

# Alcohol Price Policy Options: Effectiveness and Cost-effectiveness Modelling in the UK

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Renewed interest in alcohol policy in UK at the moment:

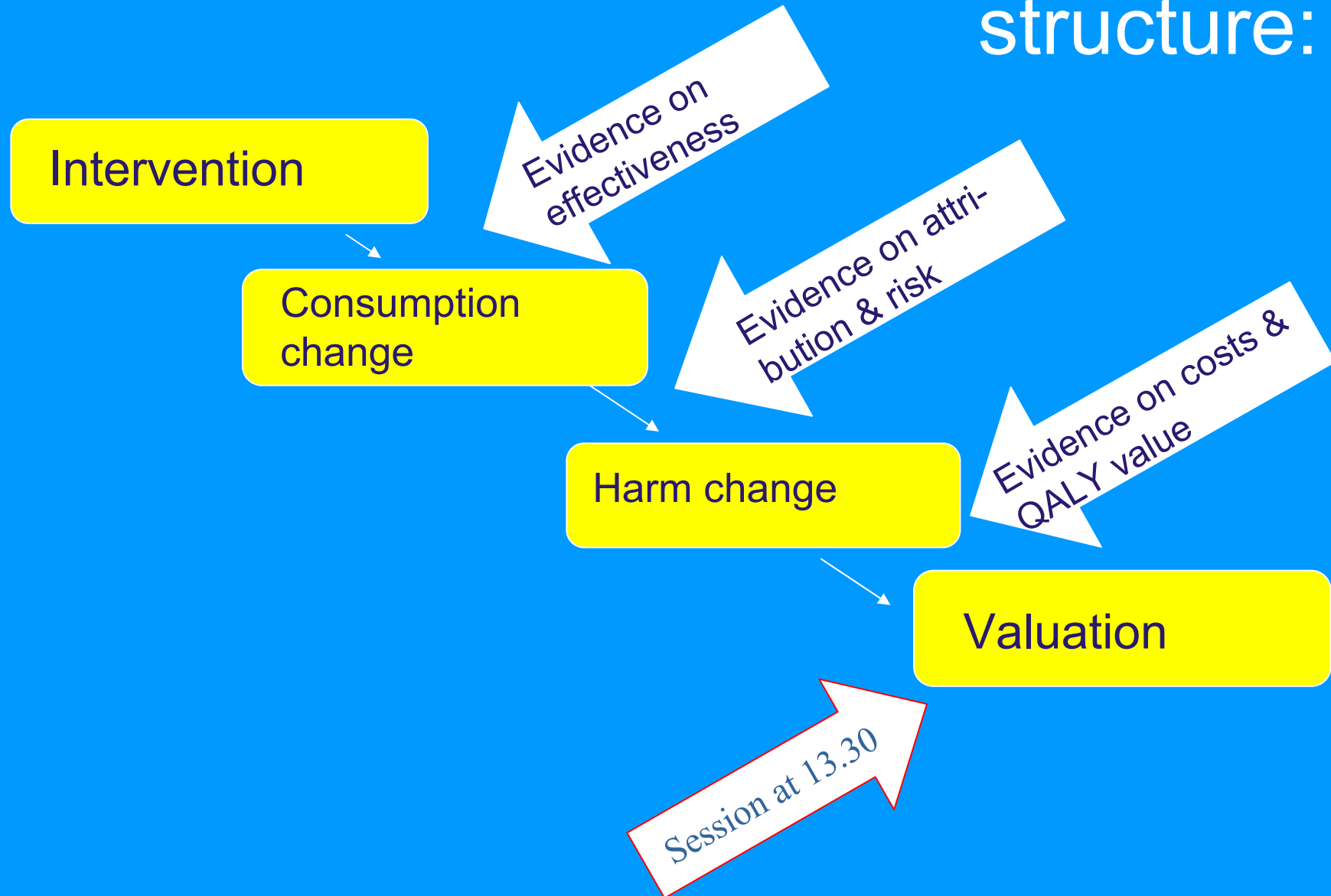


Questions we were asked to answer:

What is the effectiveness and cost-effectiveness of

- **Price policies** (discount bans, minimum price)
- Restrictions on trading hours, outlet density, advertising
- **Screening & Brief Interventions**

# All models follow same structure:





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# Modelling macro-level policies: Alcohol pricing, consumption & harm

# What we looked at

## Policies

- Minimum retail prices (per 10ml pure alcohol)
- Restrict off-trade promotions (discounts)
- General price rises (e.g through taxation)

## Harms

- Health, Crime, Unemployment, Workplace absence
- Costs to healthcare, social care, criminal justice

## Populations

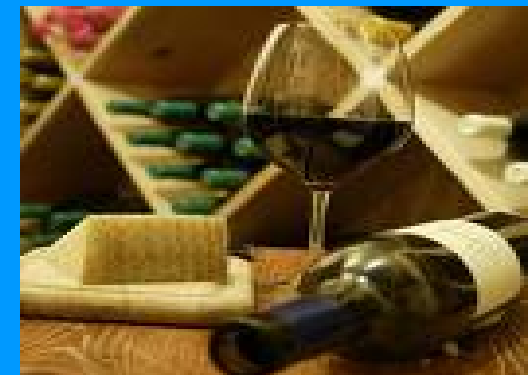
- Total population, and Moderate vs hazardous and harmful drinkers  
(Underage drinkers, 18-24 year old hazardous drinkers)



## Why are subgroups important?

- Different alcohol buying and drinking preferences
  - Beer, wine, spirits...
  - Going out vs drinking at home
  - “Quality experience”
- Different risks
  - Acute vs chronic harms
  - Health vs crime vs workplace harms

(Meier et al. 2009: Addiction)



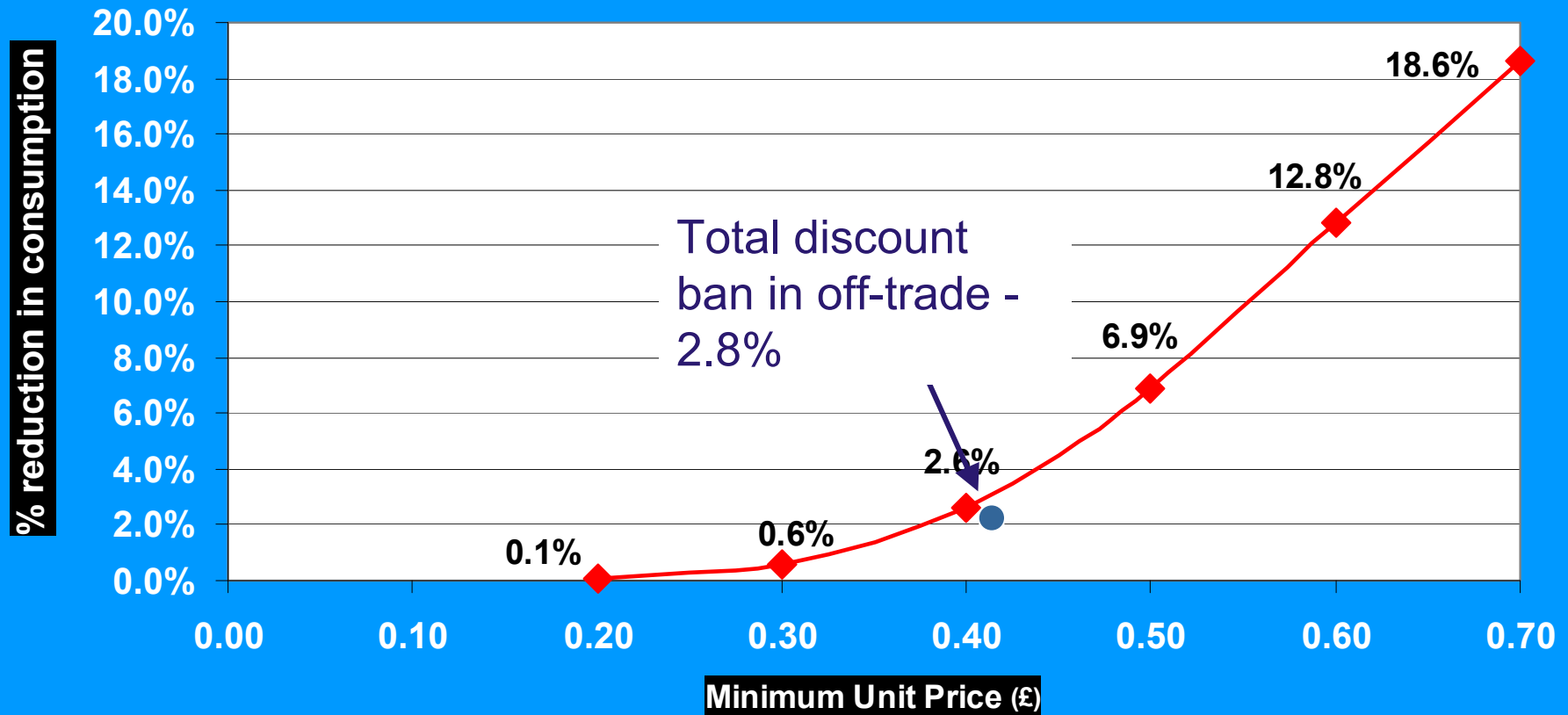
# Why focus on subgroups?

Minimum pricing and discount bans target cheap alcohol only (ie only part of the market)

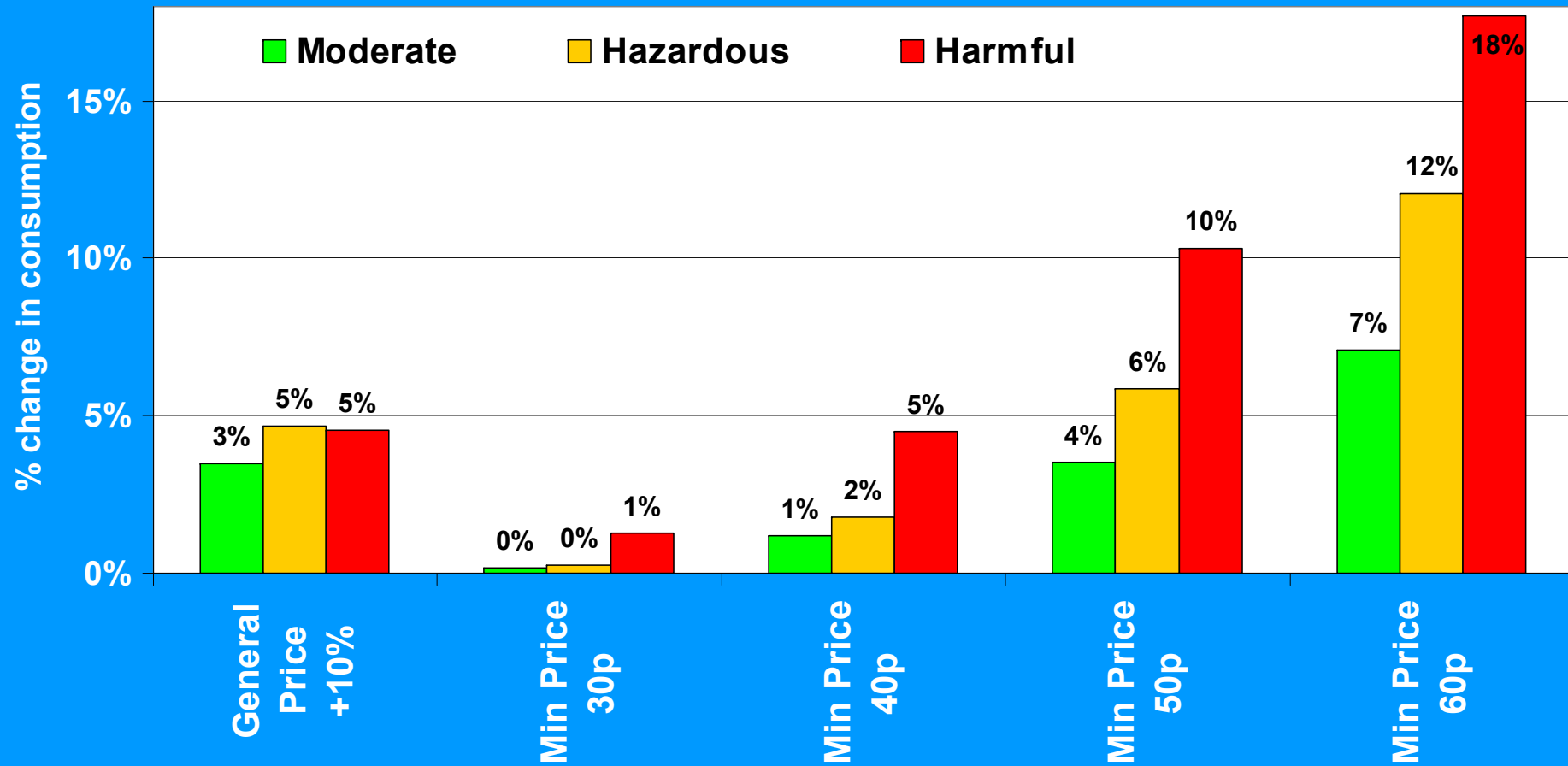
## Understand winners & losers:

- For whom is policy effective?
- For which type of harms is it effective?

# What consumption reductions can we expect?

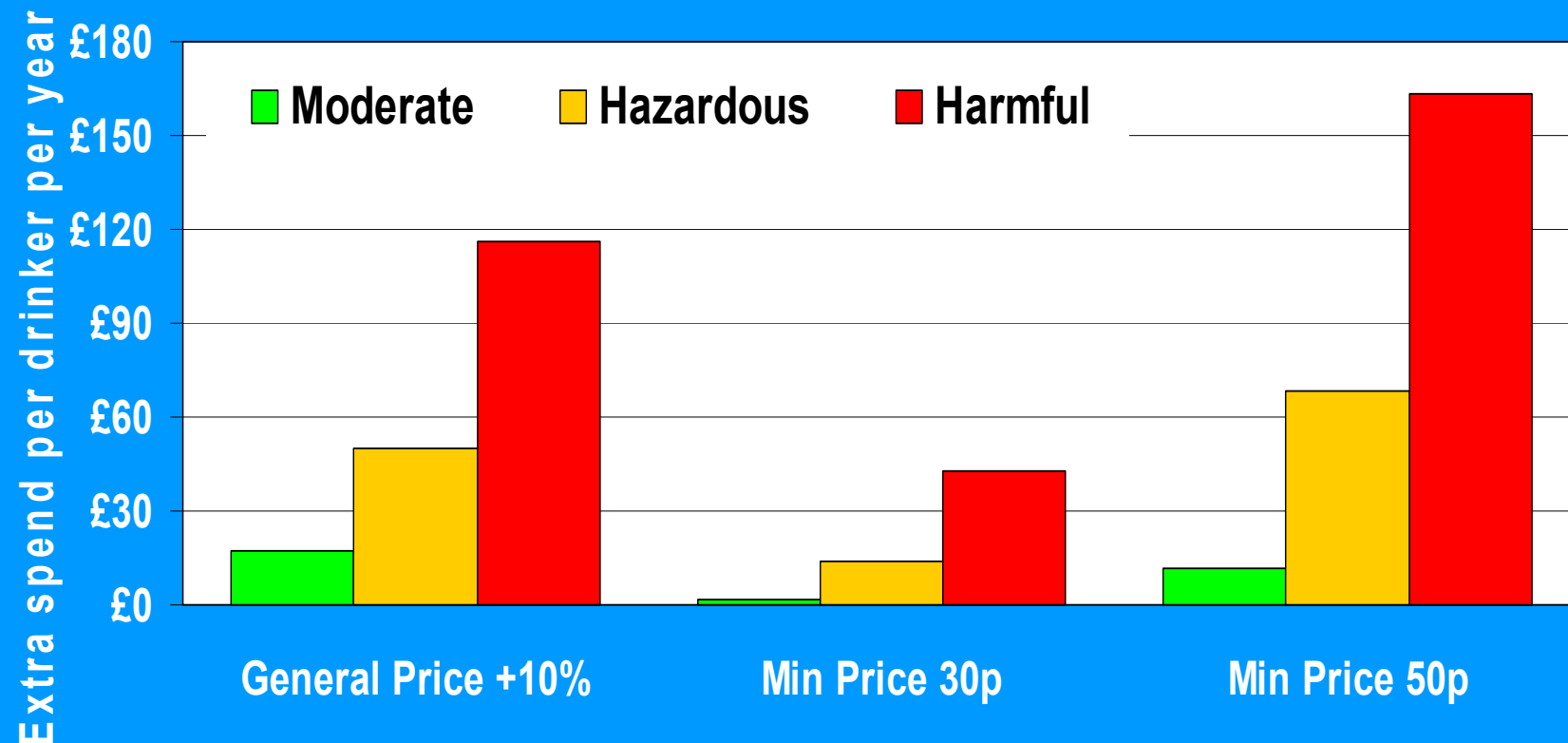


# Key finding 1: Minimum pricing affects harmful drinkers more



## Key finding 2: Pricing policies do not punish sensible drinkers

...at least not proportionately: An extra €20 per year for a large general price rise or 50p minimum price . This compares to an extra €200 for a harmful drinker.



# Price policies target harmful drinkers because:

## Harmful drinkers

- **buy 15 times more** alcohol than a moderate drinker, i.e. 36l of pure alcohol
- Spend **10 times** as much on alcohol than a moderate drinker (€2500 per year)
- They prefer cheaper drinks, and **pay 40% less** per litre of pure alcohol



**So any price policy will “hit” heavy drinkers more, and minimum pricing affects more of their preferred beverages.**

# What does that mean in terms of harms?

For a 50p Minimum price (-7% consumption)

## **Annual savings:**

- 3,400 deaths, 98,000 hospital admissions
- 300,000 days of workplace absence
- 46,000 crimes

## **Total 10-year valuation: €15bn**

- €1.5bn direct health cost savings & €5.7bn QALY gains
- €480m direct crime cost savings & €715m QALY gains
- Rest social care (unemployment), workplace absence



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# Modelling micro-level policies: Screening & Brief Intervention (BI)

# Settings

1. At next GP (family doctor) appointment
2. When registering with new doctor
3. At next Emergency Department visit  
(patients invited to come back, assumed take-up 30%)



## Procedures:

1. 1-question pre-screen, if positive:
2. short screen, if positive:
3. long screen, if positive:
4. 5 or 25 mins BI



# Effectiveness estimates

Main sources: Cochrane Review (doctors) and Crawford *et al.* 2004 (Emergency setting).

No good evidence on effectiveness differences by duration or type of staff used.

**All options are cost-effective according to NICE rules.  
For GP registration, and males, the financial savings  
(burden of illness) outweigh the costs of delivering BI.**

## **GP registration**

Screens 40% of the population, with 35% of heavy drinkers receiving a BI over 10 year period.

## **Next GP appointment:**

Screens 96% of the population, and 80% of heavy drinkers receive a BI.

## **Emergency dept:**

Screens 78% of the population, Only 30% assumed to come back, thus only 18% of heavy drinkers receive a BI

# Policy implications

- Pricing policies are effective at reducing consumption and harm
- Policies targeting cheap alcohol affect heavy drinkers disproportionately
- Screening and brief interventions in primary and emergency care is cost-effective.

# ANY QUESTIONS?

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# What consumption reductions can we expect from policy combinations?

