

# Is Italy on track to eliminate HCV infection by the year 2030?

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1 February 2024

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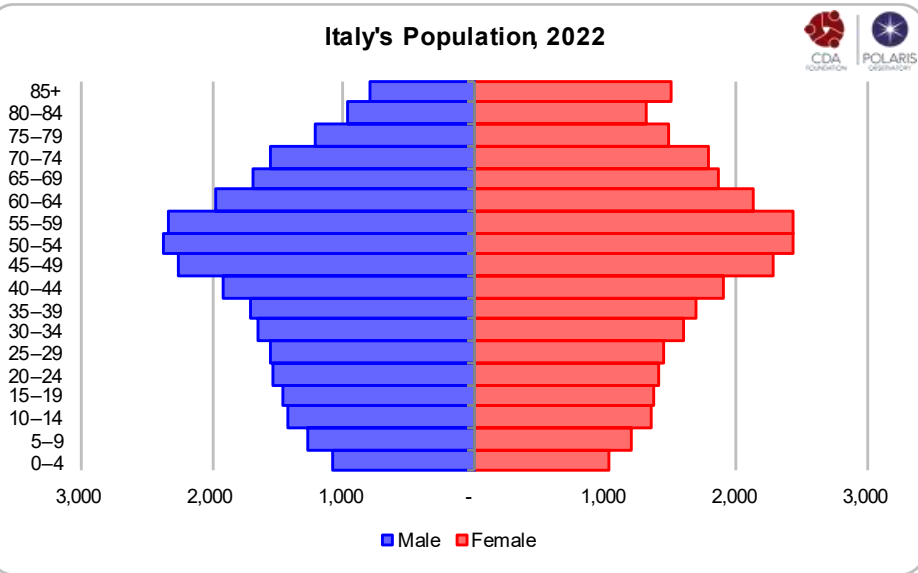


## To reach the 2030 elimination targets, Italy needs to diagnose 90% of all HCV infections and treat 80% of all diagnosed

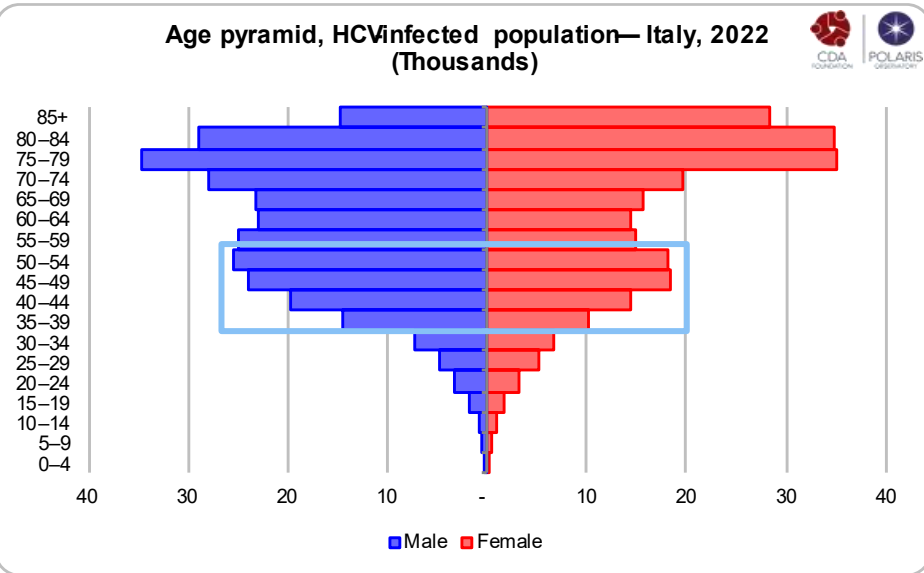
| Elimination targets   | Elimination of chronic HBV infection as a public health problem   |   | Elimination of chronic HCV infection as a public health problem  |   |
|---|---|---|--|---|
| <b>2030 GHSS relative reduction reference targets (compared to 2015)</b>          | <b>Incidence</b><br>95% reduction   | <b>Mortality</b><br>65% reduction   | <b>Incidence</b><br>80% reduction  | <b>Mortality</b><br>65% reduction                       |
| <b>HBV- and HCV-specific absolute prevalence, incidence and mortality targets</b> | <b>HBV EMTCT</b><br>≤0.1% HBsAg prevalence in ≤5 year olds <sup>a,b</sup><br><i>Additional target: ≤2% MTCT rate (where use of targeted HepB-BD)<sup>c</sup></i>  | <b>Annual mortality<sup>g</sup> (HBV)</b><br>≤4/100 000   | <b>Annual incidence (HCV)</b><br>≤5/100 000<br>≤2/100 (PWID)   | <b>Annual mortality<sup>g</sup> (HCV)</b><br>≤2/100 000 |
| <b>Programmatic targets<sup>d</sup></b>   | <p><b>Countries with universal HBV vaccine birth dose (BD)</b><br/>≥90% HepB3 vaccine coverage<br/>≥90% HepB timely hepatitis B BD (HepB-BD) coverage<sup>e</sup></p> <p><b>Countries with targeted HBV vaccine birth dose (BD)</b><br/>≥90% HepB3 vaccine coverage<br/>≥90% coverage of those infants at risk with targeted HepB-BD<br/>≥90% coverage of maternal antenatal HBsAg testing<br/>≥90% coverage with antivirals for those eligible<sup>f</sup></p> | <p><b>Testing and treatment</b><br/>≥90% of people with HBV diagnosed<br/>≥80% of people diagnosed with HBV and eligible for treatment are treated<sup>h</sup></p> <p><b>Prevention</b><br/>≥90% HepB3 vaccine coverage<br/>≥90% HepB-BD coverage</p> | <p><b>Testing and treatment</b><br/>≥90% of people with HCV diagnosed<br/>≥80% of people diagnosed with HCV are treated<sup>g</sup></p> <p><b>Prevention</b><br/>0% unsafe injections<br/>100% blood safety<br/>300 needles/syringes/PWID/year</p> |   |

# We need to expand screening to the older age groups to diagnose 90% of all HCV infections and meet the WHO targets

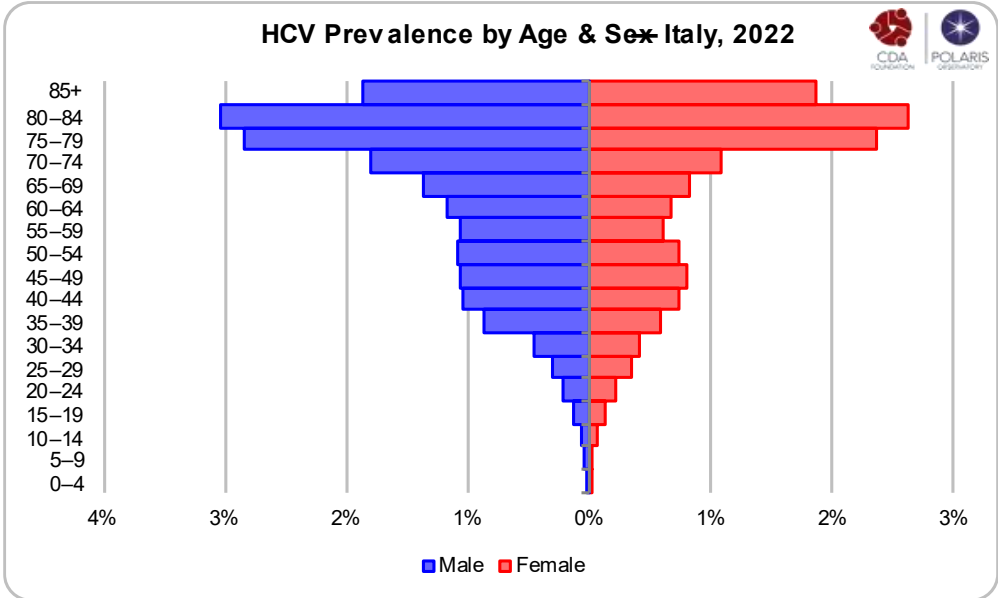
Italy's Population, 2022



Age pyramid, HCVinfected population— Italy, 2022 (Thousands)

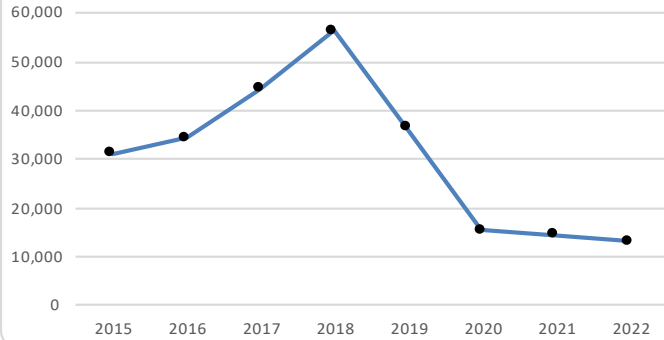


HCV Prevalence by Age & Sex Italy, 2022

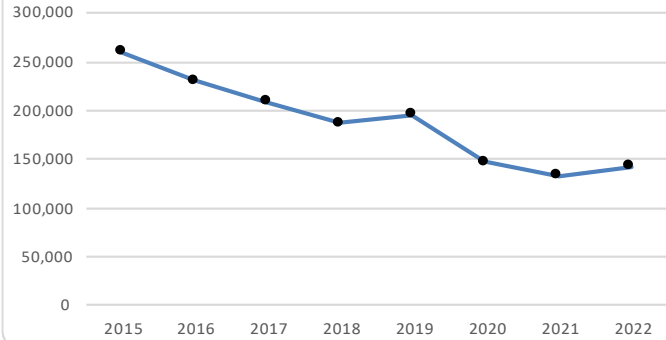


# The drop in the number of treated patients is being seen in every major country

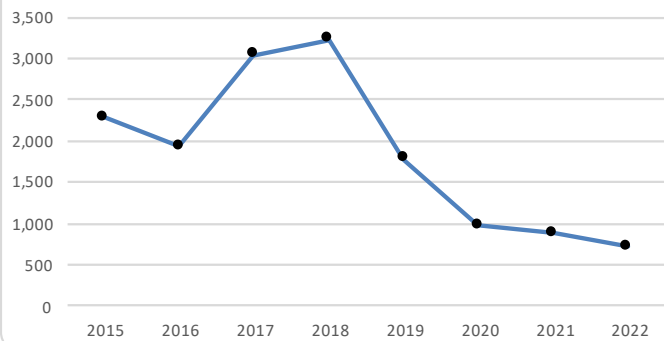
Number of HCV Treated Patients - Italy



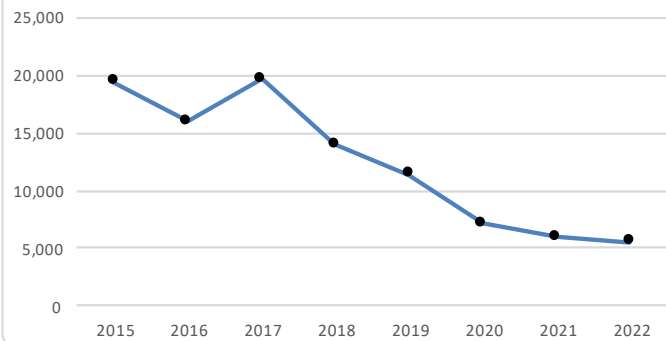
Number of HCV Treated Patients - U.S.



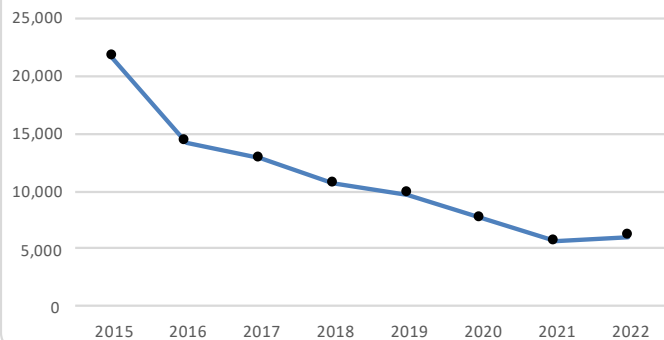
Number of HCV Treated Patients- Switzerland



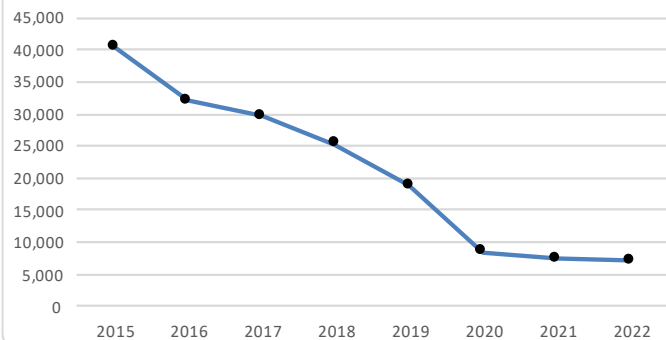
Number of HCV Treated Patients - France



Number of HCV Treated Patients - Germany



Number of HCV Treated Patients - Spain



The sustained high number of treated patients in Italy is indicative of a higher infection rate than France, Germany & Spain.

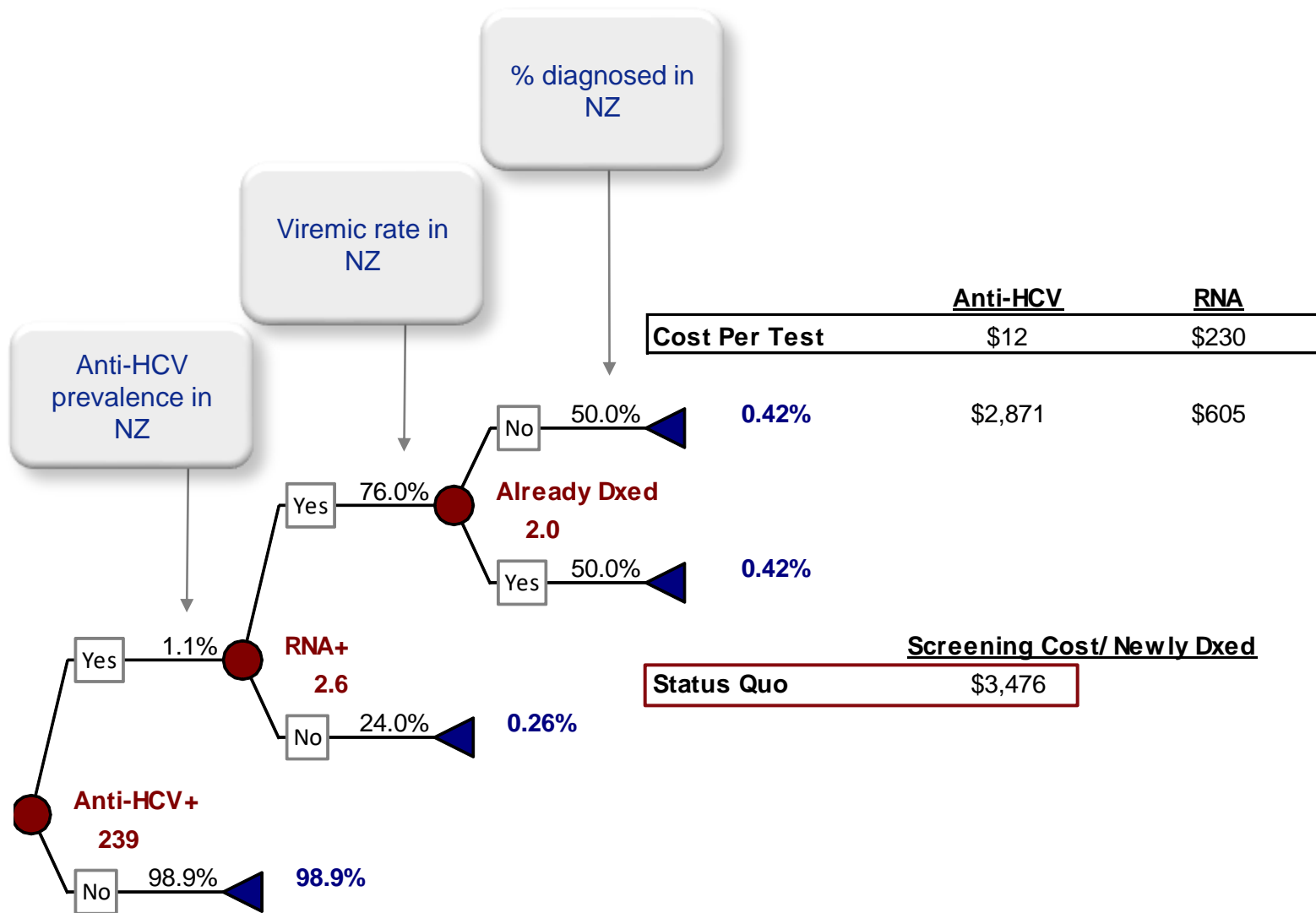
Linking diagnosed HCV individuals to care is a major problem in every country.

## In the US, 65-73% of all diagnosed HCV patients, with treatment coverage, are lost to follow up within one year of being diagnosed

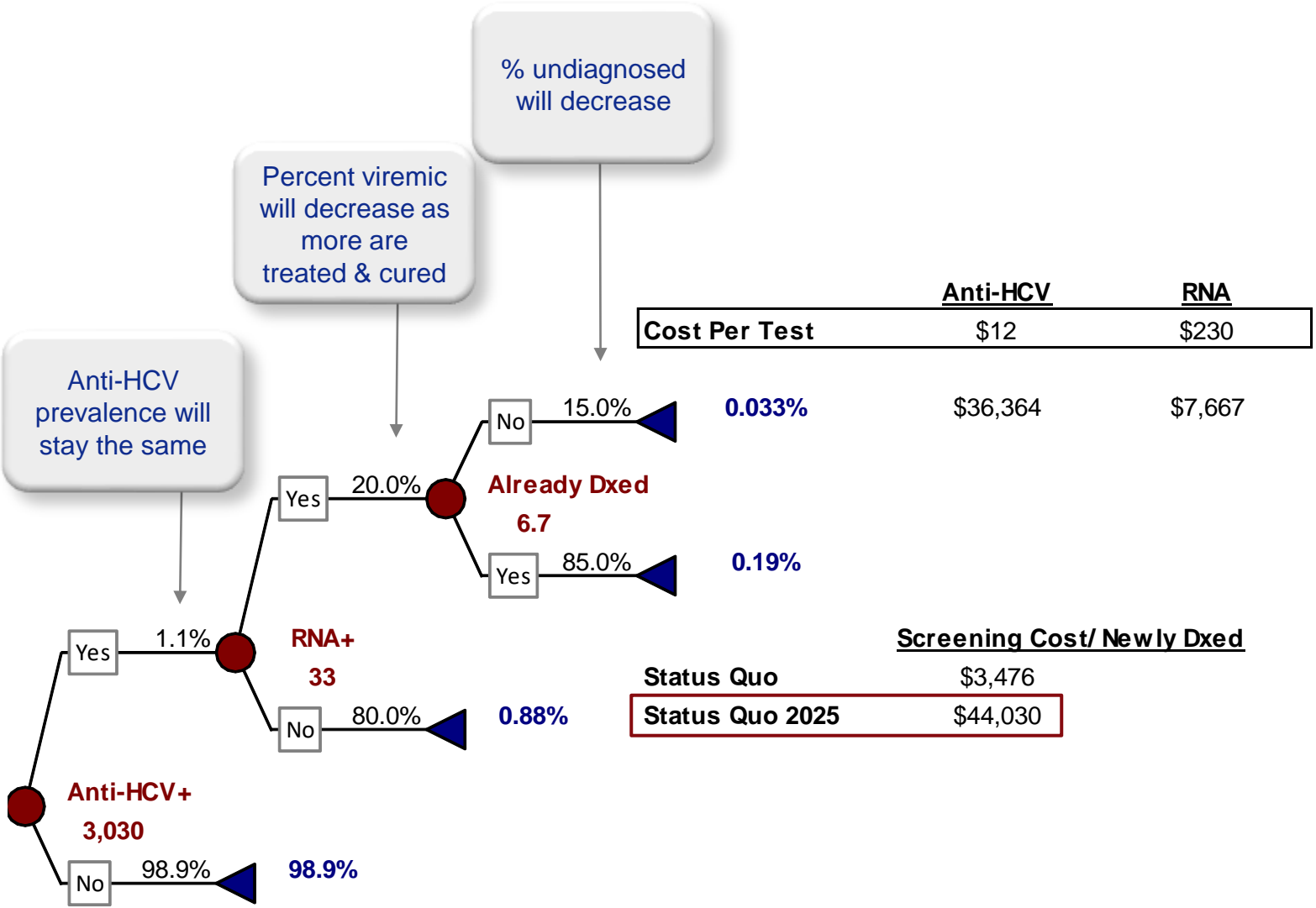
**Results:** The prevalence of DAA treatment initiation within 360 days of the first positive HCV RNA test result among Medicaid, Medicare, and private insurance recipients was 23%, 28%, and 35%, respectively; among those treated, 75%, 77%, and 84%, respectively, initiated treatment within 180 days of diagnosis. Adjusted odds of treatment initiation were lower among those with Medicaid (aOR = 0.54; 95% CI = 0.51–0.57) and Medicare (aOR = 0.62; 95% CI = 0.56–0.68) than among those with private insurance. After adjusting for insurance type, treatment initiation was lowest among adults aged 18–29 and 30–39 years with Medicaid or private insurance, compared with those aged 50–59 years. Among Medicaid recipients, lower odds of treatment initiation were found among persons in states with Medicaid treatment restrictions (aOR = 0.77; 95% CI = 0.74–0.81) than among those in states without restrictions, and among persons whose race was coded as Black or African American (Black) (aOR = 0.93; 95% CI = 0.88–0.99) or other race (aOR = 0.73; 95% CI = 0.62–0.88) than those whose race was coded as White.

Even after removing HCV treatment restrictions and reimbursing treatment, most HCV patients are lost to follow up.

# A patient registry is very important for an HCV elimination program to prevent testing the same people again and again – Example: New Zealand

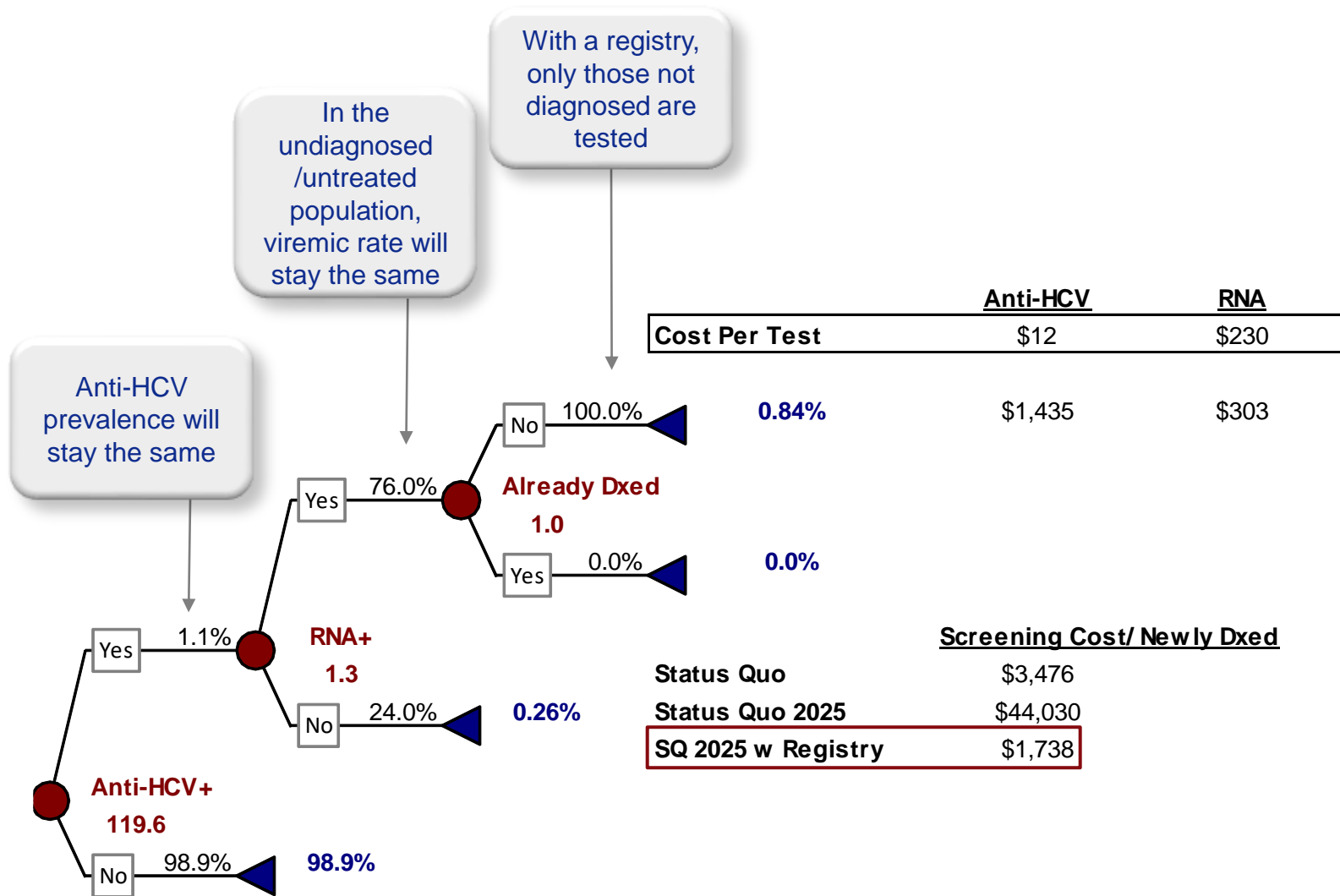


# Without a registry, the cost of screening will increase exponentially as viremic rate and percent undiagnosed decreases





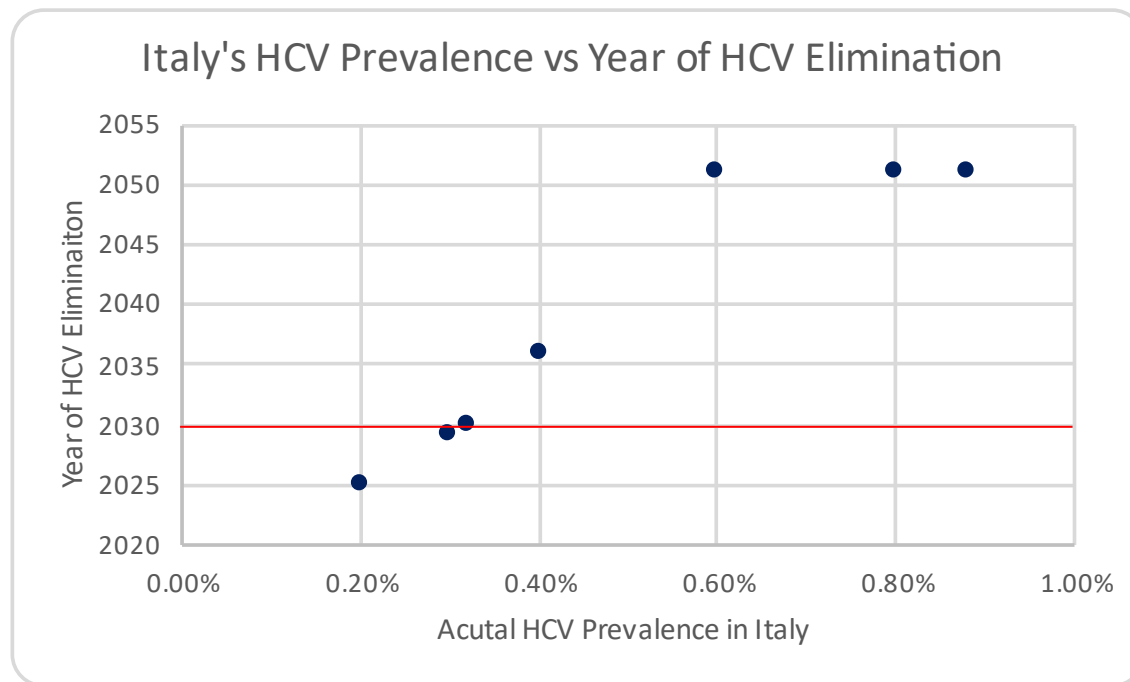
# A robust patient registry can reduce screening costs significantly





## What if HCV prevalence in Italy is lower than we have forecasted?

- If we continue to diagnose 3,500 people per year and treat 13,000 people per year, the prevalence must be  $<0.32\%$  to reach the WHO 2030 elimination targets.



An expanded screening program can be used to determine a more accurate estimate of HCV prevalence in Italy.

## Conclusions:

1. Italy can and will achieve the 2030 WHO elimination targets.
2. We recommend expanding screening to the older age groups.
3. We recommend putting in place a linkage to care program to get diagnosed patients on treatment.
4. Create a patient registry to test all adults only once.
5. Recommendations 2 & 4 can also result in a better estimate of HCV prevalence by age.
6. A better estimate of HCV prevalence in Italy can help us determine how quickly Italy will meet the WHO elimination targets.