# REDUCING WASTE IN HEALTH AND LONG-TERM CARE IN THE NETHERLANDS

By: Fred Lafeber and Patrick Jeurissen

**Summary:** The Dutch government tries to involve the population in its struggle to contain the rising costs of health care. Among its efforts is a special virtual reporting point to report 'waste'. Between late May and August 2013, 16,000 questionnaires were filled in at the virtual reporting point. Results highlight that waste seems to occur in all aspects of care. However, in acute care waste seems predominantly related to volume and the level of pricing, whereas in long-term care more waste seems to be connected to management expenses and the administrative complexity of the system. There are some indications that in the Netherlands comparatively more waste is tied to volume than in the United States where waste with respect to pricing and administrative complexity is more prevalent.

***Keywords:*** *Reducing Waste, Health Care, Long-term Care, The Netherlands*

## Introduction

European countries are struggling to curb rising health expenditures. However, since health care services are so highly valued, many countries find it hard to openly reduce entitlements or increase the level of co-payments. Research by the European Observatory on Health Systems and Policies echoes this view, at least for those countries that are at the center of the storms of the fiscal crisis.[1] Keeping in mind the potential effects of more restrictive global budgets on things such as longer waiting lists, measures to directly address waste garner greater attention. Tackling waste also fits in with broader policy agendas in health, such as creating sustainable health systems and related to this, increasing the overall efficiency of health system functioning.

Indeed, Berwick and Hackbarth[2] claim that reducing waste is the largest and smartest opportunity for developing an affordable health system. They distinguish six categories of waste: 1) health care delivery failures; 2) failures of coordination (e.g. fragmented care); 3) overutilisation; 4) administrative complexity; 5) pricing failures; and 6) fraud and abuse. The authors estimate that between 21% and 47% of all US health care costs are being 'wasted'. In a recent study, former Dutch health care minister Ab Klink estimates that a combined strategy of reducing overutilisation, increasing integrated care and stimulating shared-decision making can add-up to annual savings of €8 billion in the Netherlands – almost 20% of the total budget for acute care.[3]

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**Box 1:** Structure and examples of online portal questions

The questionnaire was structured as follows:

1. *What type of waste do you want to report?* Four categories were offered:

a) organisational waste

b) waste in the delivery of services

c) waste regarding prescription medicines

d) waste regarding medical devices

People could also fill in the option: 'Other (please specify)'.

For the four closed-question categories, people were asked to fill in a further specification of the type of waste plus the option for an open answer. For example for organisational waste people could select 'too much paperwork', 'bad procurement', 'limited use of ICT' etc.

2. *Who is causing the waste (for example doctor, pharmacist, specialist, government, insurer etc)?*

3. *Where does the waste occur (for example hospital, at home, institution etc)?*

4. *How do you think this waste can be addressed?*

The closed answers were dependent on the answer for Question 1. For example, for 'organisation' people could fill in 'better procurement', 'quality management', 'improve cooperation', 'more control' and the option 'Other (please specify)'.

Source: Authors.

The combination of pressures of the current austerity agenda and a broadly-felt perception that there is much waste in Dutch health care helped to induce the Ministry of Health, Welfare and Sport to establish a virtual reporting point where patients, professionals and citizens could report cases of waste in Dutch health and long-term care. To our knowledge, no other similar initiative for addressing waste exists in other European countries.

## Reporting point

In May 2013, an online questionnaire was designed by experts from the Ministry in collaboration with external consultants and tested by a professional market research agency. On the Waste-in-Care website (www.verspillingindezorg.nl ) people could report anonymously on any waste they had encountered in the health care system. The questionnaire consisted of both open-ended and closed questions (**see Box 1**). Publicity for the website was undertaken via an announcement on the central government website and by the Minister directly in a consumer advice programme on television (which led to an explosion of reports in the first month). Between 25 May and 1 August 2013, 16,403 people filled in the survey at the virtual online reporting portal. More women (60%) than men reported, an outcome that is to be expected, as it is known that women are overrepresented both in the group of health care service users and in the health care workforce. There was also a high response from people aged 46–65 (55%). Most people who filled in the questionnaire were patients (42%) or care givers (26%), although in long-term care the majority of people reporting were care givers.

The amount of open non-structured answers (**see Box 1**) made it necessary to codify the answers, which was done by a team at the Ministry using a framework that is somewhat similar to Berwick and Hackbarth's categories (**see Table 1**). Codifying types of waste was further automated with the help of selected key words.

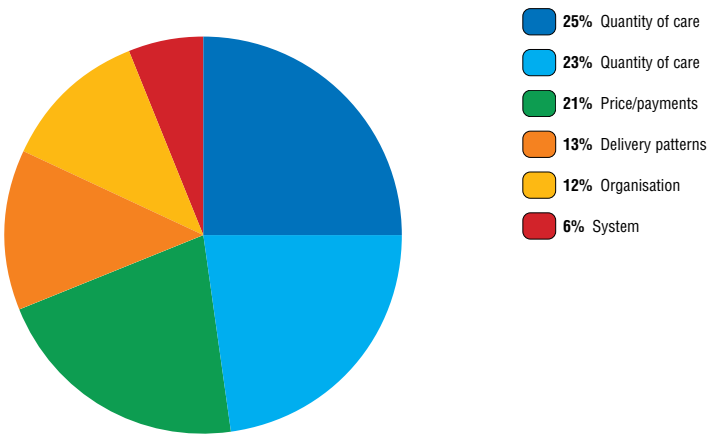
**Table 1:** Main waste categories and specific subcategories

| Main category of waste | Subcategory of waste | Corresponding item in Berwick and Hackbarth (2012) |
|---|---|---|
| Quantity of care | Overutilisation, transition to other care settings, underutilisation | Overutilisation |
| Use of care | No re-use of devices, used too long, patient does not follow prescriptions | – |
| Price/payments | Too expensive, inaccurate billing (upcoding, fraud) too many amenities | Pricing failures<br>Fraud |
| Delivery patterns | Care coordination, information failures, bad collaboration, quality problems, wrong diagnosis | Health care delivery failures and failures in care coordination |
| Organisation/administration | Unnecessary management, bad office management, too much bureaucracy | Administrative complexity |
| System | Abuse of personal budgets*, wrong incentives in laws and legislation, too extensive benefit package | – |

Source: Compiled by the authors.

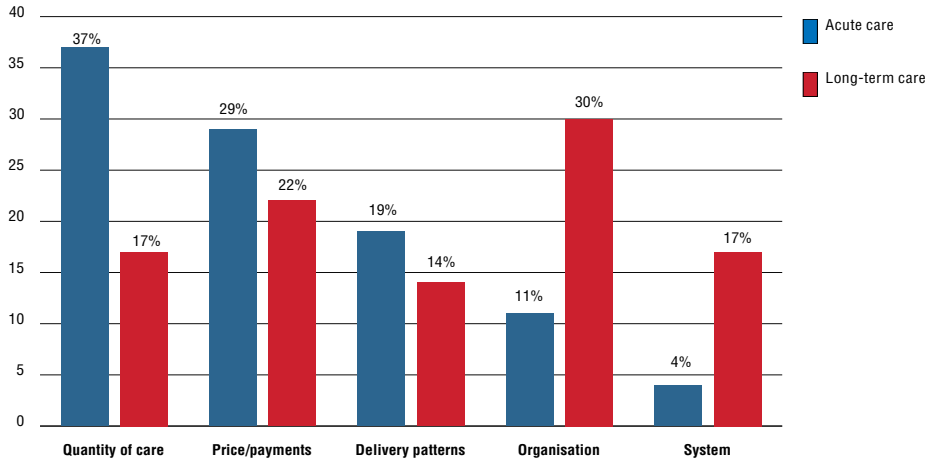
Notes: * Recently the government introduced steps to restrict eligibility for personal budgets. While many people reported on abuse with personal budgets in the online questionnaire, some were of the opinion that waste could be addressed by using personal budgets more often, as it is cheaper than care provided in kind.

**Figure 1:** Waste by main category



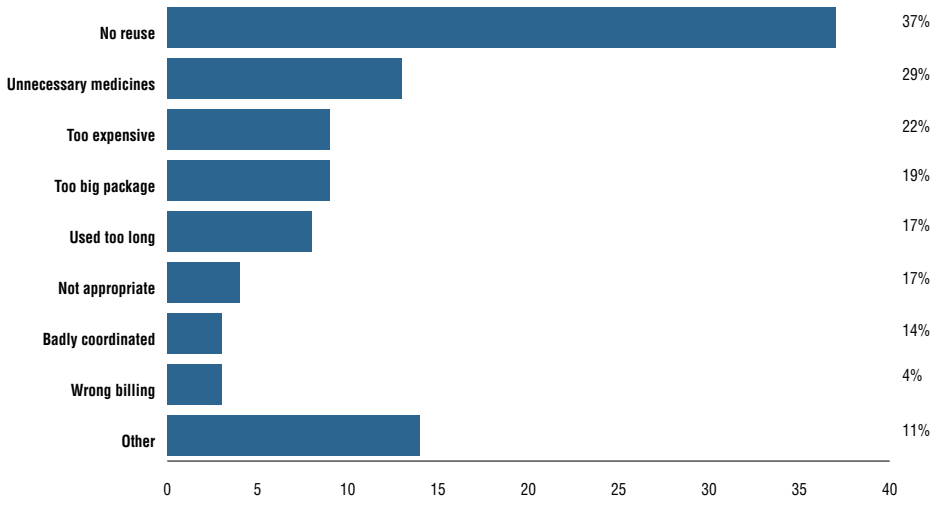

Source: Compiled by the authors.

**Figure 2:** Main categories of waste in acute and long-term care, excluding medicines and medical devices




Source: Compiled by the authors

**Figure 3:** Waste of medicines by subcategory




Source: Compiled by the authors

As explained in **Box 1**, people were asked where they thought that waste had occurred. Based on their answers we could distinguish between acute care, long-term care and other locations (health insurer, various health care related agencies). If people mentioned that the waste occurred in more than one place (e.g. at the pharmacy and in a nursing home) the waste was registered under both categories. Although we did not generate a randomised sample, people could decide for themselves whether or not to fill in the questionnaire and thus the sample might be somewhat biased towards those suffering from health issues. However, due to the large size of this sample we feel that the results do illustrate some general opinions among the population on waste in health care.

> 16,403 people filled in the survey

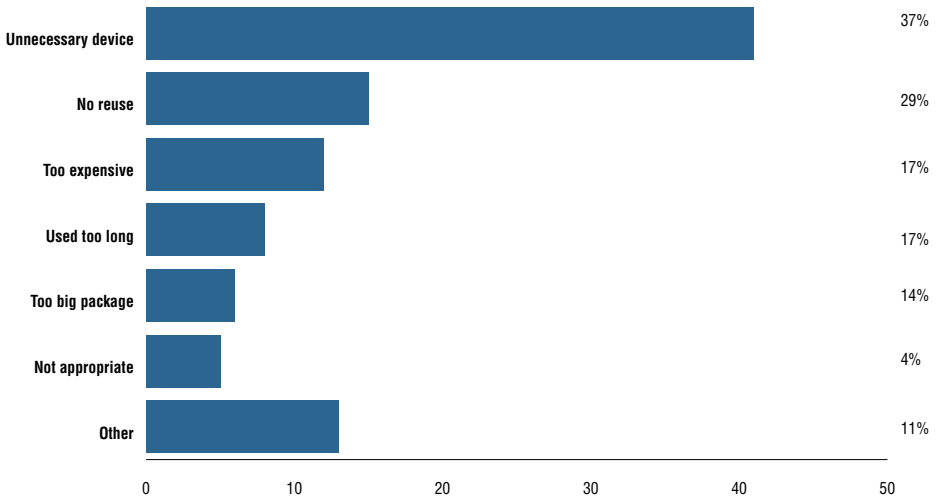
## Results

From all the completed answers we could conclude that 55% of the reported waste was related to acute care; 18% to long-term care; and 21% to other sources or sectors (6% could not be categorised). In both acute and long-term care, pharmaceuticals and medical devices generated almost half of all waste reports. Overall, 31% of reports were related to medicines and 11% to medical devices. This might be due to the fact that these categories were highly visible on the opening screen of the survey.

If we focus on the different types of waste (**see Figure 1**), the main conclusion seems to be that substantial amounts of waste occur in all main categories. Waste in the quantity of care as well as the use of delivered care are the most dominant (together totaling 48%), but there are also many cases of waste reported in pricing, organisation and the delivery of care.

**Figure 2** gives the breakdown of the main areas for waste within acute care and long-term care. We have excluded the reports on medicines and medical devices because of their large numbers (and included the

**Figure 4:** Waste of medical devices by subcategory




Source: Compiled by the authors

**Table 2:** Comparison of waste distribution in the Berwick and Hackbarth study and The Netherlands

| | Berwick & Hackbarth study) % | Reports in our survey % |
|---|---|---|
| Quantity | 21% | 48% |
| Price | 34% | 21% |
| Delivery/system | 18% | 19% |
| Organisation/Administration | 27% | 12% |

Source: Compiled by the authors.

remaining 'use of care' in the quantity category). Consequently, we can see that in acute care comparatively large amounts of waste seem to be tied to the volume of care: people reported many cases of overutilisation, unnecessary and duplicate care. Inconvenience with pricing seems to be a main issue in both acute and long-term care. People reported that care is too expensive, that bills are not justified or correct and that hospitals or nursing homes do not use the right coding during reimbursement procedures. In long-term care there were a relatively large number of reports on organisational waste in institutions. This includes administrative procedures, office management, waste of food, water and energy and too much management.

**Figures 3 and 4** show the specific waste subcategories for medicines and medical devices. For medicines, the main issue seems to be a lack of use and reuse.

For various reasons, people receiving medicines do not always use them or prescriptions are not always collected from the pharmacy. However, there are also many reports on medicines that are too expensive as well as unnecessary. Regarding medical devices, 41% of people reported that devices had been given without a clear need. In addition, there are also examples of the non-transferability of devices across care settings (e.g. from home care to nursing home or from one municipality to another).

## The costs of waste

Results from the virtual reporting point cannot be translated into monetary amounts. However, as a thought experiment, we compared the distribution of the actual number of reports that we received with the distribution of costs estimated by Berwick and Hackbarth. To increase the level of comparability we had to combine certain categories (**see Table 1**).

The results are presented in **Table 2** and have a highly tentative character. However, they insinuate that in the United States more waste may take place in pricing (due to pricing failures/too high prices) and administrative complexity, a result that fits with existing literature.[4] In The Netherlands, the volume of acute care seems to be a main issue. This fits with some results of the Survey of Health, Ageing and Retirement in Europe (SHARE) surveys that show that the number of physician visits seem to have increased more in The Netherlands compared to certain other countries in Europe, perhaps indicating an increase in overutilisation and more prescriptions.[5] Universal coverage for health care, the broad benefit package, low copayments and the extensive public long-term care system in The Netherlands are factors that may all contribute to more overuse .

## Conclusion

Further research is needed to quantify the costs of waste in The Netherlands and to enable more in-depth comparison with other European countries and the United States. As next steps, the results of the online reporting point will be used to initiate various actions to address waste in 2014–2016 in curative care, long-term care, and for medicines and medical devices.

## References

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