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# Select Cost Sharing in Universal Health Care Countries

by Steven Globerman



#### SUMMARY

- A prominent feature of Canada's health care system is the absence of any charge for publicly insured health care services at the point of consumption. This feature is mandated by the Canada Health Act along with a prohibition on extra-billing by health care providers.
- A strong argument can be made that "firstdollar" coverage leads to an inefficient overconsumption of health care services. Specifically, it encourages the consumption of health care services whose costs exceed the associated benefits of those services.
- Most developed countries with universal coverage for health care services do not mandate first-dollar coverage. Rather, insurers (whether public or private) typically impose some type of cost sharing for the health care services they cover, including services that are similar to those that are covered by provincial health care plans in Canada. Exemptions from cost-sharing, or subsidies to help pay for cost sharing, are typically provided to low-income insurance subscribers, the chronically ill, and

- children. There are also usually caps or limits on the total out-of-pocket expenses that different groups of subscribers can incur as a result of cost sharing.
- A prominent argument against cost sharing is that it will discourage the consumption of "necessary" medical services with the potential consequence of much larger future costs being imposed on the insurance system to remediate the discouraged earlier consumption.
- Empirical evidence generally suggests that cost sharing at the point of consumption does lead to a reduced use of health care services at the margin; however, the evidence does not consistently establish that cost sharing results in adverse long-term health outcomes. This latter result might reflect the fact that exemptions and subsidies that are granted for specific services and for low-income and other "vulnerable" patient groups mitigate risks that cost sharing will discourage the consumption of necessary medical treatments and procedures.

#### Introduction

An important distinguishing feature of the Canadian health care system is the absence of co-insurance, deductibles, or co-payments for basic health care covered by provincial health care insurance plans.1 Sections 18-21 of the Canada Health Act explicitly disallow user charges, which are defined as any charge for an insured health service authorized or permitted by the provincial government health plan that is not payable by the plan. Extra-billing (an amount in addition to the amount covered by the plan by medical practitioners for insured health services) is also prohibited (see Clemens and Esmail, 2012).

In effect, there is "first-dollar" coverage of health care costs for Canadians for all services covered by provincial health care plans. There has been some controversy surrounding the potential implementation of some form of co-payment arrangement for publicly insured health care services in Canada.<sup>2</sup> The nature of the controversy will be discussed in more detail in a later section. What is clearly true is that Canada belongs to a small minority of countries in its first-dollar coverage practice, even among a set of countries that can be classified as having universal access health care systems. This latter observation suggests that implementing cost-sharing at the point of health care consumption does not undermine universal access to health care, particularly when exemptions or subsidies are granted to groups in society that might find cost-sharing financially burdensome.

of developed countries with cost-sharing features; it pays particular attention to the nature of the cost sharing and the groups, if any, that are exempted from the cost sharing or receive a subsidy to help defray the cost. The third section of the paper addresses the conceptual arguments for and against imposing cost sharing at the point of consumption. To preview the main finding here, the available evidence suggests that imposing some required payment at the point of consumption does reduce the use of the health care system. However, over the range of cost-sharing that has been studied, reduced consumption of health care services due to cost sharing does not appear to have significant adverse effects on health for most consumers of publicly insured services. This latter conclusion must be tempered by the observation that there is relatively little evidence on the long-term effects of cost sharing on health. The final section of the paper provides a brief set of policy conclusions.

The second section of this paper reviews universal access insurance programs across a set

### Cost-sharing in developed countries

It should be noted at the outset that there is a substantial degree of heterogeneity in the nature of the insurance arrangements in different countries, as well as in specific cost-sharing features of the respective health insurance schemes. This makes it difficult to draw simple contrasts to the Canadian system. Since the focus of this paper is on the first-dollar coverage in Canada of insured physician, diagnostic, and hospital services, comparisons to other countries are limited to these specific services, including prescription drugs provided in hospital settings which are covered in Canada through the public insurance program. What are excluded, in particular, are premium pay-

<sup>&</sup>lt;sup>1</sup> Definitions for these various terms are provided in Appendix A.

<sup>&</sup>lt;sup>2</sup> For a discussion of the arguments for and against first-dollar coverage in Canada, see Esmail and Walker (2008).

ments for private health insurance that are mandated by the government in those countries that do not fund universal access through the tax system, since mandated premiums are similar to tax payments.<sup>3</sup> It should also be explicitly noted that the comparisons are made to countries for which relatively recent information is publicly available about cost-sharing. While this limits the list of countries providing comparative information, there is no reason to believe that a more comprehensive comparison of national health systems would alter the fundamental conclusions drawn here.

#### 1. Australia:4

In Australia, the federal government funds health services including Medicare, the national medical insurance scheme. Medicare usually reimburses 85% to 100% of its fee schedule for ambulatory services. It also reimburses 75% of the medical fee schedule (but not accommodation, surgery theater fees, or medicines) for private patients. Inpatient care for public patients is free of charge. The government's 2014 budget included an AU\$7.00 (CA\$6.67) copayment for GP, radiology, and pathology services.<sup>5</sup> Annual limits apply to both "gap" payments (the difference between the scheduled fee and Medicare reimbursement) and

to total out-of-pocket payments.<sup>6</sup> For gap expenses, once the annual maximum threshold is reached, the Medicare payment is increased from 85% to 100% of the Medicare fee schedule for the remainder of the calendar year, irrespective of income. For total out-of-pocket costs, there are separate thresholds for individuals with concession cards, low income families, and for all other patients. Once the (separate) thresholds are reached, 80% of the patient's out-of-pocket costs are reimbursed for the remainder of the calendar year. Families can register to have their gap expenses and out-ofpocket costs combined to reach the applicable threshold amount sooner.

#### 2. France:<sup>7</sup>

Health coverage in France is universal and is provided to all residents by noncompetitive statutory health insurance (SHI) funds. Eligibility for SHI is either gained through employment or granted as a benefit to persons who have lost their jobs but were previously employed (and their families), to students, and to retired persons. The state covers the health insurance costs of residents not eligible for SHI coverage. Cost-sharing takes three forms: coinsurance, copayments, and extra-billing. The rates of coinsurance and co-payment vary

<sup>&</sup>lt;sup>3</sup> In a number of countries, residents can choose their insurer and, therefore, the insurance premium that they pay, at least to a limited degree.

<sup>&</sup>lt;sup>4</sup> Information about cost sharing in Australia is taken from Dugdale and Healy (2015) and Esmail (2014).

<sup>&</sup>lt;sup>5</sup> Translation of foreign currency values into Canadian dollars uses exchange rates reported by the Bank of Canada as of June 29, 2015.

<sup>&</sup>lt;sup>6</sup> Incentive schemes are in place to encourage GPs to bill Medicare directly with no patient charge (referred to as bulk billing) for care provided to low income families, older people, children less than 16 years of age and residents of rural and remote areas. See Dugdale and Healy (2015).

<sup>&</sup>lt;sup>7</sup> Information about cost-sharing in France is taken from Durand-Zaleski (2015).

by service. For example, there is a 20% coinsurance rate applied to inpatient care and a 30% rate applied to doctor visits. In addition to coinsurance, nonreimbursable co-payments apply (up to an annual ceiling) for each inpatient hospital day, and per doctor visits, among other services. The co-payments are fairly nominal. For example, the co-payment is €18 (CA\$25) for each inpatient hospital day and €1 (CA\$1.39) per doctor visit. Hospital coinsurance applies only to the first 31 days of inpatient hospital care, and some surgical interventions are exempt. Children and people with low incomes are exempt from paying non-reimbursable copayments. In addition, exemptions from coinsurance apply to individuals with specific chronic illnesses, people with low incomes, and individuals receiving invalidity and work-injury benefits.

#### 3. **Germany**:<sup>8</sup>

Health insurance in Germany is provided by competing, not-for-profit, nongovernmental health insurance funds which comprise the statutory health insurance (SHI) scheme, or by voluntary substitutive private health insurance. In 2004, co-payments were introduced for ambulatory care office visits for adults 18 years and older for the first visit per quarter and for subsequent visits without referral. These co-payments were removed in January 2013. Remaining co-payments include a €10 (CA\$13.90) charge per inpatient day for hospital and rehabilitation stays (for the first 28

<sup>8</sup> Information about cost-sharing in Germany is from Blumel and Busse (2015) and Esmail (2014).

days per year), and €5 to €10 (CA\$6.95 to CA\$13.90) for prescribed medical aids. Children under 18 are exempt from cost-sharing. For adults, there is an annual cap on cost-sharing equal to 2% of household income. The cap is lowered to 1% for chronically ill people.

#### 4. **Italy**:<sup>9</sup>

Italy's central government controls the distribution of tax revenue for publicly financed health care and defines a national minimum statutory benefits package to be offered to all residents in every region of the country. While there are no user charges for GP consultations and hospital admission stays, patients pay a copayment for procedures and specialist visits up to a ceiling. The ceiling is currently €36.15 (CA\$50.21) per procedure. A €25 (CA\$34.72) co-payment also exists for the "unwarranted" use of emergency services defined as noncritical or nonurgent conditions. Exemptions from cost-sharing are applied to people age 65 and over, or age 6 and under, who live in households with a gross income below a nationally defined threshold, as well as to people with severe disabilities. People with chronic or rare conditions and pregnant women are exempt from cost-sharing for treatment related to their condition. Most screening services are provided free of charge. While there are no caps on out-of-pocket payments, all individuals with out-ofpocket payments above a set amount (currently €129 or CA\$179.20) in a given year are eligible for a tax credit equal to roughly one-fifth of their spending.

<sup>&</sup>lt;sup>9</sup> Information about Italy is from Donatini (2015).

#### 5. **Japan**:10

The universal public health insurance system in Japan is comprised of approximately 3500 insurers. Employees and their dependents under age 75 are required to enroll in coverage offered by their employers (if employed by large companies) or the Japan Health Insurance Association (if employed by small or medium-sized companies). The remaining population under age 75 is covered by municipally-run plans, while those age 75 and over are covered by insurance plans for the "old-old." All enrollees have to pay coinsurance of 30% for services and goods covered under the insurance package. The rate is reduced to 20% for children and people aged 70-74 with lower incomes, and to 10% for those ages 75 and older with lower incomes. Catastrophic coverage stipulates a monthly out-of-pocket threshold that varies according to the enrollee's age and income. Above this threshold, a 1% copayment is applied. The threshold is a ceiling for low-income families. Subsidies (mostly restricted to low income households) are provided to people with disabilities, mental illness, and specified chronic conditions.

#### 6. The Netherlands<sup>11</sup>

Under the Health Insurance Act, all residents of the Netherlands are mandated to purchase statutory health insurance from private insurers. Every insured

<sup>10</sup> Information about Japan is from Matsuda (2015) and Esmail (2013).

person over age 18 must pay an annual deductible (€360, or CA\$500, as of 2014) for health care costs, including costs of hospital admission but excluding some services, such as GP visits. Apart from the overall deductible, patients are required to share some of the costs of selected services (e.g., medical transportation, via co-payments or coinsurance). Besides GP care, children's health care is exempt from cost-sharing.

#### 7. New Zealand<sup>12</sup>

Health services in New Zealand are largely publicly financed through general taxes. Co-payments exist for GP services and many nursing services provided in GP clinics. The average fee for an adult's GP consultation ranges between NZ\$15 (CA\$12.70) and NZ\$40 (CA\$33.90). Co-payments are capped for adults in low income areas with government subsidies making up for lost fee income. Co-payments are also required for drugs prescribed by GPs and specialists, including those in-hospital. After co-payments are made for 20 prescription drugs per family per year, they are free. Primary care is mostly free for children age 13 and under and is subsidized for the population enrolled in the networks of self-employed providers known as primary health organizations (PHOs). Additional PHO funding is made available for treating people with chronic conditions and "high health needs." Public hospital clinical services are free, although there are some user charges (for crutches, for example).

<sup>&</sup>lt;sup>11</sup> Information about the Netherlands is from Wammes, Jeurissen, and Westert (2015) and Esmail (2014).

<sup>&</sup>lt;sup>12</sup> Information about New Zealand is from Gould (2015).

#### 8. Norway<sup>13</sup>

Universal health care coverage in Norway is nationally financed through general taxation. GP and specialist visits require co-payments, as do physiotherapy visits, covered prescription drugs, and radiology and laboratory tests. As of 2014, the required co-payments for GP and specialist visits were NOK141 (CA\$15.70) and NOK320 (CA\$50.24). There is an annual maximum for many cost-sharing requirements, above which out-of-pocket costs are waived. Certain groups are exempt from cost sharing. For example, children under the age of 16 receive free physician treatment. Pregnant women receive free medical exams during and after pregnancy. Individuals suffering from specific communicable diseases and patients with work-related injuries receive free medical treatment and medication. Taxpayers with high expenses as a result of permanent illness receive a tax deduction.

#### 9. Sweden<sup>14</sup>

Sweden's universal insurance system is funded by taxes largely collected by municipalities and county councils. Cost sharing in the form of co-payments per health care visit and per hospital bed-day is determined by individual county councils. In 2014, consultation with a physician in primary care cost between SEK120 (CA\$18) and SEK300 (CA\$45). The fee for consulting a specialist at a hospital was between SEK200 (CA\$30) and SEK350 (CA\$52.55). Patients

<sup>13</sup> Information is from Lindahl (2015).

were charged SEK80 to SEK100 (CA\$12 to CA\$15) per day for hospitalization. There is a national ceiling for out-ofpocket payments that caps an individual's spending on health care visits at SEK1,100 (CA\$165.17) per year in all county councils. Children, adolescents, pregnant women, and the elderly are generally exempted from user charges or granted subsidies for specific services such as maternity care.

#### 10. Switzerland<sup>15</sup>

Swiss residents are required to purchase statutory health insurance from competing private insurers. Insurers are required to offer statutory health insurance plans with a minimum annual deductible for adults of CHF300 (CA\$400), although insured individuals may opt for a higher deductible (up to CHF2500 or CA\$3,333) and a lower premium. Insured persons pay 10% coinsurance above deductibles for all services. 16 For treatment in acute care hospitals, there is a CHF15 (CA\$20) co-payment per inpatient day. Cost sharing related to the 10% coinsurance is capped at CHF700 (CA\$933.33) for adults and CHF300 (CA\$400) for minors under age 19 in a given year. Maternity care and a few preventive services are exempt from deductibles, coinsurance and co-payments. Minors do not have to pay deductibles or copayments for inpatient care.

<sup>&</sup>lt;sup>14</sup> Information is taken from Glenngard (2015) and Esmail (2013).

<sup>&</sup>lt;sup>15</sup> Information is from Camenzind (2015) and Esmail (2013).

<sup>&</sup>lt;sup>16</sup> There is a 20% charge for brand name drugs with generic alternatives.

#### **Summary**

This overview of a set of developed economies characterized by universal health care systems underscores the point that cost sharing at the point of consumption for health care is not at all unusual. To be sure, there are also countries that employ first-dollar coverage similar to Canada. Denmark and England are most notable in this regard. Nevertheless, it is clear from the experience summarized in this section that cost sharing at the point of consumption is not inconsistent with universal access health care systems. Of course, this observation does not necessarily mean that cost sharing as a policy has net social benefits, although the fairly large number of countries that employ some form of cost sharing compared to those that employ first dollar coverage suggests that more policymakers see net benefits in cost sharing schemes than in first dollar coverage schemes. In the next section of this paper, the pros and cons of cost sharing are reviewed and assessed.

### Cost-sharing: The policy perspective

The main policy objective of cost sharing is to reduce patient use of relatively ineffective or unnecessary health care services. In this regard, the concern with first-dollar coverage is that people will use health care services that, at the margin, have outcome benefits that are substantially lower than the costs of providing those services. A reduction in low value uses of health care services would therefore likely result in a more efficient use of the health care system including reductions in wait times for patients with relatively urgent medical needs.<sup>17</sup>

Figure 1: Use of Health Care Services with First **Dollar Coverage** 

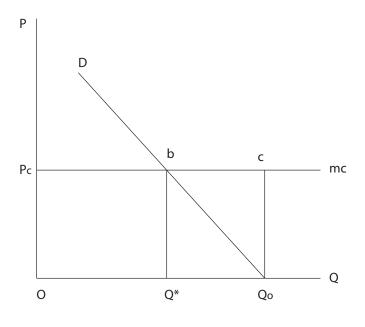


Figure 1 illustrates the basic logic underlying the potential inefficiency of first-dollar coverage at the point of consumption. The horizontal axis measures the quantity of health care services while the vertical axis measures the price charged per unit of health care services. The demand for health care services (D) is assumed, for convenience, to be a straight line. The supply curve for health care services, equal to the marginal cost (MC) of providing those services, is also, for convenience, assumed to be linear and constant. The efficient output rate for health care services is determined where the marginal cost of an additional quantity supplied equals the marginal benefit of an additional quantity consumed, where the latter is given by the demand curve. This efficient output rate is shown as OQ\* in figure 1. However, if there is first dollar coverage at the point of consumption, patients will, in theory, consume Q<sub>o</sub>, where the marginal benefit of additional con-

<sup>&</sup>lt;sup>17</sup> A full discussion of the potential efficiency gains from cost sharing is found in Esmail and Walker (2008) and Henderson (2013).

sumption equals zero. This is because patients are effectively charged a zero price for each unit of health care consumed. The result is that a quantity of health care (OQ<sub>0</sub> - OQ\*) is consumed for which the incremental cost exceeds the incremental benefit. The associated inefficiency is shown as the triangle bcQ<sub>o</sub>. This inefficiency would be eliminated if patients were charged the marginal cost associated with the service provided. The elimination of this inefficiency is the main benefit from cost sharing.

There are both actual and potential costs associated with cost sharing. The actual cost is the increase in financial risk imposed by cost sharing. Simply put, cost sharing means that insured individuals face higher contingent financial liabilities that depend upon changes to their health status and to their resulting use of the health care system. For most people, increased risk is intrinsically undesirable and therefore represents an implicit cost associated with cost sharing; however, to a substantial extent, this implicit cost can be minimized through the use of caps or limits on out-of-pocket health care expenditures. As discussed in the previous section of this report, cost sharing schemes in the developed countries reviewed are characterized by, among other things, limits on out-of-pocket health care expenditures.

Cost sharing has the potential to increase the overall costs of providing health care services to the extent that it encourages patients to cut back on the consumption of effective and "necessary" health care services. In such cases, any resulting (and potentially avoidable) deterioration of patients' health status over time might result in long-run increases in costs of treatment that exceed any savings from discouraging relatively inefficient uses of the health care system. The main study examining health status outcomes related to cost sharing is the Rand

Health Insurance Experiment.<sup>18</sup> The Rand study documented that higher coinsurance rates led to declines in medical care usage and spending by individuals, primarily from declines in patient-initiated visits to physicians or other medical providers. It also found that, for the average person under the age of 62, there was no adverse health effects due to reductions in the use of health care services tied to cost sharing.

Swartz (2010) argues that major changes in medical care practices since the late 1970s when the Rand study was conducted, as well as changes in age and income distributions in society in the intervening years since the study, make it risky to continue to draw conclusions about the overall net social benefits of cost sharing from the Rand study. She reviews a number of more recent but much smaller scale studies of the impacts of cost sharing on health care usage and health status outcomes. These later studies qualify but do not reverse the main conclusion of the Rand study. What more recent studies show is that the impacts of cost sharing on usage and health outcomes likely vary according to the age and health status of the patient. In particular, older and sicker patients are more likely to suffer longer run health complications by reducing their usage of health services owing to cost sharing. It is noteworthy in this regard that the countries reviewed in the preceding section typically exempt older people from cost sharing, as well as those with chronic illnesses or other health disabilities. While there is less evidence on this point, there are also indications from more recent studies that the impacts of cost sharing on health outcomes and future health

<sup>&</sup>lt;sup>18</sup> See Esmail and Walker (2008) and Swartz (2010) for detailed reviews of this study.

care costs may depend upon the nature of the health care service to which cost sharing is applied. For example, cost sharing imposed on preventive health care services might be inefficient in the long-run.

### **Summary and conclusions**

While some other countries besides Canada eschew the use of cost sharing in their universal health care insurance schemes, most developed countries do have some cost sharing features in their universal insurance programs. That is to say, most developed countries employ cost sharing in the form of deductibles, coinsurance, and/or co-payments for the set of services that are provided in Canada under provincial government health insurance programs. This is clear evidence that cost sharing is completely compatible with universal health care coverage. At the same time, those developed countries that impose cost sharing set limits on out-ofpocket expenditures by insured persons. They also do not impose a uniform cost sharing rule on the insured. Rather, there are exemptions or financial subsidies granted to groups that are less likely to provide an efficient response to cost sharing incentives, e.g., patients with chronic health conditions. There are also exemptions and subsidies for poorer individuals and families that would find cost sharing an undue financial burden.

The overall message to be gleaned from a review of the cost sharing experiences of other countries is that the net social benefits of cost sharing initiatives will be sensitive to the design of the cost sharing regime including identification of any health care services that will be exempted from cost sharing. 19 It seems likely

#### References

Miriam Blumel and Reinhard Busse (2015). The German Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne, and Chloe Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund): 63-72.

Paul Camenzind (2015). The Swiss Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne, and Chris Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund): 143-152.

Jason Clemens and Nadeem Esmail (2012). First Do No Harm: How the Canada Health Act Obstructs Reform and Innovation. MacDonald-Laurier Institute.

Andrea Donatini (2015). The Italian Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne, and Chloe Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund): 73-82.

Paul Dugdale and Judith Healy (2015). The Australian Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne,

that the "optimal" cost sharing design, i.e., the design that maximizes net social benefits, will vary with the demographics, health status, and income of a country's population. Hence, it is not surprising that specific features of cost sharing differ across the countries reviewed in section two of this report. In this regard, the experiences of other countries in terms of the varied cost sharing rules they impose can serve as guides to any Canadian initiative to introduce cost sharing.

<sup>&</sup>lt;sup>19</sup> The nature of the cost sharing arrangement (e.g., deductibles versus coinsurance or co-payments) will

also affect patients' use of the health care system and possibly their long-run health status.

and Chloe Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund): 11–20.

Isabelle Durand-Zaleski (2013). The French Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne, and Chloe Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund): 53-62.

Nadeem Esmail and Michael Walker (2008). How Good is Canada's Health Care? The Fraser Institute.

Nadeem Esmail (2014). Health Care Lessons from Australia. The Fraser Institute.

Nadeem Esmail (2014). Health care Lessons from Germany. The Fraser Institute.

Nadeem Esmail (2013). Health Care Lessons from Japan. The Fraser Institute.

Nadeem Esmail (2014). Health Care Lessons from the Netherlands. The Fraser Institute.

Nadeem Esmail (2013). Health Care Lessons from Sweden. The Fraser Institute.

Nadeem Esmail (2013). Health Care Lessons from Switzerland. The Fraser Institute.

Anna Glenngard (2015). The Swedish Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne, and Chloe Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund): 133-142.

Robin Gould (2015). The New Zealand Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne, and Chloe Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund):103-112.

David Henderson (2013). The Inefficiency of Health Care Rationing-and a Solution. In

Steven Globerman (ed.), Reducing Wait Times for Health Care (The Fraser Institute): 77-94.

Anne Karin Lindahl (2015). The Norwegian Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne, and Chloe Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund): 113-122.

Ryozo Matsuda (2015). The Japanese Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne, and Chloe Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund): 83–92.

Katherine Swartz (2010). Cost-Sharing: Effects on Spending and Outcomes. Research Synthesis Report No. 20. Robert Wood Johnson Foundation.

Joost Wammes, Patrick Jeurissen, and Gert Westert (2015). The Dutch Health Care System, 2014. In Elias Mossialos, Martin Wenzl, Robin Osborne, and Chloe Anderson (eds.), 2014 International Profiles of Health Care Systems (The Commonwealth Fund): 93-102.

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### **Appendix A: Definition of Cost Sharing Options\***

- Co-insurance: Requires individuals to pay some fraction of each dollar of cost, usually set as a percentage of the cost to the insurer.
- Deductible: The amount that a patient must pay out-of-pocket during a period of time before the insurer will start paying for health care services consumed.
- Co-Payment: A user fee set as an absolute amount for a given health care service.

\*These definitions are taken from Esmail and Walker (2008).



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