EXPENDITURE ON PREVENTION ACTIVITIES UNDER SHA 2011:

SUPPLEMENTARY GUIDANCE

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1. INTRODUCTION AND AIMS

1. *A System of Health Accounts 2011* (SHA 2011)[1] provides a comprehensive framework for reporting internationally comparable data on health expenditure. The core accounting framework of SHA 2011 is organised around a tri-axial system of classifications: the different types of health care goods and services consumed (classification of health care functions, ICHA-HC), the providers of these goods and services (classification of health care providers, ICHA-HP) and the financing schemes paying for them (classification of health care financing schemes, ICHA-HF). The functional classification defines the overall boundary of health expenditure and is organised according to purpose, including services with the aim of prevention.

2. SHA 2011 was released in October 2011 after a four-year collaborative effort between OECD, WHO and the European Commission and replaced the manual *System of Health Accounts – Version 1.0* (SHA 1.0)[2] first published by OECD in 2000 as the new health accounting standard. SHA 2011 sets out in more detail the boundaries, the definitions and the concepts of health accounting. In the move from SHA 1.0 to SHA 2011, prevention was one of the functional categories that saw the biggest changes, making the structure more policy relevant by putting a stronger emphasis on the purpose to determine if an activity falls within the prevention boundary. It also organises its subcategories more closely around the type of service rather than the disease or population group. SHA 2011 explains the refinement of the functional classification of prevention as follows:

> "***Prevention***. The functional category in the new manual has been better aligned to the purpose of consumption, i.e. one of the objectives of contacting the health system is to receive preventive care. The boundary criteria (as described in Chapter 4 [of SHA 2011]) have been applied to better differentiate health prevention from the health care-related categories (HCR) of SHA 1.0. Refined definitions should ensure comprehensive, exhaustive and mutually exclusive categories and increase the comparability of HC classes across countries. The "prevention and public health" class of SHA 1.0 has been unclear in its content, because the categories were based on a mix of criteria: "public" referred at the same time to government-financed services, place of delivery (public-owned services) and the beneficiaries involved (population priority groups). Thus, "prevention and public health" has been restructured into a preventive class, which is better distinguished by purpose from the curative components." (SHA 2011, p74).

3. Notwithstanding the definitions and further guidance on accounting for prevention expenditure in SHA 2011 (pp100-106), this document aims to address some of the possible ambiguities that may remain.[3] Section 2 provides an overview of the main boundary criteria used in SHA 2011. Section 3 applies those criteria and considerations to some specific areas that are on the borderline between prevention spending and non-health spending (including health care-related spending). Finally, Section 4 provides guidance on how to distinguish between prevention and other health care expenditure and offers some further clarifications about the allocation of prevention expenditure to the second-digit prevention categories.

1 . OECD, Eurostat, WHO (2011), *A System of Health Accounts, 2011 Edition*, OECD Publishing.

2. OECD (2000), *A System of Health Accounts*, OECD Publishing.

3 . The original version of this guidance document was prepared by John Henderson of the UK Department of Health and first published in June 2013. The current version of the document builds on the June 2013 version and updates it based on the discussions during the 18th Meeting of Health Accounts Experts and the results of a survey on accounting of prevention expenditure under SHA conducted in 2016.

2. MAIN BOUNDARY CRITERIA USED IN SHA 2011

4. A number of key boundary criteria to distinguish prevention from non-health spending (including health care-related spending) and from other health spending (curative/rehabilitative care, pharmaceuticals, governance, etc) can be derived from SHA 2011. These include the primary purpose of an activity, the involvement of the health system in defining preventive measures as well as some additional considerations.

Primary purpose

5. SHA 2011 (pp55-56) lists four main criteria to determine whether an activity is within the **health care boundary** and should therefore be included in health expenditure: 1) primary purpose is health, 2) qualified medical and health knowledge needed in carrying out the activity, 3) the activity refers to the final consumption of health care goods and services of residents and 4) there is a transaction of health care goods and services.

6. The criterion of **primary purpose** is central in setting the boundaries of health care (and that of prevention): "The main criterion to include or exclude certain activities relates to their role in enhancing health status, diminishing ill-health, or preventing the deterioration of the health of individuals and/or the population as a whole." (SHA 2011, p56).

7. For an activity to be counted as prevention expenditure in SHA 2011 – that is under "HC.6 Preventive care" in the functional classification of health care (Table 1) – it must be within the **prevention boundary.** Activities are within the prevention boundary if they are within the health care boundary and if the primary purpose of an activity is to avoid diseases and risk factors (**primary prevention**) or the early detection of disease (**secondary prevention**). This includes both services consumed by individuals (e.g. preventive immunisation or screening) as well as collective services (e.g. information campaigns or epidemiological surveillance). Not included in this category is tertiary prevention (i.e. reducing the negative impact of an already established disease or injury) which is accounted for under curative care (HC.1) and rehabilitative care (HC.2). In the same way, the allocation to the more detailed second-digit prevention categories is made according to the primary purpose of the activity.

8. The category "HCR.2 Health promotion with a multi-sectoral approach" exists as a health care-related memorandum item to report activities which are outside the health care boundary (and therefore outside the prevention boundary) but where protecting public health may be an important secondary goal rather than the primary purpose. The distinction between prevention expenditure and health care-related expenditure where public health protection is an important secondary goal is addressed in Section 3.

9. While the primary purpose of an activity is the central criterion in order to distinguish prevention from non-health spending (including health care-related spending), in practice there is sometimes ambiguity as regards the primary purpose. If it is doubtful whether the primary purpose of an activity is prevention, this might be an indication for excluding it from prevention expenditure.

Table 1. Classification of health care functions in SHA 2011

Current health expenditure	
HC.1	Curative care
HC.2	Rehabilitative care
HC.3	Long-term care (health)
HC.4	Ancillary services (non-specified by function)
HC.5	Medical goods (non-specified by function)
HC.6	**Preventive care**
HC.6.1	**Information, education and counselling programmes**
HC.6.2	**Immunisation programmes**
HC.6.3	**Early disease detection programmes**
HC.6.4	**Healthy condition monitoring programmes**
HC.6.5	**Epidemiological surveillance and risk and disease control programmes**
HC.6.6	**Preparing for disaster and emergency response programmes**
HC.7	Governance and health system and financing administration
HC.0	Other health care services not elsewhere classified (n.e.c.)
Memorandum items: health care related	
HCR.1	Long-term care (social)
HCR.2	Health promotion with a multi-sectoral approach

Source: SHA 2011, pp83-84.

Role of the health system

10. Another key boundary issue is the role of the health system in the process of deciding preventive measures. Prevention includes identifying measures to avoid risks and their health consequences and determining measures appropriate to a specific health system, in a specific country, for a specific risk or disease. The surveillance of specific and strategic collective risks is a responsibility of the health system and is also included as prevention.

11. Preparatory work for preventive regulations relies on the health system but it may involve different types of activities, such as surveillance and evidence gathering. Regulatory work to address health risks may involve other sectors (e.g. for road safety risks) and the role of the health system may be to help design, certify or sanction the validity of the health preventive components but regulation of road safety matters remains under the road authorities.

12. The regulatory agency in the relevant sector will take care of its enforcement – e.g. the road authorities in the road safety example. In this case enforcement is classed as health care-related and therefore outside the health care boundary. For health laws involving the health system itself, responsibility for enforcement remains with the health system. Therefore, enforcement of regulations with a preventive purpose which apply to health care providers is inside the prevention boundary – for example, inspections of hospitals by the health care regulator to ensure that hygiene and safety standards are met (SHA 2011, p107).

Additional considerations

13. A number of additional boundary considerations are relevant in order to distinguish prevention from non-health spending, health care-related spending or other health spending. These include:

- **Pharmaceuticals and medical goods with a preventive function** (e.g. antihypertensives, statins) dispensed at a pharmacy against a prescription or purchased over-the-counter are, by convention, recorded under the functional category "HC.5 Medical goods" irrespective of their final purpose (SHA 2011, p98). Vaccines that are independently purchased at pharmacies and then brought to the vaccination provider are an exception to this convention. As vaccines are always aimed at prevention and constitute an integral part of immunisation, their cost should be recorded under HC.6.2, even if purchased independently.

- **Making regulations to protect public health** is considered to be part of health governance rather than spending on prevention as such and should be recorded under the functional category "HC.7.1 Governance and health system administration". This should also include expenditure for the design and formulation of regulations under the responsibility of non-health ministries and public bodies if the primary purpose is to protect human health, reduce hazards and increase human safety.

- **Costs to individuals and companies in complying with public health regulations** are outside the health care boundary and should also be excluded from health care-related expenditure as the primary intent may be to operate a business or to avoid fines and penalties.[4] However, the costs to health care providers in complying with health regulations are part of their intermediate consumption and therefore implicitly included in the health care boundary.

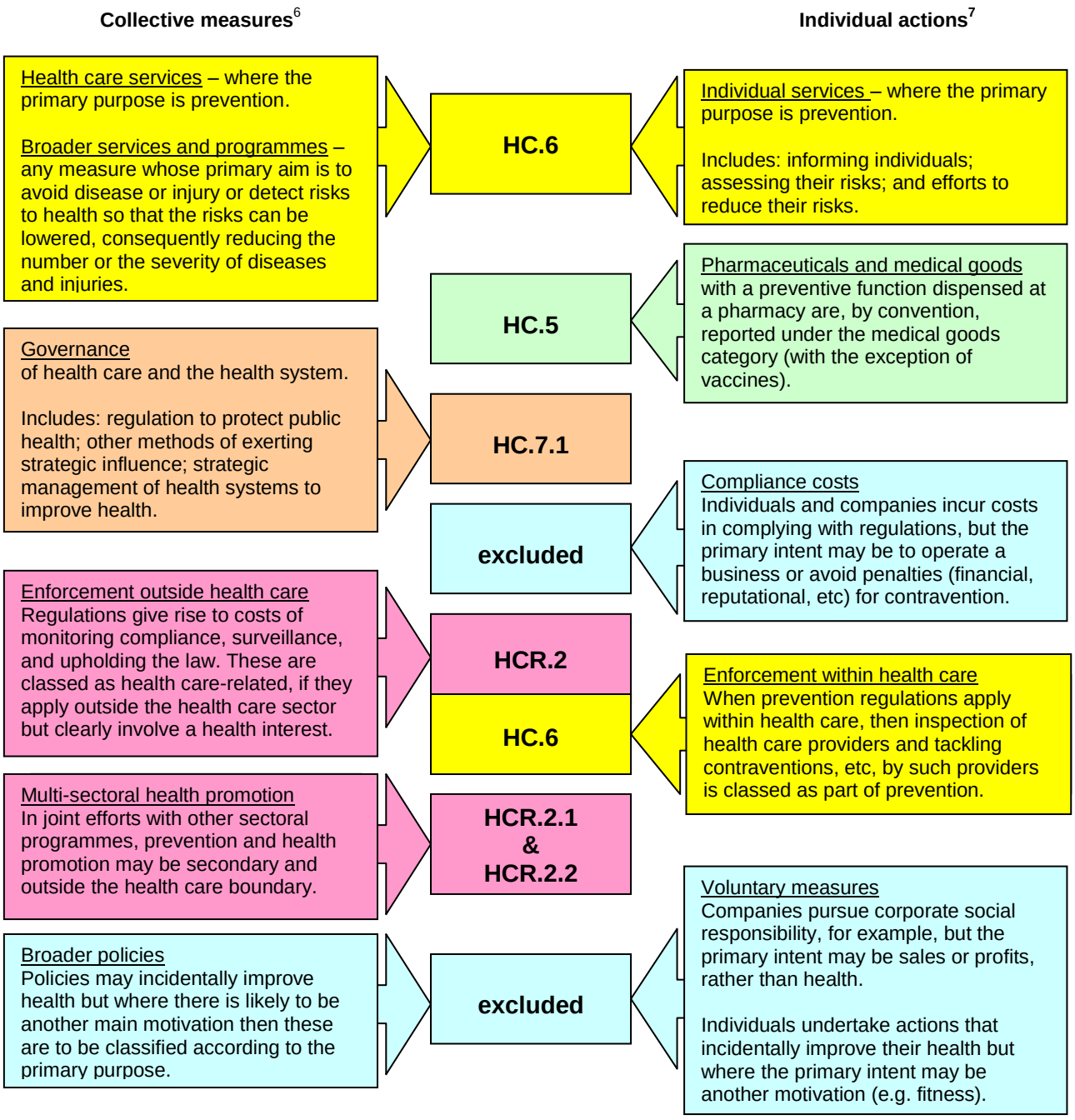
- **Practicality** of extracting relevant data and/or disaggregating data by functions. Sometimes the available data are aggregated to a relatively high level and can cover several prevention categories, a mixture of prevention and other health spending or a mixture of prevention and non-health spending. Ideally, the appropriate expenditure shares of the different activities should be allocated accordingly. However, if data cannot be disaggregated further, then a general rule is that the aggregated expenditure should be allocated to that area which takes the largest part of the spending. How much effort to put into overcoming such problems will partly depend on the usefulness of the results – for example, the larger the sums involved, the more useful efforts to disaggregate the spending is likely to be.[5]

14. Figure 1 illustrates the main boundary considerations described above for a number of different types of activities, some of which are inside the prevention boundary and others that are not. Further, Figure 1 aims to explain the rationale for the SHA classification of relevant activities.

4 . Although compliance costs are excluded, these are costs that are incurred due to regulations with a preventive purpose. As they can be very substantial expenditure, it may well be policy relevant to monitor their scale. If so, a country-specific memorandum item could be reported.

5. If many countries were spending large amounts on, say, ensuring food safety, it may be useful to disaggregate the expenditure and record the preventive part of such spending (which might then facilitate analysis of its costs and efficiency).

Figure 1. Type of activities and rationale for their SHA classification



6 . Collective measures typically can be consumed by groups of people simultaneously and use of the measure by one person does not reduce its availability for other.

7 . Individual actions typically involve personal consumption and use by one person does reduce availability for others. Enforcement may have elements that are "collective" – e.g. monitoring data and compliance report publishing – and elements that are "individual" – e.g. inspections and prosecutions.

3. THE HEALTH CARE BOUNDARY AS IT AFFECTS PREVENTION

15. There are changes between SHA 1.0 and SHA 2011 in what falls within the boundary of prevention spending. For example, SHA 1.0 states in paragraph 3.4: "In the context of the SHA, general public safety measures like technical standards monitoring, road safety, etc, are not considered as application of medical technology and are, for that reason, excluded from the core health care functions." On the other hand, SHA 2011 states that "Prevention is any measure that aims to avoid or reduce the number or the severity of injuries and diseases, their sequelae and complications." (p100).

16. A specific example of a change is the treatment of health and safety at work, much more of which is included under a broader boundary in SHA 2011 (Table 2). However, several OECD countries may have already included spending on health and safety at work (in addition to occupational health care) in their prevention expenditure as reported under SHA 1.0

Table 2. Health and safety at work in SHA 1.0 and in SHA 2011

SHA 1.0, p123:	SHA 2011, p105, Table 5.2:
"Occupational health activities to improve ergonomy, safety and health and environmental protection at the workplace, accident prevention, etc, should be distinguished from occupational health care. They are not to be recorded under health care activities in the SHA."	Included under SHA 2011 in HC.6 [but excluded under SHA 1.0]: • Ergonomy, safety (health part) • Health and environmental protection at work (health part) • Accident prevention at work (health part)

17. In SHA 2011, the primary purpose of an activity is a key criterion to determine whether to include it under prevention expenditure. Therefore, prevention of mortality and morbidity due, for example, to occupational, transport and other hazards would be included – where it is clear that the primary purpose of the action is prevention of harm to human health. However, this does not mean that all spending on programmes, or all parts of programmes in occupational health and safety and transport safety, for example, are to be included in category HC.6. The components not included are those associated with another primary purpose, e.g. transport or economy.

18. In a similar way, health campaigns by non-health public bodies and ministries should be included under prevention spending (HC.6.1), if such spending can be identified and the primary purpose is clearly health promotion that aims to avoid or reduce the number or the severity of injuries and diseases. Examples include spending on school information programmes under the responsibility of education ministries or campaigns against drunk driving under the responsibility of transport ministries.

19. Using the same "colour coding", Figure 2 shows how the considerations illustrated in Figure 1 apply in some specific areas that are on the borderline between prevention spending and non-health spending: domestic, fire, occupational and transport risks. Additionally, Table 3 provides examples of where to classify certain aspects related to tackling these risks.

Figure 2. Approaches to tackling risks and their SHA classification

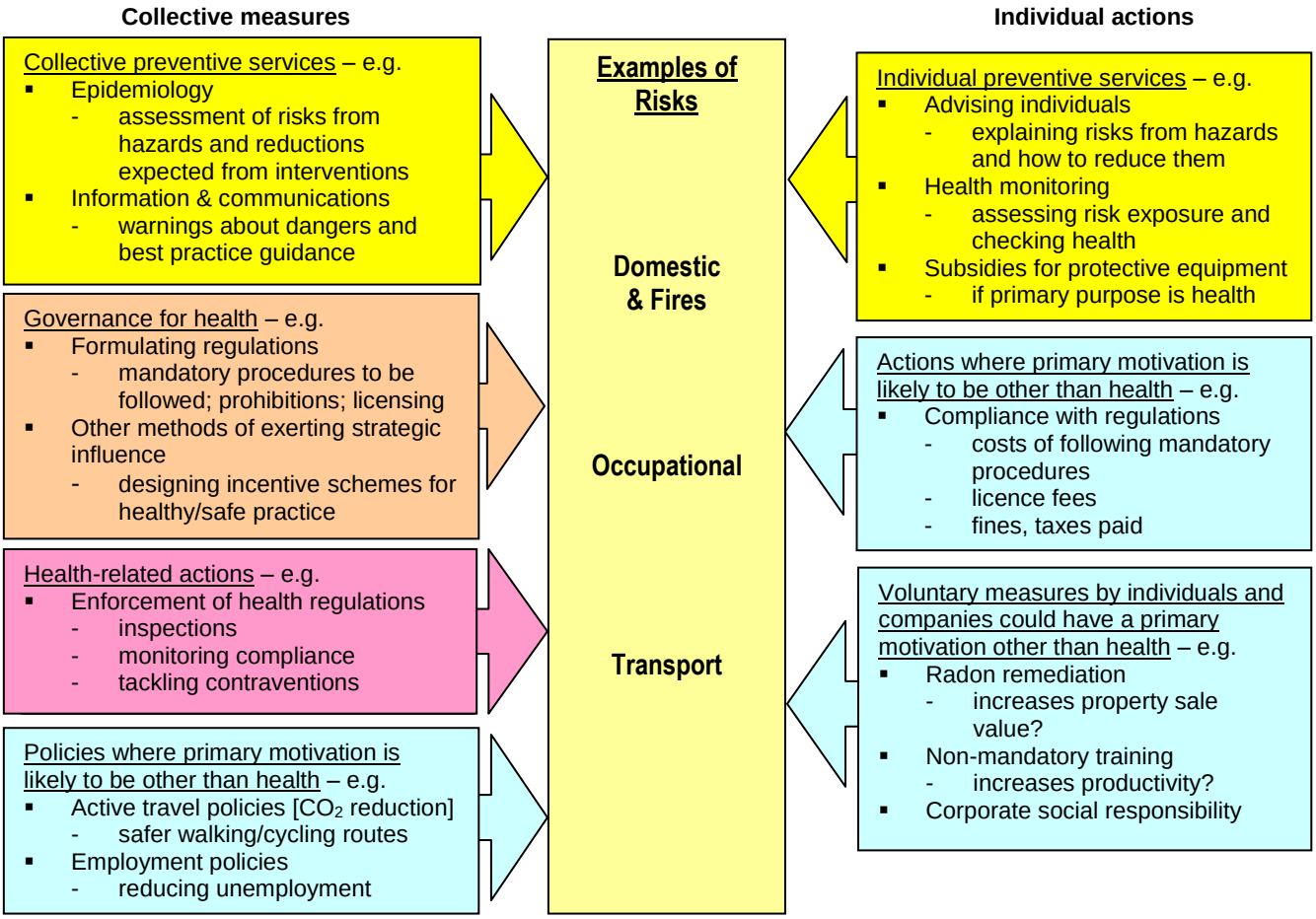


Table 3. Approaches to tackling risks and their SHA classification

SHA 2011 code	Prevention / activities		
	Domestic risks & Fires	**Occupational risks**	**Transport risks**
HC.1	Treatment of injuries caused by domestic accidents or fires	Treatment of diseases with occupational causes to reduce sequelae and damage in affected populations	Treatment of injuries caused by transport accidents
HC.6.5	Data collection on risks to health and epidemiological assessment – e.g. trends in mortality due to falls, fires, or other causes	Data collection on risks to health and epidemiological assessment	Data collection on risks to health and epidemiological assessment – e.g. trends in accidents by different modes of transport, times and seasons
HC.6.5	Prevention programme planning and design – e.g. deciding which interventions are most cost-effective	Prevention programme planning and design – e.g. deciding which interventions are most cost-effective	Prevention programme planning and design – e.g. deciding which interventions are most cost-effective and for which groups (children, young people, older people, etc)
HC.6.1	Providing health & safety information to the public – e.g. about causes of fires and accidents and how to reduce risks to health	Providing health & safety information to firms and workers about sources of hazards and how to reduce risks – e.g. the importance of wearing hard hats, and safe handling of dangerous materials such as asbestos	Providing health & safety information to the public about sources of hazards and how to reduce risks – e.g. the importance of wearing seatbelts and helmets
HC.7.1	Making regulations to protect public health – e.g. to make the installation of smoke detectors in homes mandatory	Making regulations to protect employees' health and safety – e.g. to make the wearing of hard hats mandatory or bringing in a licensing regime for work involving asbestos	Making regulations to protect public health and safety – e.g. to make the wearing of seatbelts or helmets mandatory
HCR.2	Enforcing such regulations – e.g. inspection, monitoring, tackling contraventions	Enforcing such regulations – e.g. inspection, monitoring, tackling contraventions	Enforcing such regulations – e.g. inspection, monitoring, tackling contraventions
Excluded	Cost of compliance with regulations – e.g. purchase of mandatory smoke detectors	Costs to firms and public bodies of complying with regulations – e.g. undertaking mandatory training in how to handle asbestos	Cost of compliance with regulations – e.g. motor industry fitting seatbelts to vehicles or cyclists purchasing (mandatory) helmets
Excluded	Broader policies – e.g. mandatory building insulation standards (primary purpose may be other than health)	Broader policies – e.g. mandatory leave entitlements (primary purpose may be social rather than health)	Broader policies – e.g. to promote walking or use of bicycles (primary purpose may be other than health)
Excluded	Costs of voluntary measures to reduce risks – e.g. measures by householders to reduce accumulation of radon in homes	Costs of voluntary measures to reduce risks – e.g. private purchase of training	Costs of voluntary measures to reduce risks – e.g. purchase of (non-mandatory) helmets by cyclists

Health care-related activities

20. Certain non-health activities (i.e. activities outside the health care boundary) may have the protection of public health as an important secondary goal. SHA 2011 explains that "the type of services included in the health prevention boundary is restricted to those components with a primary health purpose. Interventions that go beyond the health care boundary but are policy relevant can be reported as health care-related items." (p101). So, SHA 2011 has the class "HCR.2 Health promotion with a multi-sectoral approach". "The aim of this class is to account for health promotion resources that may go beyond the health care boundary, though nevertheless clearly involved with a health interest." (p114).

Financial incentives for healthy behaviour

21. The classification of financial incentive schemes targeted at individuals to promote healthy behaviour – such as vouchers and subsidies for healthy products or cash-benefits to reward healthy behaviour – is a particular issue that sits on the borderline between prevention spending and non-health spending. Financial incentives can under certain conditions be considered as spending for prevention. It needs to be borne in mind, however, that SHA 2011 makes a number of stipulations for activities to be considered within the health care (and the prevention) boundary – as set out by the four boundary setting criteria in Section 2 (see paragraph 5). Deciding which activities around incentivising healthy behaviour of individuals can be considered as prevention spending needs to be assessed against these criteria.

22. Some countries have introduced a **voucher scheme** for particularly healthy products. This can refer, for example, to vouchers for fruit and vegetables or membership in fitness clubs which are handed out to households under a specific prevention programme. These vouchers can be redeemed by households at particular services points (e.g. markets, fitness centres) and providers of these goods/services will be reimbursed after filing the vouchers with the scheme.

23. The costs of these programmes should be considered as prevention (HC.6.1) if they were clearly designed by a public health authority based on medical and health knowledge with the intention of promoting the health status of the population. In other words, general food voucher schemes are not to be included as they have a different purpose (e.g. reducing poverty, addressing food security needs). The classification under HC.6.1 may be best thought of as efforts to change the behaviour of people at risk, so as to reduce their risks and would also include identifying the specific individuals whose behaviour needs changing (e.g. keeping a register of names). The redemption of the voucher at the service point is the relevant transaction and the fact that the purchase of the good or service is made with a voucher is a used as signal that the main purpose for this purchase is health. This distinguishes it from identical purchases without vouchers. Individual purchases of fruits and gym membership are otherwise neither considered as prevention nor as health care-related spending. Even though the transaction takes place at non-health providers, the costs of these programmes are best reported under HP.6.

24. In some countries programmes have been introduced that reward people with **cash-benefits for healthy behaviour** – for example, financial rewards to former smokers who continue to stay away from tobacco products or rewards aimed at overweight people for losing weight through physical activity. The costs of these programmes are, however, outside the health care boundary in general and the prevention boundary in particular. The reason for this is that these activities violate the inclusion criteria set out in Section 2 (see paragraph 5). They do not constitute a transaction of health care goods and services. If these payments are linked to a transaction (e.g. the non-smoker receives the money only under the condition that he uses it to finance health counselling) the situation is different. In that case the rewards can be considered as a proxy for a paid transaction for final use.

25. Figure 3 contains a number of specific areas – environmental, food safety and behavioural risks – where non-health spending that is relevant for the health care-related category might occur. Further, financial incentives (e.g. vouchers, subsidies) might be relevant approaches for tackling these risks. Figure 3 shows how the considerations illustrated in Figure 1 apply to these risks, using the same "colour coding". Additionally, Table 4 provides examples of where to classify certain aspects related to tackling these risks.

Figure 3. Approaches to tackling risks and their SHA classification (cont.)

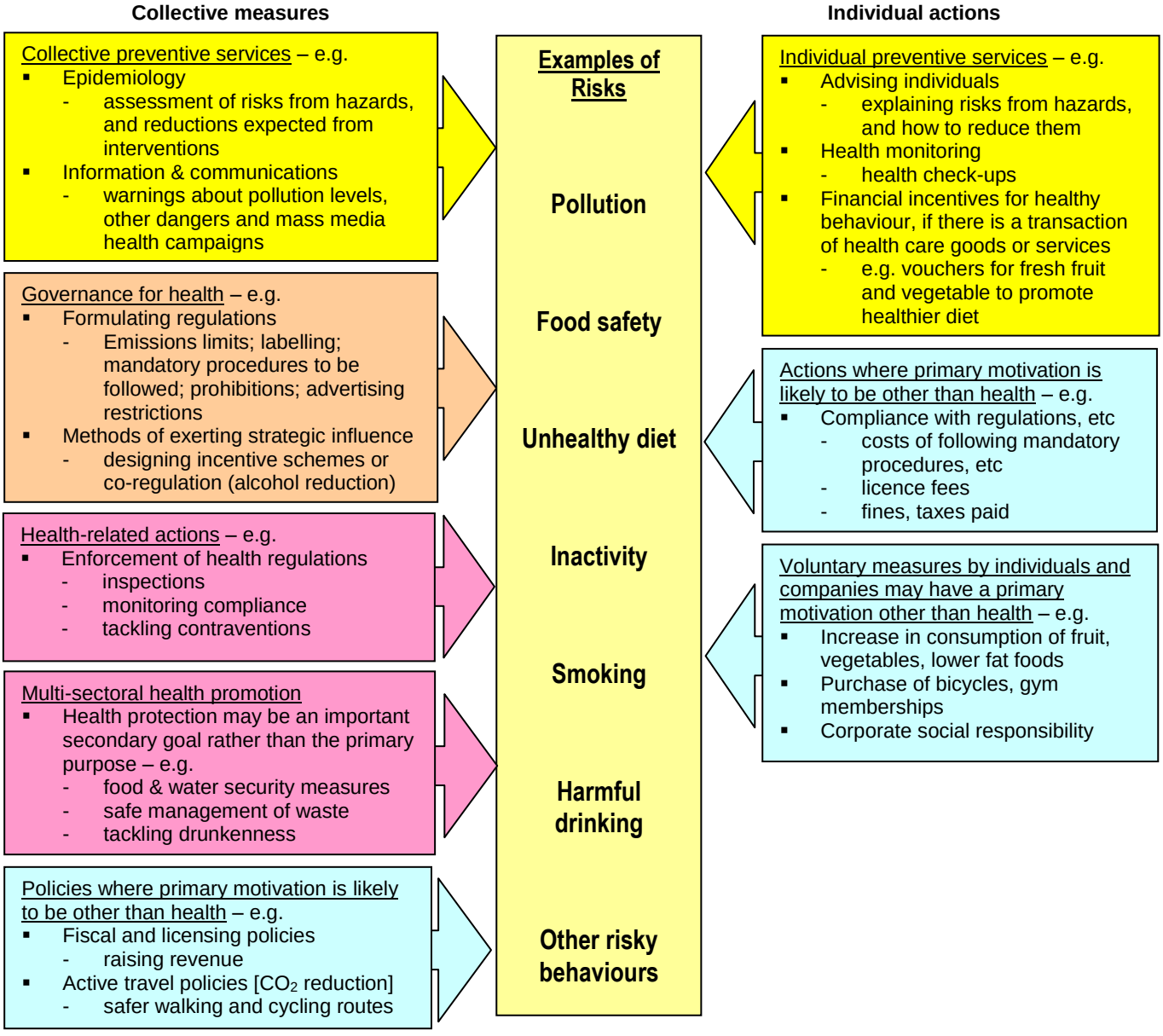


Table 4. Approaches to tackling risks and their SHA classification (cont.)

SHA 2011 code	Prevention / activities		
	Environmental risks	**Food safety risks**	**Behavioural risks**
HC.6.1	*Media campaigns or web pages* Providing information to the public – e.g. about elevated pollution levels and how to reduce risks to health (e.g. avoiding ozone or particulates hotspots)	*Media campaigns or web pages* Providing information to the public – e.g. about safe handling of foods to avoid food poisoning	*Mass media campaigns* Providing health information to the public or specific groups about how to reduce risks – e.g. the importance of good diet and regular exercise
HC.6.1	*Professional advisory services* Providing information and advice to firms about sources of hazards and how to reduce risks – e.g. (if primary purpose is health) how to control contaminants or emissions that are dangerous to human health	*Professional advisory services* Providing information and advice to firms and workers about sources of hazards, and how to reduce risks – e.g. the importance of personal hygiene, and safe handling of potential sources of pathogens	*Physician counselling and interventions in schools and workplaces* Services such as provision of advice – e.g. from physicians and other health care professionals, such as school nurses, community nurses, dieticians and pharmacists
HC.6.1	*Financial incentives to reduce risks* – if it is clear that the primary purpose is to prevent morbidity or deaths and if there is a transaction of health care goods or services – e.g. subsidies for adoption of lower-harm technologies	*Financial incentives to reduce risks* – if it is clear that the primary purpose is to prevent morbidity or deaths and if there is a transaction of health care goods or services – e.g. subsidies for fortification of certain foods	*Financial incentives to promote healthy behaviour* – if it is clear that the primary purpose is to promote healthy behaviour and if there is a transaction of health care goods or services – e.g. provision of vouchers for fresh fruit and vegetables to promote healthier diet
HC.6.5	Data collection on risks to health & epidemiological assessment – e.g. (if primary purpose is health) monitoring whether pollutants such as particulates, ozone, and toxic or carcinogenic pollutants have reached hazardous levels; monitoring water for water-borne disease risks	Data collection on risks to health & epidemiological assessment – e.g. E coli	Data collection on risks to health & epidemiological assessment – e.g. prevalence of smoking, harmful drinking, BMI
HC.6.5	Prevention programme planning and design – e.g. deciding which interventions are most cost-effective	Prevention programme planning and design – e.g. deciding which interventions are most cost-effective	Prevention programme planning and design – e.g. deciding which interventions are most cost-effective
HC.7.1	*Regulations* Making regulations to protect public health – e.g. to reduce anthropogenic emissions of pollutants that harm health	*Regulations* Making regulations to protect public health – e.g. to make mandatory training in hygiene and display training success certificates; prohibition of substances that are, or may be, toxic, carcinogenic	*Advertising regulations* Making regulations to protect public health – e.g. to prevent the advertising of “junk food” to children
HC.7.1	*Disclosure regulations* Making regulations to require firms to disclose their emissions – e.g. (if primary purpose is health) disclosure of toxic or carcinogenic substances emitted	*Labelling regulations* Making clear when products contain nuts or other potential hazards; requirements to specify additives such as potential carcinogens (e.g. food colourants and preservatives)	*Labelling regulations* Making regulations to promote public health – e.g. mandatory inclusion of labels showing calories, saturated fat and salt contents of foods, so that consumers can consume healthier diets
HCR.2	Enforcing regulations – e.g. inspection, monitoring, tackling contraventions	Enforcing regulations – e.g. inspection, monitoring, tackling contraventions	Enforcing regulations – e.g. inspection, monitoring, tackling contraventions

HCR.2	Joint efforts in environmental programmes – e.g. waste management, pollution abatement and noise control – where the health purpose is secondary to an environmental purpose	Joint efforts in food and water programmes – e.g. food and water security, control and distribution	Assessing new technologies for safety and risk reduction, enhancing risk communication and advocacy
Exclude	Cost of compliance with regulations – e.g. fitting emissions control technologies	Costs to firms of complying with such regulations – e.g. undertaking mandated training in hygiene	Costs to firms of complying with such regulations – e.g. costs of new labelling
Exclude	*Self-regulation by industry* Costs of voluntary measures to reduce emissions – e.g. corporate social responsibility	*Self-regulation by industry* Costs of voluntary measures to reduce risks – e.g. removal of colourants	*Self-regulation by industry* Costs of voluntary measures to reduce risks – e.g. corporate social responsibility
Exclude	The collection, treatment and remediation of environmental risks without (primary or secondary) health purpose		*Planning fiscal measures* Design and formulation of taxes on substances that are hazardous to health – e.g. on tobacco, alcohol, saturated fat

4. THE PREVENTION BOUNDARY AND ALLOCATION TO SECOND-DIGIT CATEGORIES

26. SHA 2011 introduced some changes that affect the allocation of expenditure between prevention and other health care expenditure. While the SHA 2011 manual provides clarification and guidance for some of the boundary setting issues between prevention and other health spending, it remains rather vague on a number of other issues. The following gives an overview of some important points that should be considered in order to distinguish prevention from other health spending and between different prevention categories and aims to provide additional information on a number of issues not explicitly addressed in the SHA 2011 manual.

Focus on primary purpose to distinguish prevention from other health spending

27. The specific health purpose of an activity is a central criterion in order to distinguish prevention from other health spending (SHA 2011, pp72-73). School health services, for example, need to be distinguished by purpose. If the purpose is prevention, then the relevant activity should be included under prevention spending – e.g. HC.6.1 in the case of health education, HC.6.2 in the case of vaccinations provided in school, HC.6.4 for routine medical check-ups to monitor pupils' health. On the other hand, any basic medical treatment provided in a school setting, for example by an on-site medical centre or school nurse, would be treated as curative care (HC.1.3).

28. Similarly, occupational health services should be distinguished by purpose. Only activities with a primary preventive purpose should be recorded under prevention spending – e.g. HC.6.1 for the provision of health and safety information to firms and workers about sources of hazards and how to reduce risks (about the safe handling of dangerous materials, etc), HC.6.2 in the case of vaccinations provided at the workplace, HC.6.4 for surveillance of employee health through routine medical check-ups. Any basic medical treatment provided at the workplace (including emergency services), for example by an on-site physician or nurse, would be treated as curative care (HC.1.3).

General guidance on using the second-digit prevention categories

29. The second-digit categories of prevention in SHA 2011 are organised in a different way to those of SHA 1.0 – following disease stage, type of service and purpose. SHA 2011 has a table to help with the mapping from SHA 1.0 to SHA 2011 (SHA 2011, p105). Generally, the allocation of prevention spending to the second-digit categories should be made according to the primary purpose of the preventive activity.

30. For example, expenditure related to providing the public or specific groups with information on prevention programmes (e.g. childhood vaccination, cancer screening or general health check-ups) should be recorded under HC.6.1, while the provision of the preventive services itself should be included under different second-digit preventive subcategories (e.g. HC.6.2 for childhood vaccination, HC.6.3 for cancer screening, HC.6.4 for general health check-ups).

31. One general issue concerns aggregation of data. Sometimes the available data are aggregated to a relatively high level and therefore cover more than one prevention category. If data cannot be disaggregated further, then a general rule is that the aggregated expenditure should be allocated to that area which takes the largest part of the spending.

32. For example, it may not be possible, in some countries, to disaggregate some services such as child health or school health. If so, they should be allocated by the dominant purpose. So if, say, the main purpose of child health or school health services was healthy condition monitoring, the spending should be allocated to HC.6.4.

Prevention as part of a programme versus outside of organised programmes

33. The criterion of primary purpose applies regardless of whether prevention activities are provided as part of a programme or are based on patients' own initiative outside of organised programmes. This is particularly true for immunisation, early disease detection and healthy condition monitoring, which should be accounted for under prevention spending in either case (HC.6.2, HC.6.3 and HC.6.4, respectively) – rather than allocating it to other functions of individual health care services such as curative care (HC.1).

34. A programme, in this context, refers to an intervention that is documented in a law or an official regulation, decision, directive or recommendation and for which, at a minimum, the relevant activity (e.g. test, examination), the frequency of the activity (e.g. examination intervals) and the eligible group of persons is defined. The intervention should be included in the benefits covered by residence-based public systems (i.e. government schemes, HF.1.1) or compulsory contributory insurance schemes (HF.1.2), although co-payments may be possible (HF.3). In some cases, the intervention may also be covered under voluntary schemes including voluntary health insurance (HF.2.1), non-profit institutions (HF.2.2) or enterprises (HF.2.3). Whether such programmes are "population-based", where the target population is actively identified and invited to participate (many breast cancer screening programmes are organised this way), or conducted in a more "opportunistic" fashion, where the initiative may come from health providers or patients themselves, is irrelevant.

35. Further, in this context, patient-initiated prevention outside of organised programmes refers to interventions that are not included in the benefits covered by government, compulsory insurance or voluntary schemes or to patients not belonging to the target group for which the interventions are part of the benefits package. They may have to be paid for entirely out-of-pocket.

36. Examples of patient-initiated prevention to be considered under prevention expenditure include:

- Vaccination for travel purposes (e.g. against yellow fever)
- Screening for people for which this is not recommended based on national guidelines[8] (e.g. breast cancer screening for women outside the target age group)
- Screening which may not be covered under the benefit package because of a lack of evidence of effectiveness (e.g. PSA-test for the detection of prostate cancer)
- Routine check-ups not included in the benefit package (e.g. in the Netherlands, the majority of dental care for those over 18 years is excluded from the benefit package, however many people purchase voluntary health insurance which covers dental care including annual dental check-ups)
- Routine medical check-ups provided and financed by enterprises to their employees
- Screening for communicable diseases (e.g. HIV/AIDS, hepatitis) provided and paid for by non-profit institutions (e.g. charities, self-help organisations)

8. While this can be considered "wasteful", this should not determine the inclusion or exclusion of services from current health spending. Unnecessary care and wasteful spending can also occur, for example, in relation to curative or rehabilitative care, which is regardless considered under health expenditure.

Immunisation – which costs to include?

37. Expenditure on immunisation (HC.6.2) should include the cost for the consultation (for the time and skills of the health personnel) and the cost of the vaccine itself (SHA 2011, p103). This includes the case where a vaccine has to be purchased independently by the patient at the pharmacy and is then brought to the vaccination provider. The cost of the independently purchased vaccine is best recorded under HC.6.2 provided by pharmacies (HP.5.1). The rationale for this is that vaccines are an integral part of immunisation and have the clearly identified purpose of (primary) prevention.

38. Further, vaccination for travel and tourism at the patient's initiative should be recorded under HC.6.2 as vaccination is always aimed at prevention. It should be noted that this is a deviation from SHA 2011 which lists travel vaccination as an example to be included under HC.1 (SHA 2011, p105). This exclusion from prevention expenditure was, however, largely due to the practical issue of being able to gather data on spending outside of organised prevention programmes.

Early disease detection – which costs to include?

39. Depending on the type of intervention, expenditure on early disease detection (HC.6.3) can include the costs for medical examinations, diagnostic tests, laboratory services and imaging services. The disease detection procedure may require a separate independent contact at an ancillary provider for a laboratory test or diagnostic test (e.g. a patient is referred by her doctor to an X-ray laboratory for mammography). The direct use of laboratory and imaging services during an independent contact with the health system is normally captured under the ancillary services category (HC.4) as the purpose (cure, rehabilitation, etc) is typically not identified (SHA 2011, p95). However, laboratory and imaging services as part of early disease detection should be included under HC.6.3 as they constitute an integral part of these interventions and have the clearly identified purpose of (secondary) prevention.

Healthy condition monitoring – which costs to include?

40. Depending on the health system, various healthy condition monitoring programmes can be universally available for particular population groups – e.g. all adults (general health check-ups), the entire population (dental check-ups), all pregnant women (antenatal check-ups) or all workers in a specific sector (medical check-ups to monitor employees' health).

41. Expenditure on healthy condition monitoring (HC.6.4) should include the cost related to the check-up and can include the medical examination, the establishment of the medical history, laboratory and diagnostic exams and some counselling based on the examination and test results. Healthy condition monitoring appointments are not a by-product of other consultations. They are more time-consuming than "ordinary" consultations and may require more than one appointment, in particular if laboratory and diagnostic tests are not immediately available. If the healthy condition monitoring procedure requires a separate independent contact at an ancillary provider for a laboratory or diagnostic test, these costs should, if possible, also be recorded under HC.6.4 as they constitute an integral part of healthy condition monitoring. Further, as counselling based on the results is an integral part of this intervention, it should also be considered under HC.6.4 rather than under HC.6.1 where other counselling activities would be recorded.

42. Routine dental check-ups are a particular example of healthy condition monitoring. Specific programmes may exist for regular check-ups (1-2 times a year) for children and youths, in particular to prevent dental caries. Adults are typically encouraged to have an annual dental check-up. The dental check-up generally includes the examination of teeth, gums and mouth, questions about general health and dental problems and dietary and dental hygiene advice. Depending on the country it may also include teeth

cleaning (polishing) and X-rays (to detect hidden cavities). Any dental treatment as the result of a check-up should be accounted for under curative care (HC.1.3.2).

43. It is important to note that the interventions included under HC.6.4 refer to "healthy conditions". In other words, check-ups with the aim to reduce the negative impact of an already established disease (e.g. regular check-ups for diabetic patients) should not be considered under prevention expenditure but rather under curative or rehabilitative care as these refer to tertiary prevention (SHA 2011, p100).

Distinguishing healthy condition monitoring and early disease detection

44. It can be challenging to clearly distinguish healthy condition monitoring (HC.6.4) from early disease detection (HC.6.3); both aim at detecting disease before symptoms appear, so that interventions can be put in place when its detrimental effects are still limited. For example, does a health check-up (initiated by the health system – e.g. for all people aged 50+) for multiple specific diseases go under HC.6.3 or HC.6.4 (e.g. if the check screens for a range of specific factors – smoking status, blood pressure, cholesterol, drinking, etc)?

45. There are two potential differences between HC.6.3 and HC.6.4. The first is that healthy condition monitoring tends to be universally available for all in particular groups – e.g. all pregnant women, or all people with teeth, can have regular check-ups. Screening programmes (HC.6.3) tend to select a higher risk group. The second is that screening programmes tend to try to detect a single disease – e.g. bowel cancer – or elevated risk of a particular disease – e.g. cardiovascular disease – and use a particular protocol related to that disease. Healthy condition monitoring, on the other hand, would tend to look for a wider range of possible diseases or risks.

Health interventions to reduce metabolic or physiological risk factors

46. Some interventions by the health care system to change modifiable metabolic or physiological risk factors might be difficult to distinguish from tertiary prevention and treatment. A key criterion will be whether the intervention is tackling a risk or treating a disease. If the primary aim is, say, to prevent a first heart attack, stroke or other major cardiovascular disease, then interventions to reduce metabolic or physiological risk factors would be included as prevention. It is recognised that it may well be easier to identify expenditure on dedicated preventive programmes to tackle, say, high blood pressure in groups likely to be at risk, than to identify expenditure on similar preventive interventions carried out individually in regular clinical interactions such as GP visits.

Pharmaceuticals and medical goods for prevention

47. Some pharmaceuticals and medical goods may have a preventive function (e.g. to prevent first occurrence of coronary heart disease or cerebrovascular disease, by reducing blood pressure or lipids). By convention, any medical goods dispensed against a prescription or purchased over-the-counter should be included under the medical goods category (HC.5), irrespective of their final purpose. Vaccines purchased independently at the pharmacy which are then brought to the vaccination provider are an exception to this convention (see paragraph 37).

48. Pharmaceuticals for preventive use can be a significant expenditure item (antihypertensives and statins, for example) and it may well be policy relevant to monitor their use. In such as case, a country-specific subcategory of HC.5 for preventive medical goods may be recommended which can be aggregated with all or part of HC.6 categories to provide a more extensive memorandum item of preventive expenditure.

Personal counselling

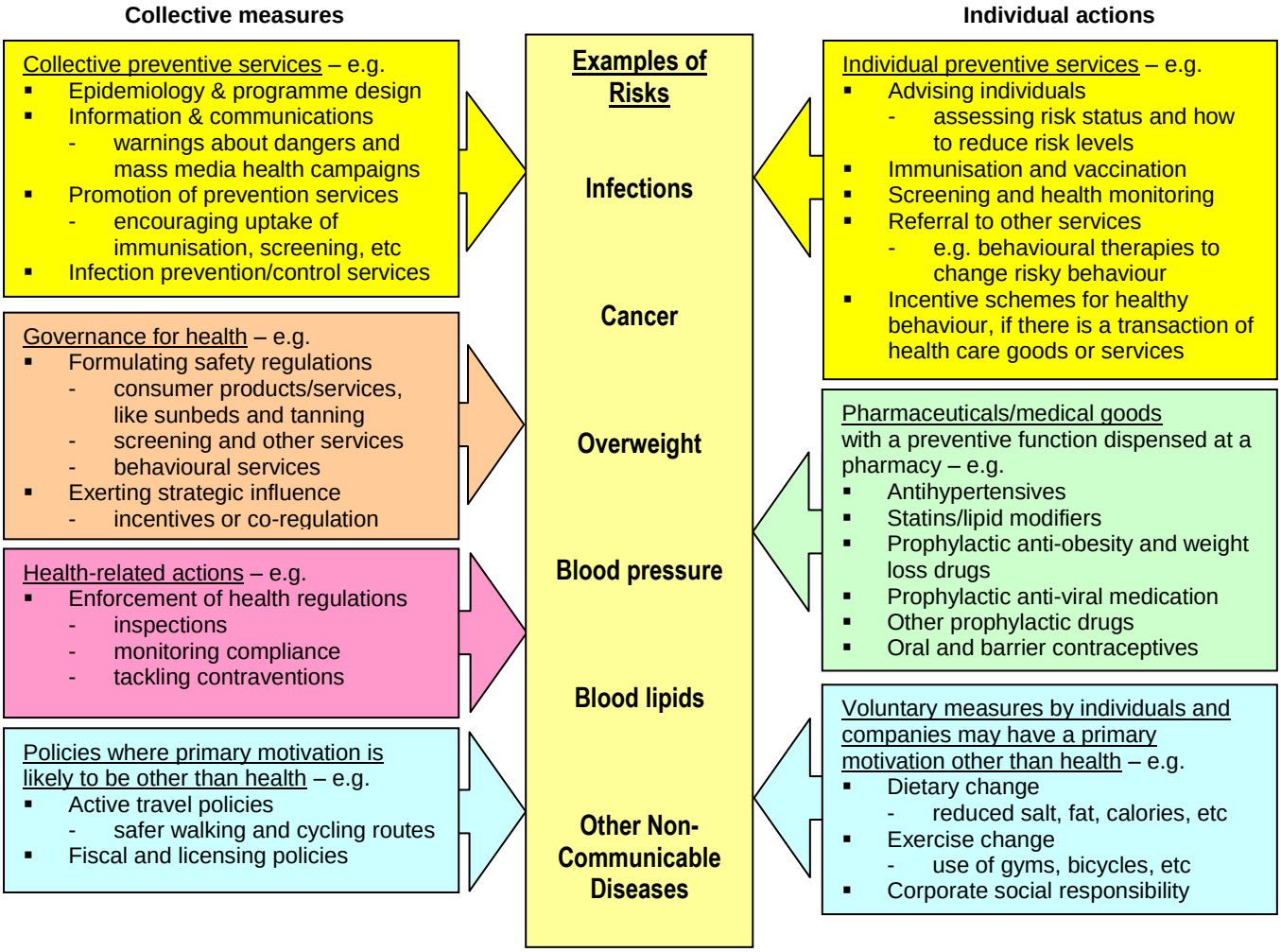
49. While personal counselling by health care professionals with the aim to promote healthy living conditions and lifestyles should generally be recorded under HC.6.1, this does not include counselling as a by-product of a regular consultation (e.g. a GP provides care for a patient suffering from breathing problems and at the same time advises the patient to lose weight and stop smoking). Also not included is personal counselling where this is an integral part of another preventive intervention, such as cancer screening, in which case it would be recorded under the relevant preventive activity (HC.6.3 in the cancer screening example). In other words, only where preventive counselling is the main purpose for a contact with the health system or where dedicated programmes for counselling at-risk groups exist, should such expenditure be included under HC.6.1.

Planning versus governance

50. HC.6.5 (or rather the part referring to programme design, monitoring and evaluation) is sometimes not easily distinguishable from HC.7.1 (Governance and health system administration). A key difference for current purposes is whether regulations are involved – regulations that make something mandatory or proscribe something. The health ministry and parliament may have the power to make regulations but other bodies may not have such authority, in which case the activities of these other organisations could be allocated to HC.6.5.

51. Based on the above guidance and applying the considerations and "colour coding" used in Figure 1, Figure 4 illustrates a number of communicable and non-communicable disease risks, the tackling of which is assumed to be of particular relevance in terms of distinguishing prevention from other health care spending.

Figure 4. Approaches to tackling risks and their SHA classification (cont.)



5. SUMMARY OF THE PREVENTION BOUNDARY UNDER SHA 2011

52. Using the guidance provided in the previous sections, Tables 5, 6 and 7 indicate where to classify different areas of prevention spending.

Table 5. Individual services related to prevention – classification under SHA 2011

Prevention category	SHA 2011 code	Examples of relevant activities
Information, education and communication "IEC"	HC.6.1	Providing health and safety-related information to the public or specific groups (e.g. firms, workers, schools, pupils), about risks and how to reduce them – e.g. ▪ information about prevention programmes such as vaccination programmes, screening programmes, health check-ups, etc ▪ the importance of specific risks and their potential to kill people or injure or cause harm to human health ▪ how to avoid risks, how to increase safety ▪ information about obligations under relevant regulations ▪ production of guidance documents and other media ▪ provision of advisers or counsellors who advise about risks and their reduction ▪ promotion of uptake of any of above
Counselling, behaviour change programmes	HC.6.1	Motivating to change behaviour, provided primary purpose is health – to reduce risks of disease, injury or death ▪ counselling to improve motivation ▪ behavioural counselling
Incentive schemes	HC.6.1	Financial incentives for healthy behaviour – if it is clear that the primary purpose is to reduce risks or promote healthy behaviour and if there is a transaction of health care goods or services ▪ e.g. subsidies for healthier consumption – e.g. vouchers for eating more fruit and vegetables ▪ e.g. subsidies for personal protective equipment
Immunisation	HC.6.2	Vaccination *typically undertaken by clinical professionals* ▪ as part of organised programmes (e.g. childhood vaccination) ▪ patient-requested vaccination (e.g. for travel)
Early disease detection	HC.6.3	Early detection of disease or risks before disease appears *typically undertaken by clinical professionals* ▪ e.g. breast cancer screening (mammography), cervical cancer screening (pap smear), prostate cancer screening (PSA-test)
Healthy condition monitoring	HC.6.4	Check-ups, which may be targeted at specific groups *typically undertaken by clinical professionals* ▪ e.g. general health check-ups, regular dental check-ups, regular antenatal check-ups, regular medical check-ups to monitor employees' health
Ancillary services	HC.6.3, HC.6.4	Laboratory and imaging services – if integral part of early disease detection or healthy condition monitoring *undertaken by ancillary providers in a separate independent contact* ▪ e.g. mammography in X-ray laboratory as part of a breast cancer screening programme
Medical goods	HC.5 (vaccines: HC.6.2)	Pharmaceuticals and medical goods with a preventive function *independently purchased from pharmacies against a prescription or over-the-counter (except vaccines)* ▪ e.g. preventive medicines such as antihypertensives, statins, other prophylactic medication and contraceptives

Table 6. Collective services related to prevention – classification under SHA 2011

Prevention category	SHA 2011 code	Examples of relevant activities
Information, education and communication "IEC"	HC.6.1	▪ Mass media and advertising campaigns – e.g. about how to reduce behavioural risks (campaign against drunk driving, anti-drug campaign, etc) or to promote preventive services (immunisation, screening, etc)
Surveillance and analysis of risks, and control programmes	HC.6.5	▪ Data collection on risks to human health and safety – e.g. mortality and morbidity rates ▪ Data recording and information systems – those parts that relate to health and safety risks ▪ Epidemiological assessment and analysis of causes and consequences of risks, trends, etc ▪ Prevention programme planning and design – e.g. deciding which programmes are most effective and cost-effective ▪ Evaluation of health and safety programmes ▪ Monitoring of drinking water in public health laboratories ▪ On-the-job training to better perform these activities
Governance (making regulations)	HC.7.1	Design and formulation of regulations to protect human health, reduce hazards and increase human safety – e.g. ▪ Making provision or use of safety equipment mandatory ▪ Requiring specific design amendments to reduce human mortality or morbidity risks ▪ Prohibitions, such as emissions of health-damaging pollutants or use of carcinogens ▪ Requiring training in safe handling of potentially hazardous substances ▪ Restrictions on advertising (in order to protect health) ▪ Making mandatory health or safety warnings and labelling requirements
Co-regulation (Gov't support for this)	HC.7.1	Government efforts to organise and promote a response from other organisations, so as to protect human health, reduce hazards and increase human safety, as an alternative to bringing in regulations

Table 7. Other services – classification under SHA 2011

Category	SHA 2011 code	Examples of relevant activities
Enforcement (by official enforcers)	HCR.2	Costs to the public sector of enforcing health and safety regulations outside of health care – e.g. inspection, monitoring and tackling contraventions
Multi-sectoral health promotion	HCR.2	Health protection may be an important secondary goal rather than the primary purpose – e.g. ▪ food & water security measures ▪ safe management of waste ▪ tackling drunkenness
Planning fiscal measures (Gov't support for this)	[other gov't]	▪ Design and formulation of taxes on substances that are hazardous to health – e.g. on tobacco, alcohol, saturated fat ▪ Design and formulation of tax exemptions or rebates on things that protect health and reduce mortality and morbidity risks
Compliance costs	[other private]	Costs to those regulated – e.g. ▪ costs of following mandatory procedures, equipment, training, record keeping, etc ▪ licence fees ▪ fines, taxes paid