

The evolution of methods to estimate specialist alcohol treatment capacity and access in the UK

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Estimating alcohol treatment capacity and access

- Ratio: Number of people in treatment : the number of people 'in need' of treatment
- Prevalence – Service Utilisation Ratio (PSUR)
- Problems
 - Definitions
 - Methods used to estimate 'need' and 'access'
 - Cost of data collection
 - Comparability within and between countries
 - Benchmarking – what is an acceptable level of access?
- Need for simpler methods using routine data
- Utility of routine alcohol-related hospital discharge data?

Alcohol needs assessment

- Number “in need of treatment” (prevalence)
- Number accessing treatment (access)
- Number receiving “appropriate” treatment
- Number successfully completing treatment
- Number benefiting from treatment (abstinent, improved)
- Number achieving sustained improvement following treatment

Drummond et al. (2005) Alcohol Needs Assessment Research Project (ANARP).
Department of Health

Prevalence-Service Utilisation Ratio England

- Funding relatively static at ~£220M per annum
- 2005
 - Prevalence Alcohol Dependence 1.1 million
 - Number entering treatment 63,000
 - **PSUR 6%**
 - Prevalence: AUDIT 16+ APMS 2000
 - Service utilisation: ANARP agency survey 2005
- 2014
 - Prevalence Alcohol Dependence 1.6 million
 - Number entering treatment 81,000
 - **PSUR 5%**
 - Prevalence AUDIT 16+ APMS 2007
 - Service utilisation: NDTMS

Prevalence-Service Utilisation Ratio Scotland

- 2008
 - Estimated budget £61M per annum
 - Prevalence Alcohol Dependence 206,000
 - Number entering treatment 17,000
 - PSUR 8% (England 6%)
 - Prevalence: AUDIT 16+ SHeS 2003
 - Service utilisation: SANA survey 2008
- 2014
 - Funding for alcohol services increased by £28M (50%) from £61M to £89M
 - Prevalence Alcohol Dependence 220,000 (5%)
 - Number entering treatment 31,796
 - PSUR 14.5% (England 5%)
 - Prevalence AUDIT 16+ SHeS 2012
 - Service utilisation: Health Scotland survey 2012

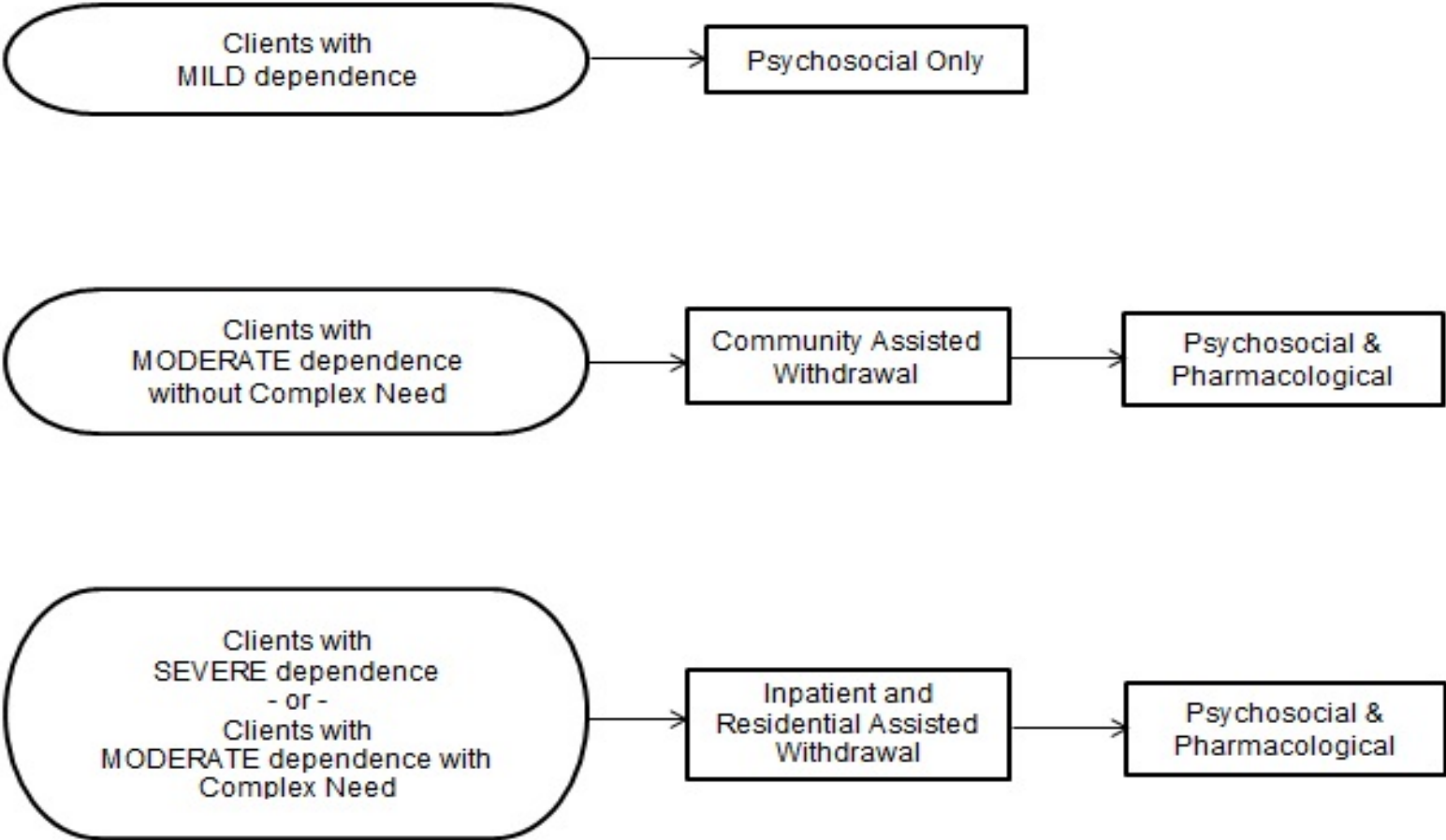
Alcohol Treatment Capacity Project in England (STreAM)

- Need definition: aligned with NICE definitions
- Moderate/severe dependence + mild not responding to extended brief intervention
 - Includes only those in need of ‘structured care’
 - Smaller number in need than ANARP
 - Local authority area prevalence modelling
- Access definition: access to “appropriate treatment” defined by NICE
 - Higher threshold for access definition
 - Treatment journeys
 - Smaller number than ANARP
- Modelling of impact of increased access rates
- Local authority level capacity tool

STreAM Findings

- Need: 735,000 (cf 1.1M in ANARP; 1.6M 2007)
- Access: 78,055 (10.6%; range 2.3 – 26.6%)
- But 75% of moderate and severe dependence received only psychosocial treatment (mild dependence pathway)
- Pharmacology in severe dependence:
 - 15% withdrawal treatment
 - 7% relapse prevention treatment
 - 4% withdrawal + relapse prevention treatment

Recommended treatment pathways (CG115; 2011) according to severity of dependence and complex needs (Brennan et al., 2017)



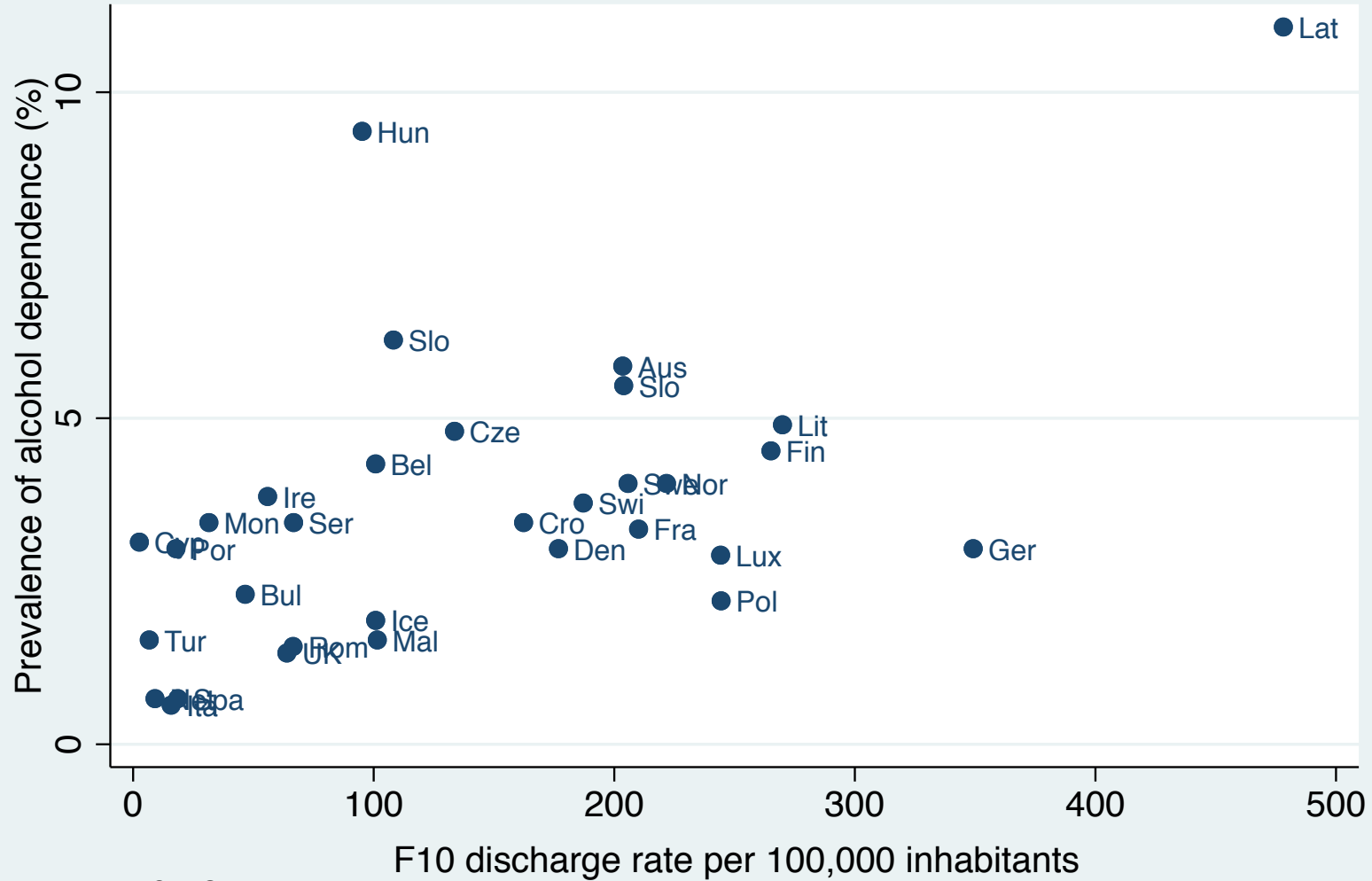
Most recent treatment journey ended in 2013-2014 by NDTMS-estimated Alcohol Dependence Severity Group and treatment pathway (Brennan et al., 2017)

Pathway	Mild	Moderate	Severe	Complex	Total
Community psychosocial only	85%	74%	68%	76%	77% N 46,945
Community psychosocial + Pharma	10%	16%	16%	12%	14% N 8,316
Inpatient	4%	8%	13%	9%	8% N 4,518
Residential	1%	2%	3%	3%	2% N 1,168
% Total N	36% 22,147	33% 19,907	15% 9,083	14% 8,388	100% 60,947

The use of routine data for needs assessment monitoring

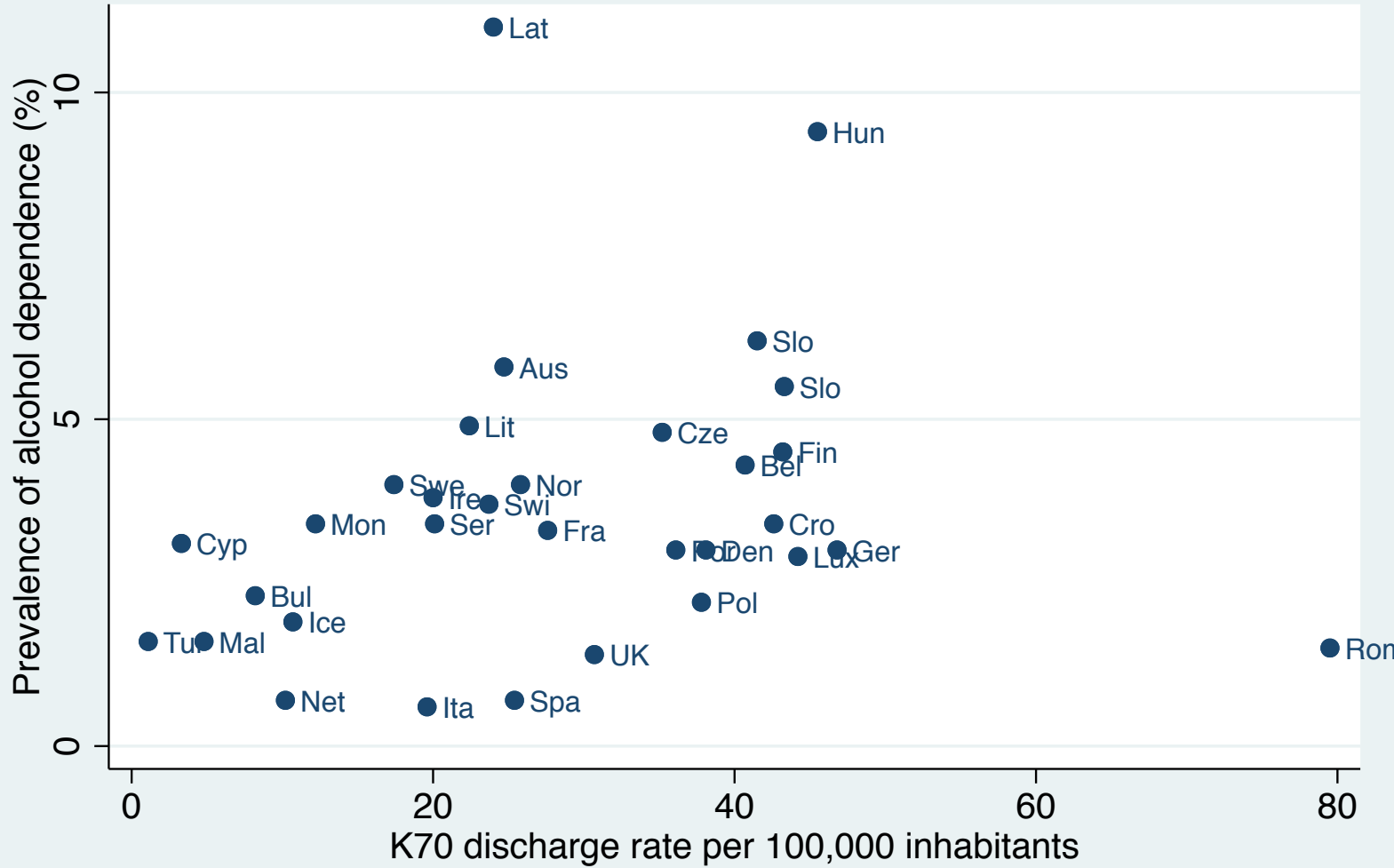
- European study
- **Comparison of** national surveys of alcohol dependence prevalence (literature plus WHO Global Status Report on Alcohol, 2018)
- **With**
- Hospital discharge rates for:
 - F10 Alcohol use disorders
 - K70 Alcoholic liver disease
- Age standardised death rates for liver cirrhosis (Jellinek estimation formula) WHO, 2018
- Alcohol per capita consumption (WHO)

F10 discharge rate versus prevalence of alcohol dependence in Europe



n=32
67% overlap
of CIs

K70 discharge rate versus prevalence of alcohol dependence in Europe



r=0.21

n=32
44% overlap
of CIs

Jellinek estimate
19% overlap
of CIs

Specialist treatment access ratios across the UK 2017/18 compared to 2016/17 (Lancet Liver Commission, 2019)

Country	Number accessing treatment for alcohol only in 2017/18 ¹	Number of F10 alcohol hospital admissions in 2017/18 ²	Rate of F10 admissions /100,000 population >18 years, 2017/18	Treatment access ratio (F10 admissions/treatment access) 2017/18 ³	Treatment access ratio (F10 admissions/treatment access) 2016/17 ⁴
Scotland	26,107	27,025	614.9	1.0	1.1
Wales	7,678	8,804	307.5	1.1	1.2
England	75,787	197,460	451.3	2.6	2.4
Northern Ireland	2,577	9,963	694.6	3.9	3.9
United Kingdom	112,149	243,252	467.0	2.2	2.1

Williams et al. (2019) Lancet, in press

Advantages and disadvantages of different prevalence estimates

	National survey	Hospital admission data
Cost	High	Low
Frequency	Infrequent (UK 7 years)	Continuous
Direct measure of prevalence	Good	Small proportion of total (~30%)
Representativeness	Extrapolation from sample	All admissions
High risk groups	Prisoners, homeless, severe depend. under-represented	All admissions included
Accuracy of recording	High	Low/under-diagnosis
Validated measures	CIDI, AUDIT	ICD Diagnostic Coding
Sample size	Small	Large
Detecting regional/local variation	Poor	Good
Measure of actual health harm	No	Yes
Confounding with treatment	No	Possible but small no.
Comparison across countries	Difficult	Easier

Conclusions

- Current 'gold standard' methods include national general population surveys and national treatment monitoring systems
- National surveys limited application in low resource settings and have limitations in granularity and coverage
- F10 hospital admissions have several advantages and are highly correlated with AD prevalence in general population across countries
- Value of routine admissions and treatment monitoring data

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