Item: 3.2

Public Health Scotland

Evaluating the impact of minimum unit pricing for alcohol in Scotland: A synthesis of the evidence

Briefing paper

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Introduction

Minimum unit pricing (MUP) sets a minimum price below which alcohol cannot be sold in licensed premises in Scotland. MUP was implemented on 1 May 2018 at £0.50 per unit,[1] with the aim of reducing alcohol-related harm in Scotland by targeting low-cost, high-strength alcohol. MUP has been and continues to be an important component in the Scottish Government's strategy to tackle alcohol-related harm. The strategy was developed in recognition of the well-documented harm alcohol causes in Scotland. It aims to reduce population levels of alcohol consumption while targeting those that drink at hazardous and harmful levels and, in turn, reduce associated levels of health and social harm.

The legislation by which MUP was implemented includes a sunset clause, requiring MUP to cease after six years of operation unless the Scottish Parliament votes for it to continue. The legislation also includes a review clause, requiring Ministers to lay before the Scottish Parliament a report on the operation and effects of MUP after five years of being in place. The Scottish Government commissioned Public Health Scotland (PHS) to lead the evaluation of MUP that will form the basis of the Scottish Government review report, and inform the Scottish Parliament vote on whether MUP will continue beyond 30 April 2024.

Aim of the evaluation

The evaluation sought to answer two overarching questions:

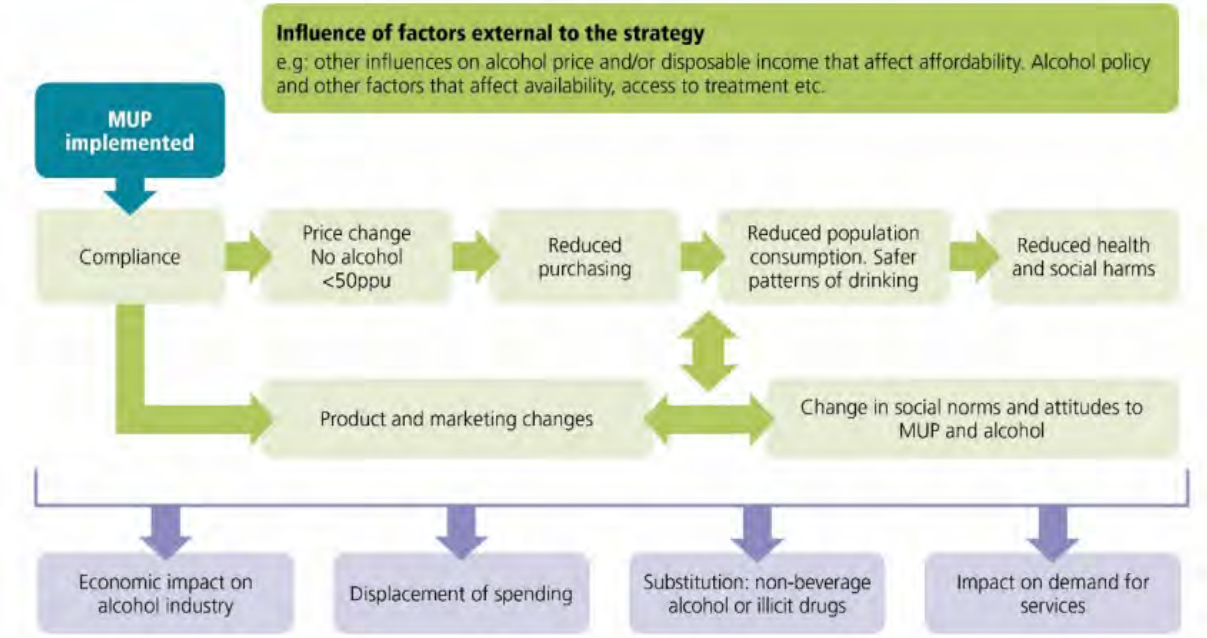
1. To what extent has implementing MUP in Scotland contributed to reducing alcohol-related health and social harms?

2. Are some people and businesses more affected (positively or negatively) than others?

The evaluation was planned around a theory of change (**Figure 1**). The theory of change presents a plausible chain of outcomes whereby successful implementation of MUP would result in increasing the price of low-cost, high-strength alcohol which in turn would have the intended outcome of reducing alcohol consumption, thus reducing alcohol-related health and social harm. The theory of change also

demonstrates how a number of other factors might interact with the main chain of events, including external influences on population-level alcohol consumption, impacts on the alcoholic drinks industry,[2] and potential adverse consequences such as substitution of alcohol with other harmful substances.

Figure 1: Theory of change for minimum unit pricing for alcohol



The evaluation comprised a portfolio of quantitative and qualitative studies, designed to provide robust evidence on whether or not the steps in the theory of change occurred as intended after the introduction of MUP. The findings from each of these studies have been published on the **PHS website**.

In producing the final report on the impact of MUP, PHS conducted a comprehensive evidence synthesis which pulls together the findings of the PHS evaluation in addition to work on the impact of MUP conducted by others, primarily academic institutions. Following a quality appraisal process, 40 research publications were identified and rated as of sufficient quality for inclusion in the evidence synthesis.

This briefing summarises the main findings and conclusions of the full evidence synthesis report. For full details on the methods used and all of the evidence that was included in the synthesis please refer to the **main report**.

What we found

Alcohol-related health outcomes

There is strong quantitative evidence that MUP was associated with a reduction in deaths wholly attributable[3] to alcohol consumption, relative to England where MUP was not implemented. A smaller, and less certain, relative decrease was seen in hospital admissions wholly attributable to alcohol. The estimated reductions in deaths and hospital admissions were largest among men and those living in the 40% most deprived areas in Scotland. Strong evidence was found that MUP was associated with reductions in deaths and hospitalisations due to chronic conditions,[4] with less certain evidence that MUP was associated with an increase in deaths and hospitalisations due to acute conditions.[5]

There is no consistent evidence of a population-level effect, either positive or negative, on alcohol-related ambulance call-outs, prescriptions for treatment of alcohol dependence,[6] emergency department attendance or the level of alcohol dependence or self-reported health status in drinkers recruited through alcohol treatment services in Scotland, relative to England.

There is some qualitative evidence that MUP may have had some negative health consequences, particularly for those with alcohol dependence. These included increased withdrawal in homeless and street drinkers, an increase in the consumption of stronger alcohol types, and concern about switching from weaker to stronger alcohol drinks. Some professionals reflected that reduced affordability was driving individuals to seek treatment.

Compliance

There is strong quantitative evidence that sales of alcohol below £0.50 per unit largely disappeared following the implementation of MUP. There is qualitative evidence that retailer compliance with the legislation was high and had become standard practice. There is qualitative evidence of some individual instances where

alcohol was reported to be available at below £0.50 per unit, but these were not typical of the evidence on compliance overall.

Price

There is strong and consistent quantitative evidence, from a range of sources, of an immediate increase in the average price per unit of alcohol sold through the off-trade[7] in Scotland, relative to other areas in Great Britain, following the implementation of MUP. Changes in price driven by MUP differed by drink type, with those products sold below the MUP prior to implementation, such as cider, perry[8] and own-brand spirits, seeing the greatest price increases. Following MUP implementation, prices tended to be clustered at between £0.50 to £0.649 per unit; approximately double the volume of alcohol was sold in this price range in Scotland compared to England & Wales in the year following implementation. There was little evidence of impact on the price of products at or above £0.65 per unit.

Consumption

There is strong and consistent quantitative evidence of a reduction in alcohol consumption, as measured by alcohol sales or purchasing data, in Scotland relative to other areas in Great Britain. The overall reduction in consumption was driven by a reduction in consumption of alcohol sold through the off-trade. The evidence consistently shows that the greatest reductions were seen for cider and spirits with mixed evidence of the impact on beer and wine.

There is consistent quantitative evidence that the greatest reductions in alcohol purchases were seen among those households purchasing the most alcohol prior to MUP implementation, with negligible impact on those that typically purchase less.

Some evidence of cross-border purchasing was identified, but its extent was observed to be minimal, most likely to occur among those living near the Scotland–England border and unlikely to undermine the overall impact of MUP on consumption.

Qualitative evidence identified a range of effects of MUP on consumption behaviour including changes in the quantity and type of alcohol consumed. Those working with families affected by alcohol reported that they thought MUP helped reduce consumption in those drinking at hazardous or harmful levels but not those with alcohol dependence.

Social outcomes

Overall, there is a lack of evidence of MUP having an impact on social outcomes at a population level. For people who already used illicit drugs before MUP was implemented, quantitative analyses from four studies found no effect of MUP on illicit drug behaviours and, while there were qualitative reports of increased illicit drug use, these were often difficult to attribute to MUP. There was no evidence that participants who did not use illicit drugs prior to MUP began using them after implementation, meaning there was no suggestion that people started to use illicit drugs because alcohol increased in price.

There was little indication of increased use of non-beverage or illicit alcohol. Quantitative studies on crime (including drug crime), switching to non-beverage alcohol, spend on food and the nutritional value of food all found no positive or negative impact, and quantitative evidence on the impact of road traffic accidents was mixed.

There were some qualitative insights that suggest that for some drinkers, especially those with probable alcohol dependence and particularly the financially vulnerable, existing social harms, particularly those related to financial pressures, may have been exacerbated, but there is no evidence of those experiences being prevalent or typical. It is not possible to say whether children and young people in families affected by alcohol use were positively or negatively affected.

Alcoholic drinks industry

Overall, there is no consistent evidence that MUP impacted either positively or negatively on the alcoholic drinks industry as a whole. Sales data identified that an

overall increase in the value of off-trade alcohol sales was seen, with increases in retail price offsetting declines in volume sales. While a reduction in producers' revenues was observed, this was considered in qualitative interviews to be minor. Little evidence was found of MUP having had an impact on key business performance metrics.[9] There is some evidence that the industry responded to MUP by introducing new formats and packaging sizes.

Attitudes to MUP

Quantitative evidence shows that, at a population level, the public were more supportive of MUP than not, with attitudes towards the policy becoming more favourable over time. The most common reason cited for supporting the policy was based on the belief that MUP would help to address alcohol-related harm while concerns about the effectiveness of MUP, potential negative impacts on the most deprived and the legitimacy of state intervention on individual behaviour were all cited as reasons for not supporting the policy. These views were largely echoed in the qualitative evidence. The view from the alcoholic drinks industry was typically, but not uniformly, opposed to MUP.

What the findings mean

Overall, the evaluation provides strong evidence that MUP has averted a number of deaths related to alcohol consumption. There is also evidence that there has been a reduction in hospital admissions wholly attributable to alcohol consumption, although the presence of this effect was more uncertain. There is strong evidence that some groups experienced greater improvements than others, with the largest reductions in deaths and hospital admissions wholly attributable to alcohol consumption being observed for men, and those living in the 40% most deprived areas. There was no evidence of impact on other health outcomes measured. There is no evidence of widespread health or wider harms, or significant costs to the alcohol industry or society in general. However, there is evidence that some people, particularly those with established alcohol dependence with limited financial or social support, may have experienced harm, such as reduced expenditure on food, as a consequence of MUP.

It is reasonable to conclude that MUP contributed to the observed decrease in alcohol-related deaths and hospital admissions, relative to England. Our confidence to make this assertion is increased because the reductions in deaths and hospitalisations were specific to the timing of MUP implementation and were preceded by the necessary high levels of compliance, increases in price and reductions in consumption, as summarised in **Figure 2**.

We have also considered a number of external factors that could have influenced the outcomes in addition to MUP. We have found that these are either unlikely to offer a plausible alternative explanation or that there is insufficient evidence to conclude what impact they have had.

The evaluation has demonstrated that MUP has reduced the number of deaths and hospital admissions in Scotland, compared to what would have happened had MUP not been implemented. When valued in monetary terms, this represents a substantial benefit to society in Scotland. The main costs associated with MUP relate to initial implementation and would not be incurred again should the policy continue. Overall, the evidence from this evaluation, as well as previous theory and evidence, suggest that the balance of costs and benefits are favourable.

Considerations for policy makers

- The evaluation of MUP was conducted with MUP set at a consistent rate of £0.50 per unit of alcohol. It is likely that any beneficial impacts of MUP realised to date will only continue if the value of MUP compared to other prices and incomes is maintained. Increasing the value of MUP could potentially increase the positive impact on alcohol consumption and related harms, but would need to be balanced against the potential for any harmful consequences to also increase.

- There is limited evidence to suggest that MUP was effective in reducing consumption for those people with alcohol dependence. Those with alcohol dependence are a particular sub-group of those who drink at harmful levels and have specific needs. People with alcohol dependence need timely and

evidence-based treatment and wider support that addresses the root cause of their dependence.

- The evaluation has demonstrated that some people with alcohol dependence who have limited financial support may experience increased financial pressure as a result of MUP. Consideration needs to be given on how best to monitor the needs and provide services for those in this group to minimise the negative impacts of MUP. This would be particularly important if increases to the level of MUP are introduced. Strategies to do this should be informed by the evidence.

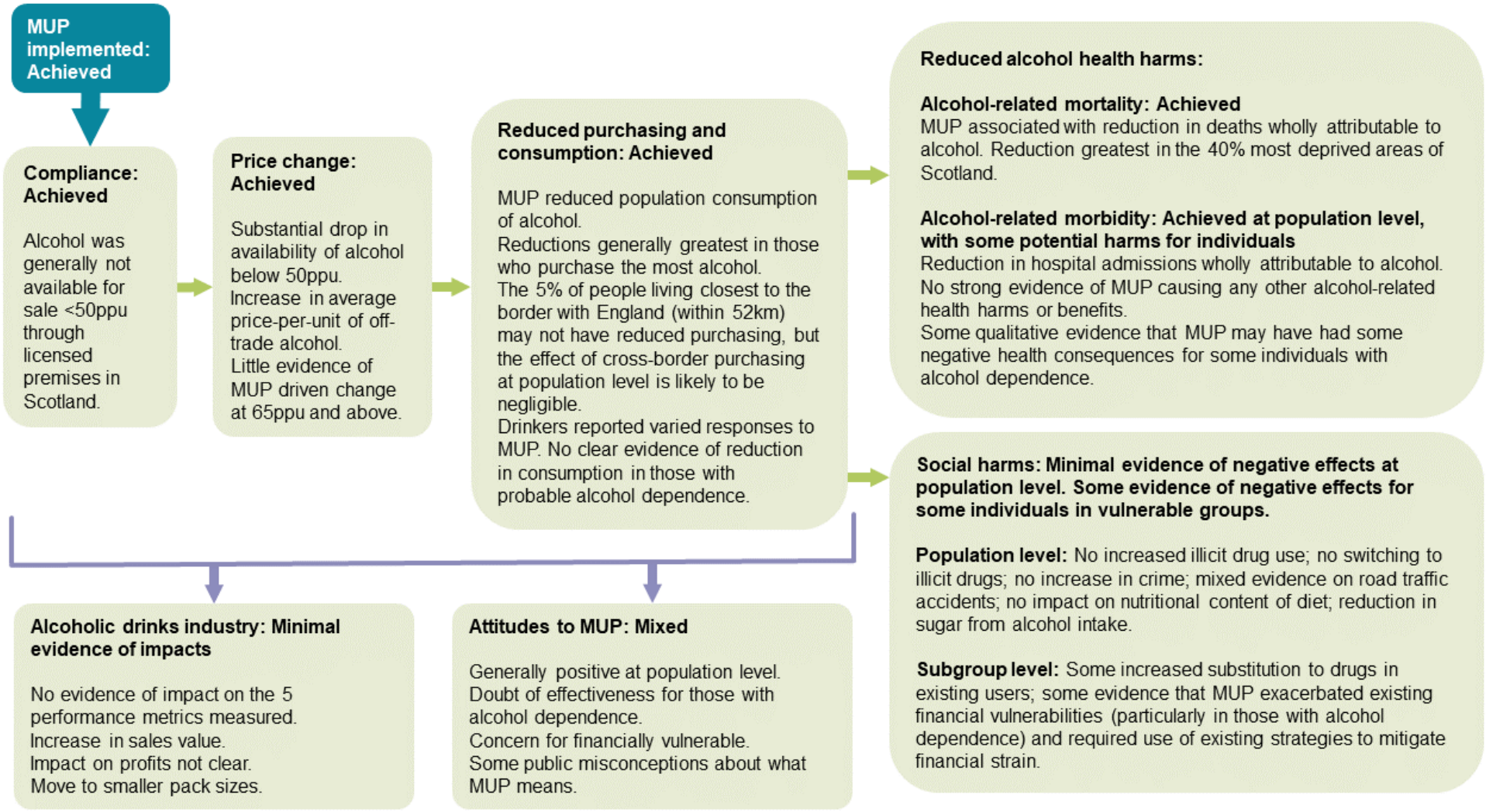
- Those under 18 years of age generally reported that MUP had not affected their alcohol consumption, largely because price was a relatively minor factor in their decision to drink alcohol. Alternative evidence-based approaches should be considered to reach drinkers below the legal age for purchasing alcohol.

- Policymakers should consider how new policies, such as the proposed Deposit Return Scheme,[10] might interact with the MUP pricing structure.

Conclusion

Taken together, the evidence supports that MUP has had a positive impact on health outcomes, namely a reduction in alcohol-attributable deaths and hospital admissions, particularly in men and those living in the most deprived areas, and therefore contributes to addressing alcohol-related health inequalities. There was no clear evidence of substantial negative impacts on the alcoholic drinks industry, or of social harms at the population level.

Figure 2: Theory of change populated with main findings



Notes and definitions

[1] An alcohol unit is equal to 10ml (or 8g) of pure alcohol. A unit is a way of expressing the alcohol content of an alcoholic drink.

[2] Producers, wholesalers and retailers of alcoholic drink products.

[3] A health outcome that may be attributed, at least in part, to the consumption of alcohol. A **wholly alcohol-attributable** condition is one that is caused directly by alcohol consumption and would not have occurred in the complete absence of alcohol. A **partially alcohol-attributable** condition is one where alcohol is known to contribute to the cause of the condition but is not the sole cause.

[4] A chronic condition or cause is one that develops slowly and may worsen over time. A chronic alcohol-attributable condition is one that develops due to long-term alcohol consumption, such as alcoholic liver disease.

[5] An acute condition or cause is one that develops suddenly and occurs over a short duration. An acute alcohol-attributable condition is one likely to be associated with an episode of excessive alcohol consumption, such as alcohol intoxication.

[6] Alcohol dependence is characterised by craving, tolerance, a preoccupation with alcohol, and continued drinking in spite of harmful consequences (for example, liver disease or depression caused by drinking).

[7] Licensed premises where alcohol is sold for consumption off the premises, such as convenience stores, supermarkets and specialist alcohol retailers.

[8] An alcoholic beverage similar to cider but made from pears rather than apples.

[9] These metrics included: Number of enterprises and business units; employment; turnover; GVA; and output value.

[10] The **Deposit Return Scheme** (DRS) as it is currently proposed would add a deposit of £0.20 on to every single-use drinks container, including each single item within a multipack and regardless of item size. The deposit would be refunded when the container is returned for recycling through an approved channel. DRS thus has the potential to interact with the MUP pricing structure at the point of

purchase. Lower-strength alcohol, such as beer and cider, are more likely to be sold in multipacks while higher-strength alcohol, such as spirits and wine, tend to be sold in single containers. There is a risk that DRS incentivises a move towards larger, single containers and higher-strength alcoholic products. The extent to which this will influence consumers' purchasing decisions and industry packaging is unknown.