

# Impact of rapid point-of-care hepatitis C testing in needle and syringe services for people who inject drugs: the RAPID EC Study

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On behalf of Dr Jess Howell

Burnet Institute & St Vincent's Hospital Melbourne



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Medical Research. Practical Action.

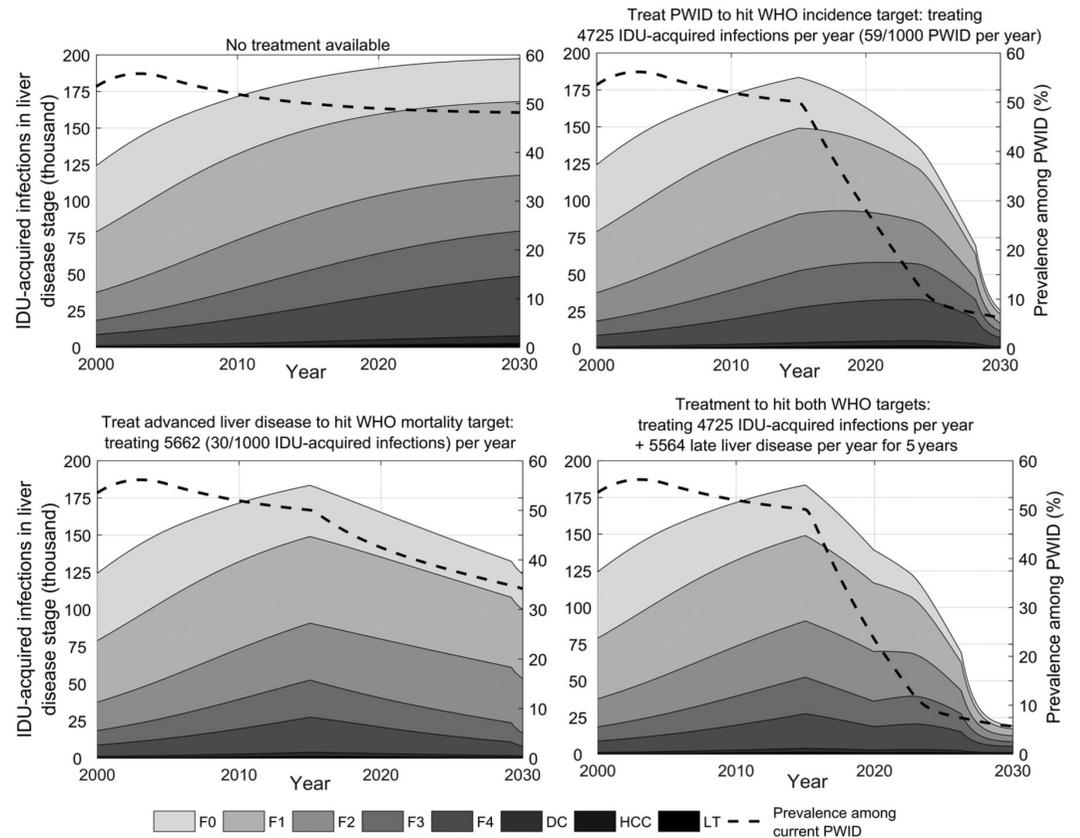
## Disclosures

- Investigator- initiated research grants from Gilead Sciences, AbbVie, Merck
- Honoraria from Gilead Sciences for educational purposes

# Achieving hepatitis C elimination

- People who inject drugs (PWID) are a key target population
- Need to increase number of PWID tested and treated for hepatitis C
  - Reduce new infections
  - Reduce morbidity and mortality

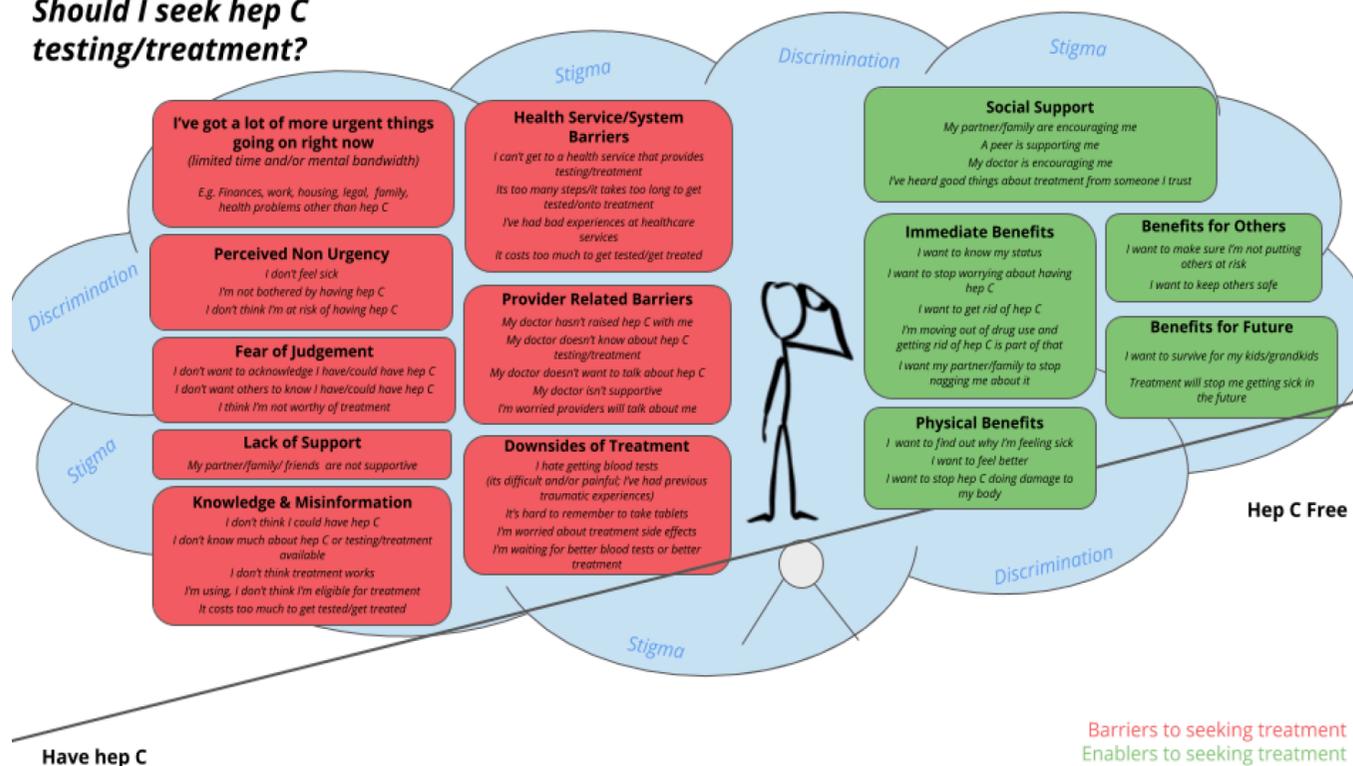
HCV-related liver disease among current and former PWID in Australia  
Projected outcomes 2015–2030 under different treatment scenarios



Scott N, JGH 2016

# Barriers to the HCV cascade of care

Should I seek hep C testing/treatment?



- Stigma
- Health service barriers
- Multi-step process of current HCV care cascade

Gold et al. Tailoring Hepatitis C Health Promotion for People Who Inject Drugs. **POSTER #131**  
Madden et al PLoSOne 2018;13(11); Goutzamaniset al BMC Infect Dis 2018 18(1);  
Chong et al Hepatitis C treatment –Peer insights on barriers and motivations to DAA treatment uptake.

# Aim

- To assess the impact of a HCV POC testing on linkage to care and HCV treatment uptake
  - Three community clinics with NSPs

# Methods - Rapid EC Pilot Study

- Three community clinics with busy NSPs in Melbourne
- Clients offered HCV POC antibody and RNA testing (visit 1)
  - NSP worker, community health worker or clinic nurse
  - Standard of care bloods also taken
  - Education/counselling
- Follow up visit booked - results, APRI, +/- Fibroscan (visit 2)
- Appt made with GP for HCV treatment

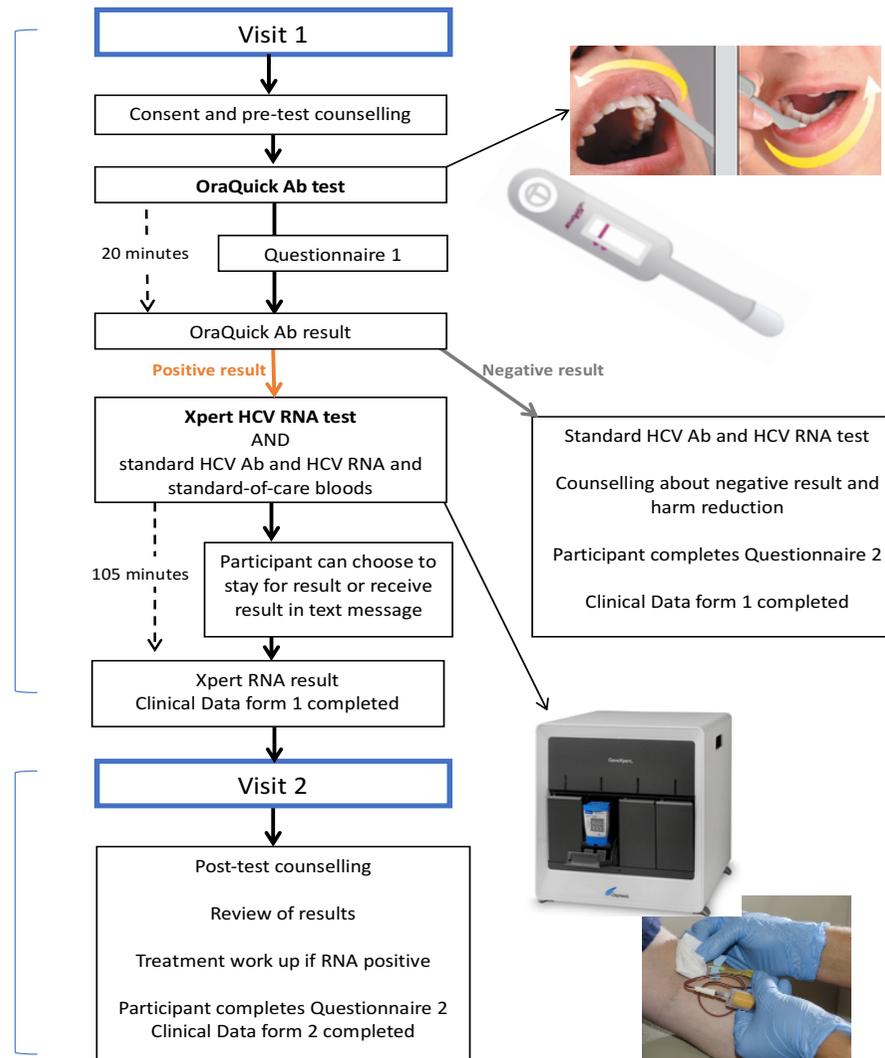
# Methods

## VISIT 1

**HCV POC testing  
+ Routine blood  
tests (laboratory)**

## VISIT 2

**Assessment  
Linkage to care  
For treatment**



# Post Rapid EC study

- 6 months post pilot - follow up clients to assess impact of pilot study
- Retrospective chart review
  - DAA prescription given
  - DAA started
  - DAA completed
  - SVR12 bloods taken
  - CURE
- Confirmed by PBS and MBS data

# Results

- 174 participants consented to the study and had HCV POC testing

Table 1: Participant Characteristics (n=174)	
Median age (IQR)	41 (35 – 48)
Male gender	118 (67%)
Injecting drug use in last 6 months	154 (94%)
Previous incarceration	125 (74%)
Homeless or unstable accommodation	54 (31%)
Any sharing of any injecting equipment in last 6 months	93 (53%)
Previous hepatitis C test	167 (97%)
Last hepatitis C test result PCR positive	73 (44%)
Previous hepatitis C treatment	37 (22%)

# Results

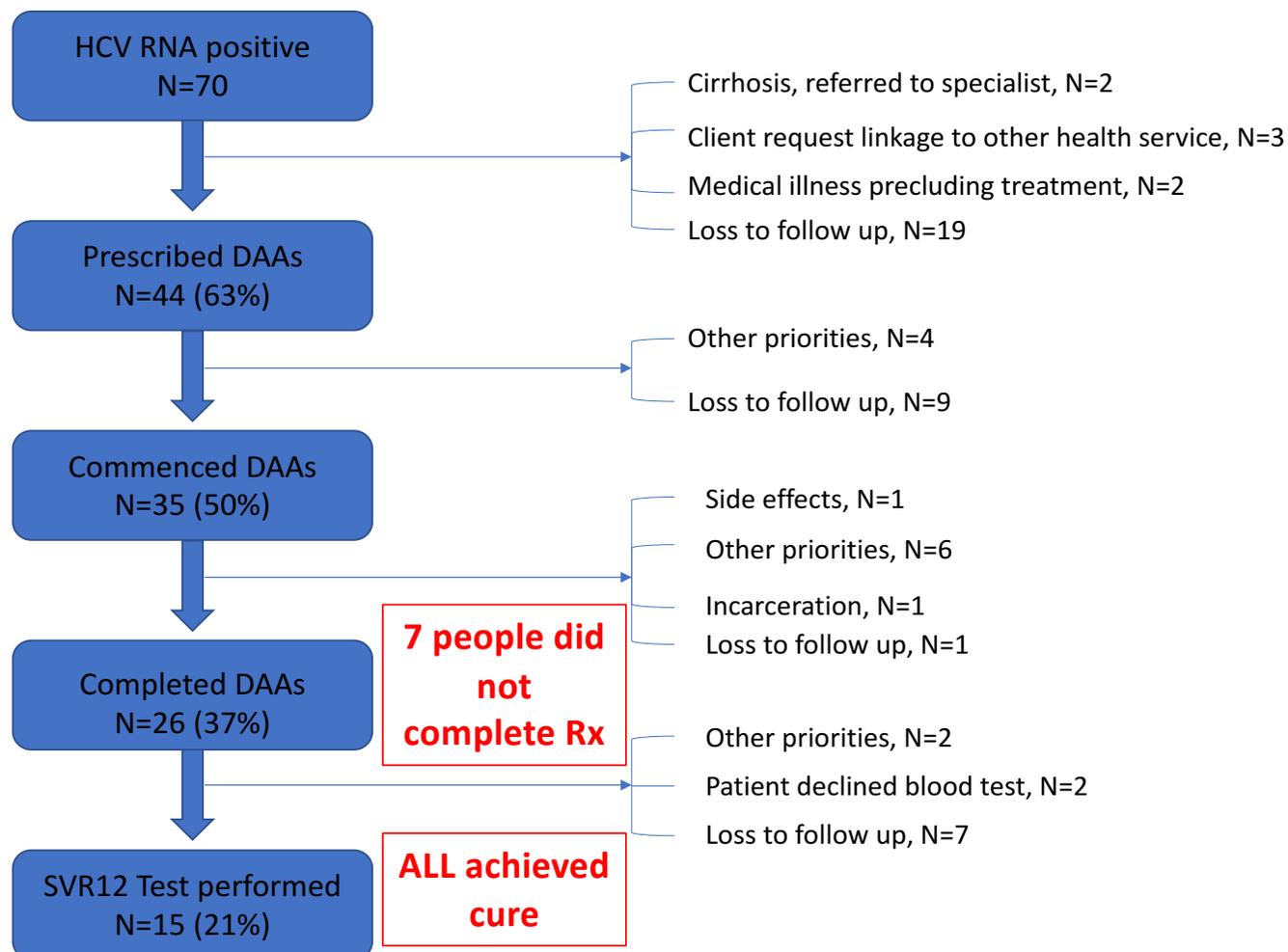
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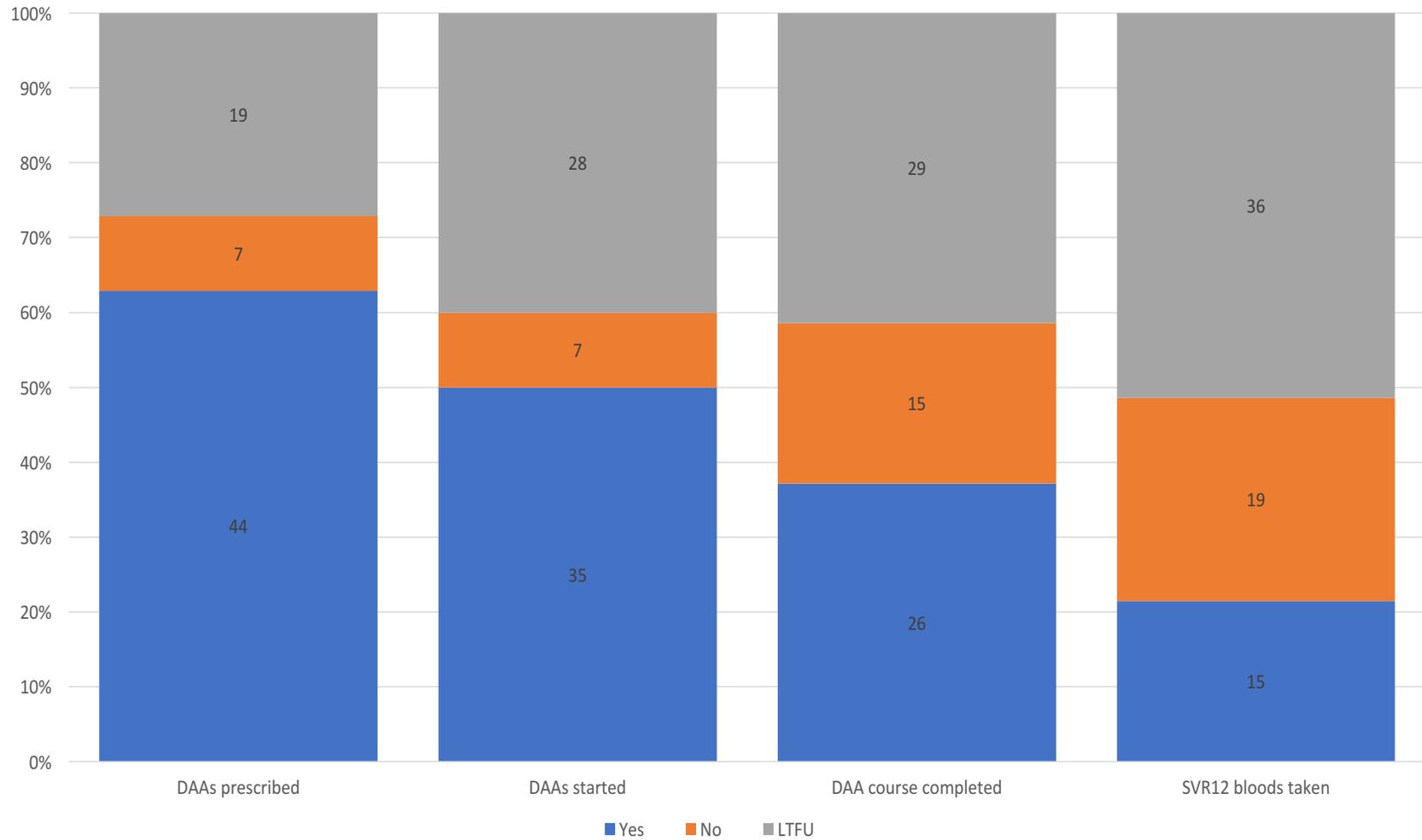
# Testing outcomes

- 174 participants had HCV POC testing
- 150 (86%) HCV Ab positive
- 140 (93%) had a POC HCV RNA test
- 70 (40%) were HCV RNA positive

# Flow through the HCV cascade of care at 6 months : Reasons lost to follow up



# Flow through the HCV cascade of care at 6 months: people who are HCV RNA positive



# Results: Associations with DAA uptake

- Treatment initiation highest at Clinics A (76%) and B (71%) compared with Clinic C (27%)
  - $P < 0.001$
  - Clinic A and B: NSPs were embedded within community clinics
  - Clinic C: NSP co-located but separate to the community clinic
- Other associations with DAA uptake:
  - Higher education level ( $p = 0.006$ )
  - Homelessness ( $p = 0.042$ )
  - Current opiate substitution therapy ( $p = 0.049$ )

**Table 2: Crude (unadjusted) associations with being prescribed HCV DAA treatment**

	Prescribed DAAs (n=44)	Not prescribed DAAs (n=26)	p-value*
<b>Site</b>			
A	16(36%)	5 (15.4%)	<b>0.014</b>
B	18 (40.9%)	6 (23.1%)	
C	10(22.7%)	15 (57.7%)	
<b>Previous HCV test</b>	42 (95.5%)	26/ 26(100%)	0.526
<b>Previously treated for HCV</b>	6 (13.6%)	4 (15.5%)	0.560
<b>Age Category</b>			0.038
20-39 years	12 (27.3%)	17 (65.4%)	
≥40 years	31 (70.4%)0.014	9 (34.7%)	
<b>Gender</b>			0.614
Male	27 (61.4%)	18 (69.2%)	
Female	16 (36.4%)	8 (30.8%)	
<b>ATSI</b>	6/ 44 (13.6%)	8/ 26 (30.8%)	0.125
<b>Education level</b>			<b>0.006</b>
No schooling	1 (2.3)	1 (3.9%)	
Primary	5 (11.6%)	11 (42.3%)	
Secondary and above	37 (86.1%)	14 (53.9%)	
<b>Employment</b>			1.00
Not working	41 (95.4%)	25(96.2%)	
Working	2 (4.7%)	1 (3.9%)	
<b>Homeless</b>	31 (72.1%)	12 (46.2%)	<b>0.042</b>
<b>Hazardous Alcohol consumption</b>	22/ 44 (50%)	10/ 26 (38.5%)	0.707
<b>Injecting drugs in past month</b>	29/ 44 (65.9%)	22/ 26 (84.6%)	1.00
<b>Opiate substitution therapy</b>			<b>0.049</b>
Never	6/ 44 (13.6%)	1/ 26 (3.9%)	
Previous	11/ 44 (25%)	14/ 26 (53.9%)	
Current	26/ 44 (59.1%)	11/ 26 (29.7%)	
<b>Incarceration</b>	30/ 44 (68.2%)	21/ 26 (80.8%)	0.535

# Conclusions

- 6 months post HCV POC testing pilot over 2/3rds of PWID were linked to care and prescribed DAAs
- POC testing in NSPs and community clinics may be a novel tool to engage new clients in HCV testing and improve client retention in the care cascade
- Further studies are needed to determine how best to incorporate POC testing into existing models of care for people who inject drugs

# Acknowledgements

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