

The economic benefits of smoking cessation

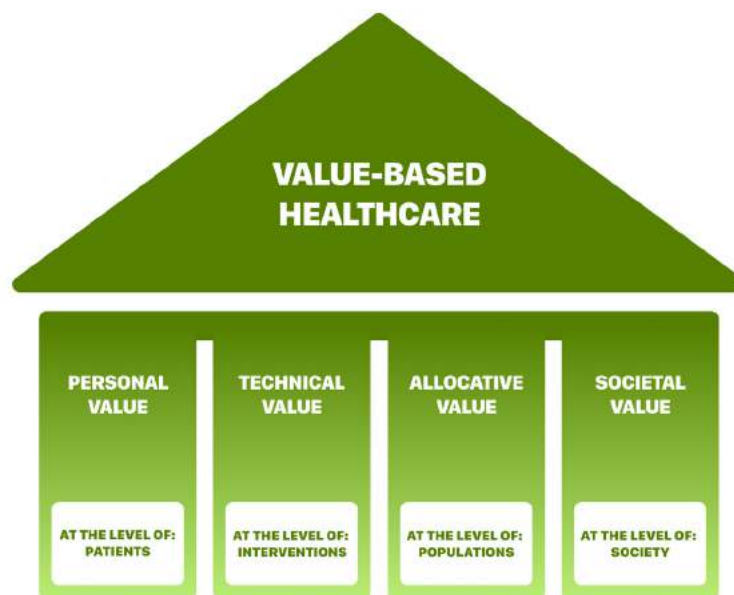
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The €195 billion missed opportunity to deliver high value healthcare in Germany

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A report by the European Commission Expert Panel on effective ways of investing in health highlighted that all healthcare systems across Europe need to focus on investing finite tax-payer derived healthcare resources more effectively and effectively to promote health, prevent disease and, in the process, reduce demand on healthcare services across Europe. To capture these broad concepts, the panel proposed value-based healthcare as an overarching principle as highlighted in the diagram below¹.



When considering value-based healthcare, it would be a truism that primary, secondary and tertiary prevention should be prioritised but how much does this actually happen in practice and what are the implications of it not happening?

If we look at Germany, one obvious area to promote primary, secondary and tertiary prevention and, in the process, avoid **losing over €195 billion every year** is smoking cessation^{2,3,4}.

Germany has one of the highest smoking rates in the world and compared to 36 European countries, Germany currently has the worst implementation of tobacco control policies^{5,6}. Annually, Germans spend €30.32 billion on the healthcare costs of smoking related illness, €66.92 billion on wider societal costs like lost productivity and €98 billion because of the loss of quality of life that results from smoking related illness and suffering. This amounts to a total of €9.545 lost every year on every German smoker including €1.477 in direct healthcare costs^{1,2,3}.

The table below gives a breakdown of these costs per Germany's approximately 20 million smokers (figures from 2018)².

COSTS/YEAR	PER GERMAN SMOKER	FOR ALL GERMAN SMOKERS
Direct	€1.477	€30.32 billion
Indirect	€3.260	€66.92 billion
Intangible	€4.808	€98.71 billion
TOTAL	€9.545	€195.24 billion

Direct costs². "direct costs of smoking include all expenditures for medical services, hospitalization, and medications, in short, all resources that are used and expended to alleviate or cure smoking-related health problems with the opportunity cost principle, can no longer be used for other purposes."

Indirect costs². "indirect costs quantify the productivity losses of those affected by tobacco-related diseases, whereby in the publications of recent years not only the losses on the labor markets have been subsumed under this, but also the productivity in the leisure sector has been recorded."

Intangible costs². "intangible costs such as the value of life "per se" and the quality of life, which are impaired by smoking[...]the intangible costs of smoking were determined using a new approach in which valuations of pain and suffering due to smoking were derived econometrically from pain and suffering judgments of German courts from a societal perspective."

Relative to total budgets, smoking related suffering and illness accounts for about 15% of the total amount of money Germany spends on healthcare every year and accounting for the wider indirect societal costs of smoking reveals that smoking costs Germans about 2% of GDP every year.

Furthermore, the costs smoking poses to Germany are only increasing if we compare the costs above to the same categories of costs from 2008-20121:

- Direct costs have increased by 19.3%
- Indirect costs have increased by 27%
- Intangible costs have increased by 7%

And given the fact that there are more smokers who are older now in Germany, these costs will continue increasing over the coming years.

Smoking cessation: A critical enabler to high value healthcare in Germany

The benefits of smoking cessation are undeniable:

- Smoking cessation before the ages of 30 or 40 years can reduce general mortality risk by 97% and 90%, respectively⁷
- Within a few years of stopping smoking, the risk of cardiovascular disease and most cancers is significantly reduced⁴
- Even for people over 60, smoking cessation can delay the risk of death by several years and risks of cardiovascular disease and cancer are also reduced⁵ (remember that on average, smokers die 10 years younger than non-smokers⁸)
- People who quit smoking have improved mental health (reduced anxiety, depression, stress), improved quality of life and improved social lives⁹

Smoking cessation clearly delivers very high value^{4,10-13}:

- personal value: most smokers in Germany want to quit
- technical value and allocative value: there are several cost effective and evidence-based interventions available to support all smokers across Germany to quit including brief medical counselling, behavioural individual or group therapy, nicotine replacement therapy, digitally-based interventions including websites and apps
- societal value: health, wellbeing and societal productivity increase

Despite all of the obvious benefits, a national study found that only 13% of smoking cessation attempts are supported with evidence-based interventions in Germany^{4,10-13}. Indeed, a study in 2016 found that less than 40% of smokers who were surveyed were advised to quit smoking within the previous 12 months by a healthcare professional. And in primary care, the DEBRA study found that only 18% of smokers received a smoking cessation recommendation with only 3% actually receiving an evidence-based treatment offer from their GPs¹¹. We know that with professional and evidence-based tobacco cessation interventions, smoking abstinence rates over a 12-month period are between 25-40% and without formal support, 95% of attempts to stop smoking end in failure within 12 months. Because relapse can happen weeks or months after quitting, it is important that there is continued support for people trying to quit smoking^{4,11,12}.

One of the main reasons for the relatively low use of smoking cessation interventions is because current legislation for tobacco cessation in Germany introduces administrative and economic barriers which means that these interventions are not used as much as they should be¹¹. But there is still hope!

Despite being a laggard on its tobacco policies, Germany is a pioneer in the digital health space with the DiGA law which was passed in 2019 – a first of its kind policy that aims to integrate digital health interventions into Germany's healthcare system¹³. Digital health applications, which can be provided to individuals through prescriptions, could prove to be the critical enabler to help healthcare professionals to support their patients to begin the journey towards smoking cessation.

Smoking costs so much money and causes so much grief and heartache to millions of Germans every year and this will only increase with time. Concerted action must be taken to remove the barriers to smoking cessation and to proactively encourage its use in Germany. If this does not happen, it would not be an understatement to say that Germany will never be able to deliver high value healthcare.

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