

Evaluating the impact of CIP on alcohol availability and alcohol related harms

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Introduction

Rationale

The Licensing Act 2003 enables English local authorities (LAs) to implement Cumulative Impact Policies (CIP). CIP strengthen the powers of LAs to reject licence applications for retail alcohol sales in cumulative impact zones (CIZ), where adverse effects of alcohol availability can be demonstrated

Aim

To assess the impact of a CIP in one London borough on granting alcohol sales licences for off and on premise consumption and on the trading and closing times of premises.

Findings presented here are an update of work previously published (1)

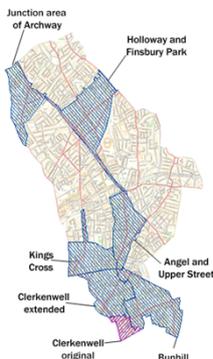


Figure. CIZ (shaded areas) in Islington

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Methods

Setting

Islington, London, UK

Data collection

Quarterly and biyearly licensing data (Apr 2008 to Jul 2016); quarterly crime data (Jan 2011 to Mar 2016), quarterly alcohol-related ambulance callouts data (Apr 2008 to Mar 2016)

Outcomes

- Number of licence applications submitted, proportion of those granted ('success rates'), average weekly trading hours of premises and proportion of premises with a closing time by midnight on Friday and Saturday
- Overall crime rates and antisocial-behaviour (ASB) rates per 1,000 population
- Alcohol-related ambulance callouts per 100,000 population

Statistical analysis

Immediate impacts (i.e. step change at the time of CIP introduction) and impacts over time (i.e. slope change comparing trends before and after the introduction of CIP) were assessed using interrupted time-series (ITS) analysis in CIZ and outside CIZ (non-CIZ). Models were adjusted for overdispersion, seasonal and secular trends, and checked for autocorrelation. In sensitivity analysis we examined the impact of CIP on outcomes in CIZ controlling for trends in non-CIZ

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Results

Licensing data

- There were 194 and 503 alcohol license applications made in non CIZ and CIZ, respectively
- There was no significant immediate or longer term impact of CIP introduction on number of applications submitted
- There were statistically significant impacts immediately after CIP introduction of reduced application 'success rates' in CIZ (-28.55%, 95% CI: -39.68 to -15.36) and non-CIZ (-24.03%, 95% CI: -41.90 to -0.65) (Figure 1). These were mostly driven by decreases in success rates for off-license applications (-41.36%, 95% CI: -53.23 to -26.48, and -24.91%, 95% CI: -43.95 to 0.60, respectively)
- We found statistically significant differences over time in both CIZ and non-CIZ. More specifically, when comparing trends before and after the introduction of CIP in 2013 we found that application 'success rates' for all licences increased in both areas (5.75%, 3.80 to 7.72, and 7.63%, 4.38 to 10.99, respectively, Figure 1)
- We found significant longer term impacts on closing times of premises in CIZ (-5.99%, -8.34 to -3.58 for all licenses, -6.55%, -11.26 to -1.60 for off-license and -6.02%, -9.55 to -2.36 for on-license)
- We found significant longer term impacts on trading hours in non CIZ (-4.79, -6.65 to -2.93 for all licenses) mostly driven by decreases in on-license (-10.24, -16.01 to -4.48)

Crime data

- There were 88,637 (of which 26,202 ASB) and 105,366 (of which 26,552 ASB) events in non CIZ and CIZ, respectively
- We found a statistically significant decrease in overall crime (but not in ASB) rates in both non CIZ (-7.97%, -13.96 to -1.56) and CIZ (-12.22%, -17.95 to -6.09)
- Overall crime rates and ASB rates continued declining over time but at a slower rate

Alcohol related ambulance callouts data

- There were 8,573 and 11,677 events in non CIZ and CIZ, respectively
- Overall there was a decreasing trend in alcohol related ambulance callouts rates, however, immediate and longer term changes were not statistically significant

Sensitivity analysis

- We found little evidence of CIP impact on our outcomes in CIZ when controlling for trends in non-CIZ

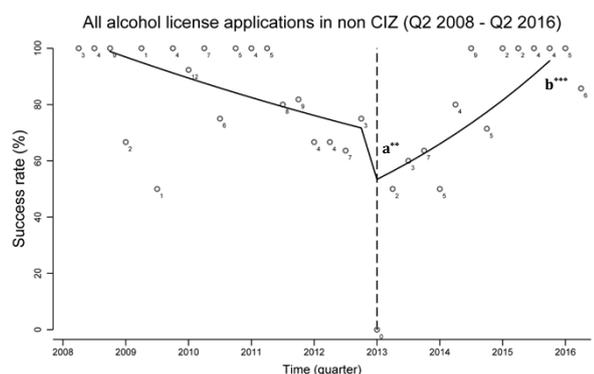
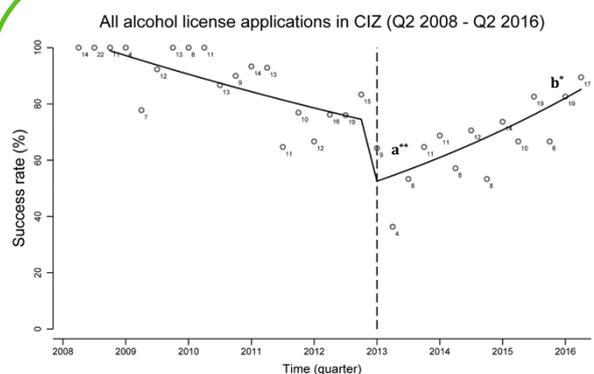


Figure 1 Modelled (predicted) linear trends indicating the immediate (step change ^a) impact of CIP introduction in 2013 and comparing the trends before and after CIP introduction (slope change ^b) on applications 'success rates' in CIZ (top graph) and non CIZ (bottom graph) (Q2 2008 to Q1 2015).

^a: Represents the change in the level of the outcome that occurs in the period immediately following CIP introduction (compared with the counterfactual) – intercept/step change.

^b: Represents differences in the outcome between slopes before and after CIP introduction – slope change.

*p<0.05; **p<0.01; ***p<0.001.

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Interpretation

- Although CIP led to short-term decreases in rates of alcohol licences granted, these reductions were not sustained over time
- Alcohol-related harms (i.e. overall crime, ASB and ambulance callouts rates) appear to have declined over time
- Qualitative research related to this study found CIPs mainly affect premise type and licence conditions (eg, opening hours) rather than number of premises
- Further research should explore these other potential impacts, including type of application, and whether non-CIZs are affected by spillover effects from CIZs

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Reference

1. Pliakas, T., M. Egan, J. Gibbons, C. Ashton, J. Hart and K. Lock (2016). Do cumulative impact zones reduce alcohol availability in UK high streets? Assessment of a natural experiment introducing a new licensing policy. *The Lancet* 388: S94.

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