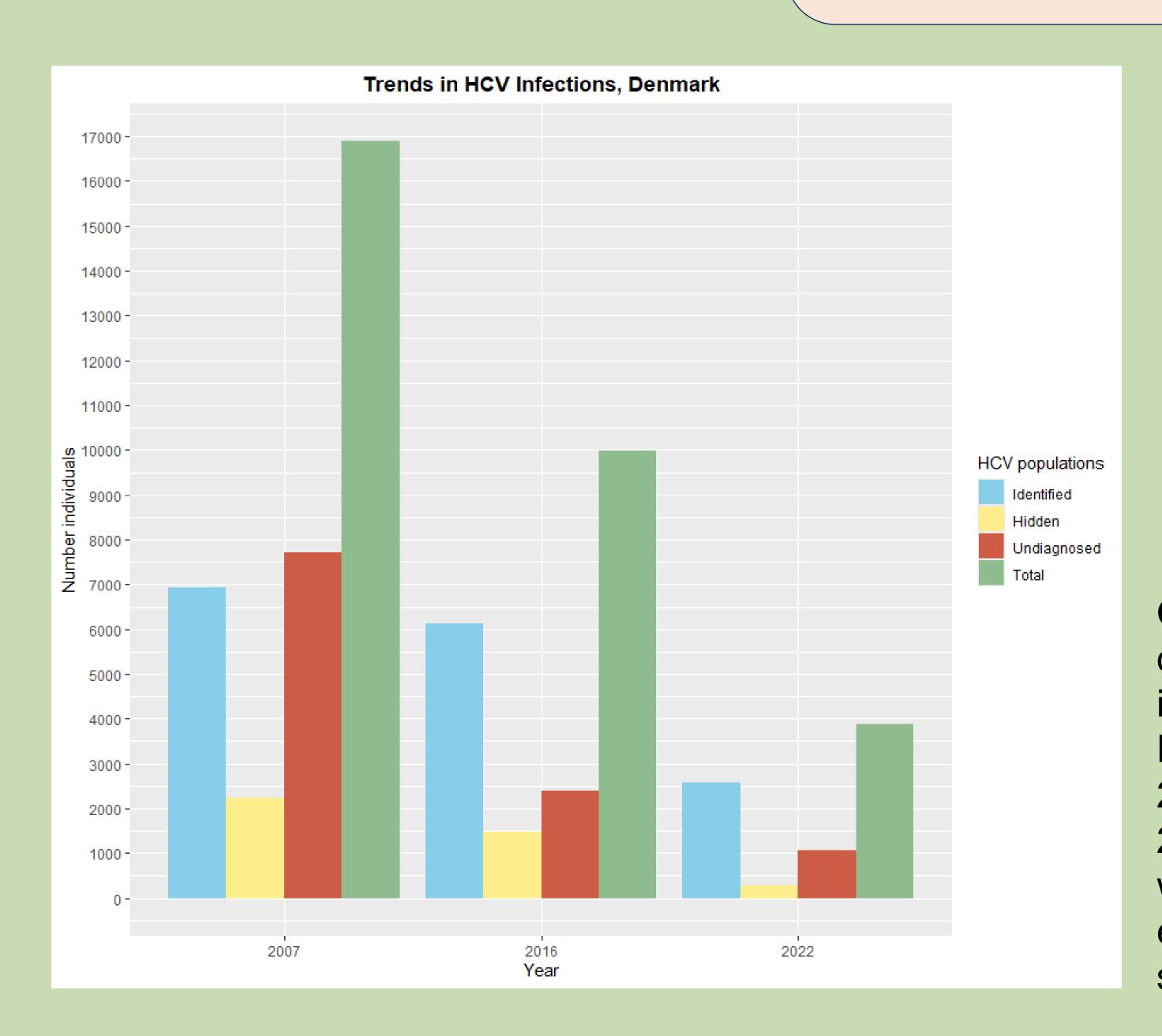
<u>Undiagnosed fraction:</u> averaged to be 36% corresponding to 1022 individuals

Total HCV population in Denmark by 2022: 3,861 corresponding to a HCV prevalence of 0.08%.

- Steadily HCV prevalence decrease in Denmark: 0.38% in 2007 to 0.21% in 2016, and down to 0.08% in 2022.
- WHO targets:
  - 61% (3,861/9,975) reduction in number of individuals infected
  - 64% diagnostic coverage

# Take-home message

Elimination in Denmark by 2030 is within reach – if we scale up efforts in testing, treatment, and high-risk groups.



**Graph:** Shows the decrease in HCV infections in Denmark, comparing 2007, 2016 and 2022. Estimates which all have been executed using the same method.