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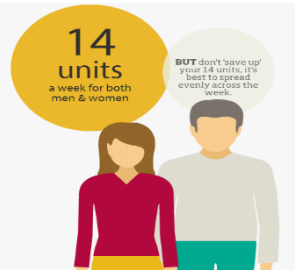
NIHR | National Institute for Health Research

Effects on alcohol consumption of announcing revised UK low risk drinking guidelines: Findings from a monthly cross-sectional survey



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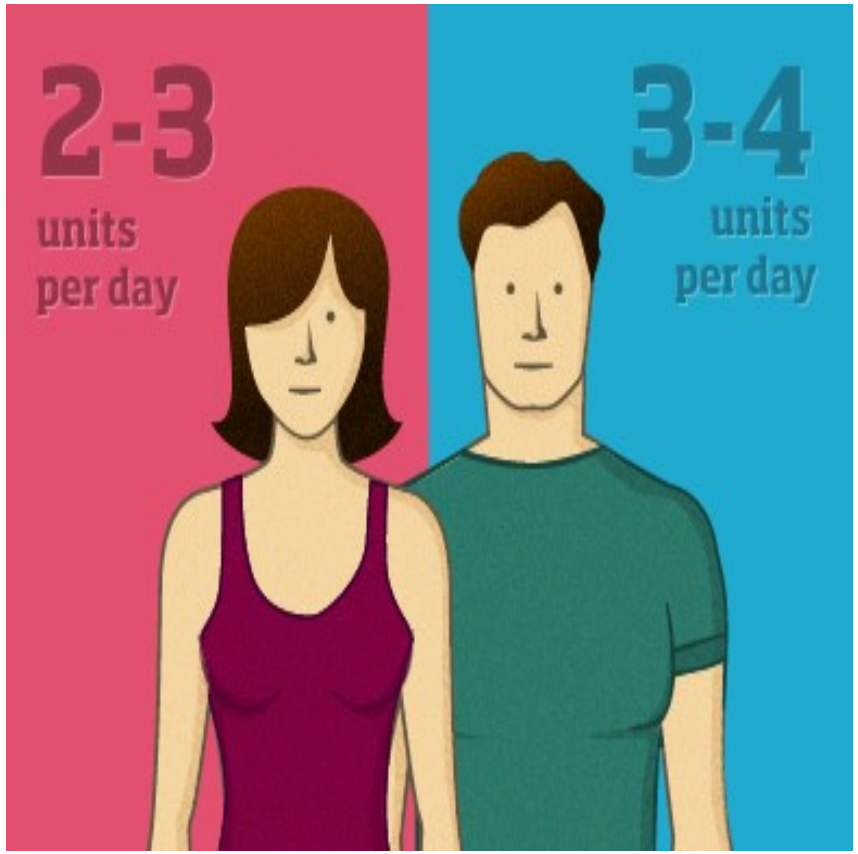
UK lower risk drinking guidelines

Old guidelines

Published in 1995



New guidelines

Announced January 2016

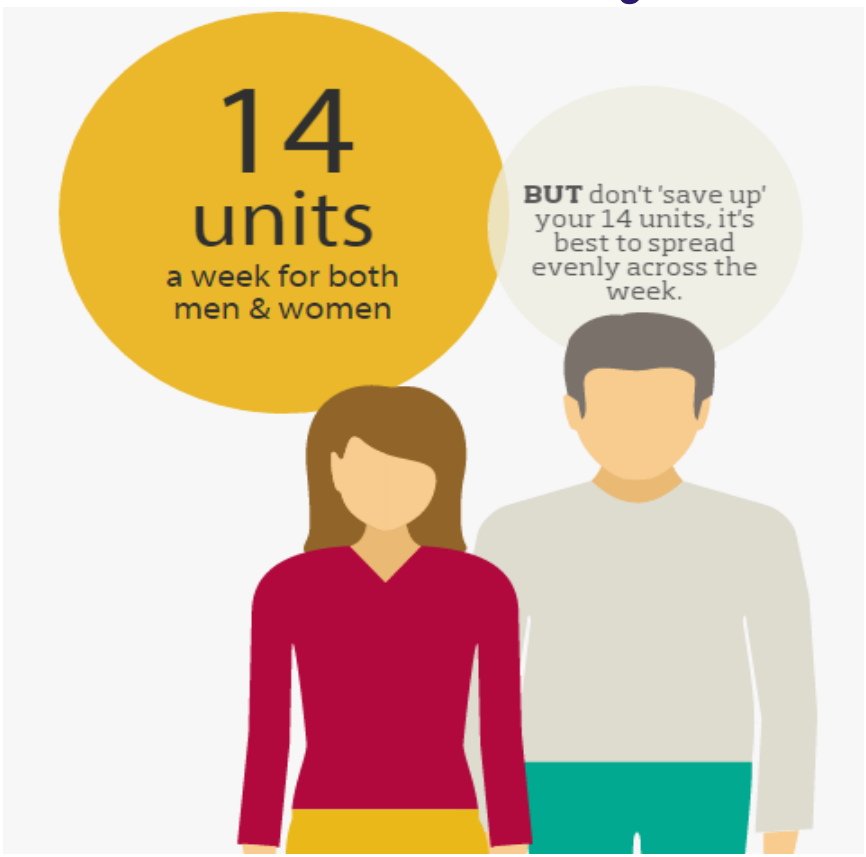


Image from DrinkAware.co.uk

1 UK unit = 8g or 10ml ethanol

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Announcement and promotion

- Media launch got lots of attention
  - Commentators mostly stuck to the facts
  - CMO for England criticised for statements including that people should consider whether they want a glass of wine or to raise their risk of breast cancer
- No large scale promotional campaign
  - Websites were updated but not all product labels

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Previous research on drinking guidelines

- Value as a public health intervention is disputed
  - Ineffective, misused by industry, distract from effective policies
  - Inform drinkers, useful in clinical practice, change norms
- Little evidence on the above points
- Most evaluation studies use weak research designs
  - Promoting guidelines may improve awareness and knowledge
  - No evidence they affect alcohol consumption

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Aim of this study

- To use high frequency time series survey data to evaluate the impact of the new UK drinking guidelines on alcohol consumption.
  - No large-scale promotional activity
  - Intervention point: January 2016 announcement of new guidelines

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Methods

- Data: Alcohol Toolkit Study
  - Monthly cross-sectional survey of adults in England (Monthly N=1,700)
  - March 2014 to October 2017 (22 months pre + 22 months post)
- Primary outcome measure: AUDIT-C score
- Secondary outcomes
  - Average weekly consumption in units (graduated frequency, 24 months only)
  - Ethanol released for sale per month (taxation data)
  - Hospitalisations for (a) assaults and (b) alcohol poisoning
- Controls: Alcohol prices and temperature

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Methods

- Primary analysis: Interrupted time series using Generalised Additive Models
  - Accounts for seasonality
  - Estimates (a) immediate step-change and (b) change in trend
- Secondary analyses:
  - When did any change in trend begin?
  - Were there a short-term (pulse) effect and for how long?
  - Does a quadratic or cubic trend fit the data better?
  - Does extending time series to February 2018 affect the results?

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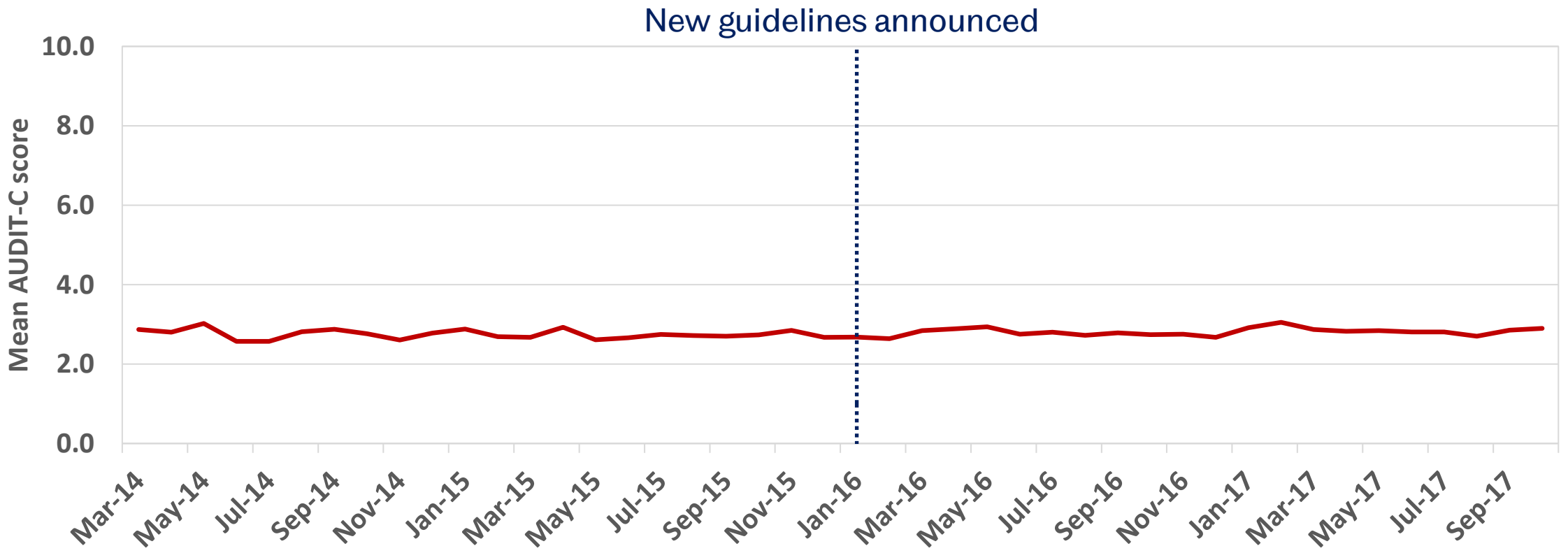
AUDIT-C scores across the study period



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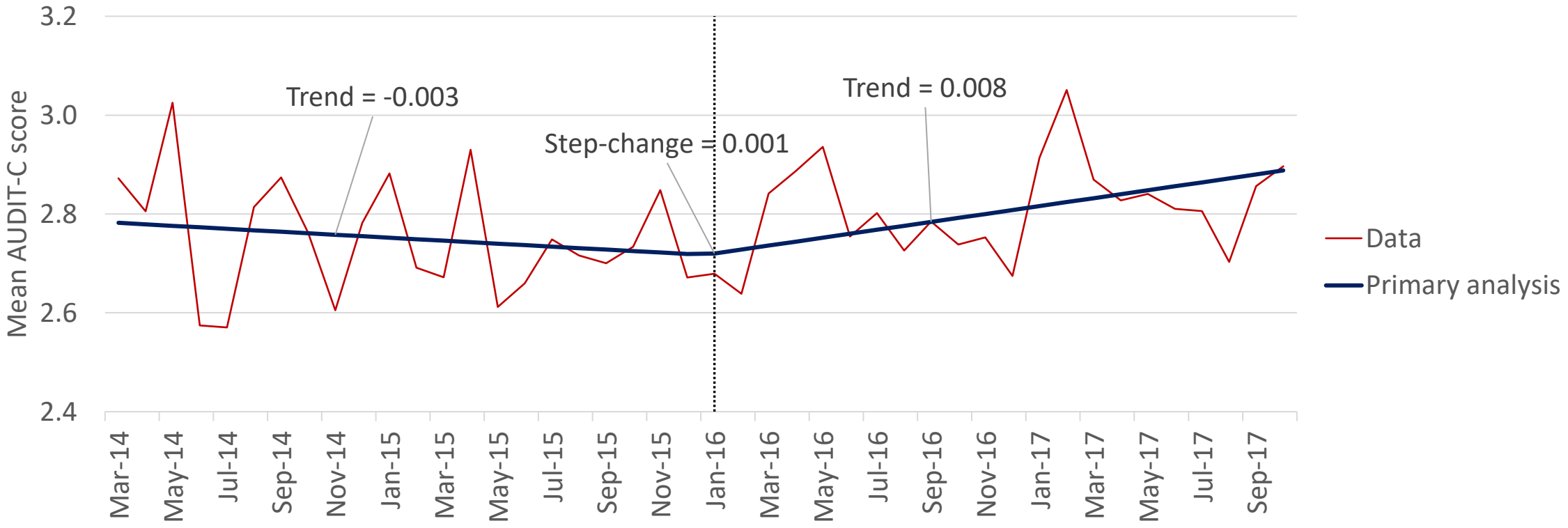
Results of primary analysis



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Results for secondary outcomes

	Immediate step-change	Change in trend	Robust to controls
AUDIT-C scores (main analysis)	B = 0.001 (p=0.82)	**B = 0.008 (p=0.02)**	No
Graduated frequency	B = 0.105 (p=0.79)	n/a	n/a
Alcohol taxation data	B = 0.006 (p=0.72)	B = 0.001 (p=0.25)	n/a
Assault hospitalisations	**IRR = 0.927 (p=0.02)**	**IRR = 1.005 (p=0.03)**	Step-change only
Alcohol poisoning hospitalisations	**IRR = 0.846 (p=0.03)**	IRR = 0.996 (p=0.44)	No

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Results for secondary analyses

- When did the change in trend begin?
  - June 2015 (six months before announcement)
- Were there a short-term (pulse) effect and for how long?
  - Yes, AUDIT-C scores up to 0.2 points lower for four months
- Does a quadratic or cubic trend fit the data better?
  - No
- Does extending time series to February 2018 affect the results?
  - No

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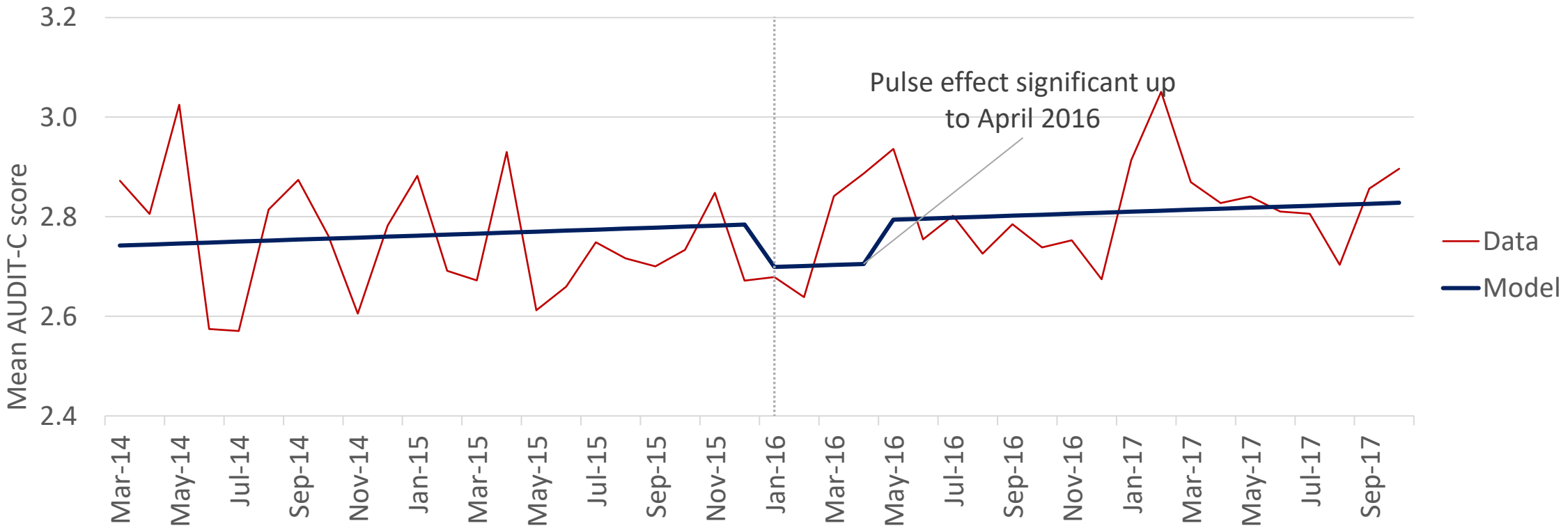
Short term pulse effect



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Discussion

- No substantial or sustained reduction in alcohol consumption following new guidelines
- Other analyses show no change in influences on behaviour change
- Strengths:
  - Time series of up to 48 monthly data points
  - Multiple relevant outcome measures and statistical analyses
- Limitations
  - Self-report biases in primary outcome measure
  - Risk of insufficient control for seasonality

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Conclusion

- If you don’t promote drinking guidelines, nothing happens

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