

NATIONAL PBS SURVEILLANCE

A Decade of Direct-Acting Antiviral Therapy

Trends in Hepatitis C Treatment Completion, Discontinuation,
and Retreatment in Australia

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Access has scaled. Has completion kept pace?

Universal access, since 2016

Australia was among the first countries to offer government-reimbursed, unrestricted DAA access through the PBS.

WHO 2030 targets: 80% reduction in incidence, 65% reduction in HCV-related mortality — dependent on sustained treatment delivery.

Completion is as important as access

Discontinuation,

Delays cure

Prolongs transmission risk

Drives retreatment need

What we didn't know

A 2016–2021 national analysis¹ found **rising discontinuation** over time, with about half of all retreatments preceded by a discontinued initial course.

Whether this trend has continued as DAA prescribing matured into routine primary care is unknown.

Assess national trends in DAA treatment completion, discontinuation, and retreatment — and identify who is being left behind.

01

Trends 2018–2024

Completion, discontinuation (early / late), and retreatment

02

Risk factors

Patient and prescriber characteristics associated with discontinuation

03

Retreatment

Regimen among those retreated after an incomplete course

Two DAA regimens, referred to by shorthand

Abbreviations used throughout this presentation, with PBS listing dates

SOF/VEL

Epclusa

Sofosbuvir / velpatasvir

1 tablet daily, pangenotypic

DURATION

12 weeks

PBS STATUS

PBS-listed Aug 2017

GLE/PIB

Maviret

Glecaprevir / pibrentasvir

3 tablets daily, pangenotypic

DURATION

8 or 12 weeks (16wk if treatment-experienced)

PBS STATUS

PBS-listed Aug 2018

Individuals commencing treatment Jan-Jul 2018 received SOF/VEL only, as GLE/PIB was not yet PBS-listed.

National PBS dispensing data, linked at the patient level

43,137

treatment-naïve individuals

dispensed SOF/VEL 12wk or
GLE/PIB 8/12wk through the PBS,

Aug 2017 – Sep 2024
(Study period)

● Source

Data extract of all PBS HCV antiviral dispensings, 1 Jan 2016 – 31 Mar 2025, linked longitudinally via de-identified person ID

● Follow-up

Cohort observed to 30 Jun 2025 — minimum 6 months' follow-up from last initial dispensing

● Exclusions

Treatment commenced after Sep 2024, or entire course dispensed in a single fill

Early vs. late discontinuation — and retreatment

A 12-week (84-day) authorised course, as an example:



Early discontinuation

Only the first 28-day dispensation of the authorised course was filled.



Late discontinuation

≥56 days dispensed, but the full authorised course not completed.



Retreatment

A different regimen any time after estimated EOT — or the same regimen ≥28 days after the last initial dispensation.

RESULTS

Who was treated: cohort characteristics (n=43,137)

69%

Male

63%

Major city residence

60%

Low-income subsidy

56%

GP-initiated

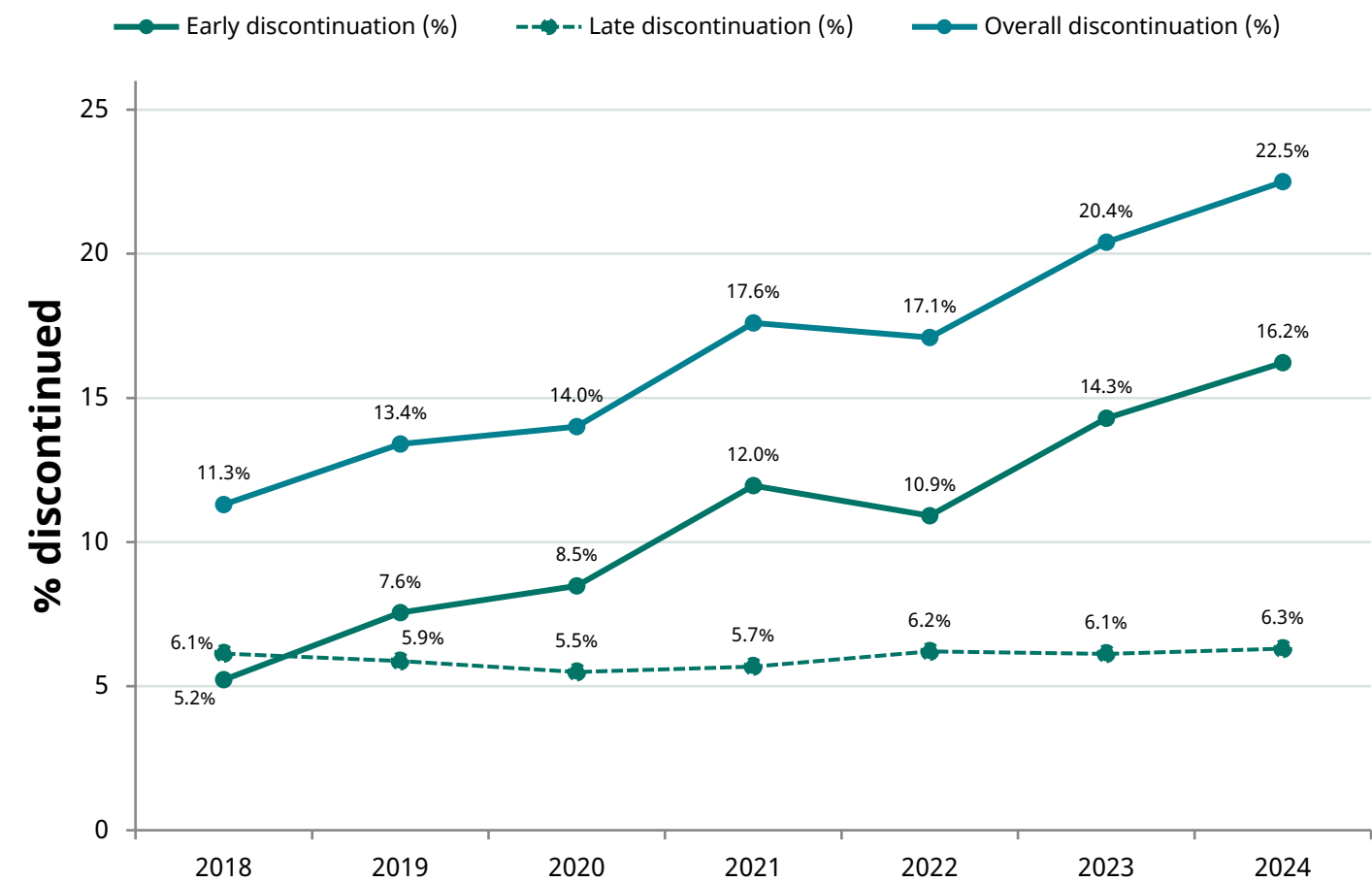
63%

SOF/VEL 12wk

40%

High-caseload prescriber

Discontinuation nearly doubled, driven by early dropout



% of discontinuations
that were EARLY

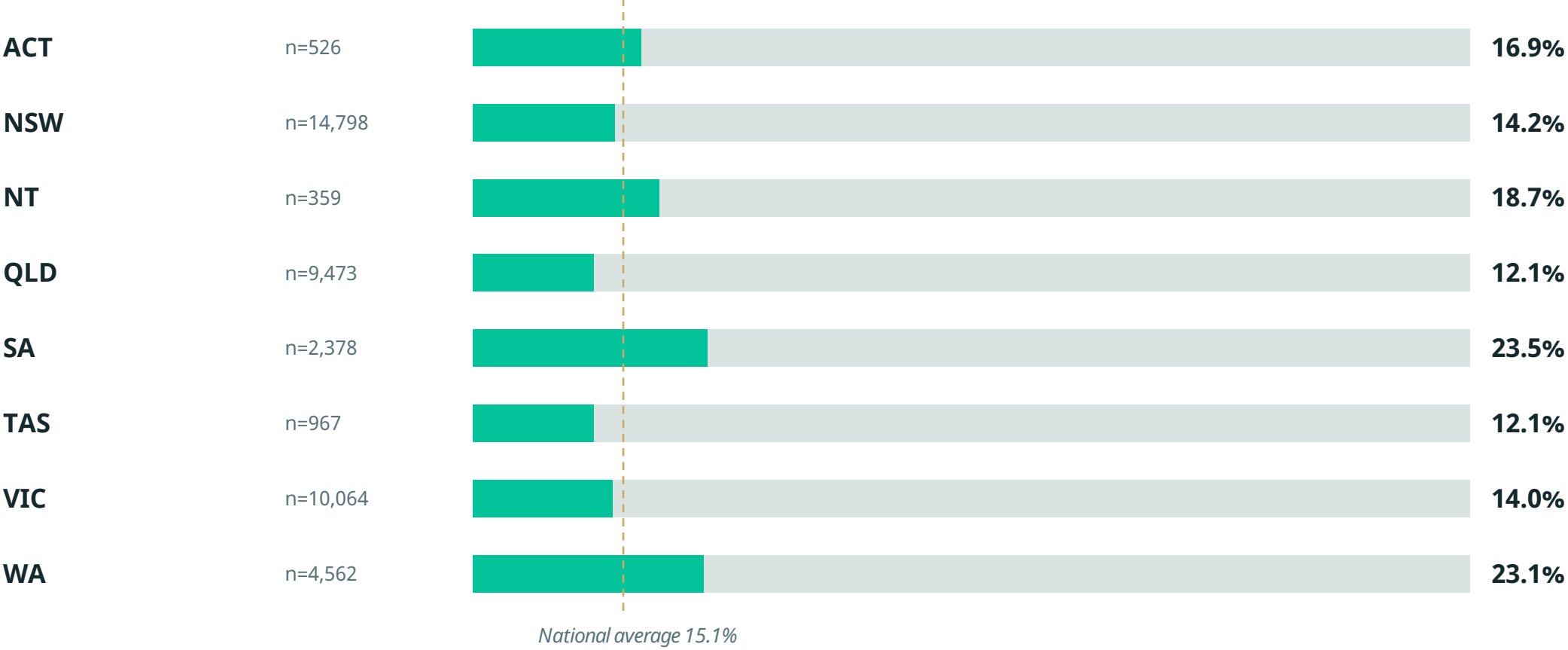
46% → **72%**
2018 2024

Recent discontinuation increasingly
means only the first 28-day dispensation
was ever filled.

RESULTS

Discontinuation by state and territory

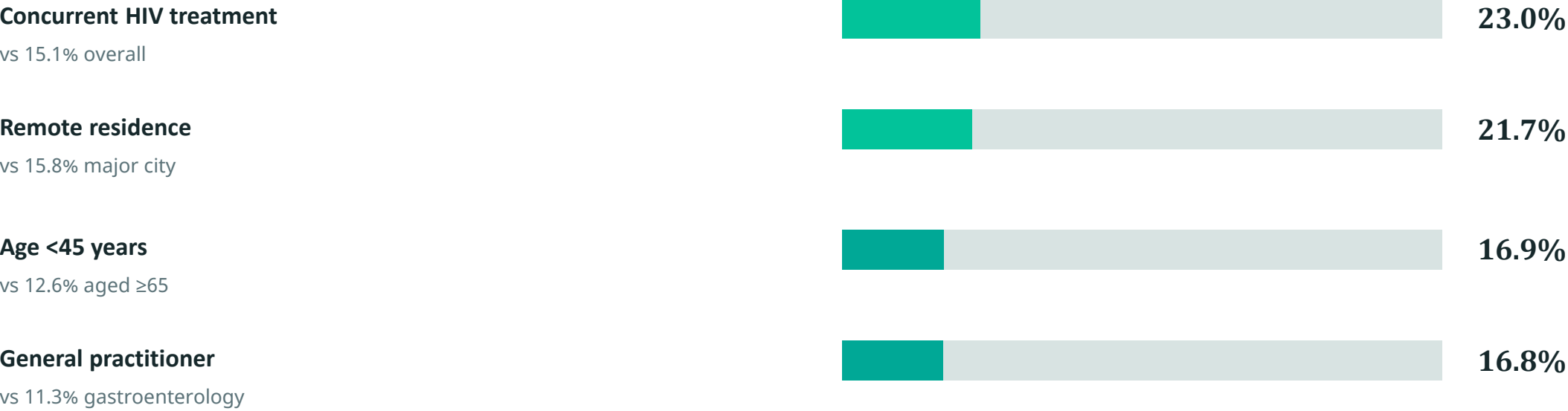
Patients grouped by state/territory of residence, 2018–2024



State/territory recorded for 97.6% of the cohort; residual missing values excluded. Discontinuation defined as ≥ 1 authorised repeat dispensation not dispensed.

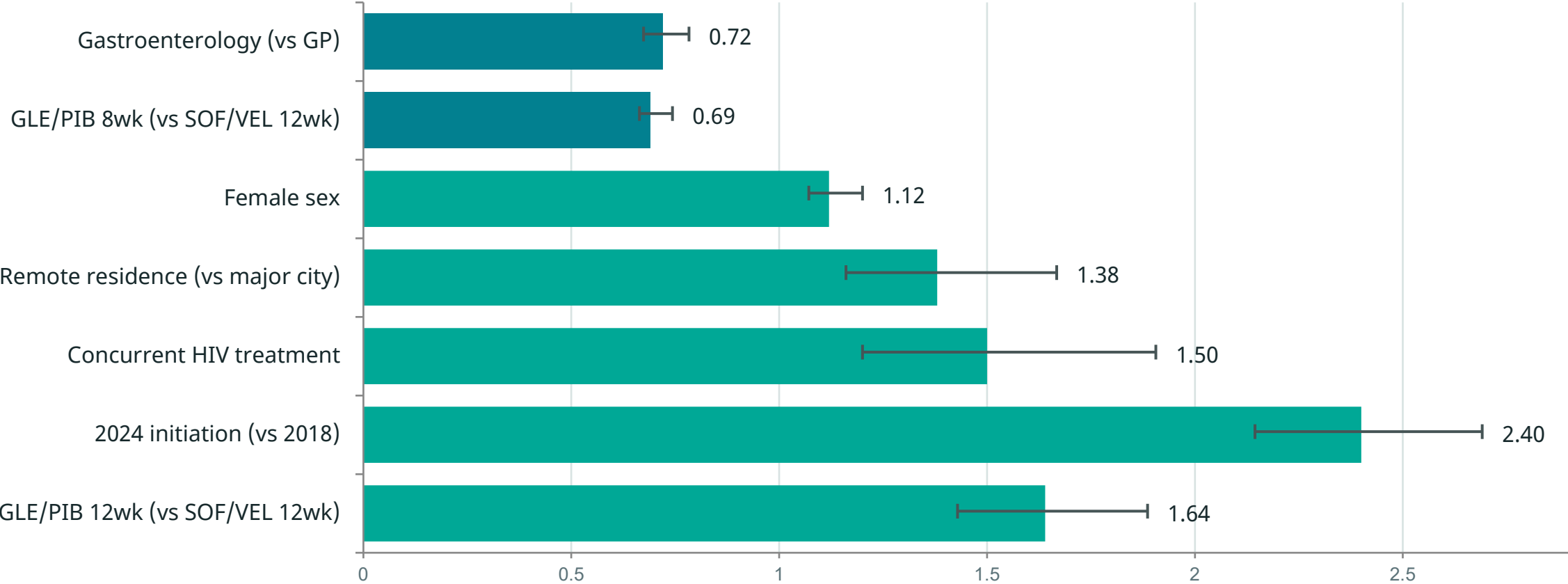
RESULTS

Discontinuation is concentrated in specific groups



Regimen duration is the dominant driver

Adjusted odds of discontinuation (reference group in parentheses)

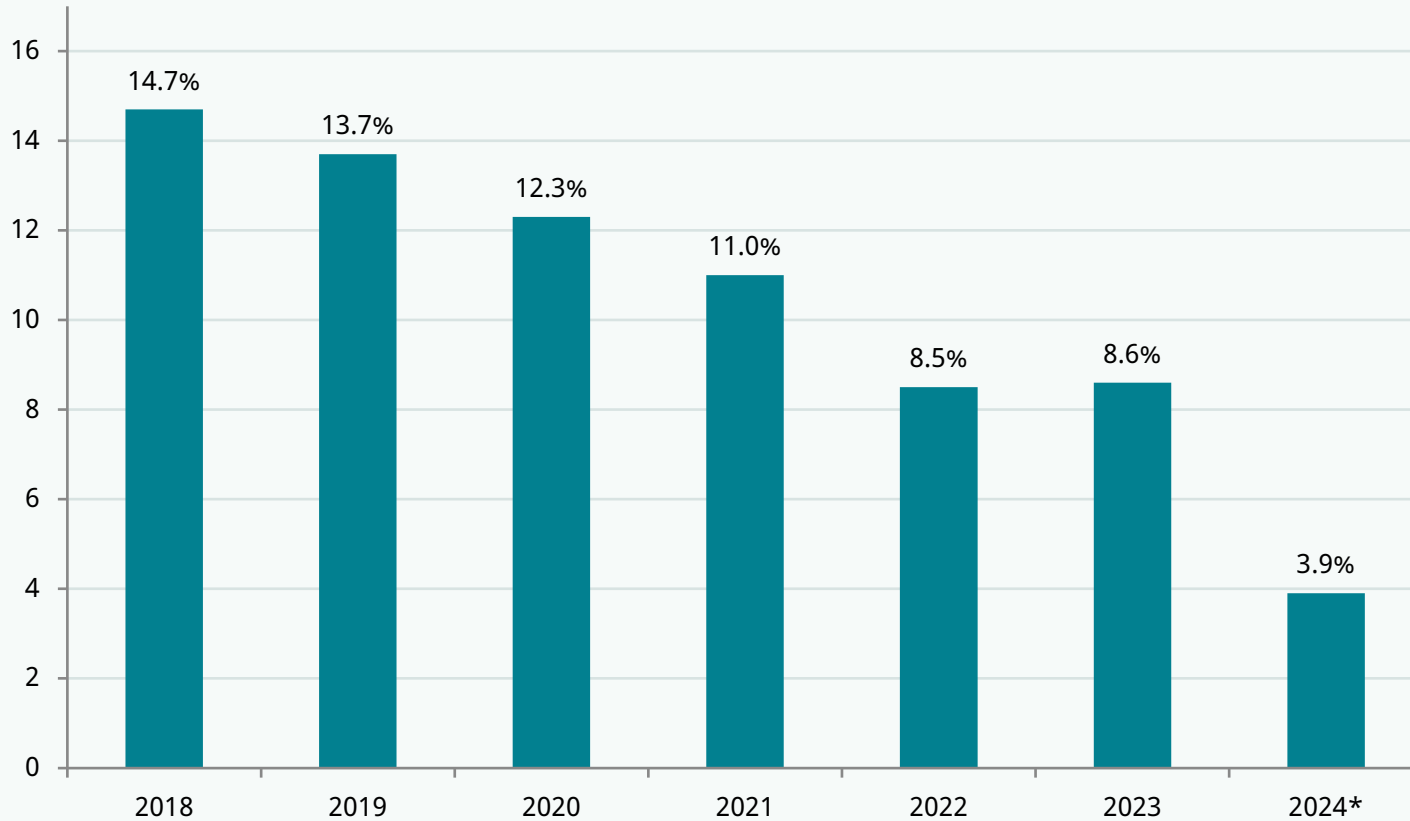


Dark teal bars = lower odds of discontinuation • Seafoam bars = higher odds of discontinuation

RESULTS

Retreatment uptake among discontinuers is falling

Annual retreatment among early discontinuers



*2024 restricted to discontinuers with ≥6 months' follow-up

11.2%

of discontinuers were ever retreated
(723 / 6,478 with ≥6 months follow-up)

Rising discontinuation + falling
retreatment → a growing number of
people are exiting the DAA pathway
uncured.

IMPORTANT CAVEAT

Early discontinuation $\neq$ treatment failure

SOF/VEL and GLE/PIB achieve rapid viral suppression within the first weeks of therapy. Some "early discontinuers" in dispensing data may have achieved cure with an abbreviated course and simply disengaged from care.

Without linkage to virological testing, dispensing data alone cannot separate effective abbreviated treatment from true treatment failure.

This caveat applies most strongly to early discontinuation. Late discontinuation more directly indicates an incomplete, clinically unintended course.

Discontinuation has nearly doubled in six years — driven by early dropout, with retreatment lagging behind.

Elimination hinges on retention at the point of treatment initiation — not on expanding access alone.

Thank you

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Initiation, not mid-course retention, is the point of failure

1 Same-day & embedded initiation

Prescribe at first encounter within OAT, prison health, pharmacy, and primary care settings where engagement already exists.

2 Short-duration regimens

Continue preferential use where clinically appropriate; incorporate emerging evidence for further duration reduction.

3 Proactive retreatment

Link dispensing to virological testing and systematise re-engagement for confirmed treatment failure.

4 Long-acting formulations

Injectable DAAs, paralleling long-acting HIV therapy, would remove reliance on daily adherence entirely.