

# Reduction in the population prevalence of chronic HCV among people who inject drugs associated with major scale-up of DAA therapy in community drug services: real world data

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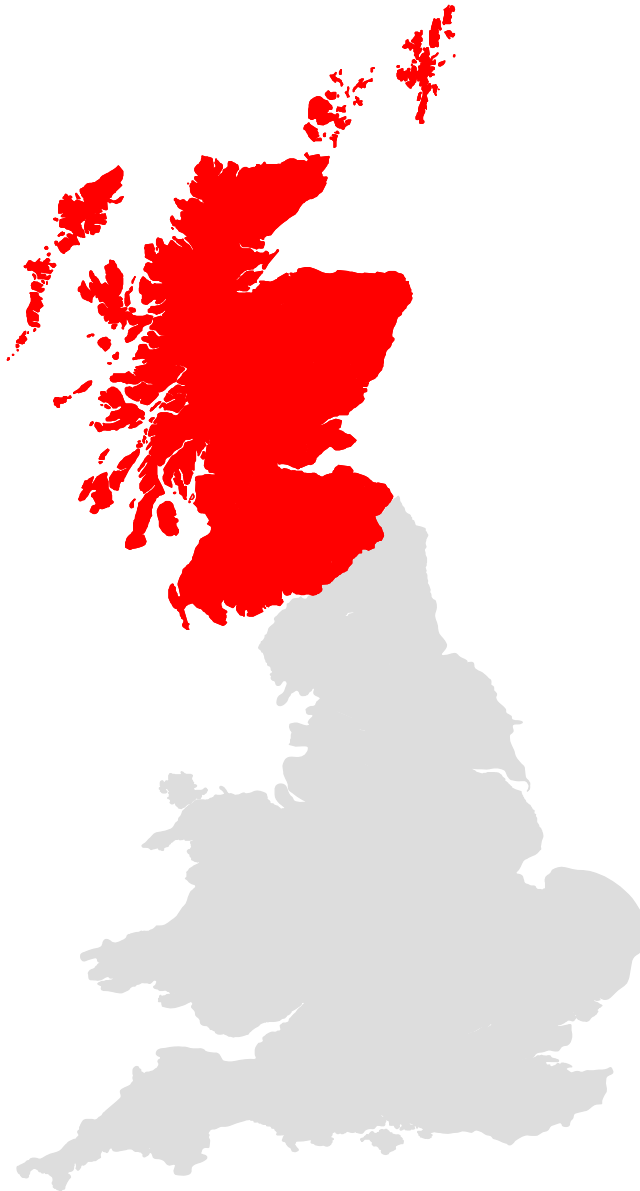
# Acknowledgments

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- Disclosure of interest:

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# Context: Scotland



<b>General population</b>	<b>5 million</b>
<b>Chronic HCV population</b>	<b>21,000 in 2018</b> (0.5% prevalence)
<b>% related to injecting drug use</b>	<b>~90%</b>
<b>PWID population</b>	<b>15,000-20,000</b>
<b>% with anti-HCV</b>	<b>~60%</b>

# Scottish Government Policy

## 2008- 2014

- Government invested Hepatitis C Action Plan
- **Treatment Targets:** 500 per year in 2008/09, rising to ~1250 by 2014/15

## 2015-2018

- **Treatment Targets :** 1500 per year
- Prioritisation based on disease stage (lifted in 2018)
- Aim to deliver therapy for most infected people in community settings (includes prisons)

## 2019-2024

- **Elimination strategy:** ≤5000 chronically infected people by 2024
- **Treatment Targets:** Average of 3,000 people each year from 2020



# Evaluation of rapid major scale-up of DAAs among PWID: the EPITOPe study

## NHS Tayside – the intervention site:

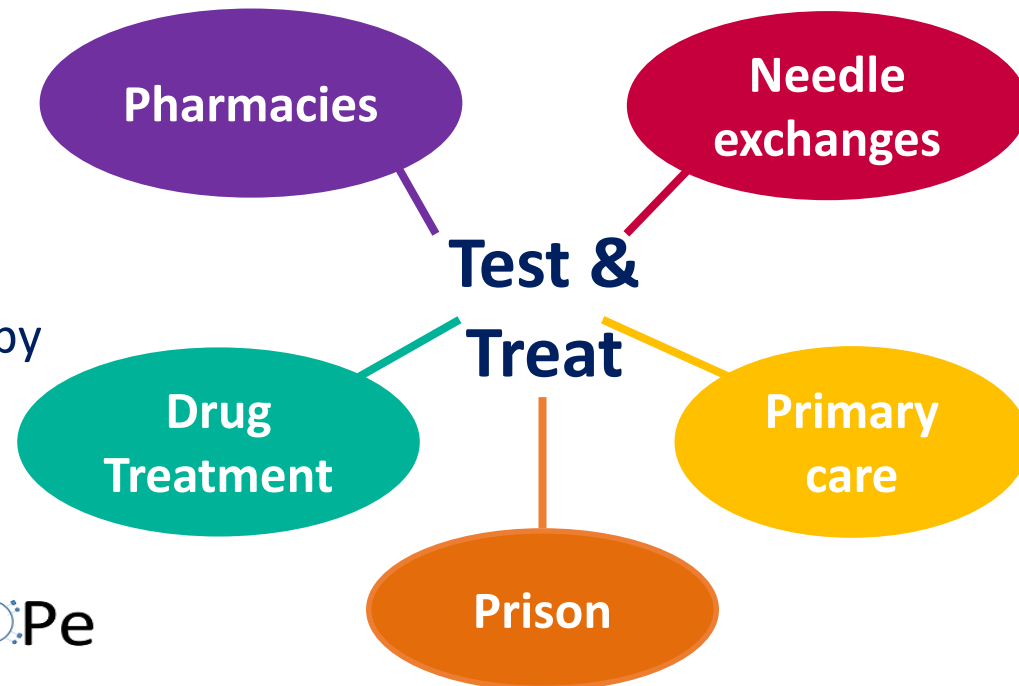
- Rapid & major scale-up of DAAs among PWID (500 over 2-3 years from 2017)
- Aim to reduce chronic HCV prevalence among PWID from 30% to <10%
- Testing (by services) & treatment (by nurses & pharmacists) in multiple community settings

### NHS Tayside

Popln: 400,000

PWID: 2,700

(800 with chronic HCV)



# Early scale-up of HCV therapies among PWID in Tayside



- Testing and treatment of PWID in needle exchange
- ~100 PWID treated during **2012 - 2016**



- Testing and treatment of PWID on opioid substitution therapy (OST) in pharmacies
- 100 PWID treated during **2016-2018**

## NHS Tayside

Popln: 400,000

PWID: 2,700

(800 with chronic HCV)



# Research question

- What is the early impact of the scale up of DAAs on the population prevalence of chronic HCV among PWID?



Evaluate using data from the  
Needle Exchange Surveillance  
Initiative (NESI)

# NESI: Background

- A bio-behavioural survey of people who inject drugs (PWID) - questionnaire & dried blood spot (DBS)

## Setting:

- Services that provide sterile injecting equipment across Scotland (mainland NHS Boards)

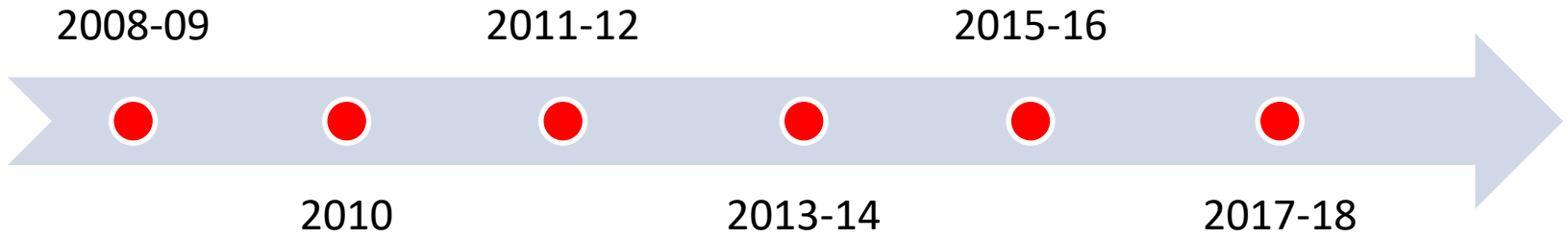
## Eligibility:

- Ever injected drugs (70-80% injected in the last 6 months)

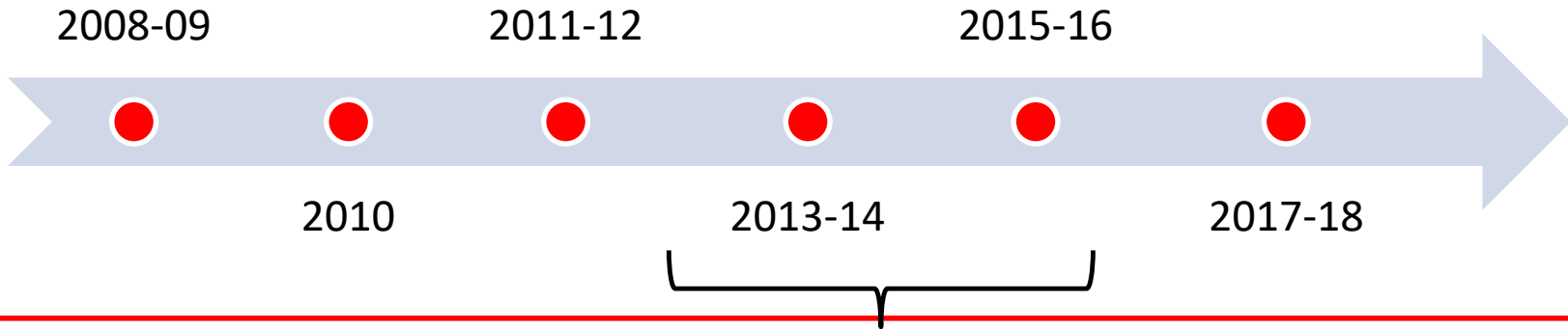
**Recruits between 2,000-2,500 participants per sweep (equivalent to ~10% of the population of PWID in Scotland)**



# NESI sweeps

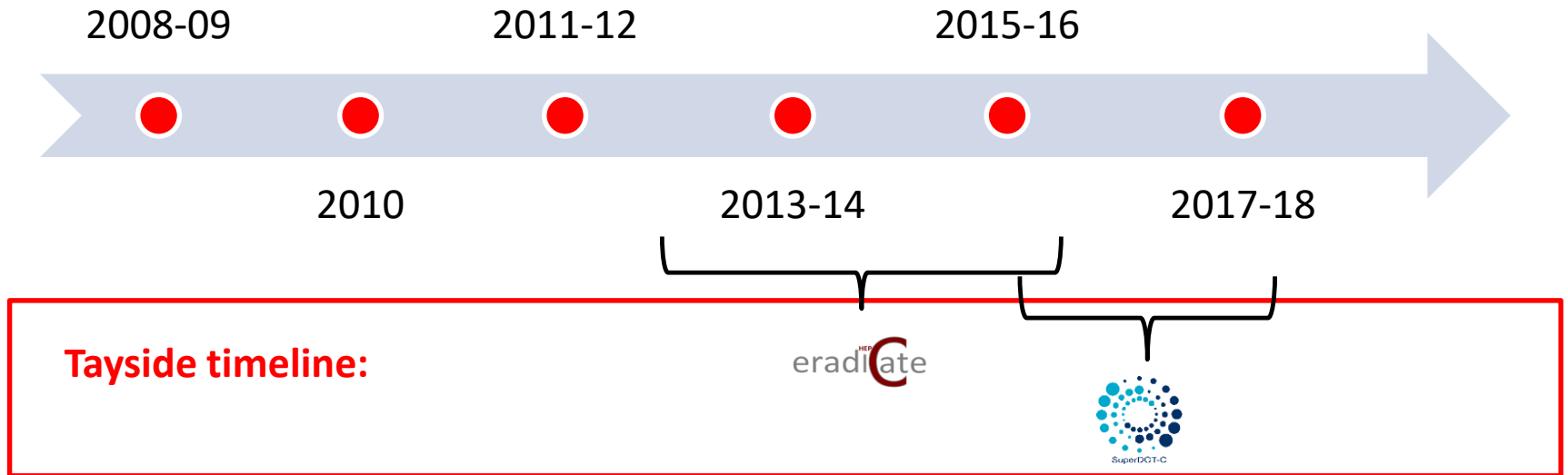


# NESI sweeps

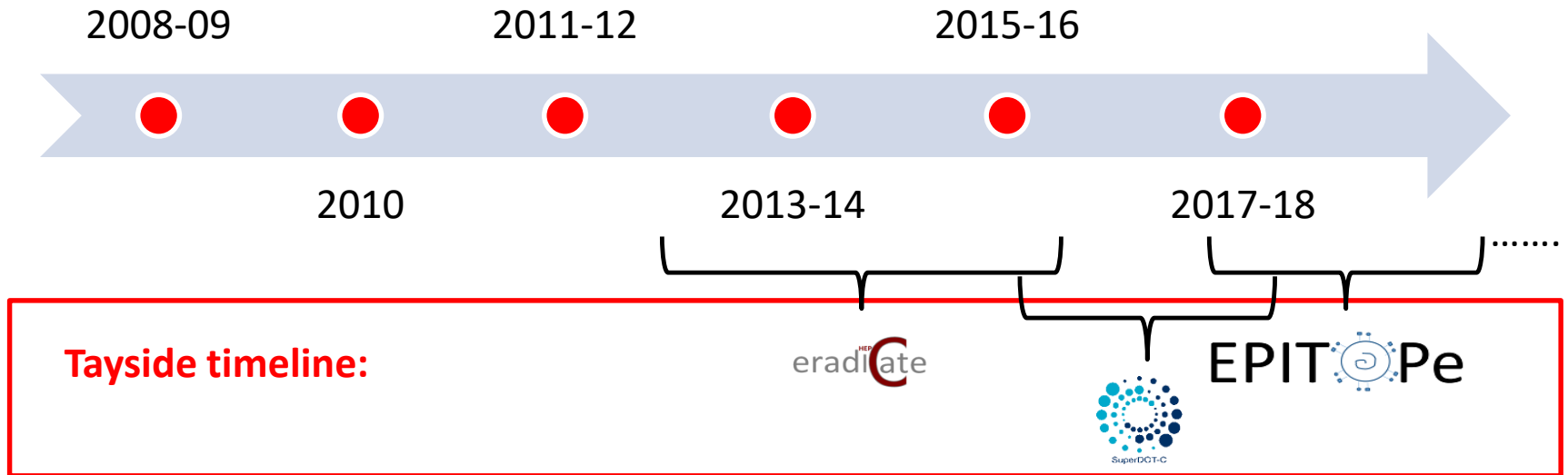


**Tayside timeline:**

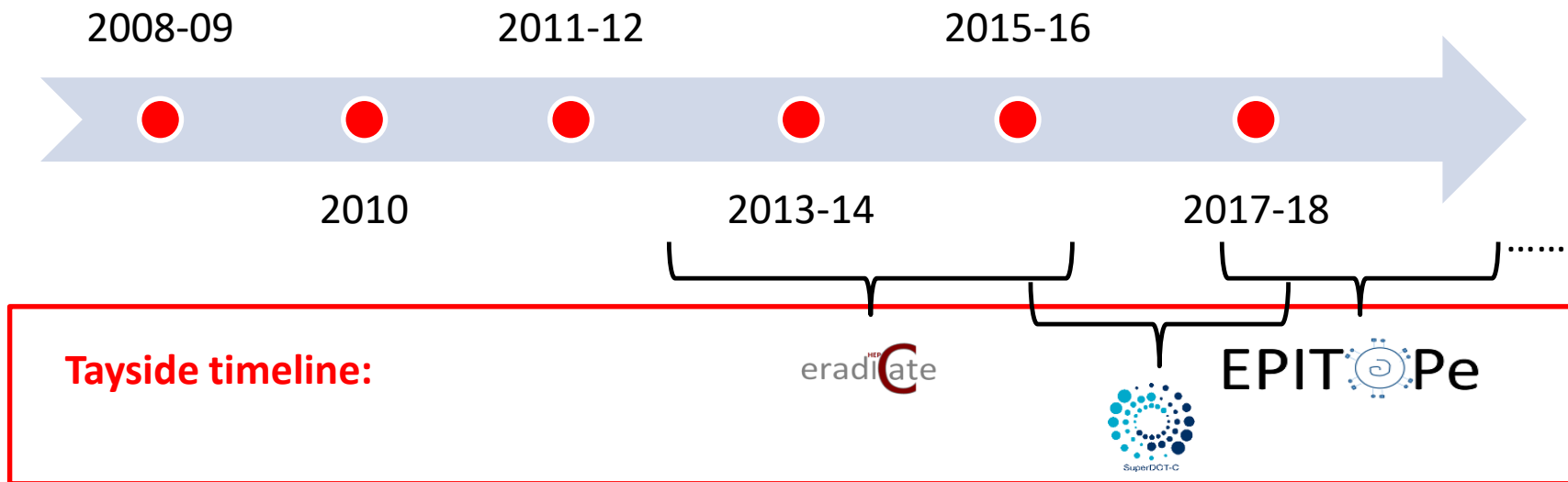
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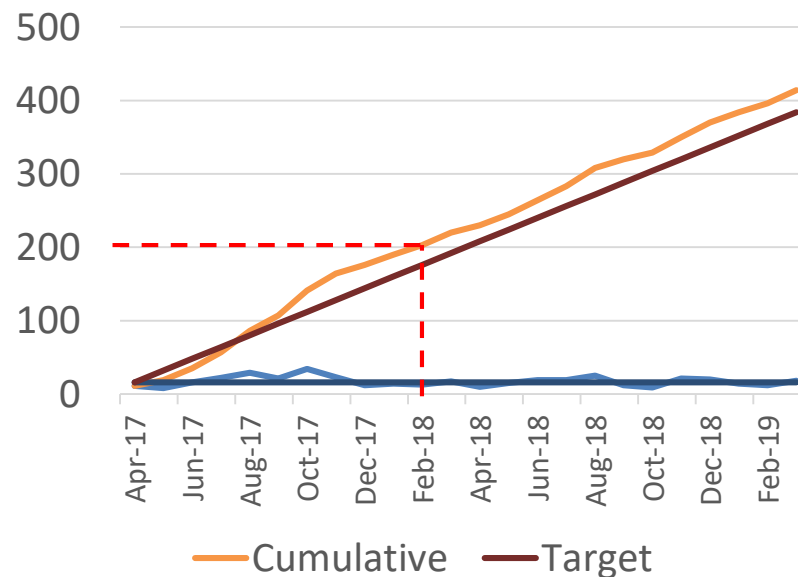
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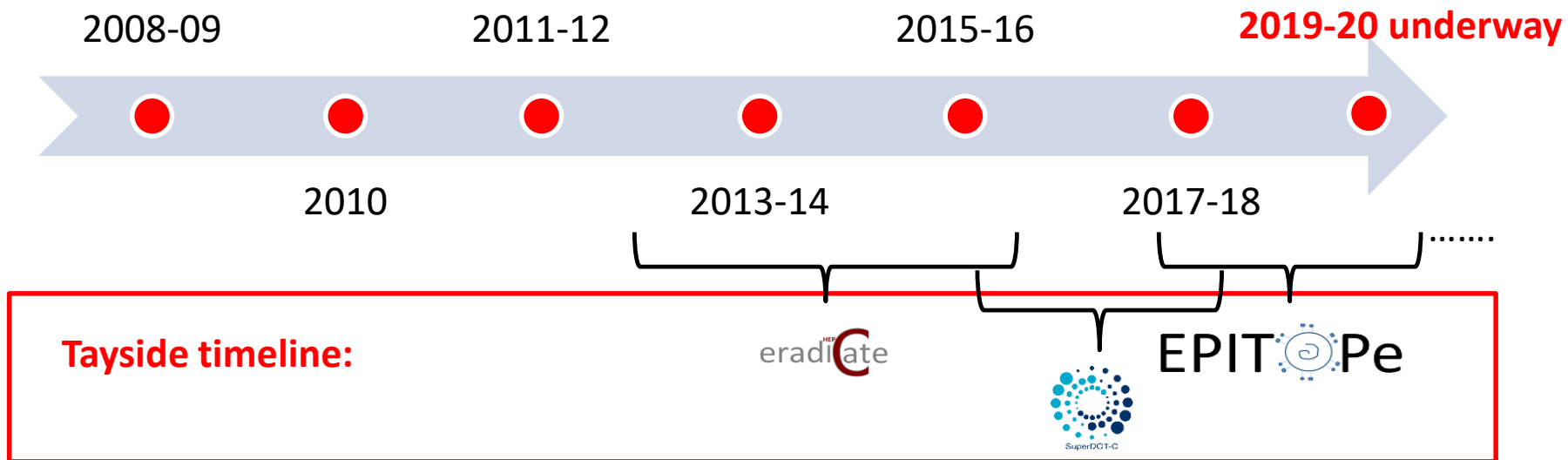
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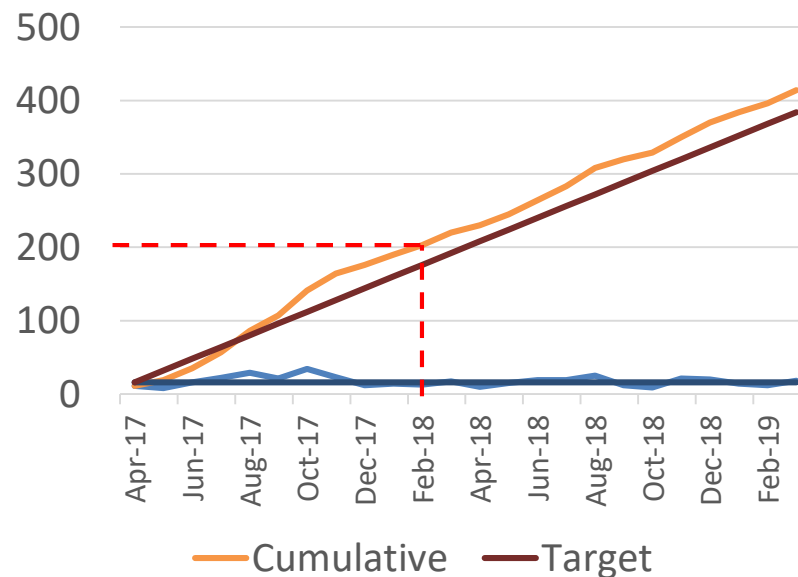
Approximately 40% of overall Epitope treatment target achieved in Tayside by the end of recruitment in the 2017-18 NESI sweep



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# Participants & demographics

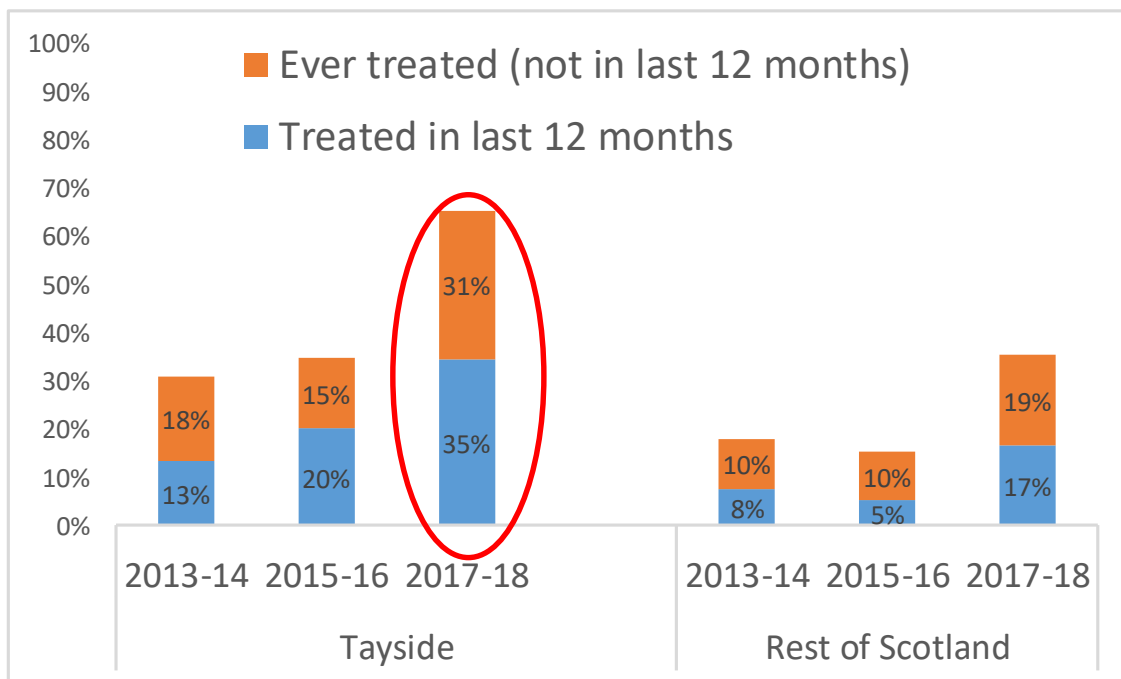
	2010	2011-12	2013-14	2015-16	2017-18
	<b>N=3168</b>	<b>N=2154</b>	<b>N=2344</b>	<b>N=2696</b>	<b>N=2130</b>
<b>% Male</b>	72%	72%	69%	71%	73%
<b>Age (Mean)</b>	34.5	35.3	36.8	38.2	40.6
<b>Time since onset of injecting (Mean)</b>	11.1	11.6	13.2	14.4	16.6
<b>% Current injectors<sup>1</sup></b>	78%	84%	83%	82%	69%
<b>% Injected cocaine<sup>2,3</sup></b>	10%	11%	12%	15%	31%
<b>% Homeless<sup>2</sup></b>	22%	21%	25%	22%	23%
<b>% on OST<sup>2</sup></b>	80%	81%	73%	78%	80%
<b>% with 100% NSP coverage<sup>2,3</sup></b>	78%	77%	84%	71%	77%
<b>HCV antibody prevalence</b>	54%	56%	57%	57%	57%

<sup>1</sup>injected in last 6 months

<sup>2</sup>in the last 6 months

<sup>3</sup>among those who reported injecting in the last six months

# HCV therapy uptake\*, 2013-14 to 2017-18

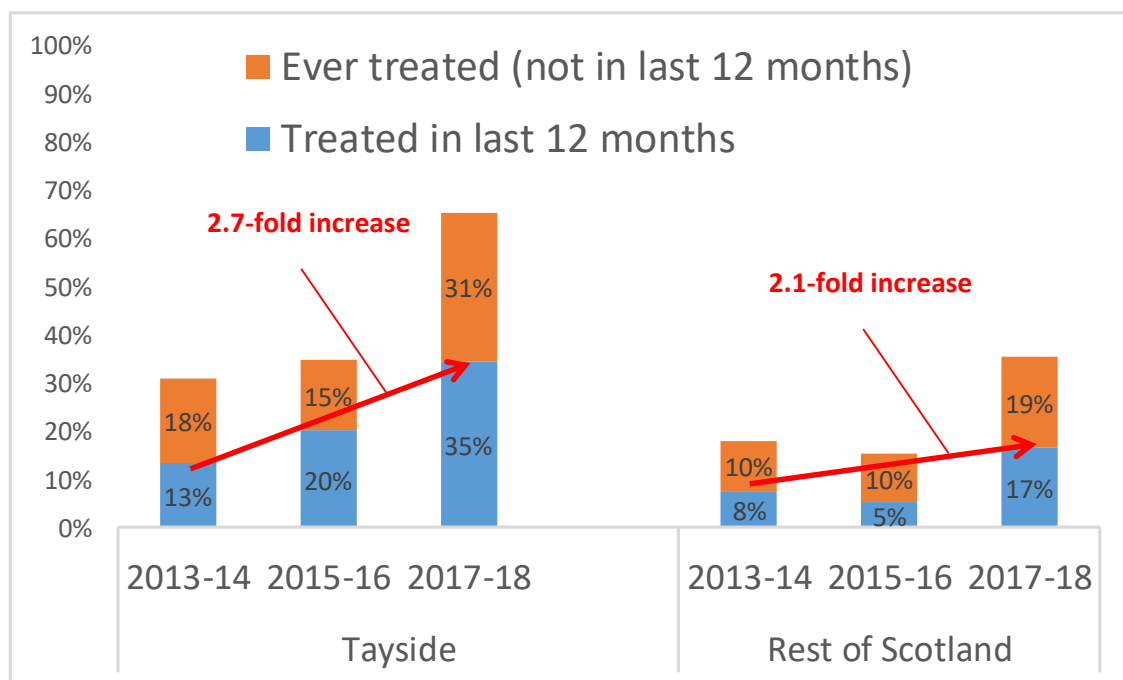


- 66% ever treated in Tayside

\*among those who were eligible for therapy



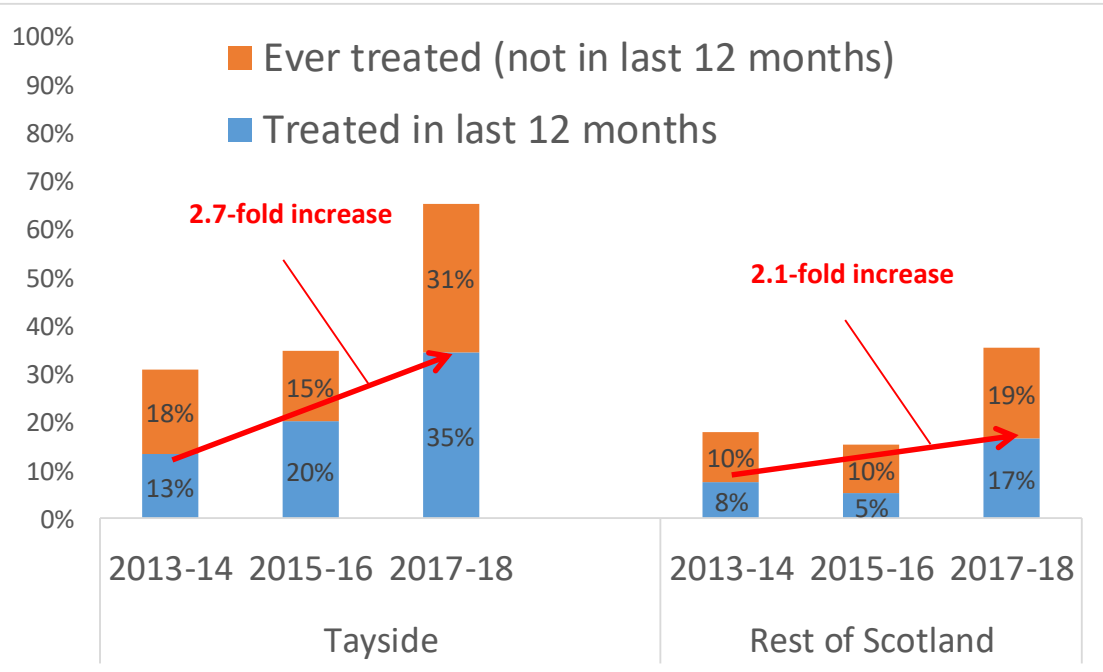
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- Increase in recent treatment (last 12 months) seen across Scotland but larger in Tayside

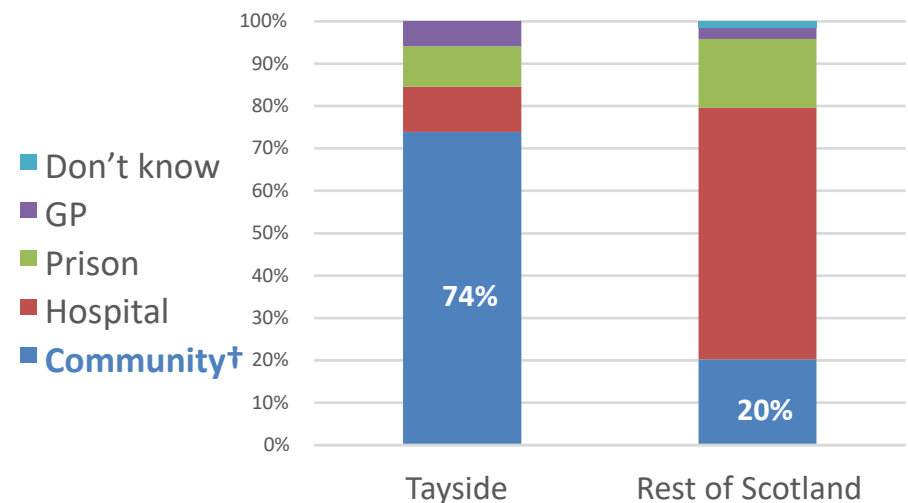
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Site of therapy initiation, 2017-18\*\*

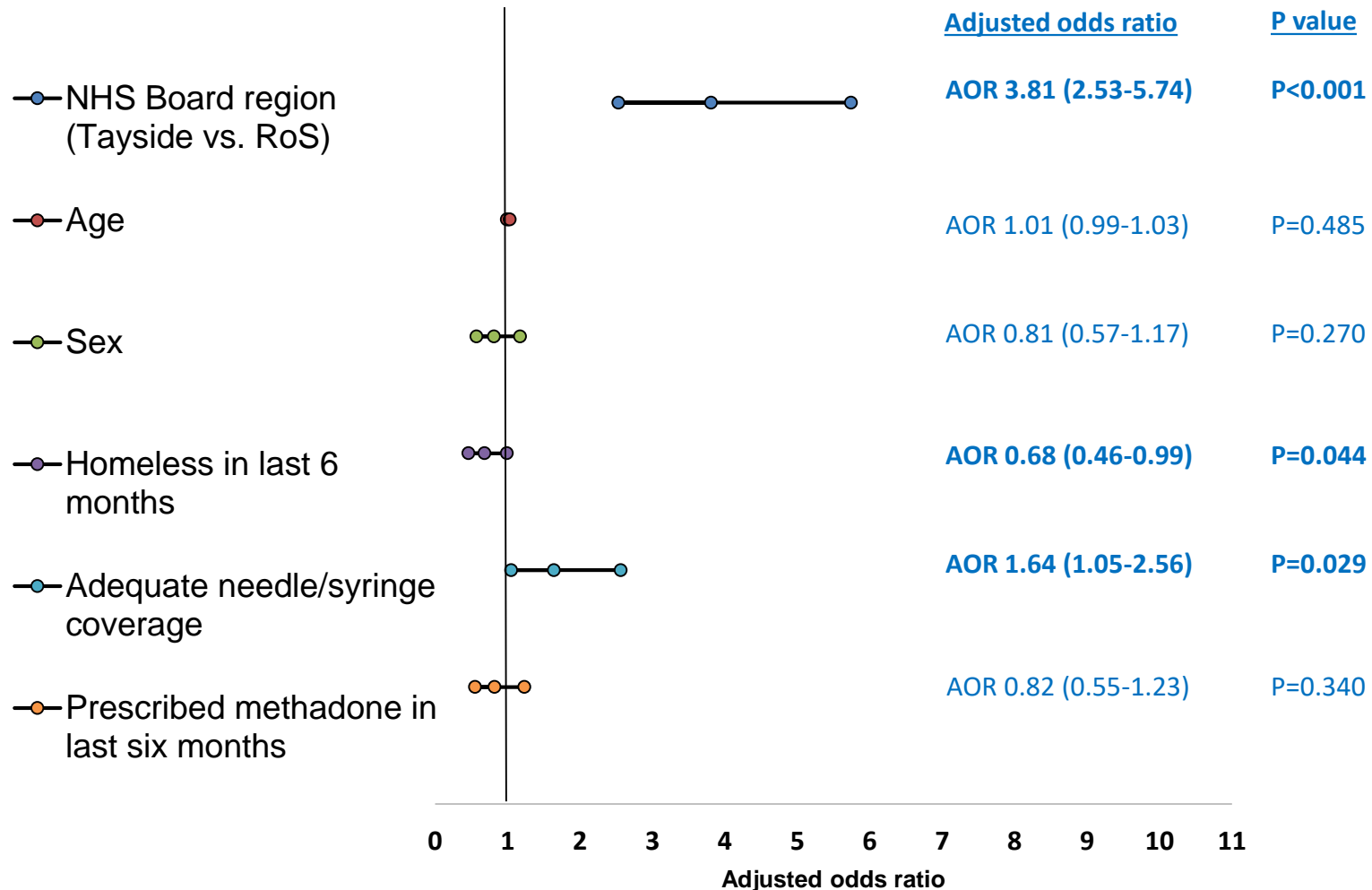


\*among those who were eligible for therapy

\*\*of most recent course of therapy

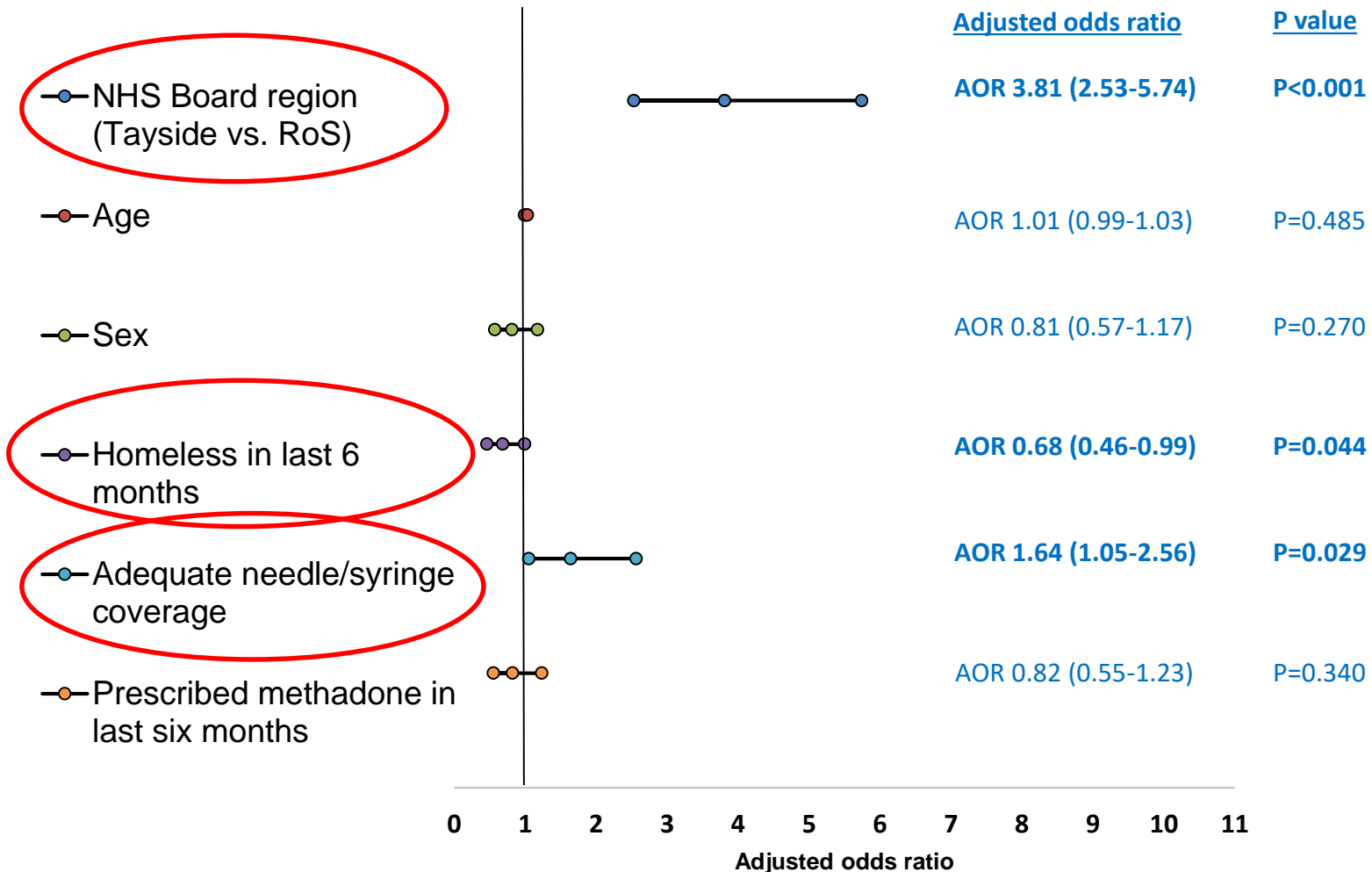
# Characteristics associated with recent HCV therapy uptake (NESI 2015-16 & 2017-18)

All Scotland (n=1,547)



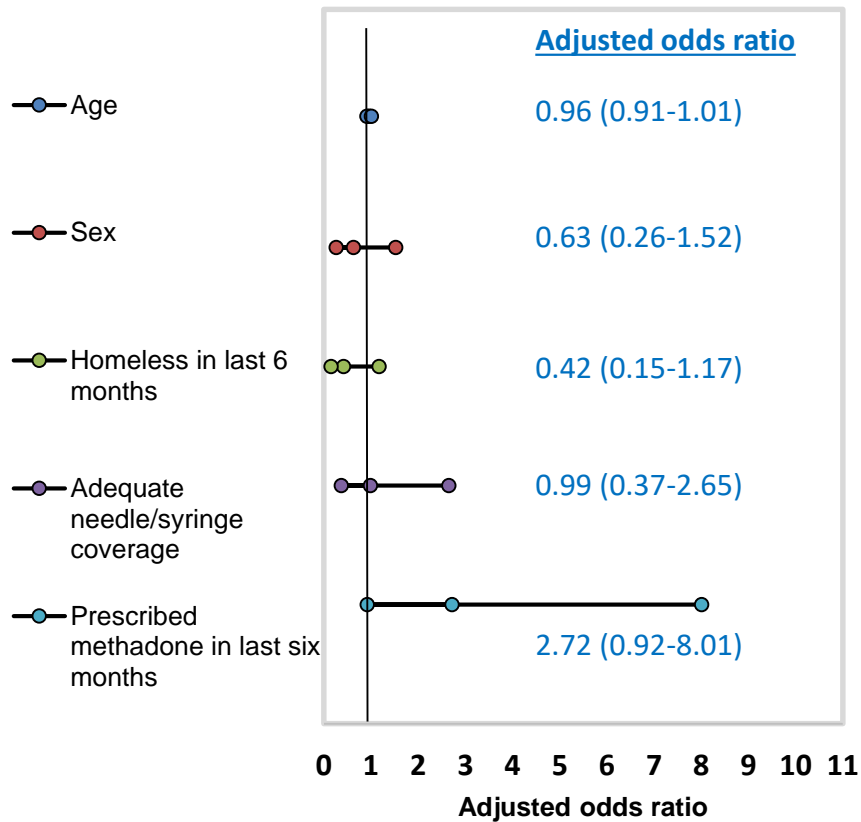
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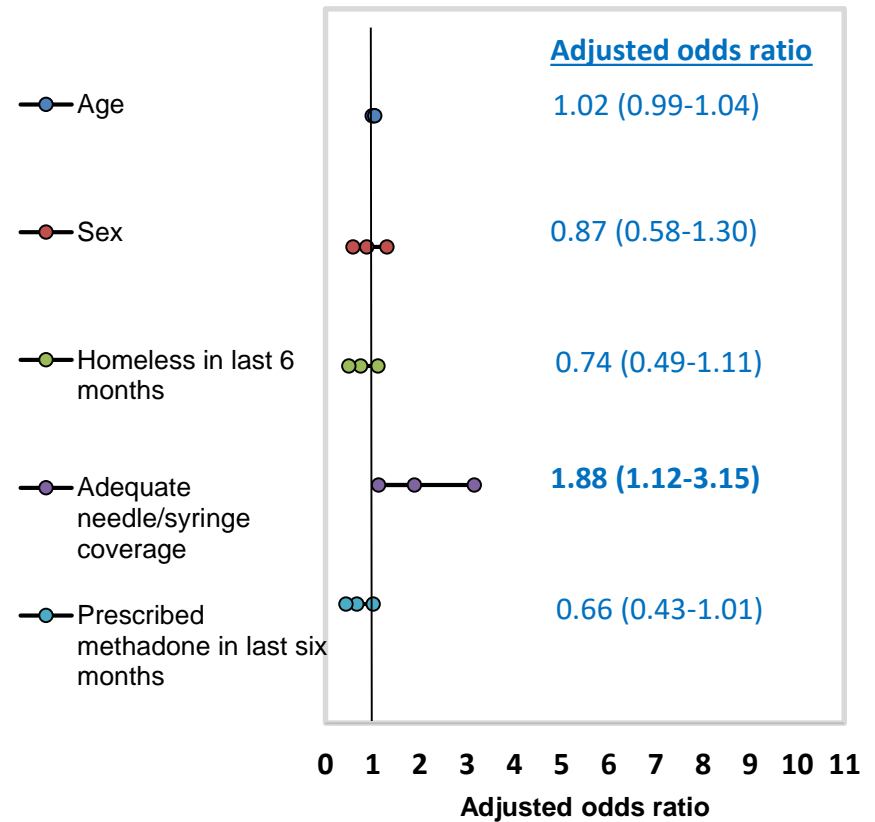


# Characteristics associated with recent HCV therapy uptake (NESI 2015-16 & 2017-18)

## Tayside (n=132)



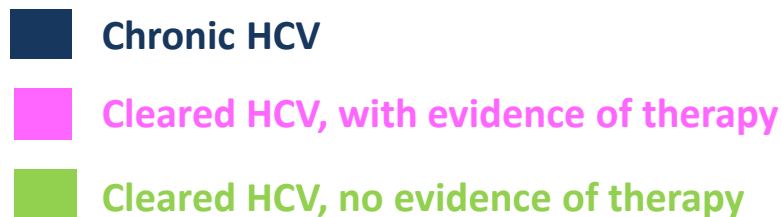
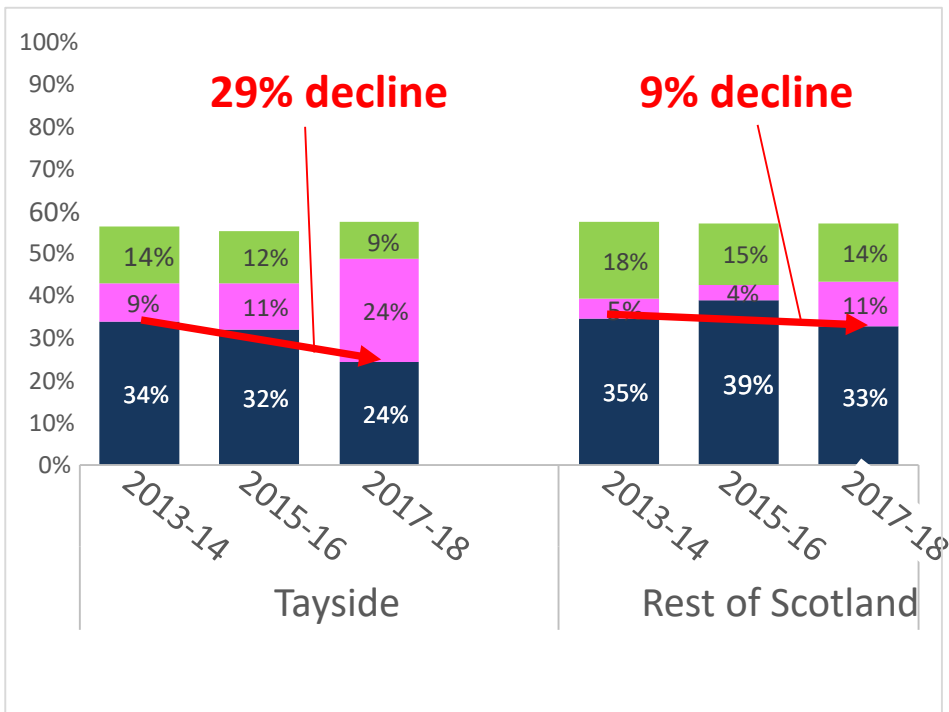
## Rest of Scotland (n=1,415)



# Estimates of chronic and cleared HCV infection among PWID in Scotland\*

(\*missing Ab and RNA data have been imputed)

## All PWID

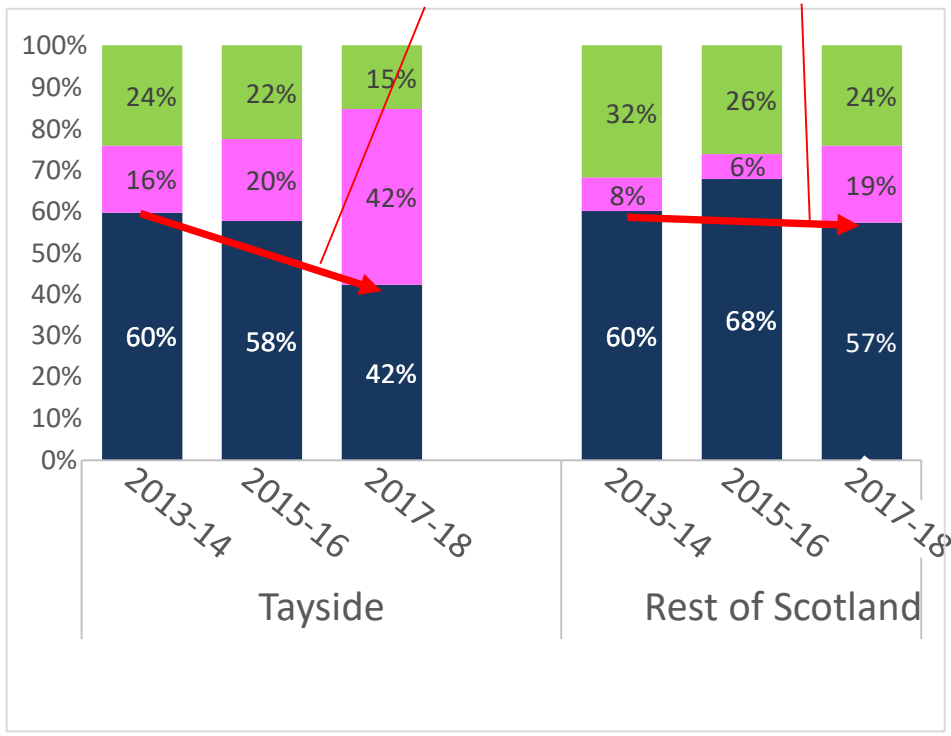
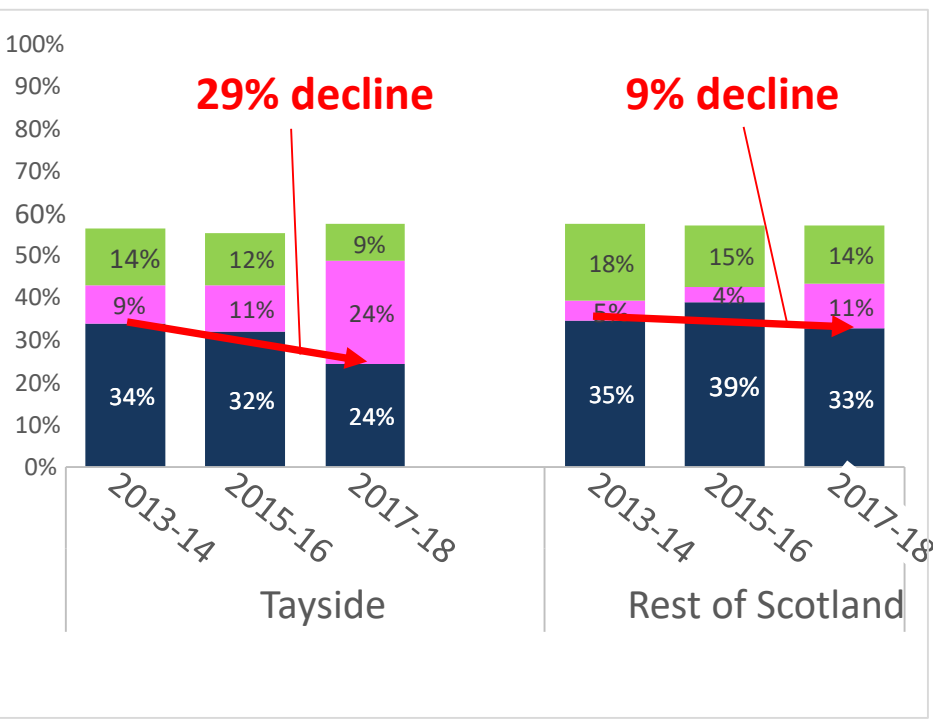


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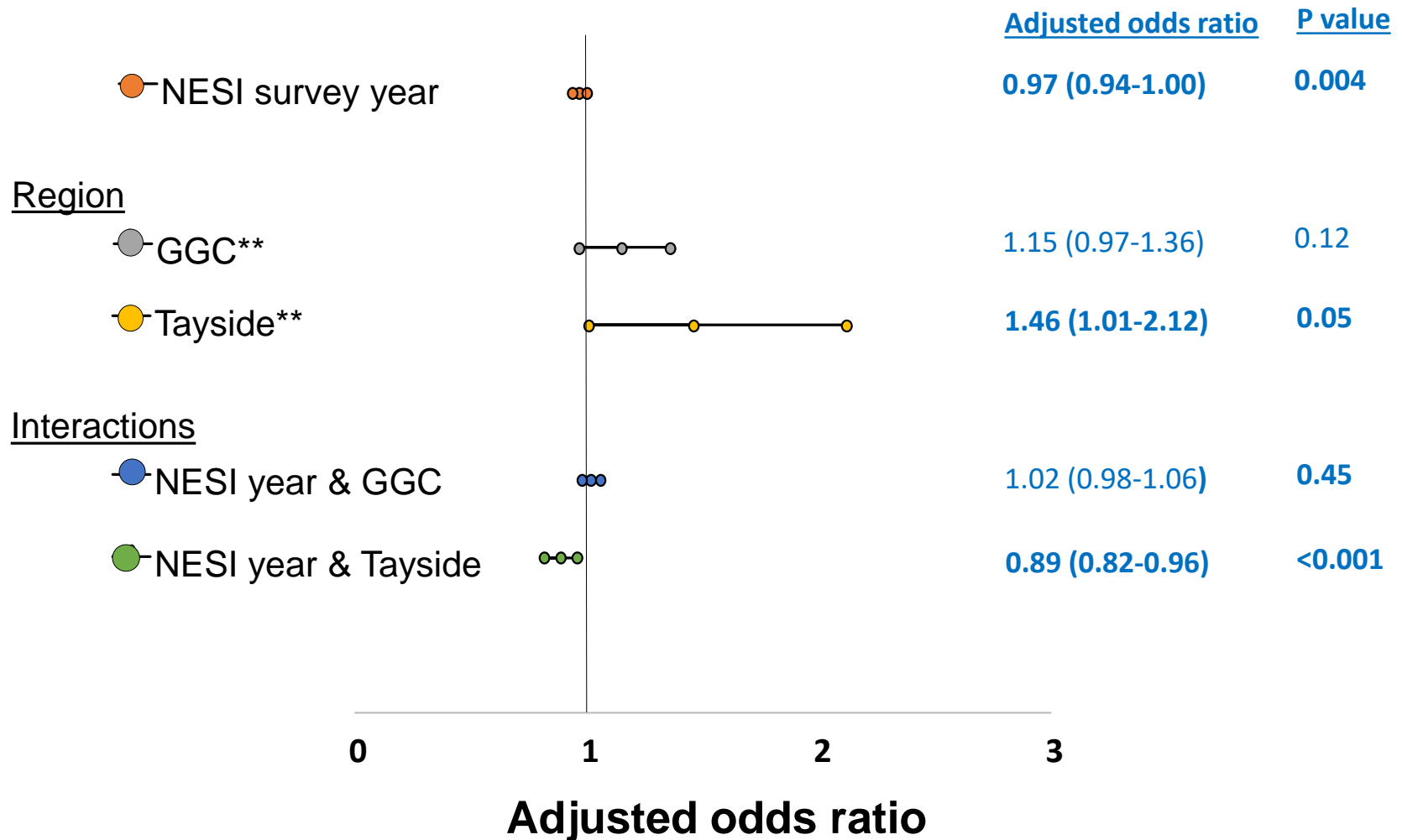
## All PWID

## Antibody positive PWID



- Chronic HCV
- Cleared HCV, with evidence of therapy
- Cleared HCV, no evidence of therapy

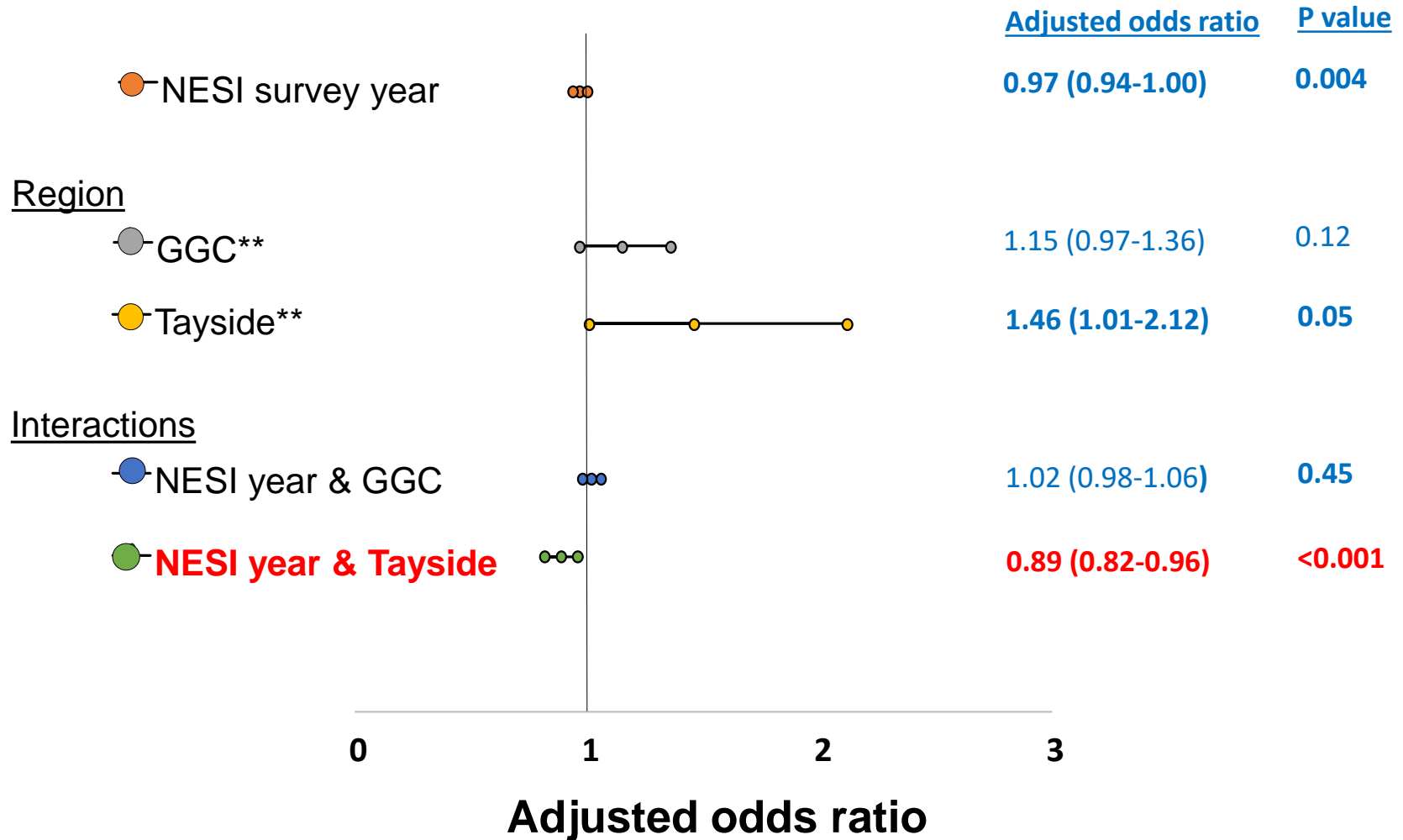
# Association between covariates and aggregate chronic HCV prevalence\*



\*Among HCV antibody positives; \*\*Compared with the rest of Scotland

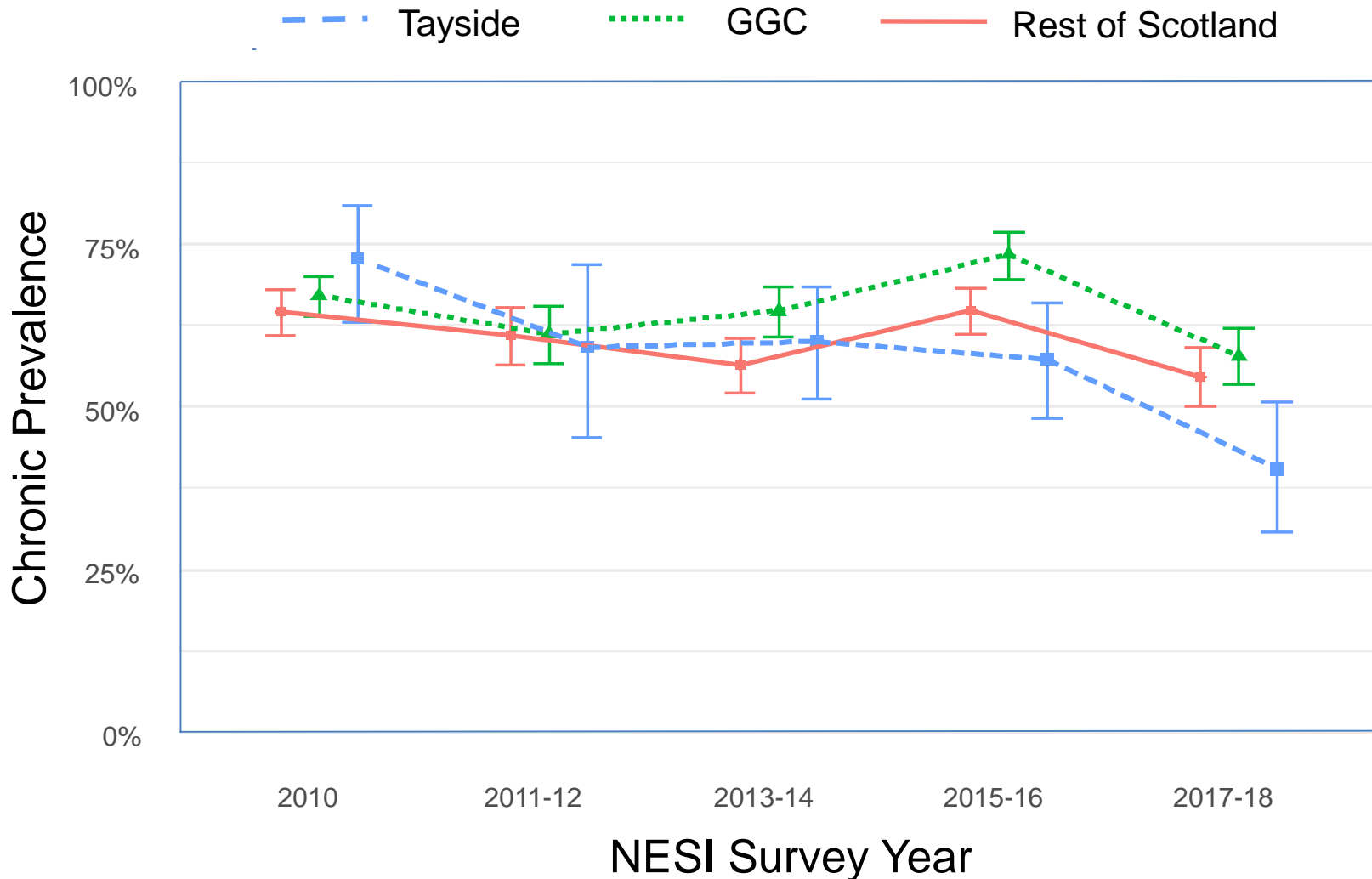


# Association between covariates and aggregate chronic HCV prevalence\*



\*Among HCV antibody positives; \*\*Compared with the rest of Scotland; GGC=Greater Glasgow & Clyde

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# Key messages

- Rapid scale-up of DAAs has been achieved in Tayside through HCV testing & treatment in community settings
- Largest decline in chronic prevalence seen in Tayside, relative to other Scottish regions where treatment uptake has not been as great
- Some vulnerable groups (e.g. homeless) may have lower uptake of therapy and therefore require additional targeted interventions

# Key messages

- Rapid scale-up of DAAs has been achieved in Tayside through HCV testing & treatment in community settings
- Largest decline in chronic prevalence seen in Tayside, relative to other Scottish regions where treatment uptake has not been as great
- Some vulnerable groups (e.g. homeless) may have lower uptake of therapy and therefore require additional targeted interventions
- Next sweep of NESI (2019-20) will provide data to more fully evaluate EPITOPe

# Acknowledgments

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