
Executive summary

Health Council of the Netherlands. The individual, collective and public importance of vaccination. The Hague: Health Council of the Netherlands, 2013; publication no. 2013/21

Under-use of vaccines means potential health gains are being left untapped

Vaccine development has been improved and accelerated by new biotechnological methods, especially DNA techniques. New vaccines are regularly becoming available. Efficacious vaccines are now available for the prevention of diseases such as chickenpox, gastroenteritis caused by rotavirus infection, and shingles. However, these are rarely used in the Netherlands. As a result, potential health gains are being left untapped.

Reasons for the under-utilisation of vaccines

There are no formal barriers to the use of these vaccines. Having been approved by the medicines authorities, the vaccines are – in theory at least – available to physicians and patients. The limited use of such vaccines is probably based on a lack of knowledge about vaccination among physicians, coupled with their lack of experience in this area. Other factors may be a limited awareness among the general public, and the fact that these vaccines are not included in the basic health insurance package, or are financially inaccessible for other reasons. In the Netherlands, vaccines are mainly used in the context of public vaccination programmes.

Government responsibilities with regard to vaccination and vaccination programmes

What are the government's responsibilities in terms of vaccination and vaccination programmes? Under what circumstances is it sufficient just to ensure the availability of safe, efficacious vaccines? Are there any situations in which the government needs to get involved in promoting the actual use of specific vaccines? Furthermore, under what circumstances should a given vaccination be included in a public programme, such as the National Immunisation Programme?

State intervention in public health is based on two principles. First, the government is tasked with protecting the population and the fabric of society. Secondly, it endeavours to achieve a fair distribution of care.

In situations where vaccines for individuals and groups in society can be designated as essential healthcare, the Committee that drew up this advisory report feels that (in keeping with the second principle) it is the government's responsibility to eliminate any barriers to their use. According to current thinking, the criterion of "individual disease burden" is a pivotal consideration when determining whether a given aspect of care should be designated as essential. If such care is also cost-effective, then it merits funding under the Health Insurance Act. The Committee feels that there is no fundamental reason why prevention and treatment should be dealt with differently.

Deficiencies in the way vaccination care is currently organised

All new medicinal products (i.e. vaccines too) are assessed for safety and efficacy by the medicines authorities. Once these have received marketing authorisation, they are theoretically available for use. Subsequently, part of the cost of such medicinal products has to be met by the users themselves, some is reimbursed by their health insurance company, and the remainder is met by the government. The current assessment frameworks for basic health insurance packages and for public vaccination programmes were created by the Health Care Insurance Board (CVZ) and the Health Council respectively.

The existing frameworks have demonstrated the effectiveness of assessing purely individual vaccinations (such as those for travellers) and of including specific vaccinations in a public programme. At the present time, however, the option of

including vaccinations in the basic health insurance package is only available to children who have missed certain National Immunisation Programme vaccinations, and to individuals with specific disorders that involve a higher risk of infection or of complications. Potential health gains are being left untapped, mainly due to the way in which vaccination care is currently organised.

A single assessment framework and a single assessment authority for all vaccinations

The Committee proposes that a single assessment framework be used for all vaccinations. The starting point here spans the entire spectrum of vaccination care, from care charged directly to individuals or companies, to collectively funded essential healthcare, and public vaccination programmes (see table).

A general assessment framework can be relatively easily derived from existing frameworks. The assessment authority must have a remit spanning the entire spectrum of vaccination care if it is to determine a vaccine's status effectively. In many cases, public considerations will be involved in the use of vaccines as part of the health insurance package. This requires the sort of specific expertise that is readily available within the Health Council. Accordingly, the Committee recommends to assign the scientific advisory duties for the entire spectrum of vaccination care to the Health Council. Clearly, agreement must be reached with the Health Care Insurance Board regarding criteria for the inclusion of vaccinations in health insurance packages.

It is usually possible to operate more effectively and efficiently in the context of a public programme, as a result of the centralised organisation and procurement involved. The Committee recommends that an evaluation be carried out to determine whether similar economies of scale can also be achieved for vaccinations that are collectively funded under the Health Insurance Act.

The proposed assessment framework is in keeping with government initiatives to modernise vaccination care. The government is now also aware that, given the way in which vaccination care is presently organised, any vaccines not offered in the context of a programme tend to remain unused. As a result, major potential health gains are being left untapped, so the government is looking for ways to administer vaccinations outside the public programmes.

Avoid situations that might undermine public vaccination programmes

The public debates surrounding vaccination against cervical cancer, pandemic influenza, and seasonal flu have once again highlighted the importance of fine-tuning the profiles of public vaccination programmes. Partly for this reason, it is difficult to broaden the criteria for including vaccinations in public programmes. Conversely, creating greater scope for vaccination outside public programmes can help to ensure that these programmes' nature and content are more effectively safeguarded.

More training and instruction on vaccines

In itself, the adoption of a single general assessment framework does not resolve the problem of the under-utilisation of potentially useful vaccines. This probably results from a lack of knowledge about vaccination among physicians, coupled with a lack of experience, as well as limited awareness among the general public. Accordingly, the Committee recommends that modifications be made to training programmes and refresher courses for nurses and physicians in child healthcare, senior house officers, general practitioners, paediatricians and internists. This would involve a systematic focus on vaccinology and on the related interview techniques and information provision skills. Members of the public, too, should be better informed about vaccines and vaccinations. The Committee proposes that the National Institute of Public Health and the Environment be entrusted with the management of public information campaigns across the entire spectrum of vaccination care.

The spectrum of vaccination care and related government duties.

	Individual healthcare	Essential healthcare, collectively funded	Public healthcare
	Care charged directly to individuals or companies		Public programmes
Justification for government involvement	Make vaccines available for the protection of individuals	Promoting equal access to essential healthcare	Protecting the population and the fabric of society against serious infectious diseases
Government duties in the relevant area of vaccination care	<ul style="list-style-type: none"> Granting vaccines marketing authorisation Public information campaigns Legislation, regulations, and healthcare monitoring Monitoring potential harmfulness (registration of adverse effects) 	<ul style="list-style-type: none"> Decision on implementation and funding: inclusion in collective packages, possibly in the context of a programme, with funding under the Health Insurance Act or from the national budget, with a possible patient's own contribution Public information campaigns Legislation, regulations, and healthcare monitoring Monitoring the process to determine whether the intended effect (equality of access, and – in selected cases – effectiveness) has been achieved; monitoring adverse effects at individual level and population level 	<ul style="list-style-type: none"> Decision on implementation and funding: details of what is being offered in the context of a programme, practical organisation, funding from the national budget Public information campaigns Legislation, regulations, and healthcare monitoring Monitoring the process to determine whether the intended effects (high vaccination coverage/herd immunity, effectiveness) have been achieved; monitoring adverse effects at individual level and population level
Assessment framework	<ul style="list-style-type: none"> Assessment of quality, efficacy and potential harmfulness by medicines authorities 	<ul style="list-style-type: none"> Criteria for collective funding Considerations for implementation in the context of a programme: urgency, effectiveness, efficiency, quality 	<ul style="list-style-type: none"> Criteria for the inclusion of vaccinations in public programmes Views of the WHO and other international public health organisations International context
Examples	<ul style="list-style-type: none"> Guidelines for medical practice Vaccinations for travellers Vaccination in the context of occupational healthcare (where this is in the interests of employees and/or employers)^a 	<ul style="list-style-type: none"> Guidelines for medical practice Individuals with a defined disorder that involves a higher risk of infection or of complications are vaccinated against hepatitis A, hepatitis B, pneumococcal disease and rabies Vaccination (in the context of a programme) for vulnerable groups, e.g.: <ul style="list-style-type: none"> The elderly and medical high-risk groups against seasonal flu Certain patient groups against Q fever 	<ul style="list-style-type: none"> Guidelines for medical practice National Immunisation Programme BCG vaccination of the children of a parent (or parents) from high-risk countries Vaccination against hepatitis B of individuals belonging to high-risk groups (gay men, intravenous drug users) Vaccination during public health emergencies, such as an influenza pandemic Vaccination in the context of occupational healthcare (where this is in the interests of third parties)^a

^a On 11 April 2013, the Health Council established a separate committee which, at the request of the Minister of Social Affairs and Employment, will advise on employers' duties and responsibilities regarding the vaccination of employees.

