# Assertive outreach treatment for people who attend hospital frequently for alcohol-related reasons

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# The Plan

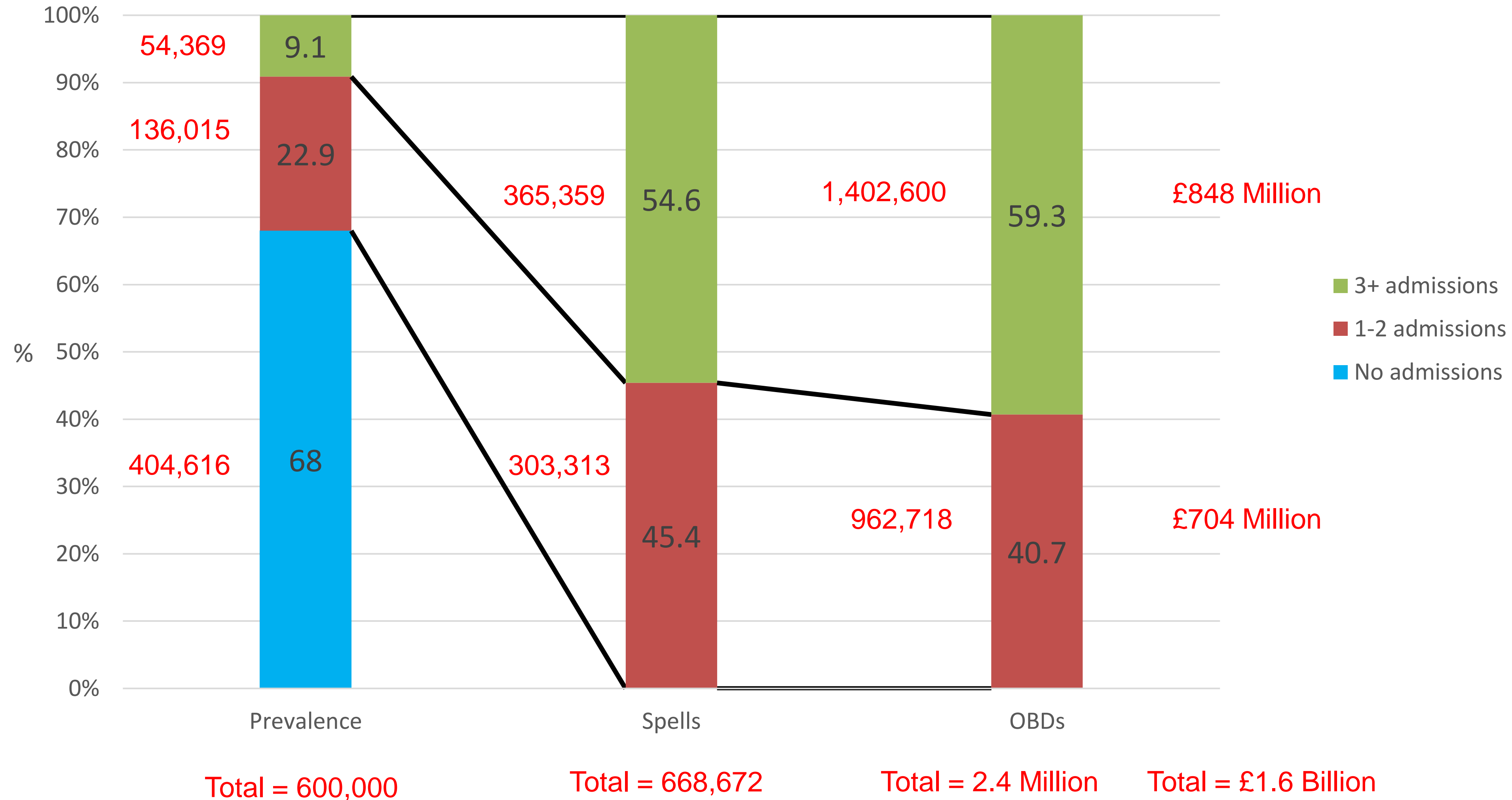
- Background and context
- AAOT clinical trail
- Clinical and economic evaluation
- Qualitative study

** Preliminary findings **

# People who attend hospital frequently for alcohol-related reasons

- Heterogeneous group
- Complex needs: alcohol dependence PLUS multiple, unmet physical/mental health and social care needs
- Rarely access community addiction services; HIGH attendance acute hospital care
- Care received / accessed = high cost and low impact (short-term vs. long-term needs)
- Poor outcomes
- Feel stigmatised and socially excluded
- Alcohol-related frequent (hospital) attenders (ARFA), “frequent fliers”, superutilizers, “high-need, high-cost” (US literature)
- In two South London boroughs, 9% of people with alcohol dependence accounted for 59% of alcohol admissions
- Those 1.4 million bed days per year = £848 million

# Distribution of alcohol admissions in people with alcohol dependence



# AAOT clinical trial – what we did

- Adapt an Assertive Outreach Treatment model previously used in severe mental illness
- Multidisciplinary team based at Maudsley Trust (SLaM) – nurses, keyworkers, consultant psychiatrist and volunteers
- Partnership working with hospital and community teams
- Identified patients through hospital e-health records
- Inclusion criteria: combination of A&E attendance AND/OR acute care admission, within one month/year, PLUS diagnosis of alcohol dependence
- Weekly contact by phone / in person depending on need, rounded support for health and practical issues – for twelve months
- Recruited 174 patients into a trial of AAOT versus Care as Usual, 87 per treatment group **(n=174, n=87 in each arm).**
- Funded by Guy's and St. Thomas' Foundation Trust Charity and NIHR CLAHRC (collaboration for leadership in applied health research and care)

# What is Alcohol Assertive Outreach Treatment?

- Originates from treatment for severe mental illness
- Minimum weekly contact for 12 months
- Small keyworker caseloads ≤15
- Persistent, assertive engagement
- Home-based or community setting
- Working across traditional professional boundaries
- Patient-led agenda
- Engagement with families, carers and professionals
- Advocacy
- Supporting patients to attend addiction and health services
- Volunteers provided practical help and support

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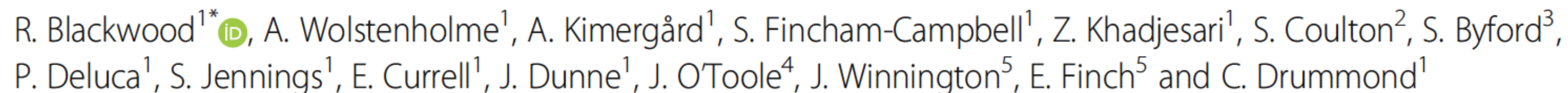
BMC Public Health

STUDY PROTOCOL **Open Access**

# Assertive outreach treatment versus care as usual for the treatment of high-need, high-cost alcohol related frequent attenders: study protocol for a randomised controlled trial



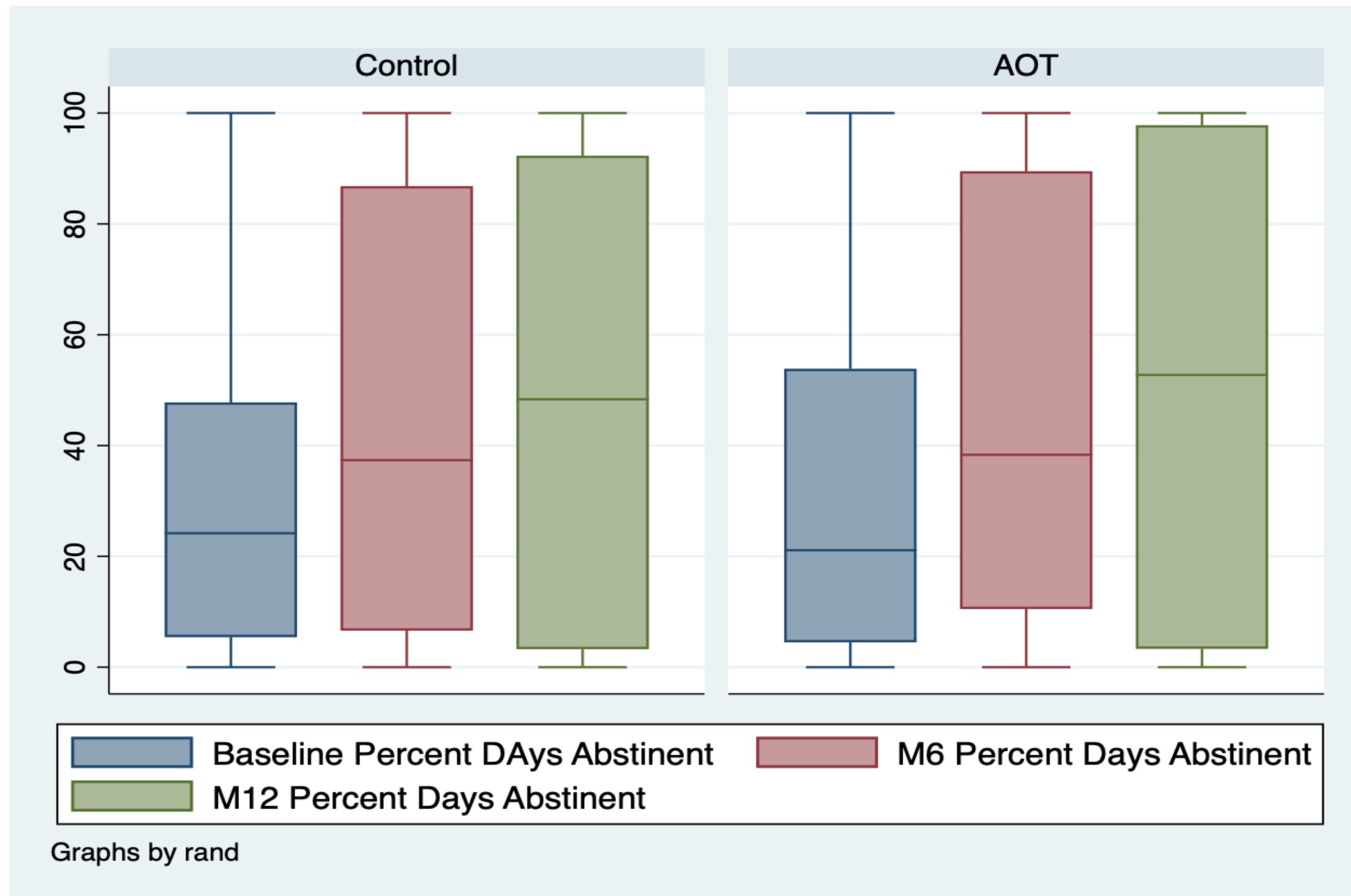
R. Blackwood[1*], A. Wolstenholme[1], A. Kimergård[1], S. Fincham-Campbell[1], Z. Khadjesari[1], S. Coulton[2], S. Byford[3], P. Deluca[1], S. Jennings[1], E. Currell[1], J. Dunne[1], J. O'Toole[4], J. Winnington[5], E. Finch[5] and C. Drummond[1]

## Abstract

**Background:** Alcohol-related hospital admissions have doubled in the last ten years to > 1.2 m per year in England. High-need, high-cost (HNHC) alcohol-related frequent attenders (ARFA) are a relatively small subgroup of patients, having multiple admissions or attendances from alcohol during a short time period. This trial aims to test the effectiveness of an assertive outreach treatment (AOT) approach in improving clinical outcomes for ARFA, and reducing resource use in the acute setting.

**Methods:** One hundred and sixty ARFA patients will be recruited and following baseline assessment, randomly assigned to AOT plus care as usual (CAU) or CAU alone in equal numbers. Baseline assessment includes alcohol

Shows graphically error plot for PDA at baseline, month 6 and month 12. Plot shows median, IQR, min and max values.



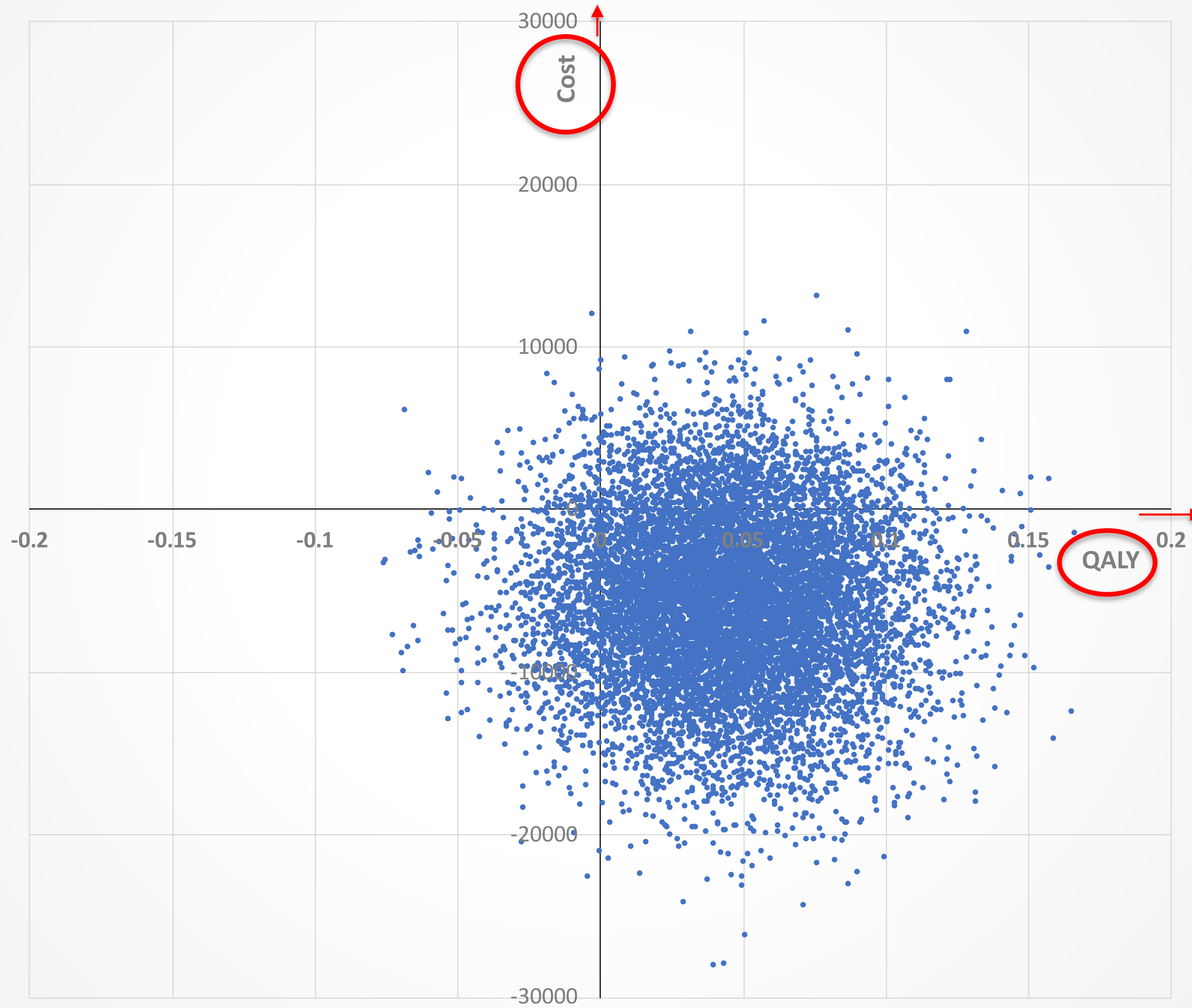
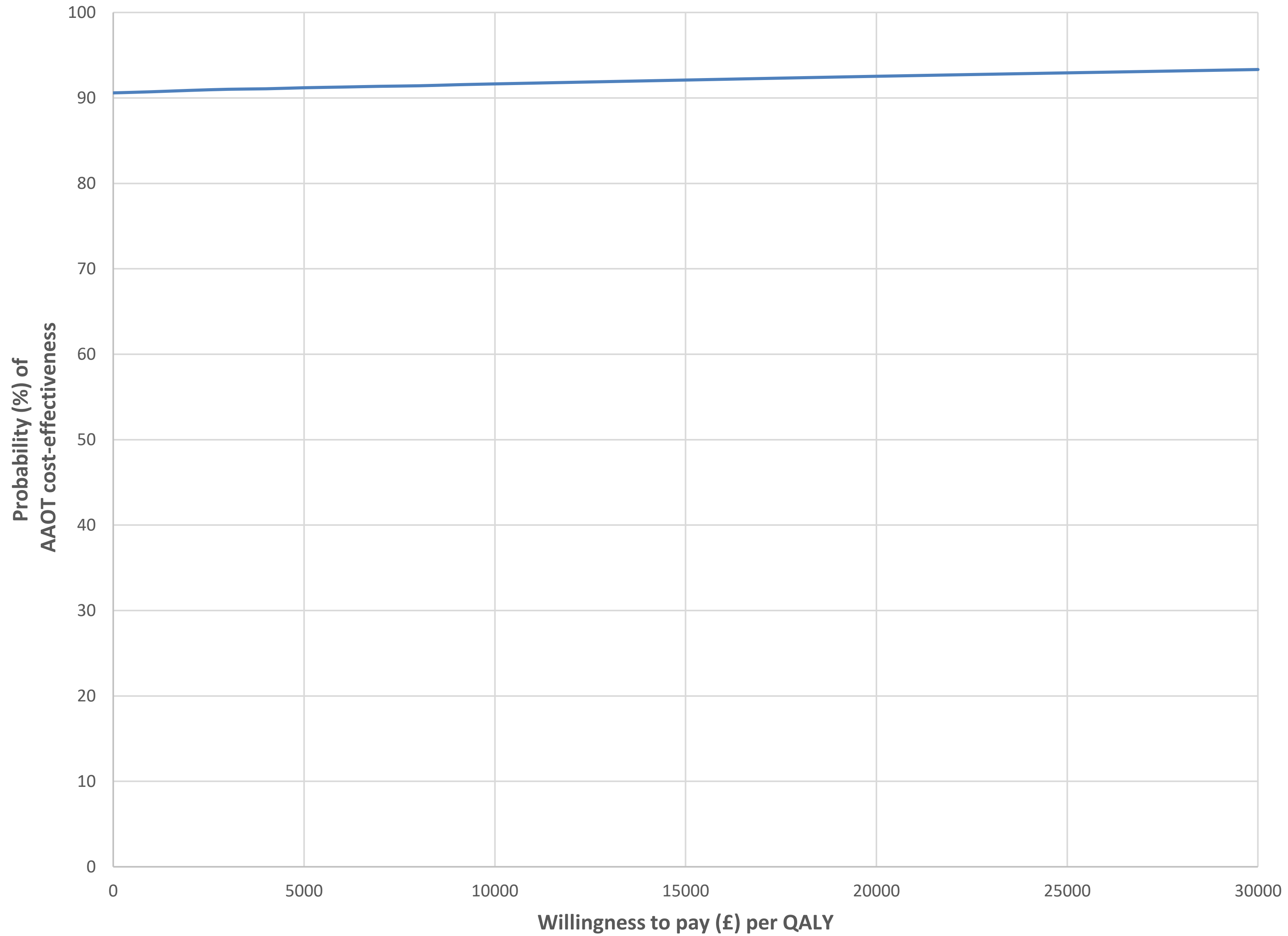


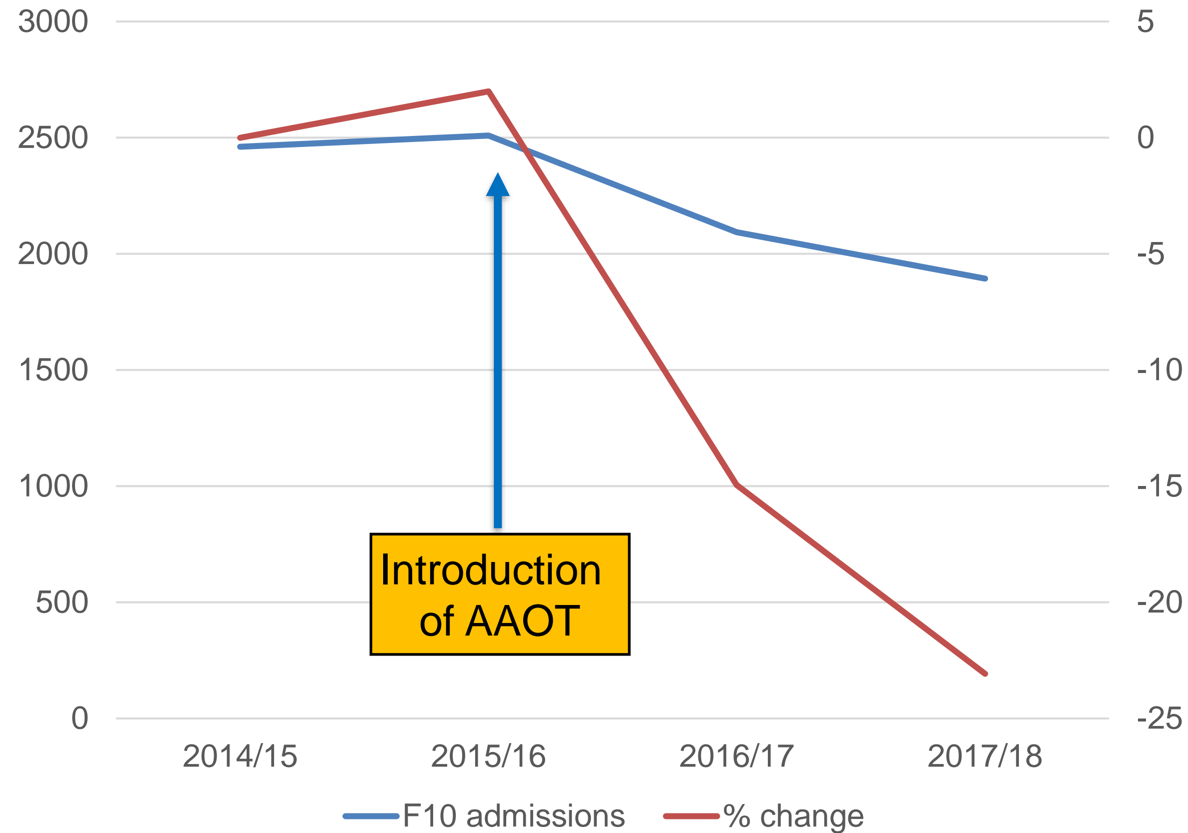
FIGURE 5: Scatterplot on a cost-effectiveness plane of differences in costs vs. differences in QALYs (complete case sensitivity analysis)
Cost
QALY
30000
20000
10000
0
-10000
-20000
-30000
-0.2
-0.15
-0.1
-0.05
0
0.05
0.1
0.15
0.2

**FIGURE 7: Cost-effectiveness accptability curve (primary analysis) showing the probability that AAOT is cost-effective compared with usual care for different values a decision-maker might be willing to pay per QALY**



# Impact at whole hospital level

Change in alcohol admissions via Emergency Department in King's College Hospital targeting 87 alcohol-related frequent attenders



# Qualitative study:- aim, objectives and methods

- To explore factors that influence cost-effectiveness / lack of cost-effectiveness
- Specifically, to explore participants' support needs, service use, outcomes and experiences of services before and after entering the AAOT trial
- Semi-structured interviews with 29 trial participants (18 from AAOT arm and 11 from CAU arm) – purposive sample
- Recorded and transcribed verbatim
- Themes coded using MAXQDA
- Exploratory, thematic analysis using iterative categorisation (Neale 2016 and Neale, 2020)

# Summary findings

- Extensive data on service use, health and unmet support needs
- Participants described large amount of unmet need before trial
- Most participants described multimorbidity: -
  - half had a mixture of mental and physical health conditions
  - a further nine described physical health conditions only
  - four had mental health conditions only
- Very few had ever accessed community alcohol treatment services
- Those receiving AAOT reported changes in the way they engaged with services
- Most feedback on AAOT very positive

# Positive experiences of AAOT intervention

- Subset analysis of intervention arm (n=18)
- Subthemes were interlinked
- “Interpersonal” aspects of support
  - Therapeutic style
  - Relationship with keyworker
  - Keyworker qualities
- “Practical” aspects of support
  - Flexible format of engagement and support
  - Broad focus on all needs (patient-centred approach)
  - Care coordination and navigation
- Negative experiences included too sudden / ill-timed end to support and one bad match between keyworker and patient

# In summary

- Economic outcomes appear to be driven by service use reduction
- Key drivers included that participants:
  - felt supported across a variety of needs
  - felt respected and listened to
  - were better informed about their own health, drinking and services
  - were more engaged in playing an active role in their health care
- Mixed methods integration of quantitative and qualitative – methodological challenges
  - First time qual attempt to explain HEA rather than simply clinical
  - Integration informing analyses both ways

# References


- Blackwood, R, Wolstenholme, A, Kimergard, A, Fincham-Campbell, S, Khadjesari, Z, Coulton, S, Byford, S, Deluca, P, Jennings, S, Currell, E, Dunne, J, O'Toole, J, Winnington, J, Finch, E and Drummond, C. (2020). *BMC Public Health* 20:332
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