Supplemental material 1 – “Vaccination” telephone questionnaire of GPs in private practice

I- General opinions in vaccination

I-1. Concerning vaccination in general in your daily practice, are you? (not at all favourable; somewhat unfavourable; somewhat favourable; very favourable)

I-2. How many half-days or evenings of continuing medical education have you done in the past 12 months on the topic of infectious diseases and/or vaccination?

I-3. Do you feel the need for training in vaccination? (yes; no)

I-4. Do you trust the following sources to give you reliable information on the benefits and risks of vaccines? (do not trust at all; distrust somewhat; trust somewhat; trust completely)
   - The Health Ministry,
   - Health agencies (for example, national institute for disease prevention and health education, national drug agency…),
   - The pharmaceutical industry,
   - The media (TV, press, radio),
   - Scientific sources (learned societies, scientific journals),
   - Your specialist colleagues (for example, in a hospital or vaccination centre).

I-5-A. Do you consult the INPES vaccination guide? (never; sometimes; often; very often)

I-5-B. Do you visit free medical websites specialised in vaccination, such as infovac or mesvaccins.net? (never; sometimes; often; very often)

I-6. Have you ever visited websites giving unfavourable opinions on vaccination or certain
I-7. Do you agree with the following statements about these negative sites? These sites:
(strongly disagree; disagree; agree; strongly agree)
- Provide useful information,
- Question the very principle of vaccination,
- Help to understand the reticence of some patients.

II- Vaccination habits for physicians, their families and their patients

II-1. Personally, were you vaccinated against the seasonal flu vaccine for winter 2013-14?
(yes; no; don’t remember)

II-2. When was your last diptheria-tetanus-pertussis (DTP) booster? (less than 10 years ago; 10-20 years ago; over 20 years ago; don’t remember)

II-3. Are you vaccinated against Hepatitis B? (yes, 3 or more doses; yes, fewer than 3 doses; no, don’t remember; not concerned)

II-4-A. You have a child aged between 2 and 25: did you have him or her vaccinated against:
(yes; no)
- Hepatitis B,
- Meningococcal meningitis C,
- Measles-mumps-rubella (MMR).

II-4-B. You have children aged between 2 and 25: did you have them vaccinated against:
(yes, all; yes, some; no, none)
- Hepatitis B,
- Meningococcal meningitis C,
- Measles-mumps-rubella (MMR).

II-5-A. You have one daughter aged between 11 and 25: did you have her vaccinated against Human papillomavirus (HPV)? (yes; no but you are intending to; no, because the indications didn’t seem to apply to her; no, you do not intend to for a different reason)

II-5-B. You have daughters aged between 11 and 25: did you have them vaccinated against HPV? (yes, all of them; yes, some of them; no, but you are intending to; no, because the indications didn’t seem to apply to them; no, you do not intend to for a different reason)

II-6. Do you recommend the following vaccines? (never; sometimes; often; always)
- Measles, mumps and rubella (MMR) for non-immunized adolescents or young adults,
- Meningococcal meningitis C catch-up vaccine for ages 2 – 24,
- Meningococcal meningitis C for infants aged 12 months,
- HPV for girls aged 11-14,
- Hepatitis B catch-up vaccine for adolescents,
- Seasonal flu vaccine for adults with diabetes younger than 65.

II-7. Do you give parents a list of the diseases covered by the hexavalent vaccine? (never; sometimes; often; always)

II-8. In the last five years, have you experienced the following situations? (yes; no)
- Measles in adolescents or young adults
- Recently discovered chronic Hepatitis B
- Hospitalisation for complications of seasonal flu
- Bacterial meningitis
- Cervical cancer

II-9. You have seen at least one case of measles: was it reported to the health authorities?
(yes, by you; yes, by someone else; no)

III- Clinical vignette

**Version 1:** A mother comes to your surgery with her 4 month-old child for a hexavalent vaccine booster (note to interviewer: DTPa, Polio, Hepatitis B, Haemophilus B); the child has had a temperature of 38°C for two days with common, uncomplicated rhino-pharyngitis; the rest of the examination is normal and the mother tells you that the child’s behaviour is the same as usual.

Question: the mother has brought the vaccine; you recommend:

- giving the vaccination on that day;
- postponing the vaccination until the temperature is normal.

**Version 2:** A mother comes to your surgery with her 4 month-old child for a hexavalent vaccine booster (note to interviewer: DTPa, Polio, Hepatitis B, Haemophilus B); the child has had a temperature of 38°C for two days with common, uncomplicated rhino-pharyngitis; the rest of the examination is normal and the mother tells you that the child’s behaviour is the same as usual; the mother is worried about whether her feverish child will tolerate the vaccine.

Question: the mother has brought the vaccine; you recommend:

- giving the vaccination on that day;
- postponing the vaccination until the temperature is normal.

**Version 3:** A mother comes to your surgery with her 4 month-old child for a hexavalent vaccine booster (note to interviewer: DTPa, Polio, Hepatitis B, Haemophilus B); the child has had a temperature of 39°C for two days with common, uncomplicated rhino-pharyngitis; the rest of the examination is normal and the mother tells you that the child’s behaviour is the same as usual.
Question: the mother has brought the vaccine; you recommend:

- giving the vaccination on that day;
- postponing the vaccination until the temperature is normal.

**Version 4:** A mother comes to your surgery with her 4 month-old child for a hexavalent vaccine booster (note to interviewer: DTPa, Polio, Hepatitis B, Haemophilus B); the child has had a temperature of 39°C for two days with common, uncomplicated rhino-pharyngitis; the rest of the examination is normal and the mother tells you that the child’s behaviour is the same as usual; the mother is worried about whether her feverish child will tolerate the vaccine.

Question: the mother has brought the vaccine; you recommend:

- giving the vaccination on that day;
- postponing the vaccination until the temperature is normal.

**Version 5:** A mother comes to your surgery with her 11 month-old child for a hexavalent vaccine booster (note to interviewer: DTPa, Polio, Hepatitis B, Haemophilus B); the child has had a temperature of 38°C for two days with common, uncomplicated rhino-pharyngitis; the rest of the examination is normal and the mother tells you that the child’s behaviour is the same as usual.

Question: the mother has brought the vaccine; you recommend:

- giving the vaccination on that day;
- postponing the vaccination until the temperature is normal.

**Version 6:** A mother comes to your surgery with her 11 month-old child for a hexavalent vaccine booster (note to interviewer: DTPa, Polio, Hepatitis B, Haemophilus B); the child has had a temperature of 38°C for two days with common, uncomplicated rhino-pharyngitis; the rest of the examination is normal and the mother tells you that the child’s behaviour is the
same as usual; the mother is worried about whether her feverish child will tolerate the vaccine.

Question: the mother has brought the vaccine; you recommend:

- giving the vaccination on that day;
- postponing the vaccination until the temperature is normal.

Version 7: A mother comes to your surgery with her 11 month-old child for a hexavalent vaccine booster (note to interviewer: DTPa, Polio, Hepatitis B, Haemophilus B); the child has had a temperature of 39°C for two days with common, uncomplicated rhino-pharyngitis; the rest of the examination is normal and the mother tells you that the child’s behaviour is the same as usual.

Question: the mother has brought the vaccine; you recommend:

- giving the vaccination on that day;
- postponing the vaccination until the temperature is normal.

Version 8: A mother comes to your surgery with her 11 month-old child for a hexavalent vaccine booster (note to interviewer: DTPa, Polio, Hepatitis B, Haemophilus B); the child has had a temperature of 39°C for two days with common, uncomplicated rhino-pharyngitis; the rest of the examination is normal and the mother tells you that the child’s behaviour is the same as usual; the mother is worried about whether her feverish child will tolerate the vaccine.

Question: the mother has brought the vaccine; you recommend:

- giving the vaccination on that day;
- postponing the vaccination until the temperature is normal.

IV- Opinions on vaccination and certain vaccines

IV-1. Do you believe that your role in vaccinating your patients is to encourage them to have
a vaccination even if they are reticent? \textit{(strongly disagree; disagree; agree; strongly agree)}

\textbf{IV-2.} Do you feel that you easily obtain your patients’ adhesion to vaccination in the following situations? \textit{(not at all easily, not easily, somewhat easily, yes, very easily)}

- Against seasonal flu in people with diabetes younger than 65,
- Against meningococcal meningitis C in adolescents and young adults,
- Against human papillomaviruses in girls aged 11-14,
- Against hepatitis B in previously unvaccinated adolescents,
- Against MMR in adolescents or young adults.

\textbf{IV-3.} Do you agree with the following statements on vaccination? \textit{(strongly disagree, disagree, agree, strongly agree)}

- The health authorities are influenced by the pharmaceutical industry,
- Patients should mistrust what they find on internet,
- You trust your own judgement rather than the official recommendations.

\textbf{IV-4.} Do you think the following vaccines are likely to cause these diseases? \textit{(not at all likely, not very likely, fairly likely, very likely, no opinion)}

- Vaccine against seasonal flu to cause Guillain-Barré syndrome,
- Vaccine against hepatitis B to cause multiple sclerosis,
- Vaccines containing aluminium to cause Alzheimer’s disease,
- Pandemrix vaccine against H1N1 pandemic flu to cause narcolepsy,
- Papillomavirus to cause multiple sclerosis.

\textbf{IV-5.} Do your patients ask you about the risks of adjuvants in vaccines? \textit{(never, sometimes, often, always)}
IV-6. Do you think that adjuvants in vaccines is linked to long-term complications? (no; unlikely; likely; yes)

IV-7. In your opinion, aluminium is present: (yes; no; no opinion)
   - In most of the vaccines used in France,
   - In the vaccine against seasonal flu.

IV-8-A. Have you ever been confronted with a SERIOUS health issue, i.e. one which led to a hospitalisation, disability, etc., potentially linked to a vaccination in one of your patients? (yes; no)

IV-8-B. Did you notify the health authorities? (yes; no)

V- Opinions on what prevents vaccination

V-1. Do you agree with the following statements? (strongly disagree, disagree, agree, strongly agree)
   - In general, your patients overestimate the risks related to some vaccines,
   - In general, your patients underestimate the INDIVIDUAL benefits of vaccination,
   - In general, your patients underestimate the COLLECTIVE benefits of vaccination,
   - Today, certain vaccines recommended by the authorities are pointless,
   - The media publish too many negative messages about vaccination,
   - Children are vaccinated against too many diseases.

V-2. Do you think that the vaccines in the vaccination schedule should be compulsory? (Yes, all; yes, only some; no, none)

V-3. Do you agree with each of the following proposals concerning the vaccine against human papillomavirus infections in girls aged 11-14? (strongly disagree, disagree, agree,
Your patients:

- Fear complications from this vaccine: strongly disagree, disagree, agree, strongly agree
- Are unaware of the diseases caused by papillomavirus
- Doubt the efficacy of the vaccination
- Do not see the advantages of the vaccination as monitoring by smear test must be continued (note to interviewer: cervical and vaginal smear test)
- Fear that the vaccine encourages unprotected sex

V-4. Still on the vaccine against papillomavirus in girls aged 11-14: Do you agree with the following statements? (strongly disagree, disagree, agree, strongly agree)

- The presence of a parent complicates the consultation,
- You hesitate to discuss sexuality with young female patients,
- You have doubts about the efficacy of the vaccine,
- Not enough is known about the risks of the vaccine.

V-5. Do you think the recommendation to vaccinate adolescents and young adults against meningococcal meningitis C is quite clear? (yes; no)

V-6. Still on this vaccination: Do you agree with the following statements? (strongly disagree, disagree, agree, strongly agree)

Your patients

- Fear unpleasant side effects from the vaccine,
- Underestimate the risk of contracting meningitis,
- Are not aware of the gravity of bacterial meningitis,
- Express doubts as to the efficacy of the vaccine,
- Have never heard of this vaccination.
V-7. In general, do you feel comfortable giving explanations to your patients about: (not at all comfortable, somewhat uncomfortable, somewhat comfortable, very comfortable)
- The value of vaccines,
- The safety of vaccines,
- The role of adjuvants.

V-8. Do you agree with compulsory vaccination for doctors against seasonal flu? (yes; no)

VI- Opinions on various actions concerning vaccination

VI-1. Have you consulted the new vaccination schedule published in 2013? (yes; no)

VI-2. Does it make your work easier? (yes; no)

VI-3. Do you think the following would be useful in your practice? (yes; no)
- An electronic vaccination record in your professional software,
- An automatic text message to remind patients of their dates of vaccination,
- A special procedure payment for a consultation about vaccination,
- A free hotline for doctors about vaccines,
- A free electronic letter intended for GPs providing updates on vaccination,
- Vaccines kept in your surgery,
- Leaflets for GPs on the benefits and risks of each vaccine,
- Information leaflets for patients on the benefits and risks of vaccination,
- Public awareness campaigns on vaccines.

VI-4. If there was a law allowing for a nurse to work in your surgery, paid by the national health insurance fund, would you agree to delegate to him or her the task of: (yes; no)
- Monitoring vaccinations for your patients,
- Noting down these vaccinations in medical records,
- Administering vaccinations,
- Prescribing vaccines.