New modelling of alcohol pricing policies, alcohol consumption and harm in Scotland

Summary of key findings

This briefing note presents an overview of the findings of a new report from the Sheffield Alcohl Research Group commissioned by Scottish Government.

Scotland introduced a 50p Minimum Unit Price (MUP) in May 2018. A comprehensive evaluation led by Public Health Scotland has estimated that the policy reduced alcohol consumption by 3% and alcohol-specific deaths by 13.4%. A new modelling report from the University of Sheffield looks at the potential impact of changes in the MUP level and the impact of wider factors – the COVID-19 pandemic and high rates of inflation – on alcohol consumption and health.

Chapter 1 of the new report looks at patterns in alcohol consumption and harm in Scotland using data from 2019:

- There are an estimated 3.6million drinkers in Scotland, consuming an average of 12 units of alcohol per week at a cost of £28.
- People living in the most deprived areas are less likely to drink, drink less on average if they do so and spend less money on alcohol.
- Every year, an estimated 1,340 people die in Scotland due to alcohol consumption and alcohol causes 21,480 admissions to hospital and 45,221 years of life lost due to premature death.
- This health burden falls disproportionately on the most deprived groups, in spite of their lower alcohol consumption, with 36% of alcohol-attributable deaths occurring in the most deprived 20% of the population.

Chapter 1 also estimates the impact, all else being equal (i.e. assuming no other factors have affected alcohol consumption or harm and that the MUP level has been raised in line with inflation since its introduction), of changing the level of the MUP, from its current threshold of 50p per unit.

- Raising the MUP level by 10p would reduce alcohol consumption by an estimated 6.7%, reducing the number of people drinking at harmful levels by 26,579 (an 18.5% fall). Removing the MUP entirely would increase alcohol consumption by an estimated 5.4% and increase the number of harmful drinkers by 26,884 (an 18.7% increase).
- Raising the MUP level by 10p would also lead to an estimated 2,126 fewer deaths, 27,774 fewer hospital admissions and 66,936 fewer years of life lost to premature death over 20 years. Removing the MUP would lead to an estimated 1,803 additional deaths, 21,997 hospital admissions and 55,674 additional years of life lost over 20 years.
- Higher MUP levels are estimated to lead to greater health impacts.
- These impacts would be greatest in the most deprived groups, meaning that raising the MUP level would reduce health inequalities, whereas lowering or removing it would increase inequality.

- Raising the MUP level by 10p would reduce NHS hospital costs by an estimated £33.2million over 20 years, while removing it would increase hospital costs by £26.1million.

However, all else has not been equal. Chapter 3 of the report looks at how alcohol consumption in Scotland changed during the COVID-19 pandemic and the longer-term implications of these changes for public health.

- We find that, on average, people in Scotland who were drinking within the UK lowrisk drinking guidelines of 14 units/week reduced their alcohol intake in 2020, while those drinking above the guidelines increased their drinking by an average of 2 units/week.
- We explored 4 scenarios for how these changes in drinking persisted, or not, from 2022 onwards and compared these to drinking having remained at pre-pandemic levels throughout.
- In the best-case scenario where we assume that alcohol consumption reverts to pre-pandemic levels in 2022, we estimate an additional 423 deaths, 2,359 hospital admissions, 10,211 years of life lost and £3.1million in NHS hospital costs over the following 20 years.
- When we assume that consumption changes during the pandemic persist in the long-term, we estimate there would be an additional 3,258 deaths, 36,262 admissions, 92,919 years of life lost and £43.6million in hospital costs over 20 years.
- This harmful health impact of the pandemic on alcohol-related outcomes is estimated to fall disproportionately on the most deprived groups, further increasing existing inequalities in health.

Since 2021 the UK has also experienced high rates of inflation, with the UK Government's preferred measure, CPIH, reaching 9.6% annually in October 2022. This means that the real-terms value of the MUP threshold fell from 50p/unit in May 2018 to 41p/unit in July 2023. The threshold would need to have increased to 61p/unit to maintain its real-terms value. Chapter 4 of the report looks at the impact of this real-terms erosion of the MUP on alcohol consumption and harm. It then estimates the impact of different ways of linking the MUP to inflation in the future.

- We estimate that the reduction in the real-terms value of the MUP level since 2018 means alcohol consumption in Scotland was 2.2% higher in 2023 than it would have been if the MUP level had risen with inflation. This will rise to 3.4% by 2040 if the level remains at 50p.
- Keeping the MUP at 50p until 2040 is also estimated to lead to an additional 1,055 deaths, 12,932 hospital admissions, 31,114 years of life lost and £15.5million additional NHS hospital costs over this period.
- Linking the MUP threshold to inflation from 2023 onwards, but not addressing the deflation in its level between 2018 and 2023 would have a small beneficial impact on future alcohol harms compared to leaving the MUP at 50p/unit in the longer-term.
- Adjusting the MUP threshold in 2023 to account for deflation in its level since 2018 and then adjusting its level in line with inflation in future years is estimated to lead to around 1,100 fewer deaths, 13,400 fewer hospital admissions, 32,000 fewer years of life lost and a £16million reduction in NHS costs due to alcohol over 20 years compared to leaving MUP at 50p/unit in the longer-term.

Finally, the UK Government reformed alcohol duties in August 2023. This particularly changed the way that tax on wine and cider are levied in line with WHO recommendations. In Chapter 2 of the report we estimate the impact of these reforms.

- The 2023 alcohol duty reforms are estimated to lead to a small (0.4%) reduction in alcohol consumption, leading to 130 fewer deaths, 1,098 fewer hospital admissions and 2,699 fewer years of life lost over 20 years. These impacts are much smaller than the estimated impacts of increasing the MUP threshold by 10p.
- Reductions in alcohol consumption following the duty reforms are also estimated to be largest among the least deprived groups, leading to a small increase in health inequalities.

Overall, the new report highlights two key conclusions. First, the erosion of the real-terms value of the MUP by high levels of inflation is likely to increase alcohol related harm. Adjusting the level of the MUP to account for inflation is therefore important to maintain its public health impacts. Second, the long-term effects of the COVID-19 pandemic are also likely to lead to increases in alcohol-related harm that will cancel out some of the beneficial impacts of MUP.