

# Registration for Opioid Agonist Treatment (OAT) in Ireland from 1999 to 2019: Positive Findings in Younger Individuals

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# Background

- Heroin epidemic Ireland in 1980s and 1990s, overwhelmingly in Dublin and among young men
- Recent evidence of declines in opioid use in young people, but increases in older individuals (1)
- One measure of opioid/heroin use is new registrations for opioid agonist treatment (OAT)
- Aim: to investigate changes in new registrations for OAT in Ireland from 1999 to 2019

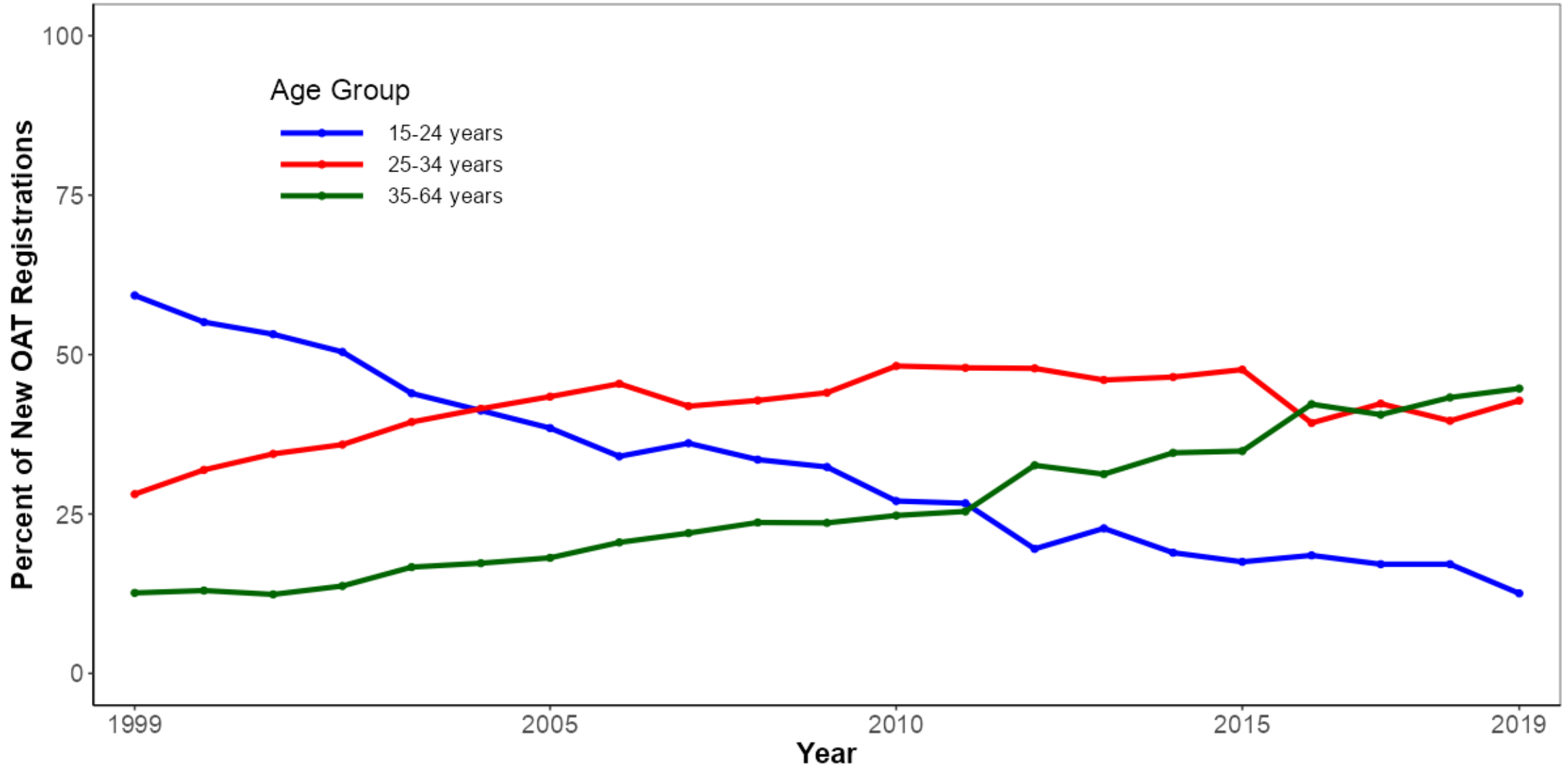
# Methods

- Study population: All 15-64 year-olds registering for OAT for first time in Ireland from 1999 to 2019
- Data: Year of First OAT registration, Age, Sex
- Incidence of new OAT registrations calculated by sex and age group
- Z-tests to test for differences between new OAT registration rates in 1999 compared to 2019
- Secular changes in new OAT registration rates examined using linear regression

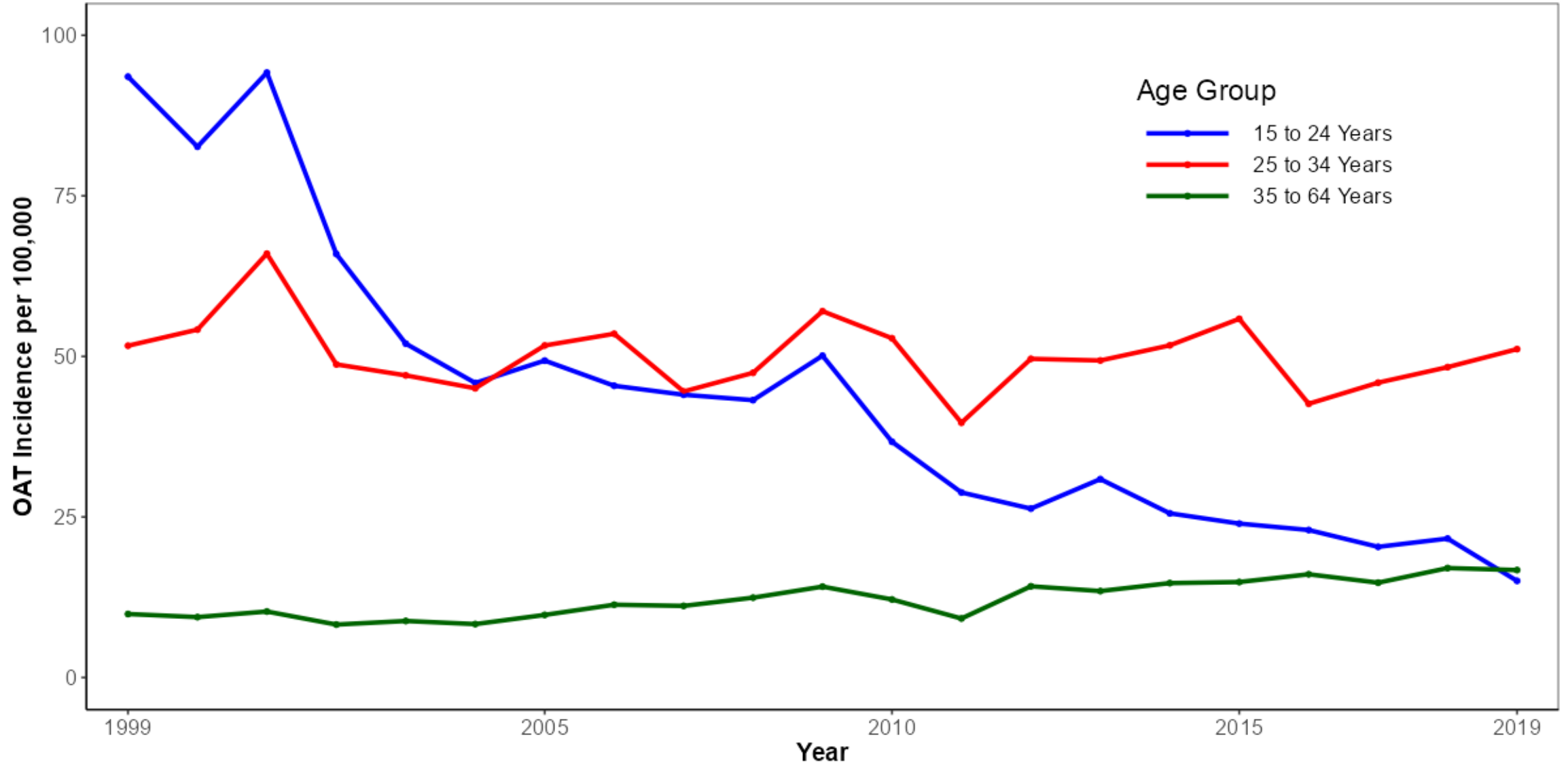
# Numbers and Rates of New Registrations for OAT 1999 vs. 2019

Age group, years	New OAT 1999, n (%)	Rate per 100,000, 1999	New OAT 2019, n (%)	Rate per 100,000, 2019	Rate in 2019 as % of Rate in 1999	P
<b>Males</b>						
15-19	110 (16.3)	63.3	9 (1.7)	5.5	8.8	<0.001
20-24	258 (38.2)	168.0	53 (10.1)	35.0	20.8	<0.001
25-29	147 (21.7)	104.6	112 (21.3)	77.1	73.7	<0.014
30-34	67 (9.9)	50.0	109 (20.7)	68.2	136.3	0.045
35-39	44 (6.5)	32.5	92 (17.5)	47.9	147.2	0.034
40-64	50 (7.4)	9.7	151 (28.7)	19.3	197.8	<0.001
<b>Total</b>	<b>676 (100.0)</b>	<b>54.1</b>	<b>526 (100.0)</b>	<b>33.0</b>	<b>61.0</b>	<b>&lt;0.001</b>

# Proportion of New Registrations for OAT by Year and Age Group



# New OAT Registration Incidence By Year and Age Group



# Yearly change in New OAT Registration Rate by Age Group from 1999 to 2019

Age group (years)	Yearly Change (95% CI) in New OAT Registration Rate per 100,000	P for linear trend
15-19	-2.4 (-2.7 to -2.0)	<0.001
20-24	-4.5 (-5.2 to -3.8)	<0.001
25-29	-0.8 (-1.2 to -0.50)	<0.001
30-34	0.4 (0.1 to 0.7)	0.004
35-39	0.7 (0.6 to 9)	<0.001
40+	0.3 (0.3 to 0.4)	<0.001
<b>All ages</b>	<b>-1.0 (-1.5 to -0.5)</b>	<b>&lt;0.001</b>

# Conclusions

- Overall decline in OAT Registration from 1999 to 2019 largely accounted for by steep downward trends among 15-29 year-olds
- Concerning increases in people >30 years
- Decline in opioid use among young people provides supporting evidence for effectiveness of prevention efforts aimed at opioid use disorder (OUD)
- OAT potentially important in reducing “contagion” effect
- Growing wariness of heroin among young people including polydrug using adolescents (2-5)
- Ongoing monitoring of registration for OAT important to help counter unfavourable trends and attendant co-morbidities in older individuals and to assist in maintaining favourable trends in younger age groups



# References

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