



## JITSUVAX: Jiu-Jitsu with Misinformation in the Age of Covid

An instrument to measure  
determinants of HCP's  
vaccination behaviour and  
attitudes

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## JITSUVAX Deliverable 1.1

### An instrument to measure determinants of HCP's vaccination behaviour and attitudes

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## Summary

This document describes the original validation and the cross-national adaptation of the Pro-VC-Be questionnaire for use in multiple countries and languages.

## Scope and purpose of this document

This document briefly describes the methods used to develop and validate the original version of the Pro-VC-Be, for which more detailed information can be found in the publication by Verger et al. (2022) (1). This document details the adaptation of the original Pro-VC-Be in French for use in the UK, Finland, Germany and Portugal, including translation from French into English, Swedish, Finnish, Portuguese and German. This document does not include information related to analysis of the data gathered using this tool (beyond the pilot testing), which will be described in D1.2 ‘Report of HCP’s vaccination behaviour and attitudes’ and is due in March 2023.

## Project overview

Vaccine hesitancy—the delay or refusal of vaccination without medical indication—has been cited as a serious threat to global health by the World Health Organization (WHO)(2), attributing it to misinformation on the internet. The WHO has also identified Health Care Professionals (HCPs) as the most trusted influencers of vaccination decisions.

JITSUVAX will leverage those insights to turn toxic misinformation into a potential asset based on two premises:

1. One of the most promising ways to acquire knowledge and to combat misperceptions is by employing misinformation itself, either in weakened doses as a cognitive “vaccine”, or through thorough analysis of misinformation during “refutational learning”.
2. HCPs form the critical link between vaccination policies and vaccine uptake, since they are trusted by their patients so their vaccination recommendations are thus listened to.

The principal objective of JITSUVAX is to leverage misinformation about vaccinations into an opportunity by training HCPs through inoculation and refutational learning, thereby neutralizing misinformation among HCPs and enabling them to communicate more effectively with patients. We will disseminate and use our new knowledge for global impact through the team’s contacts and previous collaborations with WHO and UNICEF.

## Background

Although the great majority of HCPs endorse vaccinations, vaccine hesitancy has been found among HCPs as well in several studies (3–5), including a narrative review completed within the confines of the JITSUVAX project (6). For example, Karlsson et al. (2019) found that in a sample of nearly 3,000 Finnish HCPs, an average of 5% disagreed with the statement that vaccines for children are beneficial and safe (7). For influenza vaccines, the corresponding percentage was 17%. In a French sample of 1,700 general practitioners (GPs), Verger et al. (2016) found that 11% were moderately hesitant and 3% were strongly opposed to vaccination (8). Moreover, as many as 44% of nurses in south-eastern France have been found to be vaccine hesitant (9).

Research shows that HCPs with lower confidence in vaccines are less willing to recommend vaccines to their patients (5,7,10,11). This is problematic, as receiving a vaccine recommendation from an HCP is frequently reported by laypeople as an important reason for why they have accepted vaccination (12–14). The majority of individuals also consider HCPs to be the most reliable source of information about vaccines (15–17). Low vaccine confidence among HCPs is therefore likely to affect public vaccine

uptake. Additionally, HCPs with lower vaccine confidence have been found less likely to accept vaccinations for their children and themselves (5,7), which increases the risk that they transmit infection to vulnerable patients. Vaccine hesitancy among HCPs can thus be considered a risk to public health.

Several psychological and psychosocial factors contribute to vaccine confidence among HCPs. Being able to assess these factors in a systematic and culturally-aware manner is important for the development and selection of interventions to increase HCPs' confidence in vaccines. One of the objectives of Work Package (WP) 1 in JITSUVA is to provide a validated, international instrument that can measure these determinants of vaccine confidence in HCPs.

## The original Pro-VC-Be development and validation

The original instrument development and validation was carried out before the start of JITSUVA by Pierre Verger at the Observatoire Régional de la Santé, Marseille Faculty of Medicine, in collaboration with the National Institute for Public Health in Quebec and the University of Sherbrooke. A first version of the questionnaire (labelled Pro-VC-Be; health PROfessionals' Vaccine Confidence and BEhaviors), to assess vaccine confidence in HCPs, was created based on previous quantitative and qualitative studies on vaccine hesitancy among GPs and nurses in France (9–11). The studies and the theoretical basis of the questionnaire were grounded in the Theoretical Domains Framework (TDF) (18,19) and the Health Belief Model (HBM) (20,21). The TDF is a consensus approach composed of a synthesis of theories of behaviour and behavioural change that provides relevant constructs to develop evidence-based practices for HCPs. The HBM describes predictors of health-related behaviours and has been found to be strongly related to vaccination decisions (22–24). In addition, the questionnaire was inspired by the 5C tool, which measures psychological antecedents of vaccination behaviour in the general public (25). The following paragraphs briefly describe the constructs of the Pro-VC-Be. More detailed information can be found in the publication by Verger et al. (2022)(1).

The development of the original Pro-VC-Be questionnaire in French started in September 2019 while the cognitive validation, pilot test, and the full survey, described below, were implemented in 2020. The analysis performed to evaluate the construct, discriminant and criterion validity started in April 2021 and were thus done within the frame of the JITSUVA project. In the fall of 2021, a short form version of the French version of the Pro-VC-Be was also designed and validated, and a manuscript prepared and submitted to Expert Reviews of Vaccines in February 2022. This was done in particular to prepare and test the methodology of the development of a short-form version, an objective assigned for the international version as well.

### Constructs

The Pro-VC-Be consists of the following categories of questions: (a) questions probing vaccination behaviour, and (b) questions measuring attitudinal determinants of these behaviours. Below we describe the constructs included in each category.

#### Vaccination behaviour

There are two main elements of vaccination behaviour; recommendation behaviour (HCPs' tendency to recommend vaccines to their patients) and self-vaccination behaviour (HCPs' personal vaccine uptake). Recommendation behaviour is measured in two ways: with questions concerning vaccines in general and with questions concerning the recommendation frequency of specific vaccines in specific populations and vaccine contexts. The general questions probe how often the HCP bring up, recommend, or prescribe vaccines and can be used as a generic measure of vaccine recommendation behaviour, applicable anywhere and for any type of HCP. The recommendation frequency questions probe how often HCPs recommend certain vaccines to certain patients and can be used to examine specific "vaccine situations", for example by focusing on vaccines with sub-optimal uptake in some

populations and contexts. Self-vaccination behaviour is measured separately for different vaccines. Of particular interest is whether HCPs take the vaccines that are recommended to them in their work environment.

#### Determinants of vaccination behaviour

The aim of the Pro-VC-Be questionnaire is to assess various factors that may play a role in HCPs' vaccination behaviour. These possible determinants can be divided into two categories: (1) core determinants of vaccination behaviours, that have been shown to most directly impact HCPs' vaccine confidence in previous studies (25–27), and (2) possible intermediary factors behind HCPs' vaccination behaviour. These factors can influence vaccination behaviours directly, independently from the core determinants, or by modifying links between the core determinants and vaccination behaviour, or by mediating or moderating these links.

The core determinants are:

- Perceived vaccine risks (i.e., how safe HCPs perceive certain vaccines to be)
- Complacency (i.e., how useful HCPs perceive vaccines to be)
- Perceived benefit-risk balance of vaccines (i.e., the degree to which HCPs perceive that the benefits of vaccines outweigh the risks)
- Perceived collective responsibility (i.e., the extent to which HCPs recommend vaccines to contribute to community immunity)
- Trust in authorities to inform about vaccines (i.e., trust in institutions and health authorities to provide reliable vaccine information and to define the vaccination strategy)
- Perceived constraints to vaccinating patients (i.e., perceived practical constraints, such as cost of or access to vaccines)

The intermediary factors are:

- Professional norm (i.e., the degree to which HCPs perceive the norm among their colleagues to be in favour of vaccination)
- Commitment to the vaccination of patients (i.e., the extent to which HCPs are proactive in motivating their patients to accept vaccinations)
- Self-efficacy in addressing hesitancy (i.e., how prepared HCPs feel in terms of knowledge and skills to address vaccination with patients)
- Reluctant trust (i.e., the extent to which HCPs trust the vaccination system and recommend vaccines despite potential concerns)
- Openness to patients' concerns regarding vaccination (i.e., attitudes toward [hesitant] patients)

Each core determinant and intermediary factor is measured with several statements to which the respondents were asked to report their agreement on a 5-point Likert scale from "strongly disagree" to "strongly agree" with an additional "don't know" option.

#### Validation process

The first version of the Pro-VC-Be was developed in French, then translated into English (by two independent, professional translators) and sent to five experts in the field of vaccine hesitancy to evaluate the content validity of the questionnaire. Remarks and recommendations made by these experts were taken into account, such as the rewording of certain items in the questionnaire to be more comprehensible. The Pro-VC-Be was then back-translated into French (again by two independent, professional translators) to begin the validation steps, which took place in three stages: cognitive validation, pilot testing, and survey testing in a large sample.

### Cognitive validation

Cognitive interviews were carried out with four nurses in Quebec and six GPs in France. Interviewers, one in France and one in Quebec, administered the Pro-VC-Be questionnaire to participants via telephone or face-to-face and asked participants questions related to how they understood the questions and to explain why they answered one way or another. These interviews led to certain changes within the questionnaire, such as: rewording certain questions to be more understandable, adapting questions to specific country-contexts, and deleting items that were not understood or appropriate.

### Pilot test

The questionnaire was pilot-tested online in May and July 2020 with 144 HCPs (53 French GPs, 59 Belgian GPs, and 32 Quebec nurses). Questions related to the Covid-19 pandemic were added into the Pro-VC-Be prior to pilot testing, given the epidemic occurred at the same time as the validation. The version that underwent pilot testing had 79 items and took on average 15 minutes to complete. Principal component analysis (PCA) was then used to explore the dimensionality of each theoretical construct and Cronbach's alpha coefficients to measure their internal consistency. After exclusion of 24 items that were found to be multidimensional and/or lowered Cronbach's alpha coefficients, the final version of the questionnaire was comprised of 55 questions: 41 for the core and intermediary factors and 14 for vaccination behaviours.

### Survey test

A cross-sectional, online survey collected data from GPs in France and French-speaking parts of Belgium (Brussels and Wallonia), and nurses in Quebec (Canada) with the Pro-VC-Be in October-November 2020. The study population included 2,696 HCPs: 1,209 French GPs (45%), 432 Belgian GPs (16%), and 1,055 Quebec nurses (39%). Exploratory and confirmatory factor analyses evaluated the construct validity of the Pro-VC-Be, and vaccination behavioural outcomes measured within the Pro-VC-Be (HCPs' self-reported vaccine recommendations to patients, general immunization activity, self-vaccination, and future Covid-19 vaccine acceptance) were used to test criterion validity through weighted multiple robust Poisson regressions with robust error variances (28). For a more detailed description of the methods and results of the development and validation of the first version of the Pro-VC-Be please see Verger et al (2022)(1). Briefly, the final results showed a 6-factor structure of the dimensions in the Pro-VC-Be with good fit: vaccine confidence (combining complacency, perceived vaccine risks, perceived benefit-risk balance, perceived collective responsibility), trust in authorities, perceived constraints, proactive efficacy (combining commitment to vaccination and self-efficacy), reluctant trust, and openness to patients. The Professional norm construct was excluded due to low factor loadings. The instrument showed good convergent and criterion validity according to analyses.

## Cross-cultural adaptation of the Pro-VC-Be

Within the JITSUUVAX project, an English version (translated and back-translated by professional translators) of the Pro-VC-Be questionnaire was adapted to the vaccination contexts of the UK, Portugal, Germany, France, and Finland. The adaptation process proceeded in the following temporal order: 1) initial assessment of the cultural appropriateness of the questionnaire by the JITSUUVAX researchers in each country, 2) translation, 3) cognitive validation, 4) and piloting of the adapted questionnaire. The process was planned in consultation with Peter Nynäs who is Professor of Comparative Religion at Åbo Akademi University in Turku, Finland, and has extensive experience in cross-cultural development of survey questionnaires. Revisions were made to the questionnaire at each stage. The stages are described in detail below.

## Initial assessment of cultural appropriateness

Adaptations were made based on several discussions between JITSUVAX researchers and experts before translating the English version of the questionnaire into other languages. These adaptations included: 1) adding a general recommendation behaviour question probing how often HCPs check their patients' vaccination status, 2) reformulating the recommendation-frequency questions to minimize the risk that the HCPs' working conditions influence responses, 3) adding questions to measure HCPs' intentions, what they would do in hypothetical situations, to recommend vaccines (presented if HCPs state they do not treat the relevant patient group in the recommendation frequency questions in order to decrease missing responses), 4) adding questions related to Covid-19, 5) specifying that patient groups mentioned in the questionnaire should be adapted according to relevant official vaccine recommendations in each participating country and thus be country specific, 6) constructing two new items measuring professional norms, 7) placing the "I don't know" response option in the middle of the 5-point response scale, and finally 8) various decisions related to the wording of questions to facilitate the translation of terms into each language and cultural setting.

## Translation

All translations were carried out by professional translators. The English version of the questionnaire was translated to Portuguese, German, Finnish, and Swedish (Swedish being a second official language in Finland) using double-back translation. This means that, for each language, two independent translators translated the questionnaire from English to the target language. The JITSUVAX researchers used these two translations to create a consensus version (in consultation with the professional translators when necessary). The consensus version was back-translated from the target language to English by two additional independent translators. If the back-translations revealed any translation issues, the consensus version was revised to solve these issues.

This resulted in six language versions of the adapted Pro-VC-Be: English, French, German, Portuguese, Finnish, and Swedish (adapted to the Finnish context).

## Cognitive validation

After translation, we conducted cognitive interviews with each language version. In each country, HCPs were interviewed about the questionnaire to assess the meaningfulness and appropriateness of the items within each cultural context and to obtain information on whether the items were interpreted in the way intended. The interviews followed the guidelines by (29). The HCPs were asked to answer the Pro-VC-Be questions while at the same time describing their thought process aloud. The interviewees were nurses and GPs in the UK ( $n = 6$ ), GPs in Germany ( $n = 5$ ), GPs and paediatricians in Portugal ( $n = 5$ ), GPs in France ( $n = 5$ ), and GPs and paediatricians in Finland ( $n = 7$  [five with the Finnish version and two with the Swedish version]). The interviews were conducted in October and November, 2021.

Based on the results of the cognitive interviews in all countries, certain adaptations were made. The recommendation frequency and personal vaccination questions that were not relevant for all participating countries were removed (i.e., questions related to Hepatitis B vaccinations were dropped since these are not systematically recommended in each of the participating countries), statements related to the benefit/risk balance of vaccines were reformulated to be more general, and a label of the response option in the middle of the response scale was changed from "I don't know" to "Undecided".

Cognitive interviews also allowed researchers to identify country-specific issues related to the comprehension of questions in the target languages and the validity of questions given the vaccine recommendations in each country. Appropriate changes were made when necessary.

## Pilot test

The adapted Pro-VC-Be was pilot tested between December 2021, and February 2022. The different language versions were administered to HCPs via electronic surveys. In the UK, HCPs with vaccination roles were recruited through the National Institute for Health Research's (NIHR) Clinical Research Network (CRN) support team. In Germany, HCPs were recruited using the panel provider Unipark. In Portugal, invitation emails were sent to GPs and paediatricians contacted through the network of Fernanda Rodrigues (the lead researcher in Portugal) in the Coimbra region; snowballing methods were used to contact additional GPs and paediatricians. In France, GPs were recruited from the National College of Teaching Generalists (Collège National des Généralistes Enseignants, CNGE) in the Provence-Alpes-Côte d'Azur (PACA) region of France. In Finland, respondents were recruited from the University of Turku and the University of Helsinki by sending invitation emails to mailing lists of last-year medical students.

The final pilot samples were  $n = 65$  in the UK (24 GPs, 29 nurses, and 12 other HCPs),  $n = 50$  in Germany (39 GPs, 2 paediatricians, 9 gynaecologists),  $n = 55$  in Portugal (16 GPs and 39 paediatricians),  $n = 68$  in France (all GPs), and  $n = 34$  in Finland (all medical students). The total sample size was thus  $N = 272$ , which was higher than the expected population of  $N=250$  for the pilot analyses.

Cronbach's alpha was calculated for each construct to assess internal consistency. The results indicated acceptable internal consistency ( $0.70 < \alpha < 0.80$ ) for the Complacency construct, good internal consistency ( $0.80 < \alpha < 0.90$ ) for the Perceived risks of vaccines, Perceived benefit/risk balance of vaccines, Trust in authorities, Commitment to vaccination, and Self-efficacy constructs, and excellent internal consistency ( $\alpha > 0.90$ ) for the Perceived collective responsibility, Perceived constraints, and Reluctant trust constructs. On the other hand, the internal consistency of the construct Openness to patients was low ( $\alpha = 0.37$ ). However, all items in this construct of Openness to patients were retained since inter-personal skills have been found to be important in vaccination situations between HCPs and patients (30) and significantly improved through immunization-specific motivational interviewing trainings (31). These items should nevertheless be treated separately if future analyses also indicate low reliability.

The pilot study gave support to the decision to include the recommendation intention questions (which were posed to HCPs as hypothetical situations if they did not treat patients in target groups within their actual practice) to avoid missing data. Among respondents, 48% answered at least one of the intention questions. The number of respondents who reported not treating the relevant group of patients varied between 9% and 25% depending on the recommendation frequency question. There was no statistically significant difference in vaccination behaviours between the respondents who had not answered any of the recommendation intention questions ( $n = 145$ ) and respondents who had answered at least one recommendation intention question ( $n = 127$ ). When it comes to the determinants of vaccination behaviour, those who had answered at least one of the recommendation intention items reported slightly higher collective responsibility and perceived the professional norm to be slightly more in favour of vaccination than those who did not answer any of the recommendation intention questions. There were no differences between the groups for the other determinants.

Changes made after the pilot included removing a question belonging to the General recommendation behaviour construct that concerned vaccine prescription. This was done to make the questions also applicable to HCPs who are not entitled to prescribe vaccines (internal consistency of the construct remained good after excluding the item). Furthermore, instead of having several separate questions on the benefit/risk balance of different Covid-19 vaccines, we included one general question on this topic in order to limit the number of items in the questionnaire.

## Final instrument

The Pro-VC-Be is the result of an extensive development, validation, and adaptation process. Nevertheless, more work is needed to further validate the adapted versions of the tool. Within the JITSUVAx project, a study assessing the validity of the questionnaire using larger samples of HCPs in the five participating countries is ongoing. We also encourage other researchers to adapt and use the Pro-VC-Be in their contexts of interest. A template questionnaire that can be easily adapted to various vaccination settings can be found in the Appendix. The Appendix also includes the questionnaire versions adapted to the contexts of the UK, France, Germany, Portugal, and Finland (in Finnish and Swedish).

## Additional Outputs

JITSUVAx researchers worked on additional outputs in tandem with the results mentioned here in this document, including a narrative review of the subject of vaccine hesitancy among HCPs in Western countries (6), which referred to several dimensions measured by the Pro-VC-Be. Another study was conducted among French GP medical interns (titled MOTIVAC-DUMG) to use the original Pro-VC-Be to measure determinants of vaccine confidence after an immunization-specific motivational-interview workshop, the article for which has recently been submitted for publication. This study provides evidence that educational strategies geared towards aiding HCPs in improving communication and empathy (through motivational interviewing) improves their commitment to vaccination, self-efficacy, openness to patients, and trust in authorities. WP 2 and 3 will work to provide further evidence for the effectiveness of communication and empathy trainings in increasing the vaccine confidence of HCPs, and therefore increasing vaccination recommendation behaviours.

## Next steps

As of May 2022, all five participating countries had collected data using the final instrument and survey, with a total sample size of 3,791 HCPs (N=972 in the UK; 1,284 in France; 375 in Finland; 556 in Portugal; and 603 in Germany). This quantitative data is currently undergoing validation analysis, for which the analysis plans were pre-registered (AsPredicted #94516) and will follow similar statistical analyses carried out to validate the original long- and short-form Pro-VC-Be in French. Plans for additional analyses, both country-specific and multi-country, are also under construction; these analyses will be presented in detail in further WP1 deliverables D1.2–D1.8 (due in September 2022 and March 2023).

As specified in the JITSUVAx proposal, there is also a qualitative aspect of data collection among HCPs in WP1. The qualitative interview guide that will be used to interview 20 HCPs in France and 30 HCPs in the UK has been completed, and ethical committee applications have been sent to the respective bodies in both countries for approval. These interviews will take place in the spring and summer of 2022, and will explore practices, attitudes, and experiences of HCPs in relation to their interactions with their patients and how they respond to doubts and concerns related to vaccination. Detailed information on the methods and results of this qualitative study will be presented within WP1 deliverable D1.9 (due in March 2023).

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## Appendix

### Template version

Text within brackets (“[xxx]”) needs to be adapted to the context (e.g., official vaccine recommendations) in which the questionnaire is administered.

#### VACCINATION BEHAVIOR

##### General recommendation behaviour

For the patients you treat and for whom vaccinations are relevant according to official guidelines:

1. How often do you check that your patients have received the vaccines recommended for them (whether from records or asking)?
2. How often do you bring up the subject of vaccination?
3. How often do you recommend the vaccines that are indicated for them?

Response alternatives for question 1–3:

- a) Never
- b) Sometimes
- c) Often
- d) Always

##### Recommendation frequency and recommendation intentions

The subquestion (lowercase letter) is only shown if participant responds “I do not treat patients within this age/target group” to the first question (uppercase letter).

For each situation, suppose you have all of the documentation/information necessary to know the vaccination status of the patient mentioned.

A. When you treat mothers [who have just given birth] and who have not had the whooping cough vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(a. Please imagine you are treating a mother [who has just given birth], who has not had the whooping cough vaccine, and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

B. When you treat young [girls and boys aged <insert age range>] who have not had the human papilloma virus vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(b. Please imagine you are treating a young [girl and boy aged <insert age range>] who has not had the human papilloma virus vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

C. When you treat adults over [<insert age>] years old who have not had the seasonal flu vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(c. Please imagine you are treating an adult over [<insert age>] years old who has not had the seasonal flu vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

D. When you treat adults who have not had the Covid-19 vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?

(d. Please imagine you are treating an adult who has not had the Covid-19 vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

E. When you treat [] old adolescents who have not had the Covid-19 vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?

(e. Please imagine you are treating a [] old adolescent who has not had the Covid-19 vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

F. When you treat pregnant women who have not had the Covid-19 vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?

(f. Please imagine you are treating a pregnant woman who has not had the Covid-19 vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

G. When you treat infants who have not had the MMR vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?

(g. Please imagine you are treating an infant who has not had the MMR vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

H. When you treat [] old children who have not had the Covid-19 vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?

(h. Please imagine you are treating a [] old children who has not had the Covid-19 vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

**Response scale for frequency questions (uppercase letters):**

I do not treat patients within this age/target group

- a) 0% - I do not actively recommend it to any of these patients
- b) 10%
- c) 20%
- d) 30%
- e) 40%
- f) 50%
- g) 60%
- h) 70%
- i) 80%
- j) 90%
- k) 100% - I actively recommend it to all of these patients

**Response scale for recommendation intentions (lowercase letters):**

- a) 0% - I would never recommend it
- b) 10%
- c) 20%
- d) 30%
- e) 40%
- f) 50%

- g) 60%
- h) 70%
- i) 80%
- j) 90%
- k) 100% - I would certainly recommend it

### **Personal vaccinations**

1. How many times have you been vaccinated against influenza during the last three years?
  - a) 0
  - b) 1
  - c) 2
  - d) 3
2. Have you been vaccinated against Covid-19?
  - a) No
  - b) Yes, I am partially vaccinated ([one dose of the Pfizer-BioNTech, Moderna, or Oxford/AstraZeneca vaccine])
  - c) Yes, I am fully vaccinated ([two doses of the Pfizer-BioNTech, Moderna, or Oxford/AstraZeneca vaccine, or one dose of the Johnson & Johnson vaccine])
  - d) Yes, I am fully vaccinated and received a booster ([third dose of Pfizer-BioNTech or Moderna, or a second dose of the Johnson & Johnson vaccine])

### **DETERMINANTS OF VACCINATION BEHAVIOR**

The following response scale applies to all questions in the Determinants of vaccination behaviour section:

- a) Strongly disagree
- b) Somewhat disagree
- c) Undecided
- d) Somewhat agree
- e) Strongly agree

### **Confidence in vaccines**

#### *Vaccine risk perception*

1. Vaccines against measles are safe
2. Vaccines against influenza are safe
3. Vaccines against hepatitis B are safe
4. Vaccines against human papillomaviruses are safe
5. Vaccines against Covid-19 in my country are safe

#### *Complacency*

6. Today, some vaccines recommended by [<insert relevant authority>] are not useful, because the diseases they prevent are not serious
7. Children are vaccinated against too many diseases
8. Children are vaccinated at too young an age

### *Benefit/risk balance perception*

The following statements refer to the benefit/risk balance within the targeted population for each vaccine (e.g. the measles vaccine for infants).

9. The benefits of the vaccine against measles outweigh its potential risks
10. The benefits of the vaccine against influenza outweigh its potential risks
11. The benefits of the vaccine against hepatitis B outweigh its potential risks
12. The benefits of the vaccine against human papillomaviruses outweigh its potential risks
13. The benefits of the vaccines against Covid-19 available in my country outweigh their potential risks

### *Perceived importance of collective responsibility*

14. I recommend the vaccines on the vaccination schedule to my patients because it's essential to contribute to the protection of the population (community immunity)
15. I recommend the vaccines in the official schedule to my hesitant patients, explaining to them the importance of community immunity

### **Confidence in authorities**

16. I trust the information provided by the [<insert relevant authority>] about the risks and benefits of vaccines
17. I trust the [<insert relevant authority>] to establish the vaccination strategy
18. I trust the [<insert relevant authority>] to ensure that vaccines are safe

### **Proactive efficacy**

#### *Commitment to vaccination*

19. I am committed in ensuring that my patients are vaccinated.
20. I am committed to keeping my knowledge about vaccination up-to-date (e.g. through CME, conferences, reading)
21. I am committed to developing the skills needed to communicate better with my patients about vaccination

#### *Self-efficacy*

22. I feel comfortable advising my patients about the risks and benefits of vaccines
23. I feel comfortable discussing vaccines with my patients who are highly hesitant about vaccination
24. I feel sufficiently trained and informed to discuss vaccines with all patients
25. I feel sufficiently trained on how to bring up the question of vaccines with hesitant patients

### **Openness to patients**

26. Patients who are hesitant about the benefits and risks of vaccines have legitimate questions
27. I inform my patients about the benefits and risks of vaccines without trying to influence them
28. I am open to patients delaying immunization of their children

### **Perceived constraints**

29. The cost of some vaccines is a problem for some patients and can keep me from prescribing them
30. The lack of availability of certain vaccines in my country is sometimes a problem that can keep me from prescribing them to my patients
31. The lack of availability of certain vaccines in my place of work is sometimes a problem that can keep me from prescribing them to my patients

#### **Reluctant trust**

32. I may sometimes recommend vaccines from the official schedule even if I feel I am not sufficiently informed
33. I may sometimes recommend vaccines from the official schedule even if I feel the vaccination policy is not sufficiently clear
34. I may sometimes recommend the vaccines on the official schedule even in cases where I have doubts about their safety

#### **Professional norm**

35. I think that most medical doctors in my country recommend that people get vaccinated.
36. I think that most medical doctors in my country are in favour of vaccination.

## UK version

### VACCINATION BEHAVIOUR

#### General recommendation behaviour

For the patients you treat and for whom vaccinations are relevant according to official guidelines:

1. How often do you check that your patients have received the vaccines recommended for them (whether from records or asking)?
2. How often do you bring up the subject of vaccination?
3. How often do you recommend the vaccines that are indicated for them?

**Response alternatives for question 1–3:**

- a) Never
- b) Sometimes
- c) Often
- d) Always

#### Recommendation frequency (or recommendation intentions)

The subquestion (lowercase letter) is only shown if participant responds “I do not treat patients within this age/target group” to the first question (uppercase letter).

For each situation, suppose you have all of the documentation/information necessary to know the vaccination status of the patient mentioned.

- A. When you treat mothers who have just given birth and who have not had the whooping cough vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(a. Please imagine you are treating a mother who has just given birth, who has not had the whooping cough vaccine, and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)
- B. When you treat young girls and boys aged 12-14 years who have not had the human papilloma virus vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(b. Please imagine you are treating a young girl and boy aged 12-14 years who has not had the human papilloma virus vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)
- C. When you treat adults over 65 years old who have not had the seasonal flu vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(c. Please imagine you are treating an adult over 65 years old who has not had the seasonal flu vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)
- D. When you treat adults who have not had the Covid-19 vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(d. Please imagine you are treating an adult who has not had the Covid-19 vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

E. When you treat 12-17 year old adolescents who have not had the Covid-19 vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(e. Please imagine you are treating a 12-17 year old adolescent who has not had the Covid-19 vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

F. When you treat 5-11 year old children who have not had the Covid-19 vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(f. Please imagine you are treating a 5-11 year old child who has not had the Covid-19 vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

G. When you treat pregnant women who have not had the Covid-19 vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(g. Please imagine you are treating a pregnant woman who has not had the Covid-19 vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

H. When you treat infants who have not had the MMR vaccine, what is the percentage of these patients for whom you actively recommend the vaccine?  
(h. Please imagine you are treating an infant who has not had the MMR vaccine and has no contraindications. How likely is it that you would recommend the vaccine to the patient?)

**Response scale for frequency questions (uppercase letters):**

I do not treat patients within this age/target group

- a) 0% - I do not actively recommend it to any of these patients
- b) 10%
- c) 20%
- d) 30%
- e) 40%
- f) 50%
- g) 60%
- h) 70%
- i) 80%
- j) 90%
- k) 100% - I actively recommend it to all of these patients

**Response scale for recommendation intentions (lowercase letters):**

- a) 0% - I would never recommend it
- b) 10%
- c) 20%
- d) 30%
- e) 40%
- f) 50%
- g) 60%
- h) 70%
- i) 80%
- j) 90%
- k) 100% - I would certainly recommend it

## **Personal vaccinations**

1. How many times have you been vaccinated against influenza during the last three years?
  - a) 0
  - b) 1
  - c) 2
  - d) 3
  
2. Have you been vaccinated against Covid-19?
  - a) No
  - b) Yes, I am partially vaccinated (one dose of the Pfizer-BioNTech, Moderna, or Oxford/AstraZeneca vaccine)
  - c) Yes, I am fully vaccinated (two doses of the Pfizer-BioNTech, Moderna, or Oxford/AstraZeneca vaccine, or one dose of the Johnson & Johnson vaccine)
  - d) Yes, I am fully vaccinated and received a booster (third dose of Pfizer-BioNTech or Moderna, or a second dose of the Johnson & Johnson vaccine)

## **DETERMINANTS OF VACCINATION BEHAVIOUR**

The following response scale applies to all questions in the Determinants of vaccination behaviour section:

- a) Strongly disagree
- b) Somewhat disagree
- c) Undecided
- d) Somewhat agree
- e) Strongly agree

In the following, we are interested in your opinions around the topic of vaccination.  
Please indicate your agreement with the following statements.

### **Confidence in vaccines**

#### *Vaccine risk perception*

1. Vaccines against measles are safe
2. Vaccines against influenza are safe
3. Vaccines against hepatitis B are safe
4. Vaccines against human papillomaviruses are safe
5. Vaccines against Covid-19 in my country are safe

#### *Complacency*

6. Today, some vaccines recommended by the NHS are not useful, because the diseases they prevent are not serious
7. Children are vaccinated against too many diseases
8. Children are vaccinated at too young an age

#### *Benefit/risk balance perception*

The following statements refer to the benefit/risk balance within the targeted population for each vaccine (e.g. the measles vaccine for infants).

9. The benefits of the vaccine against measles outweigh its potential risks
10. The benefits of the vaccine against influenza outweigh its potential risks
11. The benefits of the vaccine against hepatitis B outweigh its potential risks
12. The benefits of the vaccine against human papillomaviruses outweigh its potential risks
13. The benefits of the vaccines against Covid-19 available in my country outweigh their potential risks

*Perceived importance of collective responsibility*

14. I recommend the vaccines on the vaccination schedule to my patients because it's essential to contribute to the protection of the population (community immunity)
15. I recommend the vaccines in the official schedule to my hesitant patients, explaining to them the importance of community immunity

**Confidence in authorities**

16. I trust the information provided by the NHS about the risks and benefits of vaccines
17. I trust the NHS to establish the vaccination strategy
18. I trust the NHS to ensure that vaccines are safe

**Proactive efficacy**

*Commitment to vaccination*

19. I am committed in ensuring that my patients are vaccinated.
20. I am committed to keeping my knowledge about vaccination up-to-date (e.g. through CPD, conferences, reading)
21. I am committed to developing the skills needed to communicate better with my patients about vaccination

*Self-efficacy*

22. I feel comfortable advising my patients about the risks and benefits of vaccines
23. I feel comfortable discussing vaccines with my patients who are highly hesitant about vaccination
24. I feel sufficiently trained and informed to discuss vaccines with all patients
25. I feel sufficiently trained on how to bring up the question of vaccines with hesitant patients

**Openness to patients**

26. Patients who are hesitant about the benefits and risks of vaccines have legitimate questions
27. I inform my patients about the benefits and risks of vaccines without trying to influence them
28. I am open to patients delaying immunization of their children

**Perceived constraints**

29. The cost of some vaccines is a problem for some patients and can keep me from prescribing them

30. The lack of availability of certain vaccines in my country is sometimes a problem that can keep me from prescribing them to my patients
31. The lack of availability of certain vaccines in my place of work is sometimes a problem that can keep me from prescribing them to my patients

#### **Reluctant trust**

32. I may sometimes recommend vaccines from the official schedule even if I feel I am not sufficiently informed
33. I may sometimes recommend vaccines from the official schedule even if I feel the vaccination policy is not sufficiently clear
34. I may sometimes recommend the vaccines on the official schedule even in cases where I have doubts about their safety

#### **Professional norm**

35. I think that most medical doctors in my country recommend that people get vaccinated.
36. I think that most medical doctors in my country are in favour of vaccination.

## Version française

### COMPORTEMENT DE VACCINATION

Pour les patients que vous traitez et qui sont ciblés par les recommandations officielles du calendrier vaccinal :

1. A quelle fréquence vérifiez-vous que vos patients ont bien reçu les vaccins qui sont recommandés ou obligatoires pour eux (à partir de leur carnet de santé ou en leur demandant) ?
2. A quelle fréquence abordez-vous le sujet de la vaccination ?
3. A quelle fréquence recommandez-vous les vaccins qui leur sont indiqués ?

Réponses alternatives pour questions 1–3:

- a) Jamais
- b) Parfois
- c) Souvent
- d) Toujours

### Fréquence de recommandation et intentions de recommandation

La sous-question (lettres minuscule) n'est affichée que si le participant répond "Je ne traite pas de patients de ce groupe d'âge/cible" à la première question (lettres majuscule).

Pour chaque situation, supposez que vous disposez de toute l'information nécessaire pour connaître le statut vaccinal du patient mentionné.

A. Lorsque vous traitez des mères qui viennent d'accoucher et qui n'ont pas reçu le vaccin contre la coqueluche, quel est le pourcentage de ces patientes pour lesquelles vous recommandez activement le vaccin ?

(a. Imaginez que vous traitez une mère qui vient d'accoucher, qui n'a pas été vaccinée contre la coqueluche et qui ne présente aucune contre-indication: dans quelle mesure recommandez ce vaccin à cette patiente ?)

B. Lorsque vous traitez des jeunes filles et des garçons âgés de 11 à 14 ans qui n'ont pas reçu le vaccin contre le papilloma virus humain, quel est le pourcentage de ces patients pour lesquels vous recommandez activement le vaccin ?

(b. Imaginez que vous traitez une jeune fille et un jeune garçon âgés de 11 à 14 ans qui n'ont pas été vaccinés contre le papilloma virus humain et qui ne présentent aucune contre-indication: dans quelle mesure recommandez ce vaccin à ce patient ?)

C. Lorsque vous traitez des adultes de plus de 65 ans et qui n'ont pas reçu le vaccin contre la grippe saisonnière, quel est le pourcentage de ces patients pour lesquels vous recommandez activement le vaccin ?

(c. Imaginez que vous traitez un adulte de plus de 65 ans qui n'a pas reçu le vaccin contre la grippe saisonnière et qui ne présente aucune contre-indication: dans quelle mesure recommandez ce vaccin à ce patient ?)

D. Lorsque vous traitez des adultes qui n'ont pas reçu un vaccin contre le Covid-19, quel est le pourcentage de ces patients pour lesquels vous recommandez activement le vaccin ?

(d. Imaginez que vous traitez un adulte qui n'a pas reçu un vaccin contre le Covid-19 et qui ne présente aucune contre-indication: dans quelle mesure recommandez ce vaccin à ce patient ?)

E. Lorsque vous traitez des adolescents âgés de 12-17 ans qui n'ont pas reçu un vaccin contre le Covid-19, quel est le pourcentage de ces patients pour lesquels vous recommandez activement le vaccin ?

(e. Imaginez que vous traitez un adolescent de 12-17 ans qui n'a pas reçu un vaccin contre le Covid-19 et qui ne présente aucune contre-indication: dans quelle mesure recommandez ce vaccin à ce patient ?)

F. Lorsque vous traitez des enfants âgés de 5-11 ans qui n'ont pas reçu un vaccin contre le Covid-19, quel est le pourcentage de ces patients pour lesquels vous recommandez activement le vaccin ?

(f. Imaginez que vous traitez un enfant âgés de 5-11 ans qui n'a pas reçu un vaccin contre le Covid-19 et qui ne présente aucune contre-indication: dans quelle mesure recommandez ce vaccin à ce patient ?)

G. Lorsque vous traitez des femmes enceintes qui n'ont pas reçu un vaccin contre le Covid-19, quel est le pourcentage de ces patientes pour lesquelles vous recommandez activement le vaccin ?

(g. Imaginez que vous traitez une femme enceinte qui n'a pas reçu un vaccin contre le Covid-19 et qui ne présente aucune contre-indication: dans quelle mesure recommandez ce vaccin à cette patiente ?)

H. Lorsque vous traitez des nourrissons qui n'ont pas reçu le vaccin ROR, quel est le pourcentage de ces patients pour lesquels vous recommandez activement le vaccin ?

(h. Imaginez que vous traitez un nourrisson qui n'a pas reçu le vaccin ROR et qui ne présente aucune contre-indication: dans quelle mesure recommandez ce vaccin à ce patient ?)

**Échelle de réponse pour la fréquence (lettres majuscule):**

- a) Je ne traite pas de patients de ce groupe d'âge/cible
- b) 0% - Je ne le recommande activement à aucun de ces patients
- c) 10%
- d) 20%
- e) 30%
- f) 40%
- g) 50%
- h) 60%
- i) 70%
- j) 80%
- k) 90%
- l) 100% - Je le recommande activement à tous ces patients

**Échelle de réponse pour les intentions de recommandation (lettres minuscule):**

- a) 0% Je ne le recommanderais jamais à ces patients
- b) 10%
- c) 20%
- d) 30%
- e) 40%

- f) 50%
- g) 60%
- h) 70%
- i) 80%
- j) 90%
- k) 100% Je le recommanderais certainement à ces patients

### Vaccinations personnelles

1. Combien de fois avez-vous été vacciné contre la grippe saisonnière au cours des trois dernières années ?
  - a) 0
  - b) 1
  - c) 2
  - d) 3
2. Avez-vous été vacciné contre le Covid-19 ?
  - a) Non
  - b) Oui, je suis partiellement vacciné (une dose du vaccin Pfizer-BioNTech, Moderna ou Oxford/AstraZeneca)
  - c) Oui, je suis complètement vacciné (deux doses du vaccin Pfizer-BioNTech, Moderna ou Oxford/AstraZeneca, ou une dose du vaccin Johnson & Johnson)
  - d) Oui, je suis complètement vacciné et j'ai reçu un rappel (troisième dose de Pfizer-BioNTech ou Moderna, ou une deuxième dose du vaccin de Johnson & Johnson)

### VARIABLES EXPLICATIVES

L'échelle de réponse suivante s'applique à toutes les questions de la section Variables Explicatives :

- a) Pas du tout d'accord
- b) Plutôt en désaccord
- c) Incertain / Ni d'accord ni pas d'accord
- d) Plutôt d'accord
- e) Tout à fait d'accord

Indiquez si vous êtes d'accord avec les propositions suivantes:

### Confiance dans les vaccins

#### *La perception des risques liés aux vaccins*

1. Les vaccins contre la rougeole ne présentent pas des risques graves.
2. Les vaccins contre la grippe saisonnière ne présentent pas des risques graves.
3. Les vaccins contre l'hépatite B ne présentent pas des risques graves.
4. Les vaccins contre le papilloma virus humain ne présentent pas des risques graves.
5. Les vaccins contre le Covid-19 dans mon pays ne présentent pas des risques graves.

### *Complaisance*

6. Aujourd’hui, certains vaccins recommandés par les autorités sont inutiles, car les maladies qu’ils préviennent sont bénignes.
7. Les enfants sont vaccinés contre trop de maladies.
8. Les enfants sont vaccinés à un trop jeune âge.

*Perception de la balance bénéfices/risques*

Les déclarations suivantes font référence au rapport bénéfices/risques au sein de la population ciblée pour chaque vaccin.

9. Les bénéfices du vaccin contre la rougeole sont largement supérieurs à ses risques éventuels.
10. Les bénéfices du vaccin contre la grippe saisonnière sont largement supérieurs à ses risques éventuels.
11. Les bénéfices du vaccin contre l’hépatite B sont largement supérieurs à ses risques éventuels.
12. Les bénéfices du vaccin contre le papilloma virus humain sont largement supérieurs à ses risques éventuels.
13. Les bénéfices des vaccins contre le Covid-19, disponible en France, sont largement supérieurs à leurs risques potentiels.

*Importance perçue de la responsabilité collective*

14. Je recommande les vaccins du calendrier vaccinal à mes patients parce que c’est essentiel pour contribuer à la protection de la population (immunité de groupe)
15. Je recommande les vaccins du calendrier officiel à mes patients hésitants en leur expliquant l’importance de l’immunité de groupe

**La confiance dans divers acteurs et institutions**

16. J’ai confiance dans les informations fournies par le Ministère de la Santé sur les risques et les bénéfices des vaccins.
17. J’ai confiance dans le Ministère de la Santé pour établir la stratégie de vaccination.
18. J’ai confiance dans le Ministère de la Santé pour s’assurer de la sécurité des vaccins.

**Efficacité proactive**

*Engagement à la vaccination*

19. Je m’investis pour faire en sorte que mes patients soient vaccinés.
20. Je m’investis pour maintenir à jour mes connaissances sur la vaccination (CME, conférences, lectures).
21. Je m’investis pour acquérir des techniques pour mieux communiquer sur la vaccination avec mes patients.

*Auto-efficacité*

22. Je me sens à l’aise pour conseiller mes patients sur les risques et les bénéfices des vaccins.
23. Je me sens à l’aise pour discuter des vaccins avec mes patients très hésitants à la vaccination.
24. Je me sens suffisamment formé(e) et informé(e) pour discuter des vaccins avec tous les patients.
25. Je me sens suffisamment formé(e) sur la façon d’aborder les vaccins avec les patients hésitants.

**Ouverture aux patients**

26. Les patients qui hésitent sur les bénéfices et les risques des vaccins se posent des questions légitimes.
27. J'informe mes patients des bénéfices et des risques des vaccins mais je les laisse prendre leur décision sans chercher à les influencer.
28. Je suis ouvert à ce que les patients reportent la vaccination de leurs enfants.

### **Contraintes perçues**

29. Le coût de certains vaccins est un problème pour certains patients et peut me retenir de leur prescrire.
30. La disponibilité de certains vaccins dans mon pays est parfois un problème qui peut me retenir de les prescrire à mes patients.
31. La disponibilité de certains vaccins à mon lieu de travail est parfois un problème qui peut me retenir de les prescrire à mes patients.

### **La confiance réticente**

32. Je recommande les vaccins du calendrier officiel même si j'ai parfois le sentiment de ne pas être suffisamment informé(e) sur certains d'entre eux.
33. Je recommande les vaccins du calendrier officiel même si j'estime que les objectifs de la politique de vaccination ne sont pas suffisamment clairs.
34. Je recommande les vaccins du calendrier officiel bien que j'aie parfois quelques doutes sur leur innocuité.

### **Norme professionnelle**

35. Je pense que la plupart des médecins de mon pays recommandent aux gens de se faire vacciner.
36. Je pense que la plupart des médecins de mon pays sont en faveur de la vaccination.

## German version

### **IMPFVERHALTEN**

#### **Allgemeines Empfehlungsverhalten**

Für die von Ihnen behandelten Patienten und Patientinnen, für die Impfungen gemäß den offiziellen Leitlinien relevant sind:

1. Wie häufig kontrollieren Sie, ob Ihre Patienten und Patientinnen die Impfungen erhalten haben, die für sie empfohlen wurden (ob aus Dokumenten oder durch Nachfragen)?
2. Wie häufig sprechen Sie das Thema Impfung an?
3. Wie häufig empfehlen Sie den Patienten und Patientinnen Impfungen, bei denen eine entsprechende Indikation vorliegt?

**Antwortalternativen für Frage 1-3:**

- a) Nie
- b) Manchmal
- c) Oft
- d) Immer

#### **Empfehlungshäufigkeit oder Empfehlungsintentionen**

Die Unterfrage (Kleinbuchstabe) wird nur angezeigt, wenn der Teilnehmer auf die erste Frage (Großbuchstabe) antwortet: "Ich behandle keine Patienten in dieser Alters-/Zielgruppe".

Nehmen Sie für jede nachfolgende Situation an, dass Sie über alle erforderlichen Unterlagen/Informationen verfügen, um den Impfstatus der betreffenden Patientin zu kennen.

A. Wenn Sie Mütter behandeln, die gerade (ein) Kind(er) bekommen haben und keine Keuchhusten-Impfung erhalten haben, wie hoch ist der Anteil dieser Patientinnen dem Sie diese Impfung aktiv empfehlen?

(a. Bitte stellen Sie sich vor, Sie behandeln eine Mutter, die gerade (ein) Kind(er) bekommen hat und keine Keuchhusten-Impfung erhalten hat und bei der keine Kontraindikationen vorliegen. Wie wahrscheinlich ist es, dass Sie die Impfung empfehlen würden?)

B. Wenn Sie Mädchen und Jungen im Alter von 9 bis 14 Jahren behandeln, die keine Impfung gegen das humane Papillomavirus erhalten haben, wie hoch ist der Anteil dieser Patienten und Patientinnen, dem Sie diese Impfung aktiv empfehlen?

(b. Bitte stellen Sie sich vor, Sie behandeln ein Kind im Alter von 9 bis 14 Jahren, das keine Impfung gegen das humane Papillomavirus erhalten hat und bei dem keine Kontraindikationen vorliegen. Wie wahrscheinlich ist es, dass Sie die Impfung empfehlen würden?)

C. Wenn Sie Erwachsene im Alter von unter 60 Jahren mit chronischen Erkrankungen behandeln, die keine saisonale Grippeschutzimpfung erhalten haben, wie hoch ist der Anteil dieser Patienten und Patientinnen, dem Sie diese Impfung aktiv empfehlen?

(c. Bitte stellen Sie sich vor, Sie behandeln einen Erwachsenen im Alter von unter 60 Jahren mit chronischen Erkrankungen, der keine saisonale Grippeschutzimpfung erhalten hat und bei dem keine Kontraindikationen vorliegen. Wie wahrscheinlich ist es, dass Sie die Impfung empfehlen würden?)

D. Wenn Sie Erwachsene behandeln, die keine Covid-19-Impfung erhalten haben, wie hoch ist der Anteil dieser Patienten und Patientinnen, dem Sie diese Impfung aktiv empfehlen?

(d. Bitte stellen Sie sich vor, Sie behandeln einen Erwachsenen, der keine Covid-19-Impfung erhalten hat und bei dem keine Kontraindikationen vorliegen. Wie wahrscheinlich ist es, dass Sie die Impfung empfehlen würden?)

E. Wenn Sie Jugendliche im Alter von 12 bis 17 Jahren behandeln, die keine Covid-19-Impfung erhalten haben, wie hoch ist der Anteil dieser Patienten und Patientinnen, dem Sie diese Impfung aktiv empfehlen?

(e. Bitte stellen Sie sich vor, Sie behandeln einen Jugendlichen im Alter von 12 bis 17 Jahren, der keine Covid-19-Impfung erhalten hat und bei dem keine Kontraindikationen vorliegen. Wie wahrscheinlich ist es, dass Sie die Impfung empfehlen würden?)

F. Wenn Sie schwangere Frauen im 2. oder 3. Trimester behandeln, die keine Covid-19-Impfung erhalten haben, wie hoch ist der Anteil dieser Patientinnen, dem Sie diese Impfung aktiv empfehlen?

(f. Bitte stellen Sie sich vor, Sie behandeln eine schwangere Frau im 2. oder 3. Trimester, die keine Covid-19-Impfung erhalten hat und bei der keine Kontraindikationen vorliegen. Wie wahrscheinlich ist es, dass Sie die Impfung empfehlen würden?)

G. Wenn Sie Kinder im Alter von 5 bis 11 Jahren behandeln, die keine Covid-19-Impfung erhalten haben, wie hoch ist der Anteil dieser Patienten und Patientinnen, dem Sie diese Impfung aktiv empfehlen?

(g. Bitte stellen Sie sich vor, Sie behandeln ein Kind im Alter von 5 bis 11 Jahren, das keine Covid-19-Impfung erhalten hat und bei dem keine Kontraindikationen vorliegen. Wie wahrscheinlich ist es, dass Sie die Impfung empfehlen würden?)

H. Wenn Sie Kleinkinder behandeln, die keine MMR-Impfung erhalten haben, wie hoch ist der Anteil dieser Patienten und Patientinnen, für den Sie diese Impfung aktiv empfehlen?

(h. Bitte stellen Sie sich vor, Sie behandeln ein Kleinkind, das keine MMR-Impfung erhalten hat und bei dem keine Kontraindikationen vorliegen. Wie wahrscheinlich ist es, dass Sie die Impfung empfehlen würden?)

**Antwortskala für Frage zur Häufigkeit (Großbuchstaben):**

- a) Ich behandle keine Patienten und Patientinnen in dieser Alters-/Zielgruppe
- b) 0% - Ich empfehle sie keiner dieser Patienten und Patientinnen
- c) 10%
- d) 20%
- e) 30%
- f) 40%
- g) 50%
- h) 60%
- i) 70%
- j) 80%
- k) 90%

- I) 100% - Ich empfehle sie allen diesen Patienten und Patientinnen

**Antwortskala für Fragen zur Intention (Kleinbuchstaben):**

- a) 0% - Ich würde sie auf keinen Fall empfehlen
- b) 10%
- c) 20%
- d) 30%
- e) 40%
- f) 50%
- g) 60%
- h) 70%
- i) 80%
- j) 90%
- k) 100% - Ich würde sie auf jeden Fall empfehlen

**Persönliche Impfungen**

1. Wie häufig wurden Sie in den letzten drei Jahren gegen Influenza geimpft?
  - a) 0
  - b) 1
  - c) 2
  - d) 3
  
2. Sind Sie gegen Covid-19 geimpft?
  - a) Nein
  - b) Ja, ich bin teilweise geimpft (eine Dosis des Impfstoffs von Pfizer-BioNTech, Moderna, Oxford/AstraZeneca, Johnson & Johnson oder Novavax).
  - c) Ja, ich bin vollständig geimpft (zwei Dosen des Impfstoffs von Pfizer-BioNTech, Moderna, Oxford/AstraZeneca, Johnson & Johnson oder Novavax).
  - d) Ja, ich bin vollständig geimpft und geboostert (mindestens drei Dosen des Impfstoffs von Pfizer-BioNTech, Moderna, Oxford/AstraZeneca, Johnson & Johnson oder Novavax).

**DETERMINANTEN DES IMPFVERHALTENS**

**Die folgende Antwortskala gilt für alle Fragen im Abschnitt Determinanten des Impfverhaltens:**

- a) Stimme überhaupt nicht zu
- b) Stimme eher nicht zu
- c) Unentschlossen
- d) Stimme eher zu
- e) Stimme voll und ganz zu

Im Folgenden interessieren uns Ihre Einschätzungen rund um das Thema Impfen.  
Bitte geben Sie Ihre Zustimmung zu den folgenden Aussagen an.

**Vertrauen in Impfstoffe**

### *Risikowahrnehmung bei Impfstoffen*

1. Impfstoffe gegen Masern sind nicht sicher.
2. Impfstoffe gegen Influenza sind nicht sicher.
3. Impfstoffe gegen Hepatitis B sind nicht sicher.
4. Impfstoffe gegen humane Papillomaviren (HPV) sind nicht sicher.
5. Impfstoffe gegen Covid-19 sind nicht sicher.

### *Selbstgefälligkeit*

6. Heutzutage sind einige Impfungen, die von der Ständigen Impfkommission (STIKO) empfohlen werden, nicht sinnvoll, da die Erkrankungen, die sie verhindern, keine schweren Erkrankungen sind.
7. Kinder werden gegen zu viele Krankheiten geimpft.
8. Kinder werden zu früh geimpft.

### *Nutzen/Risiko-Verhältnis*

The following statements refer to the benefit/risk balance within the targeted population for each vaccine (e.g. the measles vaccine for infants).

9. Die Vorteile der Impfung gegen Masern überwiegen die potenziellen Risiken der Impfung.
10. Die Vorteile der Impfung gegen Influenza überwiegen bei Personen mit einer chronischen Erkrankung die Risiken der Impfung.
11. Die Vorteile der Impfung gegen Hepatitis B bei Kleinkindern (oder der Auffrischungsimpfung bei Jugendlichen) überwiegen die potenziellen Risiken der Impfung.
12. Die Vorteile der Impfung gegen humane Papillomaviren (HPV) überwiegen die potenziellen Risiken der Impfung.
13. Die Vorteile der Impfung gegen Covid-19 mit den in Deutschland zugelassenen Impfstoffen überwiegen die potenziellen Risiken der Impfung.

### *Wahrgenommene Bedeutung der kollektiven Verantwortung*

14. Ich empfehle meinen Patienten und Patientinnen die Impfungen laut Impfempfehlung, weil es wichtig ist, zum Schutz der Bevölkerung beizutragen (Herdenimmunität).
15. Ich empfehle meinen zögerlichen Patienten und Patientinnen die Impfungen laut offiziellen Impfempfehlungen und erläutere ihnen die Wichtigkeit der Herdenimmunität.

### **Vertrauen in die Behörden**

16. Ich vertraue dem Robert Koch-Institut, dass es verlässliche Informationen über die Risiken und die Vorteile von Impfungen zur Verfügung stellt.
17. Ich vertraue dem Gesundheitsministerium in Bezug auf die Festlegung der Impfstrategie.
18. Ich vertraue dem Paul-Ehrlich-Institut, dass es sicherstellt, dass die Impfungen sicher sind.

### **Proaktive Wirksamkeit**

#### *Engagement für die Impfung*

19. Ich bemühe mich, mein Wissen über Impfungen auf dem aktuellen Stand zu halten (durch CME-Fortbildungen, Konferenzen, Lesen).
20. Ich bemühe mich, Kompetenzen weiterzuentwickeln, um besser mit meinen Patienten und Patientinnen über Impfungen kommunizieren zu können.
21. Ich bemühe mich, dass meine Patienten und Patientinnen geimpft werden.

### **Selbstwirksamkeit**

22. Ich fühle mich dabei sicher, wenn ich meine Patienten und Patientinnen über die Risiken und die Vorteile von Impfungen informiere.
23. Ich fühle mich dabei sicher, wenn ich mit Patienten und Patientinnen über Impfungen spreche, die sehr zögerlich sind, ob sie sich impfen lassen.
24. Ich fühle mich hinreichend geschult und informiert, um mit allen Patienten und Patientinnen über Impfungen zu sprechen.
25. Ich fühle mich hinreichend geschult, wie man das Thema Impfung mit zögerlichen Patienten und Patientinnen anspricht.

### **Offenheit gegenüber Patienten**

26. Patienten und Patientinnen, die zögerlich sind, was die Vorteile und Risiken von Impfungen betrifft, haben berechtigte Fragen.
27. Ich informiere meine Patienten und Patientinnen über die Vorteile und Risiken von Impfungen, ohne sie dabei zu beeinflussen.
28. Ich bin offen dafür, dass Eltern die Immunisierung ihrer Kinder hinauszögern.

### **Wahrgenommene Zwänge**

29. Die Kosten einiger Impfungen stellen ein Problem für manche Patienten und Patientinnen dar, was mich davon abhält, ihnen diese Impfungen zu verschreiben.
30. Die mangelnde Verfügbarkeit bestimmter Impfstoffe in Deutschland stellt manchmal ein Problem dar, was mich davon abhält, Patienten und Patientinnen diese Impfungen zu verschreiben.
31. Die mangelnde Verfügbarkeit bestimmter Impfstoffe in meiner Praxis stellt manchmal ein Problem dar, was mich davon abhält, Patienten und Patientinnen diese Impfungen zu verschreiben.

### **Zögerndes Vertrauen**

32. Ich empfehle manchmal Impfungen, die Bestandteil der offiziellen Impfempfehlung sind, auch wenn ich selbst das Gefühl habe, dass ich nicht hinreichend informiert bin.
33. Ich empfehle manchmal Impfungen, die Bestandteil der offiziellen Impfempfehlung sind, auch wenn ich selbst das Gefühl habe, dass die Impfempfehlung nicht klar genug ist.
34. Ich empfehle manchmal Impfungen, die Bestandteil der offiziellen Impfempfehlung sind, auch wenn ich selbst Zweifel bezüglich ihrer Sicherheit habe.

### **Berufliche Norm**

35. Ich denke, dass die meisten Ärzte und Ärztinnen in Deutschland Impfungen empfehlen.
36. Ich denke, dass die meisten Ärzte und Ärztinnen in Deutschland

## [Portuguese version](#)

### **COMPORTAMENTO NA VACINAÇÃO**

#### **Recomendação geral de comportamento**

Para os utentes que trata, e para os quais, de acordo com diretrizes oficiais, a vacinação é relevante:

1. Com que frequência verifica se os utentes receberam as vacinas recomendadas, seja pelos registos ou perguntando?
2. Com que frequência aborda o tema da vacinação?
3. Com que frequência lhes recomenda as vacinas indicadas?

#### **Alternativas de resposta para pergunta 1–3**

- a) Nunca
- b) Às vezes
- c) Frequentemente
- d) Sempre

#### **Frequência de recomendação e intenções de recomendação**

A subquestão (letra minúscula) só é apresentada se o participante responder “Não atendo doentes nesta idade/grupo alvo” à primeira questão (letra maiúscula)

Para cada situação, imagine que tem toda a documentação/informação necessária para saber o status vacinal do utente mencionado.

- A. Quando trata grávidas que não receberam a vacina contra a tosse convulsa, qual a percentagem destas a quem recomendaativamente a vacina?
  - a. Por favor, imagine que está a tratar uma grávida que não recebeu a vacina contra a tosse convulsa. Qual é a probabilidade de recomendar a vacina?
- B. Quando trata raparigas e rapazes entre 11 e 14 anos que não receberam a vacina contra o vírus do papiloma humano (HPV), qual a percentagem destes a quem recomendaativamente a vacina?
  - b. Por favor, imagine que está a tratar uma rapariga ou um rapaz entre 11 e 14 anos que não recebeu a vacina contra o vírus do papiloma humano (HPV). Qual é a probabilidade de recomendar a vacina?
- C. Quando trata adultos com mais de 65 anos que não receberam a vacina contra a gripe sazonal, qual a percentagem destes utentes a quem recomendaativamente a vacina?
  - c. Por favor, imagine que está a tratar um adulto com mais de 65 anos que não recebeu a vacina contra a gripe sazonal. Qual é a probabilidade de recomendar a vacina?
- D. Quando trata adultos que não receberam a vacina contra a Covid-19, qual a percentagem destes utentes a quem recomendaativamente a vacina?
  - d. Por favor, imagine que está a tratar um adulto que não recebeu a vacina contra a Covid-19. Qual é a probabilidade de recomendar a vacina?

E. Quando trata adolescentes dos 12 aos 18 que não receberam a vacina contra a Covid-19, qual a percentagem destes utentes a quem recomenda ativamente a vacina?

e. Por favor, imagine que está a tratar um adolescente dos 12 aos 18 que não recebeu a vacina contra a Covid-19. Qual é a probabilidade de recomendar a vacina?

F. Quando trata grávidas que não receberam a vacina contra a Covid-19, qual a percentagem destas a quem recomenda ativamente a vacina?

f. Por favor, imagine que está a tratar uma grávida que não recebeu a vacina contra a Covid-19. Qual é a probabilidade de recomendar a vacina?

G. Quando trata crianças que não receberam a vacina contra o sarampo, parotidite e rubéola (VASPR), qual a percentagem destes utentes a quem recomenda ativamente a vacina?

g. Por favor, imagine que está a tratar uma criança que não recebeu a vacina contra o sarampo, parotidite e rubéola (VASPR). Qual é a probabilidade de recomendar a vacina?

**Escala de resposta para perguntas de frequência (letras maiúsculas):**

Não trato utentes dessa idade/grupo alvo

0% - Eu não a recomendo ativamente a nenhum desses utentes

10%

20%

30%

40%

50%

60%

70%

80%

90%

100% - Eu recomendo ativamente a todos esses utentes

**Escala de resposta para intenções de recomendação (letras minúsculas):**

0% - Nunca recomendaria isso

10%

20%

30%

40%

50%

60%

70%

80%

90%

100% - Recomendaria isso com certeza

**Vacinação pessoal**

1. Quantas vezes é que foi vacinado contra a gripe nos últimos três anos?

- a) 0
- b) 1
- c) 2

d) 3

2. Foi vacinado contra a Covid-19?

- a) Não
- b) Sim, estou parcialmente vacinado (uma dose da vacina Pfizer-BioNTech, Moderna ou Oxford/AstraZeneca)
- c) Sim, tenho a vacinação completa (duas doses da vacina da Pfizer-BioNTech, Moderna ou Oxford/AstraZeneca, ou uma dose da vacina da Johnson & Johnson)
- d) Sim, eu estou totalmente vacinado e recebi o reforço (terceira dose da Pfizer-BioNTech e Moderna, ou uma segunda dose da vacina da Johnson & Johnson)

## **DETERMINANTES DO COMPORTAMENTO NA VACINAÇÃO**

A escala de resposta seguinte aplica-se a todas as perguntas na seção Determinantes do comportamento na vacinação:

- a) Discordo totalmente
- b) Discordo em parte
- c) Não tenho a certeza
- d) Concordo em parte
- e) Concordo totalmente

Em seguida, estamos interessados nas suas opiniões sobre o tema da vacinação.  
Por favor indique se concorda com as frases que se seguem.

### **Confiança nas vacinas**

#### *Percepção de risco da vacina*

- 1. As vacinas contra o sarampo são seguras
- 2. As vacinas contra a gripe são seguras
- 3. As vacinas contra a hepatite B são seguras
- 4. As vacinas contra o vírus do papiloma humano (HPV) são seguras
- 5. As vacinas contra a Covid-19 utilizadas no meu país são seguras

#### *Complacência*

- 6. Hoje em dia, algumas vacinas recomendadas pela Direção Geral da Saúde/ Ministério da Saúde não têm utilidade, uma vez que as doenças que previnem não são graves
- 7. As crianças são vacinadas contra demasiadas doenças
- 8. As crianças são vacinadas muito cedo

#### *Percepção do equilíbrio benefício/risco*

As afirmações seguintes referem-se ao balanço benefício/risco dentro da população-alvo para cada vacina (ex. vacina do sarampo para crianças pequenas).

- 9. Os benefícios da vacina contra o sarampo superam os seus potenciais riscos
- 10. Os benefícios da vacina contra a gripe superam os seus potenciais riscos
- 11. Os benefícios da vacina contra a hepatite B superam os seus potenciais riscos
- 12. Os benefícios da vacina contra o vírus do papiloma humano (HPV) superam os seus potenciais riscos

13. Os benefícios da vacinas contra a Covid-19 disponíveis no meu país superam os seus potenciais riscos

*Importância percebida da responsabilidade coletiva*

14. Recomendo as vacinas do Programa Nacional de Vacinação (PNV) aos meus utentes pois é essencial para contribuir para a proteção da população (imunidade de grupo)

15. Recomendo as vacinas do Programa Nacional de Vacinação a utentes hesitantes, explicando-lhes a importância da imunidade de grupo

**Confiança nas autoridades**

16. Confio na informação fornecida pela Direção Geral de Saúde (DGS) sobre os riscos e benefícios das vacinas

17. Confio na Direção Geral de Saúde (DGS) para definir a estratégia de vacinação

18. Confio na Direção Geral de Saúde (DGS) para garantir que as vacinas são seguras

**Eficácia proativa**

*Compromisso com a vacinação*

19. Estou empenhado em garantir que os meus utentes sejam vacinados

20. Estou empenhado em manter o meu conhecimento sobre a vacinação atualizado (através de Educação Médica Continua, conferências, leitura)

21. Estou empenhado em desenvolver as competências necessárias para comunicar melhor com os meus utentes sobre a vacinação

*Auto-eficácia*

22. Sinto-me confortável a aconselhar os meus utentes sobre os riscos e benefícios das vacinas

23. Sinto-me confortável a discutir vacinas com os meus utentes que são muito hesitantes em relação à d vacinação

24. Sinto-me suficientemente formado e informado para discutir vacinas com qualquer doente

25. Sinto-me suficientemente treinado sobre como abordar a questão das vacinas com utentes hesitantes

**Abertura aos doentes**

26. Os utentes que estão hesitantes acerca dos benefícios e riscos de vacinas têm questões legítimas

27. Informo os meus utentes sobre os benefícios e riscos das vacinas, tentando não os influenciar

28. Aceito que os pais atrasem a imunização dos seus filhos

**Restrições percebidas**

29. O custo de algumas vacinas é um problema para alguns utentes, e pode impedir-me de as receber

30. A falta de disponibilidade de certas vacinas no meu país é por vezes um problema que me pode impedir de as receber aos meus utentes

31. A falta de disponibilidade de certas vacinas no meu local de trabalho é por vezes um problema que me pode impedir de as receber aos meus utentes

**Confiança relutante**

32. Por vezes posso recomendar vacinas do calendário/programa oficial mesmo que sinta não estar suficientemente informado
33. Por vezes posso recomendar vacinas do calendário/programa oficial mesmo que sinta que a política de vacinação não é suficientemente clara
34. Por vezes posso recomendar vacinas do calendário/programa oficial mesmo mesmo em casos nos quais eu tenha dúvidas quanto à sua segurança

#### **Norma profissional**

35. Penso que a maioria dos médicos no meu país recomenda que as pessoas se vacinem.
36. Penso que a maioria dos médicos no meu país é a favor da vacinação.

## Finnish version

### ROKOTUSKÄYTÄTYMINEN

#### Yleinen suosittelukäytätyminen

Niiden hoitamiesi potilaiden osalta, joille rokotukset ovat tarpeellisia virallisen ohjeistuksen mukaan:

1. Kuinka usein tarkistat, että potilaasi ovat saaneet heille suositellut rokotteet (joko potilastiedoista tai kysymällä)?
2. Kuinka usein otat keskusteluissa esille rokotukset?
3. Kuinka usein suosittelet heille tarkoitettuja rokotteita?

#### Kysymysten 1-3 vastausasteikko:

- a) En koskaan
- b) Joskus
- c) Usein
- d) Aina

#### Suosittelutiheys ja suositteluaikomukset

**Suositteluaikomuksia koskeva kysymys (pieni kirjain) näytetään vain, jos osallistuja vastaa "En hoida kyseiseen ikä-/kohderyhmään kuuluvia potilaita" tiheyttä koskevaan kysymykseen (iso kirjain).**

Oletetaan, että sinulla on kussakin tilanteessa kaikki tarvittavat asiakirjat/tiedot kyseisen potilaan rokotustilanteen selvittämiseksi.

- A. Kun hoidat äitejä, jotka ovat juuri synnyttäneet, ja jotka eivät ole saaneet hinkuyskärokotetta: Mille prosentiosuudelle näistä potilaista suosittelet aktiivisesti rokotetta?  
(a. Kuvittele, että hoidat äitiä, joka on juuri synnyttänyt, joka ei ole saanut hinkuyskärokotetta ja jolla ei ole vasta-aiheita. Kuinka todennäköisesti suosittelisit rokotetta potilaalle?)
- B. Kun hoidat 10–12-vuotiaita tyttöjä ja poikia, jotka eivät ole saaneet papilloomavirusrokotetta: Mille prosentiosuudelle näistä potilaista suosittelet aktiivisesti rokotetta?  
(b. Kuvittele, että hoidat 10–12-vuotiasta tyttöä tai poikaa, joka ei ole saanut papilloomavirusrokotetta ja jolla ei ole vasta-aiheita. Kuinka todennäköisesti suosittelisit rokotetta potilaalle?)
- C. Kun hoidat yli 65-vuotiaita aikuisia, jotka eivät ole saaneet kausi-influenssarokotetta: Mille prosentiosuudelle näistä potilaista suosittelet aktiivisesti rokotetta?  
(c. Kuvittele, että hoidat yli 65-vuotiasta aikuista, joka ei ole saanut kausi-influenssarokotetta ja jolla ei ole vasta-aiheita. Kuinka todennäköisesti suosittelisit rokotetta potilaalle?)
- D. Kun hoidat aikuisia, jotka eivät ole saaneet covid-19-rokotetta: Mille prosentiosuudelle näistä potilaista suosittelet aktiivisesti rokotetta?  
(d. Kuvittele, että hoidat aikuista, joka ei ole saanut covid-19-rokotetta ja jolla ei ole vasta-aiheita. Kuinka todennäköisesti suosittelisit rokotetta potilaalle?)

E. Kun hoidat 12–15-vuotiaita nuoria, jotka eivät ole saaneet covid-19-rokotetta: Mille prosenttiosuudelle näistä potilaista suosittelet aktiivisesti rokotetta?  
(e. Kuvittele, että hoidat 12–15-vuotiaasta nuorta, joka ei ole saanut covid-19-rokotetta ja jolla ei ole vasta-aiheita. Kuinka todennäköisesti suosittelisit rokotetta potilaalle?)

F. Kun hoidat alle 12-vuotiaita lapsia, jotka eivät ole saaneet covid-19-rokotetta: Mille prosenttiosuudelle näistä potilaista suosittelet aktiivisesti rokotetta?  
(f. Kuvittele, että hoidat alle 12-vuotiaasta lasta, joka ei ole saanut covid-19-rokotetta ja jolla ei ole vasta-aiheita. Kuinka todennäköisesti suosittelisit rokotetta potilaalle?)

G. Kun hoidat raskaana olevia, jotka eivät ole saaneet covid-19-rokotetta: Mille prosenttiosuudelle näistä potilaista suosittelet aktiivisesti rokotetta?  
(g. Kuvittele, että hoidat raskaana olevaa naista, joka ei ole saanut covid-19-rokotetta ja jolla ei ole vasta-aiheita. Kuinka todennäköisesti suosittelisit rokotetta potilaalle?)

H. Kun hoidat yli 1-vuotiaita lapsia, jotka eivät ole saaneet MPR-rokotetta: Mille prosenttiosuudelle näistä potilaista suosittelet aktiivisesti rokotetta?  
(h. Kuvittele, että hoidat yli 1-vuotiaasta lasta, joka ei ole saanut MPR-rokotetta ja jolla ei ole vasta-aiheita. Kuinka todennäköisesti suosittelisit rokotetta potilaalle?)

**Suosittelutuheyden vastausasteikko (isot kirjaimet):**

- a) En hoida kyseiseen ikä-/kohderyhmään kuuluvia potilaita
- b) 0 % - En aktiivisesti suosittele sitä kenellekään kyseisistä potilaista
- c) 10 %
- d) 20 %
- e) 30 %
- f) 40 %
- g) 50 %
- h) 60 %
- i) 70 %
- j) 80 %
- k) 90 %
- l) 100 % - Suosittelen sitä aktiivisesti kaikille kyseisille potilaille

**Suositteluaikomusten vastausasteikko (pienet kirjaimet):**

- a) 0 % - En suositteli sitä koskaan
- b) 10 %
- c) 20 %
- d) 30 %
- e) 40 %
- f) 50 %
- g) 60 %
- h) 70 %
- i) 80 %
- j) 90 %
- k) 100 % - Suosittelin sitä ehdottomasti

**Omat rokotukset**

1. Montako kertaa sinut on rokotettu influenssaan vastaan viimeisen kolmen vuoden aikana?
  - a) 0
  - b) 1
  - c) 2
  - d) 3
  
2. Onko sinut rokotettu covid-19 vastaan?
  - a) Ei
  - b) Kyllä, olen osittain rokotettu (yksi annos Comirnaty-, Spikevax-, Vaxzevria- tai Nuvaxovid-rokotetta).
  - c) Kyllä, olen täysin rokotettu (kaksi annosta Comirnaty-, Spikevax-, Vaxzevria- tai Nuvaxovid-rokotetta tai yksi annos Janssen -rokotetta).
  - d) Kyllä, olen täysin rokotettu ja olen saanut tehosteen (kolmas annos Comirnaty-, Spikevax- tai Nuvaxovid- rokotetta tai toinen annos Janssen -rokotetta)

## **ROKOTUSKÄYTÄTYMISEEN VAIKUTTAVAT TEKIJÄT**

**Seuraavaa vastausasteikkoa sovelletaan kaikkiin Rokotuskäyttäytymiseen vaikuttavat tekijät -osion kysymyksiin:**

- a) Vahvasti eri mieltä
- b) Jokseenkin eri mieltä
- c) Epävarma
- d) Jokseenkin samaa mieltä
- e) Vahvasti samaa mieltä

Seuraavaksi olemme kiinnostuneita mielipiteistäsi rokotuksista.  
Merkitse missä määrin olet samaa tai eri mieltä seuraavista väittämistä.

### **Luottamus rokotteisiin**

#### *Käsitys rokotehaitoista*

1. Tuhkarokkorokotteet ovat turvallisia.
2. Influenssarokotteet ovat turvallisia.
3. Hepatiitti B -rokotteet ovat turvallisia.
4. Papilloomavirusrokotteet ovat turvallisia.
5. Covid-19-rokotteet ovat Suomessa turvallisia.

#### *Tarpeettomuus*

6. Jotkut THL:n suosittelemat rokotteet eivät ole nykyään hyödyllisiä, koska niiden ehkäisemät taudit eivät ole vakavia.
7. Lapset rokotetaan liian monia tauteja vastaan.
8. Lapset rokotetaan liian varhaisessa iässä.

#### *Hyöty-/riskitasapainoa koskevat käsitykset*

Seuraavissa väittämässä viitataan kunkin rokotteen (esim. tuhkarokkorokote vauvoille) hyöty-/riskitasapainoon kohdeväestössä.

9. Tuhkarokkorokotteen hyödyt ovat suuremmat kuin sen mahdolliset riskit.
10. Influenssarokotteen hyödyt ovat suuremmat kuin sen mahdolliset riskit.
11. Hepatiitti B -rokotteen hyödyt ovat suuremmat kuin sen mahdolliset riskit.
12. Papilloomavirusrokotteen hyödyt ovat suuremmat kuin sen mahdolliset riskit.
13. Suomessa saatavilla olevien covid-19-rokotteiden hyödyt ovat suuremmat kuin niiden mahdolliset riskit.

*Käskykset kollektiivisen vastuun merkityksestä*

14. Suosittelen kansallisen rokotusohjelman mukaisia rokotteita potilailleni, koska on tärkeää suojella väestöä (laumaimmunitettsia).
15. Suosittelen kansallisen rokotusohjelman mukaisia rokotteita epäröiville potilailleni ja selitän heille laumaimmunitetin merkityksen.

**Luottamus viranomaisiin**

16. Luotan THL:n antamiin tietoihin rokotteiden riskeistä ja hyödyistä.
17. Luotan THL:n kyyyn laatia rokotusstrategia.
18. Luotan siihen, että THL ja Fimea varmistavat, että Suomessa annettavat rokotteet ovat turvallisia.

**Ennakoiva toiminta**

*Sitoutuminen rokotukseen*

19. Olen sitoutunut varmistamaan, että potilaani ovat rokotettuja.
20. Olen sitoutunut pitämään rokotustietämykseni ajan tasalla (täydennyskoulutuksen, konferenssien ja kirjallisuuden avulla).
21. Olen sitoutunut kehittämään taitoja, joita tarvitsen voidakseen kommunikoida paremmin potilaideni kanssa rokotuksista.

*Minäpystyvyys*

22. Minulla ei ole vaikeuksia kertoa potilailleni rokotteiden riskeistä ja hyödyistä.
23. Minulla ei ole vaikeuksia keskustella rokotteista sellaisten potilaiden kanssa, jotka suhtautuvat hyvin epärövästi rokotuksiin.
24. Koen, että minulla on riittävästi koulutusta ja tietoa voidakseen keskustella rokotteista kaikkien potilaiden kanssa.
25. Koen, että minulla on riittävästi koulutusta siitä, miten lähestyä rokotekysymystä epäröivien potilaiden kanssa.

**Avoimuus potilaita kohtaan**

26. Rokotteiden hyötyihin ja riskeihin epäröiden suhtautuvien potilaiden kysymykset ovat oikeutettuja.
27. Kerron potilailleni rokotteiden hyödyistä ja riskeistä yrittämättä vaikuttaa heihin.
28. Olen avoin sille, että vanhemmat lykkäävät lastensa rokottamista.

**Havaitut rajoittavat tekijät**

29. Joidenkin rokotteiden kustannukset ovat ongelma joillekin potilaille ja voivat estää minua määräämästä niitä heille.
30. Joidenkin rokotteiden saatavuudessa on toisinaan ongelmia Suomessa, mikä voi estää minua määräämästä niitä potilailleni.
31. Joidenkin rokotteiden saatavuudessa on toisinaan ongelmia työpaikallani, mikä voi estää minua määräämästä niitä potilailleni.

### **Häilyvä luottamus**

32. Saatan joskus suositella kansallisen rokotusohjelman mukaisia rokotteita, vaikka koen, ettei minulla ole riittävästi tietoa.
33. Saatan joskus suositella kansallisen rokotusohjelman mukaisia rokotteita, vaikka koen, etteivät rokotuskäytännöt ole riittävän selkeät.
34. Saatan joskus suositella kansallisen rokotusohjelman mukaisia rokotteita myös silloin, kun epäilen niiden turvallisuutta.

### **Ammatilliset normit**

35. Uskon, että useimmat lääkärit Suomessa suosittelevat, että ihmiset ottavat rokotuksia.
36. Uskon, että useimmat lääkärit Suomessa kannattavat rokottamista.

## Swedish version (for Finnish context)

### VACCINATIONSBETEENDE

#### Generellt rekommendationsbeteende

För de patienter som du behandlar och för vilka vaccinationer är relevanta enligt officiella riktlinjer:

1. Hur ofta kontrollerar du att dina patienter har fått de vacciner som rekommenderas för dem (antingen från journaler eller genom att fråga dem)?
2. Hur ofta tar du upp frågan om vaccination?
3. Hur ofta rekommenderar du de vacciner som är indikerade för dem?

Svarsskala för frågorna 1–3:

- a) Aldrig
- b) Ibland
- c) Ofta
- d) Alltid

#### Rekommendationsfrekvens och rekommendationsintentioner

Frågan om rekommendationsintention (liten bokstav) visas endast om deltagaren svarar "Jag behandlar inte patienter i den här ålders-/målgruppen" på frågan om rekommendationsfrekvens (stor bokstav).

Anta att du för varje situation har all dokumentation/information som krävs för att känna till den aktuella patientens vaccinationsstatus.

A. När du behandlar mödrar som nyligen fött barn och som inte har fått vaccin mot kikhosta, till hur stor procentandel av dessa patienter rekommenderar du aktivt vaccinet?

a. Föreställ dig att du behandlar en mamma som nyligen fött barn och som inte har fått vaccin mot kikhosta och som inte har några kontraindikationer. Hur troligt är det att du skulle rekommendera vaccinet till patienten?

B. När du behandlar flickor och pojkar i åldern 10–12 år som inte har fått vaccin mot humant papillomvirus, till hur stor procentandel av dessa patienter rekommenderar du aktivt vaccinet?

b. Föreställ dig att du behandlar en flicka eller pojke i åldern 10–12 år som inte har fått vaccin mot humant papillomvirus och som inte har några kontraindikationer. Hur troligt är det att du skulle rekommendera vaccinet till patienten?

C. När du behandlar vuxna över 65 år som inte har fått vaccin mot säsongsinfluensa, till hur stor procentandel av dessa patienter rekommenderar du aktivt vaccinet?

c. Föreställ dig att du behandlar en vuxen person över 65 år som inte har fått vaccin mot säsongsinfluensa och som inte har några kontraindikationer. Hur troligt är det att du skulle rekommendera vaccinet till patienten?

D. När du behandlar vuxna som inte har fått vaccin mot covid-19, till hur stor procentandel av dessa patienter rekommenderar du aktivt vaccinet?

d. Föreställ dig att du behandlar en vuxen person som inte har fått vaccin mot covid-19 och som inte har några kontraindikationer. Hur troligt är det att du skulle rekommendera vaccinet till patienten?

E. När du behandlar När du behandlar ungdomar i åldern 12–15 år som inte har fått vaccin mot covid-19, till hur stor procentandel av dessa patienter rekommenderar du aktivt vaccinet?  
e. Föreställ dig att du behandlar en ungdom i åldern 12–15 år som inte har fått vaccin mot covid-19 och som inte har några kontraindikationer. Hur troligt är det att du skulle rekommendera vaccinet till patienten?

F. När du behandlar När du behandlar barn under 12-års ålder som inte har fått vaccin mot covid-19, till hur stor procentandel av dessa patienter rekommenderar du aktivt vaccinet?  
f. Föreställ dig att du behandlar ett barn under 12-års ålder som inte har fått vaccin mot covid-19 och som inte har några kontraindikationer. Hur troligt är det att du skulle rekommendera vaccinet till patienten?

G. När du behandlar När du behandlar gravida kvinnor som inte har fått vaccin mot covid-19, till hur stor procentandel av dessa patienter rekommenderar du aktivt vaccinet?  
g. Föreställ dig att du behandlar en gravid kvinna som inte har fått vaccin mot covid-19 och som inte har några kontraindikationer. Hur troligt är det att du skulle rekommendera vaccinet till patienten?

H. När du behandlar När du behandlar barn över 1-års ålder som inte har fått något MPR-vaccin, till hur stor procentandel av dessa patienter rekommenderar du aktivt vaccinet?  
h. Föreställ dig att du behandlar ett barn över 1-års ålder som inte har fått något MPR-vaccin och som inte har några kontraindikationer. Hur troligt är det att du skulle rekommendera vaccinet till patienten?

**Svarsskala för frågorna om rekommendationsfrekvens (stora bokstäver):**

- a) Jag behandlar inte patienter i den här ålders-/målgruppen
- b) 0 % - Jag rekommenderar det inte aktivt till någon av dessa patienter
- c) 10 %
- d) 20 %
- e) 30 %
- f) 40 %
- g) 50 %
- h) 60 %
- i) 70 %
- j) 80 %
- k) 90 %
- l) 100 % - Jag rekommenderar det aktivt till alla dessa patienter

**Svarsskala för frågorna om rekommendationsintentioner (små bokstäver):**

0% - jag skulle aldrig rekommendera det

10 %  
20 %  
30 %  
40 %  
50 %  
60 %  
70 %  
80 %  
90 %

100 % - jag skulle definitivt rekommendera det

### Egna vaccinationer

1. Hur många gånger har du vaccinerats mot influensa under de senaste tre åren?
  - a) 0
  - b) 1
  - c) 2
  - d) 3
  
2. Har du vaccinerats mot covid-19?
  - a) Nej
  - b) Ja, jag är delvis vaccinerad (en dos av vaccinet Comirnaty, Spikevax, Vaxzevria eller Nuvaxovid)
  - c) Ja, jag är fullvaccinerad (två doser av vaccinet Comirnaty, Spikevax, Vaxzevria eller Nuvaxovid, eller en dos av Janssen-vaccinet)
  - d) Ja, jag är fullvaccinerad och har fått en boosterdos (tredje dos av vaccinet Comirnaty, Spikevax eller Nuvaxovid, eller en andra dos av Janssen-vaccinet)

### FAKTORER SOM PÅVERKAR REKOMMENDATIONSBETEENDE

Följande svarsskala gäller för alla frågor i avsnittet Faktorer som påverkar vaccinationsbeteende:

- a) Starkt av annan åsikt
- b) Något av annan åsikt
- c) Osäker
- d) Något av samma åsikt
- e) Starkt av samma åsikt

Härnäst är vi intresserade av dina åsikter om vaccination.

Vänligen ange om du är av samma eller annan åsikt gällande följande påståenden.

### Förtroende för vacciner

#### *Uppfattning av risken med vacciner*

1. Vacciner mot mässling är trygga att ta.
2. Vacciner mot influensa är trygga att ta.
3. Vacciner mot hepatit B är trygga att ta.
4. Vacciner mot humant papillomvirus är trygga att ta.
5. Vacciner mot covid-19 i Finland är trygga att ta.

#### *Likgiltighet*

6. Nu för tiden är vissa vacciner som rekommenderas av THL onödiga, eftersom de sjukdomar som de förebygger inte är allvarliga.
7. Barn vaccineras mot alltför många sjukdomar.
8. Barn vaccineras vid för låg ålder.

#### *Bedömning av balansen mellan fördel och risk*

Följande påståenden avser balansen mellan fördelar och risker inom målgruppen för varje vaccin (t.ex. vaccin mot mässling för spädbarn).

9. Fördelarna med vaccinet mot mässling väger mer än dess eventuella risker.
10. Fördelarna med vaccinet mot influensa väger mer än dess eventuella risker.
11. Fördelarna med vaccinet mot hepatit B väger mer än dess eventuella risker.
12. Fördelarna med vaccinet mot humant papillomvirus väger mer än dess eventuella risker.
13. Fördelarna med de covid-19 vacciner som är tillgängliga i Finland väger mer än deras eventuella risker.

#### *Bedömning av vikten av kollektivt ansvar*

14. Jag rekommenderar vaccinerna i det nationella vaccinationsprogrammet till mina patienter eftersom det är mycket viktigt att bidra till att beskydda befolkningen (flockimmunitet).
15. Jag rekommenderar vaccinerna i det nationella vaccinationsprogrammet till mina patienter som tvekar, och förklarar vikten av flockimmunitet för dem.

#### **Förtroende för myndigheter**

16. Jag litar på THL:s information om riskerna och fördelarna med vacciner.
17. Jag litar på THL:s förmåga att fastställa vaccinationsstrategin.
18. Jag litar på att THL och Fimea ser till att de vacciner som ges i Finland är trygga att ta.

#### **Proaktiv effektivitet**

##### *Engagemang för vaccination*

19. Jag engagerar mig för att se till att mina patienter vaccineras.
20. Jag engagerar mig för att hålla mina kunskaper om vaccinationer uppdaterade (genom fortbildning, konferenser, läsning).
21. Jag engagerar mig för att utveckla den kompetens som krävs för att kommunicera bättre med mina patienter om vaccinering.

##### *Tilltro till den egna förmågan*

22. Jag känner mig bekväm med att ge mina patienter råd om riskerna och fördelarna med vacciner.
23. Jag känner mig bekväm med att diskutera vacciner med patienter som är mycket tveksamma till vaccinering.
24. Jag känner att jag har tillräcklig utbildning och information för att diskutera vacciner med alla patienter.
25. Jag känner att jag har tillräcklig utbildning om hur man tar upp frågan om vacciner med patienter som tvekar.

#### **Öppenhet mot patienter**

26. Patienter som är tveksamma när det gäller fördelarna och riskerna med vacciner har berättigade frågor.
27. Jag informerar mina patienter om fördelarna och riskerna med vacciner utan att försöka påverka dem.
28. Jag är öppen för att föräldrar skjuter upp immuniseringen av sina barn.

#### **Uppfattade begränsningar**

29. Kostnaden för vissa vacciner är ett problem för en del patienter och det kan avhålla mig från att ordnera dem.
30. Bristande tillgång till vissa vacciner i Finland är ibland ett problem som kan avhålla mig från att ordnera dem till mina patienter.
31. Bristande tillgång till vissa vacciner på min arbetsplats är ibland ett problem som kan avhålla mig från att ordnera dem till mina patienter.

#### **Motvilligt förtroende**

32. Ibland rekommenderar jag vaccinerna i det nationella vaccinationsprogrammet även om jag känner att jag inte har tillräcklig information.
33. Ibland rekommenderar jag vaccinerna i det nationella vaccinationsprogrammet även om jag känner att vaccinationspolicyen inte är tillräckligt tydlig.
34. Ibland rekommenderar jag vaccinerna i det nationella vaccinationsprogrammet även i de fall där jag tvivlar på om de är trygga att ta.

#### **Yrkesnormer**

35. Jag tror att de flesta läkare i Finland rekommenderar att männskor vaccinerar sig.
36. Jag tror att de flesta läkare i Finland är positivt inställda till vaccination.