

## Evaluating Drug and Alcohol Misuse Prevention: Moving from Evidence of Efficacy to Issues of Cost-effectiveness

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Oscar Wilde...

"A cynic is a man who knows the  
price of everything but the value of  
nothing"

## Health costs of substance misuse

- **Alcohol:** Regular heavy alcohol consumption and binge drinking are associated with physical problems, antisocial behaviour, violence, accidents, suicide, injuries and road traffic accidents. The annual cost of alcohol-related problems to the NHS is in the region of £1.7 billion.
- **Tobacco:** Smoking remains the main cause of preventable morbidity and premature death in England, estimated to cost the NHS £1.5 billion a year.
- **Drugs:** Young people show the highest prevalence of illicit drug use in the UK, and the annual economic cost (including health service and criminal justice costs) of Class A drug use alone, in England and Wales, was estimated at £3.5 billion in 2000.

## Policy imperatives

- the public health White Paper, Choosing Health (2004).
- Securing Good Health for the Whole Population (2004) (the 'Wanless report')
- the tobacco White Paper, Smoking Kills (1998)
- Alcohol Harm Reduction Strategy for England' (Prime Minister's Strategy Unit 2004)
- the NHS Cancer Plan and National Service Frameworks (NSFs) for CHD, Children, Young People and Maternity Services
- The Children Act 2004, including the 'Every child matters: change for children' programme (including the 'Change for children in schools' 2004 and 'Young people and drugs' 2005 elements)
- the health and social care white paper 'Our health, our care, our say: a new direction for community services' (DH 2006).

## Substance misuse prevention interventions

Recent Cochrane Reviews have highlighted the following interventions:

- Strengthening Families Programme
- Social Marketing (Media Based)
- Motivational Interviewing
- Life / Social Skills Training

D emographics

E pidemiology

E fficacy


D elivery

A good deed ...

# Delivery

- Delivery Population
- "Real world" effectiveness
- Outcomes and proxy measures
- Social and Market multipliers
- Delivery options and costs
- Utility gains
- Societal costs of misuse
- Cost-effectiveness
- Acceptability


Nine "delivery" issues that should be considered in the policy making "gap" between prevention programme efficacy evidence and programme adoption and implementation



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The population who receive a prevention intervention: calculated as the population offered the prevention multiplied by a "take-up" rate. For some prevention interventions this will be quite high (e.g. school curriculum based interventions) but for other populations it could be as low as 20-30% (e.g. family / parenting prevention interventions)



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The likely reduction in effectiveness when efficacious interventions (typically from rigorously controlled and well funded trials) are rolled out into the "real world". The reduction in effectiveness associated with "real world" roll out has been estimated at 40% in US studies, though one study in Northern Ireland found no reduction in effectiveness associated with "real world" roll out.




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Where proxy measures of misuse are used what is the impact on actual prevalence of misuse. For example, how does a delay in substance use initiation impact on lifetime misuse?

The fact that early use and lifetime prevalence are correlated does not mean they are causally related. Previous US cost-benefit analyses have used a causation / correlation value of 0.9




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This reflects the potential reduction in use due to


- an initial reduction in the number of users / misusers and consequent reduction in other new users because there are fewer people around to introduce new users to use / misuse. This reflect the fact that substance use is, in some sense, a contagious social phenomenon; and
- reduction in use associated with better use of enforcement resources, because with fewer users / misusers as a direct result of a prevention intervention existing enforcement resources can be concentrated on a smaller market volume and are therefore more effective.



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Align with present-day UK-based cost estimates for alternative service configuration and delivery options, including universal and selective (targeted) delivery for prevention interventions.



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Estimates of quality and quantity of life saved by prevention activity to produce Quality Adjusted Life Years (QALYs)



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Based on an assessment of costs associated with misuse of alcohol, tobacco and other substances in particular population groups and with particular patterns of use



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The ratio of delivery costs to cases prevented, costs saved and QALYs gained



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Testing delivery options with a group notionally representing "the public"



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A good deed...bears fruit...



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Buddhism, Dhammapada (Verse 120): Even a good person may still meet with suffering so long as his good deed does not bear fruit: but when it does bear fruit he will enjoy the benefits of his good deed.

Christianity, Bible (Matt. 3:10): If you do not maintain good works or good deeds, you have stopped bearing good fruit for God.

Hinduism, Gita (10, 13-16) Good people, who share the fruits of their work, are freed from all their sins. But those who keep the fruits of their work for themselves, consume sin. Every selfless action is inspired by God; he is present in every good deed. All life turns on this truth.

Islam, Quran (al-An'am, 160): Whoso bringeth a good deed will receive tenfold the like thereof, while whoso bringeth an ill-deed will be awarded but the like thereof, and they will not be wronged.



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Oscar Wilde...

"No good **deed** goes unpunished"