

Hepatitis C in the Emergency Department (ED): Screening and Linkage to Care for Hepatitis C Infection in the ED using Point-of-care Testing

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Disclosures

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- Advisory board member - Gilead, Abbvie, Bristol-Myers Squibb (BMS), Merck, and Roche Diagnostics
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The key challenge for eliminating HCV in Australia is
**now engagement of
marginalised individuals not
currently in care**

New models of care for HCV are needed



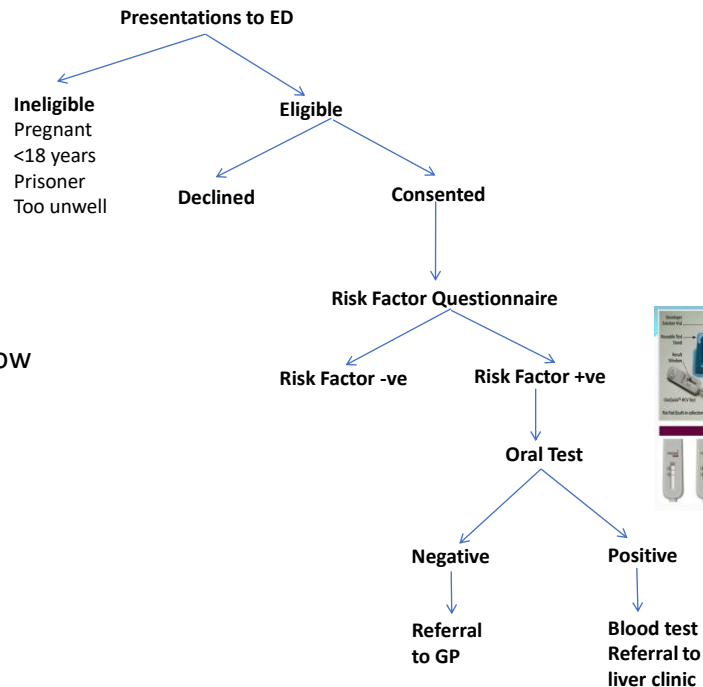
Aims

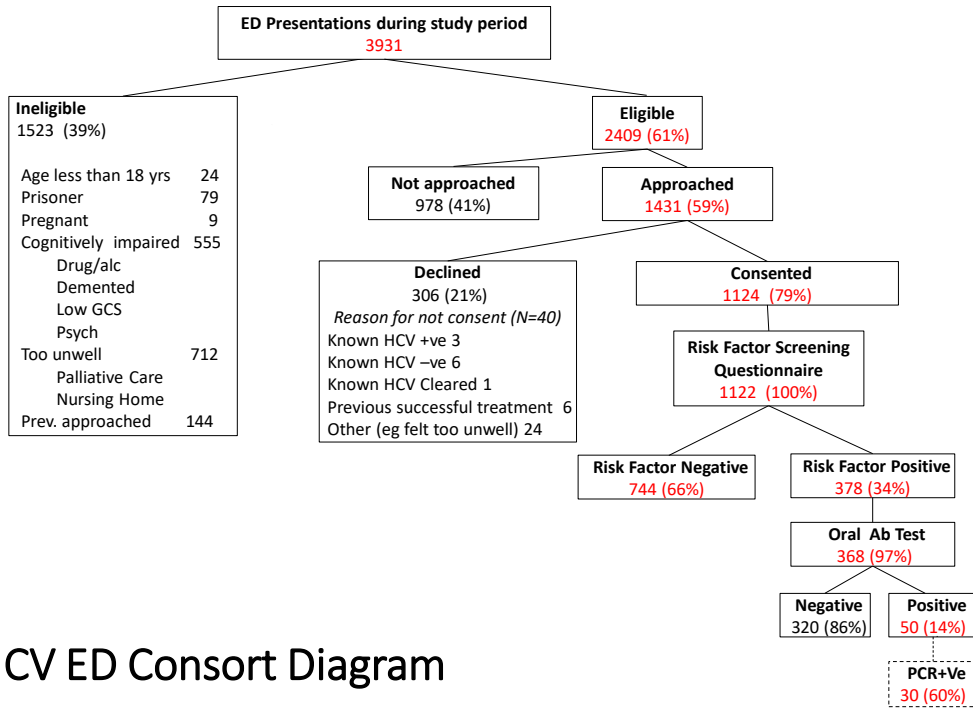
- To identify the **prevalence** and **risk factors** for hepatitis C in people presenting to a busy metropolitan ED
- To evaluate the efficacy of **linkage to outpatient liver clinic for DAA treatment** among people identified to be positive for anti-HCV in the ED

Methods

3 month recruitment window
 Mon-Fri 9am-9pm
 6 hour shifts

 8 x Sat/Sun
 24 hour period
 12 hour shifts





HCV ED Consort Diagram

Risk factors for HCV (N=368)

| | Anti-HCV +ve (N=50) | Anti-HCV -ve (N=318) | P-value |
|---|------------------------|-------------------------|------------------|
| Male gender | 72% | 59% | 0.06 |
| Age (mean) | 45 yrs | 47 yrs | 0.25 |
| Country of birth – Australia vs. overseas | 84% | 67% | 0.01 |
| Indigenous | 10% | 2% | 0.01 |
| Preferred language - English | 96% | 98% | 0.63 |
| Homeless | 24% | 3% | 0.00** |
| Previous test for HCV (test positive – recall) | 88% (68%) | 37% (1%) | 0.00** 0.00** |
| PWID | 88% | 14% | 0.00** |
| Tattoos/piercings | 46% | 23% | 0.00** |
| Prison | 60% | 16% | 0.00** |
| Needle-stick injury | 28% | 30% | 0.73 |
| Blood product recipient pre-1990 | 6% | 14% | 0.14 |
| Previous HIV test | 12% | 3% | 0.006 |
| Mother HCV + | 4% | 3% | 0.67 |
| Household contact HCV + | 46% | 21% | 0.00** |
| Born overseas – high prevalence country | 0% | 3% | 0.37 |
| Lived overseas – high prevalence country > 2 yrs | 0% | 6% | 0.09 |
| Lived in a refugee camp | 0% | 1% | 1.00 |
| Invasive procedure high prevalence country | 0% | 1% | 1.00 |

*p<0.005

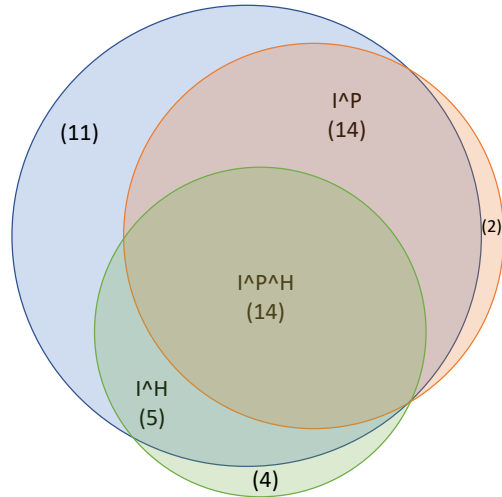
Risk factors among anti-HCV +ve (N=50)

All had one of the following 3 Risk Factors:

- I PWID (N=44)
- P Prison (N=30)
- H Household contact HCV +ve (N = 23)

Additional Risk Factors:

- Tattoos/Piercings (N=23)
- Needle-stick injury (N=14)
- Previous HIV test (N=8)
- Blood product pre-1990 (N=3)
- Mother HCV+ (N=2)
- Born / lived / invasive procedure in a high prevalence country (N=0)



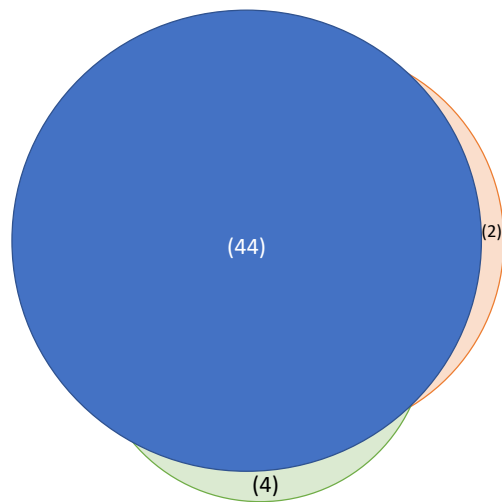
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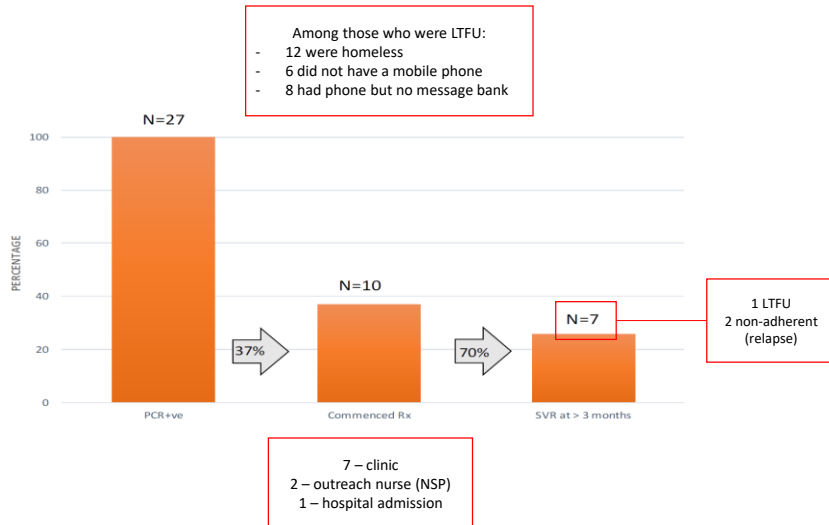
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Cascade of Care – HCV RNA positive subjects (n=27)



Conclusions

- ED visits are an opportunity to screen for HCV (anti-HCV)
 - 34% - reported a risk factor for HCV
 - 14% anti-HCV +
 - 8% - reported risk factor = IDU
 - 51% - anti-HCV +
 - 4%* - anti-HCV positive (consented participants)
- A single screening question identified most anti-HCV positive participants
 - “Have you ever injected drugs?”
 - 8% of those screened
 - detected 90% of total anti-HCV + participants
 - Suitable as a triage question for screening in the ED
- Linkage to the hospital clinic and treatment was challenging
 - Novel models of care are needed; many participants were homeless

