



## Adult vaccination action framework with policy proposals for Belgium

Detailed policy proposals with solutions for implementation to improve adult vaccination rates and enhance public health resilience

Report January 2025



### Colophon

Title	Adult vaccination action framework with policy proposals for Belgium		
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Expert contributions via interviews	12 stakeholder organisations (15 persons), amongst others*: Nicholas Echement (APB), Ludovic Sablon (AVIQ), Belinda Perin (AVIQ), Heidi Theeten (Departement Zorg), Stefan Teughels (Domus Medica), Karel Van De Sompel (GIBBIS), Paul Perdieus (Ophaco), Valérie De Block (Ophaco), Pedro Facon (RIZIV-INAMI), Steven Callens (Superior Health Council), Johan Staes (Vlaams Onafhankelijk Zorgnetwerk – Vlozo), Steven Rimbaut (Zorgnet-Icuro), Hilde De Nutte (Zorgnet-Icuro)		
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Disclaimer	External experts have contributed via an e-survey and in-depth interviews. Input from these e-survey and interviews was analysed and resulted in this report. The external experts did not coauthor this report and therefore did not necessarily agree with every element and/or recommendation in this report.		

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## Belgium needs an adult vaccination framework and strategy to improve adult vaccination rates and enhance public health resilience



Vaccination is a cornerstone of public health, yet adult vaccination rates in Belgium remain low, posing significant challenges to achieving WHO immunization goals. The COVID-19 pandemic highlighted critical gaps in adult immunization coverage and the need for a more cohesive vaccination framework. The 2020 report "Belgian vaccines landscape analysis" listed barriers to adult vaccination and systemic inefficiencies, forming the basis for this detailed adult vaccination plan with recommendations.

This report outlines detailed policy proposals on planning, governance, budget and implementation aspects, with tailored solutions for the federal and regional Belgian context, as well as defined responsibilities for public health authorities, healthcare providers, and others. This action framework aims to improve adult vaccination rates, enhance public health resilience, and meet WHO targets.

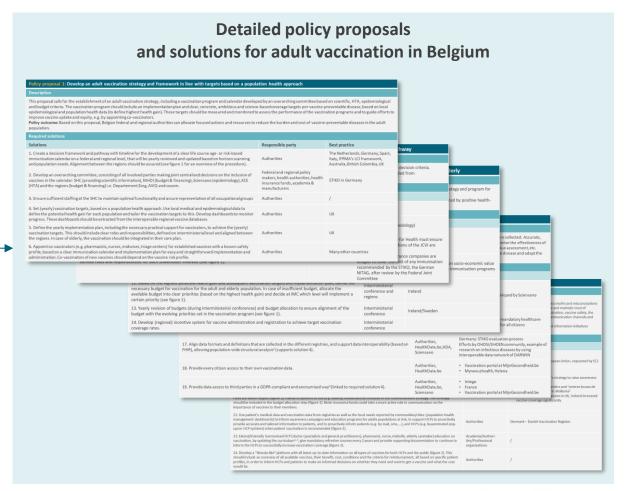
<sup>&</sup>lt;sup>1</sup> Belgian vaccines landscape analysis, 2020, Inovigate. Accessible via: https://www.inovigate.com/media/filer\_public/b8/df/b8df7b0b-80e3-4384-8dd3-14afd49037fe/vaccine landscape report 22-09-20 final.pdf

#### 2 Methodology



# The policy proposals for adult vaccination were developed based on multi-stakeholder input, best practices and the 2020 vaccine landscape report







## Diverse stakeholder inputs have been collected through structured in-depth interviews

12 stakeholder organisations (15 persons), amongst others with\*:

Association	Interviewee
APB	Nicolas Echement
AVIQ	Belinda Perin, Ludovic Sablon
Departement Zorg	Heidi Theeten
Domus Medica	Stefan Teughels
GIBBIS	Karel Van De Sompel
Ophaco	Valérie De Block, Paul Perdieus
RIZIV-INAMI	Pedro Facon
Superior Health Council	Steven Callens
Vlaams Onafhankelijk Zorgnetwerk - Vlozo	Johan Staes
Zorgnet-Icuro	Hilde De Nutte, Steven Rimbaut

<u>Disclaimer:</u> External experts have contributed via an e-survey and in-depth interviews. Input from these e-survey and interviews was analysed and resulted in this report. The external experts did not coauthor this report and therefore did not necessarily agree with every element and/or recommendation in this report.

<sup>\*</sup> Some interviewed experts preferred to remain anonymous

### **List of definitions**



Term	Definition
Vaccination strategy	Strategy that defines the priorities for vaccination in Belgium including clear coverage targets, goals and incentives for measuring and monitoring results, assessing the performance of the vaccination programs and guiding efforts to improve vaccine uptake and equity, and a clear description of the core functions needed for roll-out.
Vaccination calendar	(Yearly) calendar that defines who has to be vaccinated with what kind of vaccine at what point in time. This can be updated yearly.
Vaccination programme	The implementation of the vaccination strategy for different vaccines or populations, based on the vaccination calendar and targets
Vaccination framework	The procedures with timing, decision criteria, roles and responsibilities that are necessary to allow an implementation of the vaccination strategy, from recommendation and reimbursement of a vaccine until effective vaccination

### Policy proposals Overview of the policy proposals for a more cohesive adult vaccination framework to improve vaccination rates and enhance public health resilience

Domain:	Policy proposals:		
Planning	1: Develop an adult vaccination strategy and framework in line with targets based on a population health approach		
Governance	2: Reduce time needed from recommendation to administration for life-course vaccination with a clear funding pathway		
Budget	3: Increase budget for prevention and vaccination to achieve BE vaccine coverage targets for adults and elderly		
Implementation	4: Robust data registration to support improved policy decision-making		
Implementation	5: Set up tailored campaigns that are more effective to increase awareness and education on vaccination		



#### **Planning**

#### Policy proposal 1: Develop an adult vaccination strategy and framework in line with targets based on a population health approach

#### Description

This proposal calls for the establishment of an adult vaccination strategy, including a vaccination program and calendar developed by an overarching committee based on scientific, HTA, epidemiological and budget criteria. The vaccination program should include an implementation plan and clear, concrete, ambitious and science-based coverage targets per vaccine-preventable disease, based on local epidemiological and population health data (to define highest health gain). These targets should be measured and monitored to assess the performance of the vaccination programs and to guide efforts to improve vaccine uptake and equity, e.g. by appointing co-vaccinators.

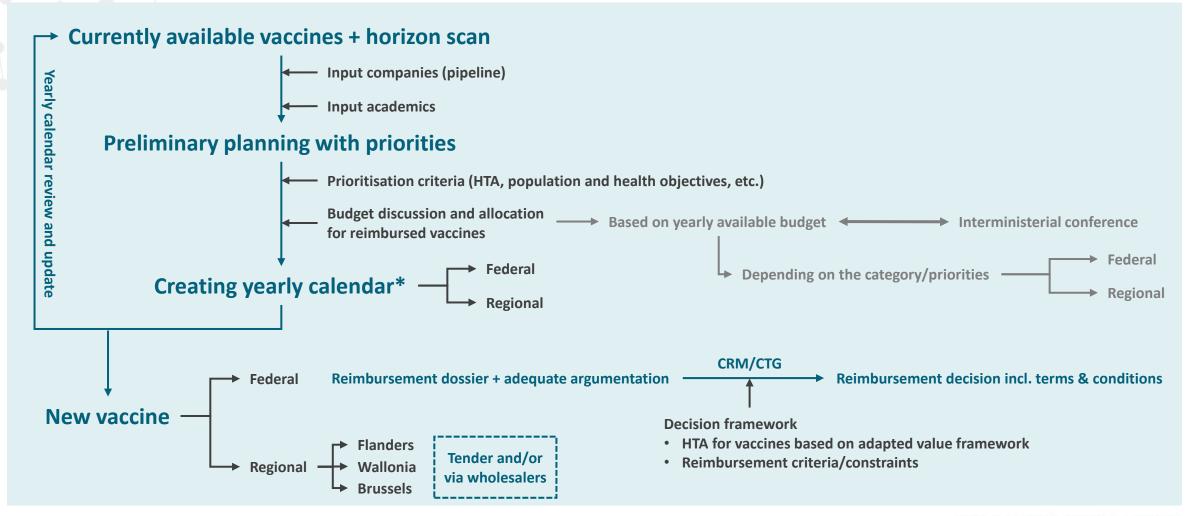
Outcome of the policy proposal: Based on this proposal, Belgian federal and regional authorities can allocate focused actions and resources to reduce the burden and cost of vaccine-preventable diseases in the adult population.

#### **Required solutions**

Solutions	Responsible party	Best practice
1. <b>Create a decision framework and pathway</b> with timeline for the development of a clear life course age- or risk-based immunisation calendar on a federal and regional level, that will be yearly reviewed and updated based on horizon scanning and population needs. Alignment between the regions should be assured (see figure 1 for an overview of the procedure).	Authorities	The Netherlands, Germany, Spain, Italy, IFPMA's LCI framework, Australia, British Colombia, UK
2. <b>Develop an overarching committee</b> , consisting of all involved parties making joint centralised decisions on the inclusion of vaccines in the calendar: SHC (providing scientific information), NIHDI (budget & financing), Sciensano (epidemiology), KCE (HTA) and the regions (budget & financing) i.e. Departement Zorg, AVIQ and cocom.	Federal and regional policy makers, health authorities, health insurance funds, academia & manufacturers	STIKO in Germany
3. Ensure sufficient staffing at the SHC to maintain optimal functionality and assure representation of all occupational groups	Authorities	/
4. <b>Set (yearly) vaccination targets</b> , based on a population health approach. Use local medical and epidemiological data to define the potential health gain for each population and tailor the vaccination targets to this. Develop dashboards to monitor progress. These dashboards should be extracted from the interoperable regional vaccine databases	Authorities	UK
5. <b>Define the yearly implementation plan</b> , including the necessary practical support for vaccinators, to achieve the (yearly) vaccination targets. This should include clear roles and responsibilities, defined on interministerial level and aligned between the regions. In case of elderly, the vaccination should be integrated in their care plan.	Authorities	UK
6. <b>Appoint co-vaccinators</b> (e.g. pharmacists, nurses, midwives, triage centers) for established vaccines with a known safety profile, based on a clear immunisation calendar and implementation plan for easy and straightforward implementation and administration. Co-vaccinators of new vaccines should depend on the vaccine risk profile.	Authorities	Many other countries



## Strategy for the development and yearly update of vaccines calendar (Figure 1)





#### Policy proposal 2: Reduce time needed from recommendation to administration for life-course vaccination with a clear funding pathway

#### Description

This proposal calls for the implementation of a clear and transparent reimbursement procedure with a clear value assessment method adapted to vaccines, timelines and decision criteria.

Outcome of the policy proposal: Belgium will offer a clear framework with timelines, decision criteria and roles and responsibilities for each stakeholder involved, to reduce the time needed from recommendation to administration of adult vaccines

#### **Required solutions**

Solution	Responsible party	Best practice
7. <b>Reduce time between EMA approval</b> (or when vaccine is coming to the market in BE) <b>and NITAG recommendation</b> , provided the necessary data is available.	Authorities	/
8. <b>Create a standardised value framework adapted to adult vaccines</b> , based on retrospective evaluation and a transversal budget silo-approach (ROI on budget in all policies) including the burden of disease, vaccine efficacy, cost-effectiveness, public health impact, societal benefits, etc. to inform the evaluation of vaccine reimbursement.	Authorities (with input from academia)	Germany (STIKO methodology)
9. <b>Create a clear and transparent funding pathway for vaccines</b> with clear timelines, decision criteria and with well-defined roles and responsibilities for each stakeholder involved (see figure 1).	Authorities	UK: Secretary of State for Health must ensure that the recommendations of the JCVI are implemented Germany: health insurance companies are obliged to cover the cost of any immunisation recommended by the STIKO, the German NITAG, after review by the Federal Joint Committee



#### Policy proposal 3: Increase budget for prevention and vaccination to achieve the Belgian vaccine coverage targets for adults and elderly

#### Description

This proposal calls for **increased budgets to achieve an increase of vaccine coverage rates**, in line with Belgian population health-based targets and the Belgian vaccine strategy and program for adults and elderly. Increased budgets will also have a positive impact on all other policy proposals.

Outcome of the policy proposal: maintain a higher number of adults and elderly at risk in healthy condition by increasing budgets for vaccination. Increased budgets will be counterbalanced by positive health-economic returns

#### **Required solutions**

Solution	Responsible party	Best practice
10. The <b>financing of vaccines should be organised in 3 categories</b> : out-of-pocket payments for travel vaccinations, regional reimbursement/financing for basic vaccinations and federal reimbursement/financing for vaccines case of comorbidities (adults at risk). The split of the vaccination budget between federal and regional authorities should be based on a clear decision framework. This framework should guide federal and regional prevention policies.	Interministerial conference, regions	Ireland, Austria
11. Increase vaccine-based prevention budgets <sup>1</sup> for adult and elderly population.	Interministerial conference	Ireland, Austria Multi-country report on socio-economic value of investment in adult immunisation programs across Europe
12. Based on the highest potential health gain and subsequent vaccination targets and implementation plan, define the necessary budget for vaccination for the adult and elderly population. In case of insufficient budget, allocate the available budget into clear priorities (based on the highest health gain) and decide at IMC which level will implement a certain priority (see figure 1).	Interministerial conference and regions	Ireland
13. <b>Yearly revision of budgets</b> (during interministerial conferences) <b>and budget allocation</b> to ensure alignment of the budget with the evolving priorities set in the vaccination program (see figure 1).	Interministerial conference	Ireland/Sweden
14. <b>Develop (regional) incentive system for vaccine administration and registration</b> to achieve target vaccination coverage rates.	Interministerial conference	



**Implementation** 

Required solutions

#### Policy proposal 4: Robust data registration to support improved policy decision-making

#### Description

This proposal calls for the **development and implementation of regional vaccination registries** in which high quality, standardised, structured and interoperable vaccination data are collected. Accurate, complete and timely data registration is essential to monitor the burden of infectious diseases, to determine the target adult and elderly population groups for vaccination, to monitor the effectiveness of vaccination programs, to identify gaps in vaccine coverage, to detect adverse events following vaccination, **to inform evidence-based decision-making and policy**, to be used in value assessment, etc. **Outcome of the policy proposal:** By creating a robust data registration system, Belgium will be able to measure and monitor the coverage targets per priority vaccine-preventable disease and adapt the vaccination program if needed

Required solutions			
Solution	Responsible party	Best practice	
15. Ensure data exchange and aggregation of data (based on interoperability format FHIR) from the current regional Vaccinnet and e-vax/vaccicard systems <sup>1*</sup> (ongoing) and other health data sources such as the global patient file, doctor and pharmacist patient file, care dossier of elderly in care homes, occupational health vaccinations, travel vaccinations, army vaccinations etc. based on a public health data strategy (to be developed, role of Health Data Agency) (linked to required solution 4)¹ and on the homologation criteria for software providers.	Authorities, HealthData.be,HDA, Sciensano, software providers	LINK-VACC project developed by Sciensano	
16. Create incentives for or impose mandatory (or make it very easy) data registration by all vaccinators to collect structured, standardised, high-quality data in Vaccinnet/vaccicard on vaccine coverage rates for all available vaccines, independent of the pathway (regional program, reimbursement or OOP), and adapt vaccination programs if necessary to reach coverage targets (linked to required solution 14). The reimbursement of the administration of vaccines could be linked to the data registration.	Authorities	Denmark: nation-wide mandatory healthcare data collection system for all citizens	
17. <b>Align data formats and definitions</b> that are collected in the different registries, and support data interoperability (based on FHIR), allowing population-wide structural analysis <sup>1</sup> (supports solution 4).	Authorities, HealthData.be,HDA, Sciensano	Germany: STIKO evaluation process Efforts by OHDSI/EHDEN community, example of research on infectious diseases by using interoperable data network of DARWIN	
18. Provide every citizen access to their own vaccination data.	Authorities, HealthData.be	<ul><li>Vaccination portal at MijnGezondheid.be</li><li>Mynexuzhealth, Helena</li></ul>	
19. <b>Provide data access to third parties</b> in a GDPR-compliant and anonymised way (linked to required solution 4).	Authorities, HealthData.be, Sciensano	<ul><li>Intego</li><li>France</li><li>Vaccination portal at MijnGezondheid.be</li></ul>	

#### **Implementation**



#### Policy proposal 5: Set up tailored campaigns that are more effective to increase awareness and education on vaccination

#### Description

This proposal calls for effective and aligned communication and education campaigns towards (1) the general public (school children, parents, community leaders, etc.) to provide objective information, address myths and misconceptions and increase vaccine acceptance and uptake, and also towards (2) health professionals (healthcare providers incl. doctors, pharmacists, caregivers, etc.) extending education on vaccination in curricula to create and maintain trust of professionals. The communication and education should provide fact- and evidence-based information and argumentation about the risks of vaccine-preventable diseases, the benefits and side effects of vaccination, vaccine safety, the importance of timely vaccination, the different vaccinators/vaccination channels, the effect on antimicrobial resistance, etc. in order to promote vaccination and counter fake news and disinformation. The communication channels and styles should be adapted to the different target groups and all information should be easy to find.

Outcome of the policy proposal: Increase vaccination coverage rates by increasing public and professional awareness of and trust in vaccination and its benefits, investing in effective fact-based education and information initiatives

#### **Required solutions**

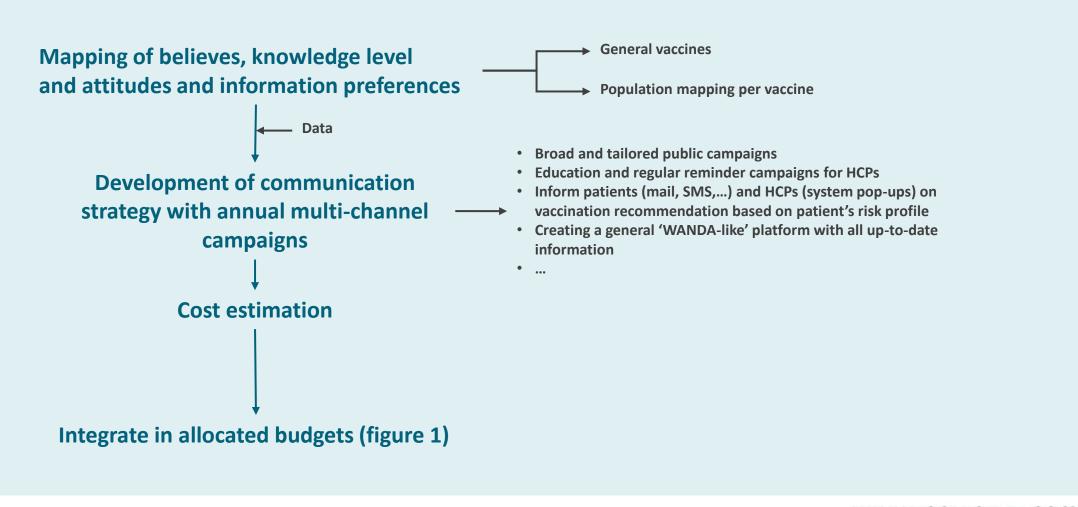
Solution	Responsible party	Best practice
20. Map current attitudes, beliefs and level of knowledge regarding vaccination and investigate the optimal communication styles and channels across all target populations to design efficient awareness and education campaigns <sup>1</sup> (figure 2).	Authorities with input from academia	<ul><li>Australia's surveys</li><li>Europabarometer (European Union, requested by EC)</li></ul>
21. <b>Develop a uniform communication strategy with aligned multi-channel annual awareness campaigns</b> oriented towards the broad public. These campaigns should be tailored to each target group with adapted messages (based on fact-based information about vaccination and VL/WAL/BXL split if necessary), communication style and channels used (based on input from solution 20), while considering the cultural, economic, social and political issues of each group towards vaccines. The messages should address the risks of vaccine-preventable diseases, the benefits and side effects of vaccination, vaccine safety, the importance of timely vaccination, the different vaccinators/vaccination channels, the effect on antimicrobial resistance, etc. <sup>1</sup> . The strategy should focuse on high-priority populations during specific seasons (flu, covid,) <sup>1</sup> and/or on populations where vaccination coverage rates are below targets (figure 2). Family of patients at risk (e.g. elderly) should also be included in the communication strategy. The strategy should be included in the budget allocation step (figure 1). Note: insurance funds could take a more active role in communication on the importance of vaccines to their members.	Authorities, insurance funds, sector associations	<ul> <li>Australia's and Canada's strategy to raise awareness at HCPs* and public¹</li> <li>'Eerstelijnszones' in Flanders and 'centres locaux de promotion de la santé' in Wallonia²</li> <li>School vaccination programs in UK, Ireland increased vaccine coverage significantly</li> </ul>
22. Use patient's medical data and vaccination data from registries as well as the local needs reported by communities/cities (population health management dashboards) to inform awareness campaigns and education programs for adults populations at risk, to support HCPs to proactively provide accurate and tailored information to patients, and to proactively inform patients (e.g. by mail, sms,), and HCPs (e.g. by automated popups in HCP systems) when patient vaccination is recommended (figure 2).	Authorities	Denmark – Danish Vaccination Register
23. <b>Extend/intensify harmonised HCP</b> (doctor (specialists and general practitioners), pharmacist, nurse, midwife, elderly caretaker) <b>education on vaccination</b> , by updating the curriculum <sup>1</sup> , give mandatory refresher courses every 2 years and provide supporting documentation to continue to inform the HCPs to successfully increase vaccination coverage (figure 2).	Academia/Authorities/Professional organisations	/
24. <b>Develop a "Wanda-like" platform</b> with all latest up-to-date information on all types of vaccines for both HCPs and the public (figure 2). This should include an overview of all available vaccines, their benefit, cost, conditions and the criteria for reimbursement, all based on specific patient profiles, in order to inform HCPs and patients to make an informed decisions on whether they need and want to get a vaccine and what the cost would be.	Authorities	/

Sources and abbreviations in comment box





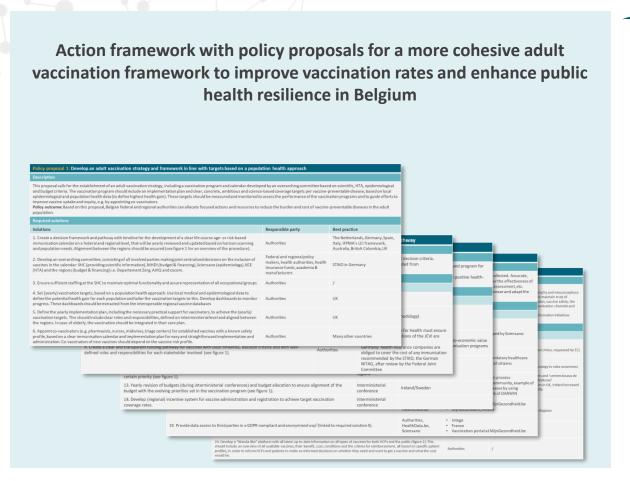
## Process for communication and awareness creation (Figure 2)







# The implementation of the policy proposals to improve adult vaccinations in Belgium will require efforts from and collaboration between all stakeholders





we count on the support of all stakeholders to implement the policy proposals with the solutions to achieve a structured and well-functioning approach to adult vaccination and strengthen Belgium's pioneering position as a vaccine country

# Connecting for better health



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#### **About Inovigate**

Healthcare is complex and constantly evolving. A successful business strategy means understanding and controlling numerous factors and stakeholders. Being able to see "the bigger picture" is crucial for this. Inovigate helps to look at the life science sector with a helicopter view. We combine research data and knowledge through years of experience in such a way that the missing pieces of the puzzle can be put together, ultimately creating the bigger picture. Inovigate is a neutral, leading and reliable knowledge partner within the life science and healthcare sector. With over a decade of experience, we provide impartial guidance and expertise to stakeholders across the sector. From innovation to seamless implementation, we offer comprehensive solutions tailored to each client's needs. Our mission is to help clients bring life science innovations to market and navigate the complexities of the healthcare ecosystem with clarity and confidence. We make the difference through customised advice based on our profound management experience, sector expertise and network.