

Healthcare Professionals: Key advocates for vaccination



**Coalition for
Life-course
Immunisation**

Dr Daphne Holt

Ms Gertraud Daye

Professor Vytautas Usonis

Professor Catherine Weil-Olivier

Mr Gary Finnegan

Ms Sandra Evans

The Coalition for Life-course Immunisation acknowledges receipt of an unconditional educational grant from Sanofi Pasteur to support the writing of this paper. Sandra Evans was commissioned by CLCI to write the paper; no other author received any honorarium from CLCI for their contribution. Dr Daphne Holt, Ms Gertraud Daye, Professor Vytautas Usonis, Professor Catherine Weil-Olivier and Gary Finnegan have no writing support from any source for this paper, or conflict of interest to report. We also thank Greet Hendrickx and Sara Valckx (University of Antwerp, Centre for Evaluation of Vaccination led by Prof Dr Pierre Van Damme) and Jan De Belie (PGEU) for their input.



Contents

HCPs as vaccination advocates today.....	3
Barriers to HCP LCI advocacy.....	4
1. The broad spectrum of vaccination value is not fully understood.....	4
2. Poor information resource hinders HCP-led discussion on vaccination value.....	4
3. Access challenges contribute to HCP hesitancy to recommend vaccination.....	5
Promising ways forward.....	5
1. Expand vaccinology education in HCP training.....	5
2. Investigate appropriateness of national policy to homogenise vaccination coverage.....	6
3. Embrace digital technologies.....	7
4. Authorise pharmacists to vaccinate to remove access barriers.....	8
5. Support HCPs to bring vaccination conversations into each health visit.....	8
Case study Motivational Interviewing.....	9
Call to Action.....	10



HCPs as vaccination advocates today

Healthcare professionals (HCPs) are key advocates for vaccination across all ages¹ because of the trust the public places in them. Almost 80% of Europeans would consult a medical professional for information about vaccines, and 65% consider them the most trustworthy source of information.² Given this evident level of trust, there is a risk that hesitant or anti-vaccine HCPs could spread concerns about vaccines. However, HCP life-course immunisation (LCI) advocacy, through regular, community-level conversations and recommendations, has the potential to increase public confidence in vaccines and, ultimately, increase vaccination uptake.²

HCPs often have positive attitudes to vaccination across the life-course and recognise vaccination as a pillar of public health. GPs are overall very confident in recommending vaccines in Europe, with Romania, Spain and UK GPs showing particularly high confidence in vaccines: 85% of GPs agreeing with the safety, confidence and efficacy of vaccines.³ LCI is also largely supported in Europe with a survey of HCPs indicating that nearly 90% of respondents thought LCI was a priority and all agreeing that it needs to be positioned as part of a healthy lifestyle together with diet, physical exercise and smoking cessation.⁴

However, HCPs currently do not have all the tools they need to fully realise their role as vaccination advocates. Uncertainty surrounding current immunization guidelines, cost of vaccines, recurring vaccine stock shortages and misinformation about vaccines are barriers for HCPs becoming effective advocates of LCI.⁴ A study in France showed that 16-43% of GPs did not recommend, or only sometimes recommended, certain vaccines.⁵ A 2016 study in Barcelona found 25% of surveyed HCPs reported doubt for at least one vaccination on the recommended childhood vaccination schedule, with the most doubt surrounding the HPV vaccinations.¹

‘We have seen the devastation of COVID on the elderly, care homes have been significantly burdened and many elderly people have died. Yet, so far, COVID has been mild in children, this challenges traditional ideas that infectious diseases and vaccinations are meant for children. This shift in consciousness could change the life-course immunisation space significantly.’

Professor Catherine Weil-Olivier, Paris VII University

This paper builds on the CLCI 7-step strategy to LCI in Europe:

- 1. Develop strong leadership**
2. Make vaccination a societal good
- 3. Mobilise health workers**
4. Innovative access
5. Data-driven decisions
6. A broad coalition
7. Budget for prevention

This paper calls for the mobilisation of HCPs to engage in LCI policy and practice, and to become strong advocates for adult vaccination. We must learn from HCPs the barriers, drivers and interventions that are involved in making HCPs louder advocates for vaccination to inform effective and sustainable LCI policy.



Barriers to HCP LCI advocacy

1. The broad spectrum of vaccination value is not fully understood

HCPs need time to deliver vaccination and engage in vaccination discussions, without feeling like they are sacrificing their other responsibilities. A recent focus group of 75 HCPs from different countries reported frustration around the increasing number of vaccinations available and increasing difficulty in convincing people of the value of vaccination. The time restrictions HCPs face across many countries means that vaccination delivery can be seen as a frustrating burden which takes time away from their other patients and priorities.⁶

‘HCP attitude can be very vaccine-specific, many HCPs do not have sufficient information on the full range of vaccination benefits.’

Jan De Belie, Pharmaceutical Group of the European Union (PGEU)

HCPs must fully understand the impact of vaccination and have access to appropriate data to effectively advocate for LCI. Flu vaccines can be undervalued because the impact on secondary bacterial infections, such as bacterial pneumonia,⁷ is not fully understood. There is a large body of evidence detailing the full range of vaccination benefits, however, there is no promotion or central resource, so a busy HCP is not aware of these benefits.⁸ In the absence of readily available information, HCPs may also be swayed by the emotive claims and stories from their community,⁸ propagating hesitancy.

2. Poor information resource hinders HCP-led discussion on vaccination value

HCPs must feel fully equipped to initiate and manage vaccination discussions. HCPs may not feel confident recommending certain vaccines when they have insufficient knowledge to answer questions or challenges, and they can feel daunted by the prospect of swaying opinion from negative to positive. One expert interview highlighted that HCPs may feel confident starting conversations and countering arguments for common topics, like flu vaccination, but not for other, less common, vaccinations.⁸

‘As a practicing community pharmacist, I feel I have to independently research a lot around less commonly discussed or requested vaccinations to fully support my patients and my own family. There is often no central source of information available at point of care, so HCPs can feel apprehensive in initiating vaccination conversations and countering challenges.’

Jan De Belie, PGEU

HCPs need training on how to communicate around vaccination, particularly with hesitant or anti-vaccine customers. A 2020 survey of HCPs found almost 25% needed additional support to initiate and manage LCI discussions and recommendations.⁴ HCPs need to have the appropriate information and training to effectively and efficiently address vaccination hesitancy within the framework of their standard consultations.⁸



3. Access challenges contribute to HCP hesitancy to recommend vaccination

Access, convenience, and price affect HCPs' enthusiasm to recommend vaccination, even in those who are positive about vaccination. In some European countries, vaccination referral and reimbursement pathways can be convoluted and expensive for those seeking vaccination. HCPs who are aware of this, may not want to recommend this arduous route and diminish the positive relationship they have with the individual.⁸ This can lead to few and infrequent catch-up vaccination opportunities for vulnerable groups like migrants, travellers, and those with access requirements.

There are several vulnerable yet under-immunised groups in Europe who are involved in vaccine preventable disease outbreaks. Migrants are under-immunised, often due to suboptimal healthcare systems in countries they come from, as well as barriers to catch-up vaccination and health services on arrival in Europe.^{20 9} Similarly, the living conditions of prisoners make them vulnerable to disease outbreaks, yet data collection on vaccination is poor and, where data is available, shows poor coverage.⁹ It is important that vulnerable groups can access appropriate vaccination services to protect their health and reduce transmission to local populations.

Promising ways forward

1. Expand vaccinology education in HCP training

HCPs don't always receive sufficient vaccinology and immunology training, the subsequent knowledge gaps among HCPs affects confidence in responding to questions or challenges.

Currently, HCP training on vaccination can be ad-hoc and variable depending on the expertise of the training institute. Technology can help trainee and practising HCPs learn vaccinology and other important modules in between their busy schedule. Dr Barbara Pahud, UMKC School of Medicine and Children's Mercy Hospital, Kansas City, has developed vaccinology modules that can be completed digitally, allowing HCPs to break up their learning into more manageable blocks.¹⁰

Working within the framework of work-package 4 of the EU Joint Action on Vaccination, the University of Antwerp is investigating HCP training, confidence-levels in vaccination and communication and HCP needs, across European countries. The team has developed the [Vaccine Training Barometer](#), a web-based survey asking HCPs questions about vaccination knowledge and confidence as well as their training needs. This was piloted in Flanders and Spain in 2020 and is soon to be introduced in Finland. Because of the repeated nature of the survey, changes in HCP training needs over time are monitored. The team will use the survey data to develop support material in line with challenges identified. The team is conducting a parallel survey within (para)-medical students to investigate confidence in communicating about vaccines and the time dedicated to vaccines and vaccination in their curriculum.¹¹



2. Investigate appropriateness of national policy to homogenise vaccination coverage

‘Vaccination is an effective tool, but then it is a question for the community and society to use that tool. We should talk to families and communities and ask them what is wrong, find out what they need or want to know to improve usage of this very effective tool.’

Professor Vytautas Usonis, Vilnius University

The impact and acceptableness of national vaccination mandates is a controversial debate. The European Commission follows the findings from the EU-funded ASSET project on vaccination mandates, which indicates that there is no clear link between vaccine uptake and mandatory vaccination.¹² Expert commentary indicates that national mandates are not long-term solutions to poor vaccination coverage. Better healthcare organisation and communication is a more effective way to improve informed vaccination coverage.^{13 14 15 16}

Mandates may be useful in increasing vaccination coverage, however if not well implemented they can divide public opinion and build distrust. Vaccination mandates in France have increased infant Meningococcal C vaccination coverage for the first dose by almost 40%. This increase was related to a drop in the number of meningitis C cases, from a yearly average of 17 between 2012-2016 to 4 in 2018. Italy also reported a 7% increase in measles vaccination in infants since the national mandate.¹⁷ Mandatory vaccination policy may have a role in increasing coverage rates. However, consensus and thoughtful implementation are essential. Without this, mandates can lead to serious backlash against vaccines in general.¹⁸

Mandatory vaccination is a divided topic, however it highlights the importance of developing policy which looks beyond protection for the individual and seeks to protect the community.

Daphne Holt, CLCI

National and regional structures can hinder clear and consistent vaccination recommendations which are needed to align HCP practice and build community confidence. Some vaccination policies are closely aligned across Europe, such as hepatitis B and seasonal influenza. However, national structures can add complexities to recommendations, for example, Greece and Switzerland national policies are supplemented by recommendations made by local infection control committees or recommendations from professional societies.¹⁹ Variable and conflicting vaccination recommendation guidelines may be unclear for HCPs and lead to geographical differences in recommendation behaviours.



3. Embrace digital technologies

‘Healthcare professionals could strongly benefit from an information resource at the point-of-care, so that if a patient comes with a certain question, and you are not sure, you can refer to that information source quickly. This is possible in many countries because prescribing/dispensing software programs are often linked to a scientific database, where with 1 or 2 clicks you can find reliable information. An instant barrier emerges when a patient asks an HCP for vaccination-related information and they can’t produce it, patients expect their HCPs to know the information they need.’

Jan de Belie, PGEU

Whilst electronic resources to facilitate vaccination conversations exist, they are inconsistently implemented into daily practice. The [European Vaccination Information Portal](#) provides comprehensive information on vaccine-preventable diseases, vaccinations and national vaccination schedules in Europe. Other similar information resources are available nationally, such as [Infovac](#). However, experts indicate that this is not translated into daily practice, and HCPs are often asked a question about vaccination to which they do not know the answer and are unable to source the information immediately.^{8 11}

Electronic vaccination records help HCPs manage their community’s vaccination status when consistently and effectively implemented. Data on vaccination coverage for high-risk groups such as prisoners and migrants are often incomplete and highly variable. Certain high-risk groups, in particular, very old adults or highly mobile populations, may have trouble remembering what vaccinations they have had and when. Digital vaccination records are needed so vaccination coverage can be monitored and recorded easily in all populations.²⁰

Social media platforms can be used to engage with hesitant adults and promote vaccination. Influencers on Instagram could address adult immunisation and encourage younger generations to talk to their grandparents.²¹ [#TeamHalo](#) on Twitter and Tik Tok are sharing engaging content on HCPs and scientists globally working on the COVID-19 vaccination, they invite questions from the public and share cutting-edge research. The WHO established [The Vaccine Safety Net](#) which is a collection of website and resources providing reliable information on vaccine safety to counter vaccine misinformation and distrust.



4. Train all HCPs in vaccinology and vaccination delivery to remove access barriers

All HCPs can be advocates for LCI as they are well-placed to deliver vaccination to vulnerable groups and are key in removing access barriers. Nurses, midwives, pharmacists, and other HCPs are well placed to advocate for and deliver vaccination in the community. Pharmacist-delivered vaccination has grown in the past decade with the UK, Ireland, France, Portugal, and other European countries mobilising their pharmacist workforce to deliver vaccinations.²²

In 2011, Ireland, pharmacists started delivering and promoting influenza vaccination. This vast increase in influenza vaccination coverage from 19,000 customers vaccinated in the 2012-13 season to 185,000 vaccinations in 2019-20 season, representing a 817% increase.²³²¹ A 2016 survey showed 85% of vaccine recipients had not previously been vaccinated and many were in high-risk groups, customer satisfaction was high and 97% of respondents said they would also attend a pharmacy for other vaccinations.²⁴

5. Support HCPs to bring vaccination conversations into each health visit

HCPs should reinforce the value of vaccination in each interaction with the public, so every individual knows HCPs think it is important to get vaccinated. As noted in CLCI position paper 2: *Vaccine hesitancy: Deconstructing the challenge and finding solutions*, an intervention to improve maternal influenza vaccination in Lithuania introduced an influenza vaccination tick box on routine pregnancy health checks. This led to a 9% increase in vaccination between 2013-14 and 2015-16.²⁵

‘I stress that it should be routine - in all European countries - to include a check-list regarding immunization status in all regular medical check-ups for adults. I know from my own experience that this question is not part of the list of data automatically checked within the framework of medical check-ups for adults in Austria.’

Gertraud Daye, NGO Committee on Ageing, Austria

We must use evidence-based methods of communication to help HCPs approach vaccination conversations at every opportunity. There is emerging evidence around effective vaccination communication methods which HCPs need to be trained on and introduce into their daily practice. For example, a recent paper suggests that recommendations are more effective when they are introduced as a directive rather than an open question e.g. “It’s time for Arthur’s MMR jab” is better than “Have you thought about the MMR vaccination?”²⁶

Motivational interviewing is a communication technique which has demonstrated significant impact in changing perceptions around vaccination. The following section dives deeply into this intervention to understand the success factors and identify relevant learning areas.



Increase acceptance of vaccination recommendation through motivational interviewing²⁷

Context

Trying to convince vaccine-hesitant parents/caregivers to vaccinate their infants by simply providing the facts about vaccinations may backfire and make them even more hesitant. While parents/caregivers want more information, traditional educational methods fail to meet their needs.

Goal

Motivational interviewing informs parents/caregivers about vaccinations, according to their specific needs and their individual level of knowledge, with respectful acceptance of their beliefs. It promotes a respectful and empathetic discussion of vaccination to build a strong relationship. Change is then elicited and strengthened by the person's motivation to change their behaviour based on their own arguments for change.

Components

1. Cultivate a culture of partnership and compassion
2. Processes to foster engagement in the relationship and focus the discussion on the target of change
3. Skills that enable HCPs to understand and address the parent/caregiver's real concerns.

Impact

PromoVac strategy, an educational intervention based on the motivational interviewing approach, has been implemented as a new practice of care in maternity wards across the province of Quebec through the Entretien Motivationnel en Maternité pour l'Immunisation des Enfants (EMMIE) program.

A multicentre randomized controlled trial found a 40% reduction in vaccine hesitancy and 12% increase in vaccine intention following an individual motivational interview (MI) based intervention on infant immunisation during a post-partum stay at a maternity ward.

Factors for success

Build trust and confidence in order to make a change through:

- Open-ended questions
- Reflective listening
- Affirming and reiterating statements back to the interviewee.



Call to Action



With these following focused actions we can help HCPs grow as vaccination advocates.

Increase awareness and knowledge

- Train HCPs on vaccinology using online training modules to help HCPs learn during their busy schedule
- Train HCPs on motivational interviewing and other communication methods to initiate vaccination conversations
- Promote the available education tools/platforms HCPs can use to advocate for vaccinations

Increase HCP vaccination coverage

- Investigate appropriateness of national-level guidance or law to increase HCP coverage
- Report on HCP vaccination coverage

Facilitate vaccination conversations at the point of care

- Introduce information resources e.g. [European Vaccination Information Portal](#) at point of care
- Translate and digest complex evidence and data so HCPs can easily absorb new information
- Improve electronic vaccination record reporting and sharing
- Include a question about the immunization status in routine medical check-ups

Remove access barriers

- Train community pharmacists in vaccinology and vaccine delivery
- Align referral and care pathways to move away from the negative, burdensome journey many individuals experience when accessing vaccination.

We call on all HCPs to become persuasive, better-heard vaccination advocates for their family, patients, and community.

‘Being so much involved with the evidence and facts behind life-course vaccination – I am very positive about this and my personal vaccination schedule. Every time I travel, I check the recommendations. Also, for my family and patients, I advise them to look beyond the recommended vaccination schedule to optimise this. My colleagues in the pharmacy are also positive.’

Jan De Belie, PGEU



-
- ¹ Picchio Camila Andrea, Carrasco Mireia Garcia, Sagué-Vilavella Maria, Rius Cristina. Knowledge, attitudes and beliefs about vaccination in primary healthcare workers involved in the administration of systematic childhood vaccines, Barcelona, 2016/17. *Euro Surveill.* 2019;24(6):pii=1800117. <https://doi.org/10.2807/1560-7917.ES.2019.24.6.1800117>
- ² European Commission. 2019. Special Eurobarometer 488 report. Europeans' attitudes towards vaccination.
- ³ Larson, H., de Figueiredo, A., Karafillakis, E. and Rawal, M. 2018. State of Vaccine Confidence in the EU 2018.
- ⁴ Philip, R.K., Di Pasquale, A. 2020. Health Care Professionals' Perspectives on Life-Course Immunization: A Qualitative Survey from a European Conference. *Vaccines* 8(2): 185
- ⁵ ECDC. 2015. Vaccine hesitancy among healthcare workers and their patients in Europe: A qualitative study
- ⁶ Wiot F, Shirley J, Prugnola A, Di Pasquale A, Philip R. Challenges facing vaccinators in the 21st century: results from a focus group qualitative study. *Hum Vaccin Immunother.* 2019;15(12):2806-2815. doi:10.1080/21645515.2019.1621147
- ⁷ Smith AM, Huber VC. The Unexpected Impact of Vaccines on Secondary Bacterial Infections Following Influenza. *Viral Immunol.* 2018;31(2):159-173. doi:10.1089/vim.2017.0138
- ⁸ Jan De Belie. Pharmaceutical Group of the European Union. 2020 Interview.
- ⁹ Vicente-Alcalde N, Ruescas-Escolano E, Harboe ZB, Tuells J. Vaccination Coverage among Prisoners: A Systematic Review. *Int J Environ Res Public Health.* 2020;17(20):7589. Published 2020 Oct 19. doi:10.3390/ijerph17207589
- ¹⁰ Finnegan, G. 2019. Mobile technology can train doctors to improve vaccine uptake. *Vaccines Today* <https://www.vaccinestoday.eu/stories/mobile-technology-can-train-doctors-to-improve-vaccine-uptake/>
- ¹¹ Greet Hendrickx and Sara Valckx University of Antwerp, Belgium. 3/12/2020. Phone interview with Sandra Evans, SE Health Policy Ltd.
- ¹² Action plan on Science in Society related issues in Epidemics and Total pandemics. <http://www.asset-scienceinsociety.eu/reports/page1.html>
- ¹³ Mandatory Vaccination: Does it work in Europe? 2017. Gary Finnegan <https://www.vaccinestoday.eu/stories/mandatory-vaccination-work-europe/comment-page-1/>
- ¹⁴ Lévy-Bruhl Daniel, Fonteneau Laure, Vaux Sophie, Barret Anne-Sophie, Antona Denise, Bonmarin Isabelle, Che Didier, Quelet Sylvie, Coignard Bruno. Assessment of the impact of the extension of vaccination mandates on vaccine coverage after 1 year, France, 2019. *Euro Surveill.* 2019;24(26):pii=1900301. <https://doi.org/10.2807/1560-7917.ES.2019.24.26.1900301>
- ¹⁵ D'Ancona Fortunato, D'Amario Claudio, Maraglino Francesco, Rezza Giovanni, Iannazzo Stefania. The law on compulsory vaccination in Italy: an update 2 years after the introduction. *Euro Surveill.* 2019;24(26):pii=1900371. <https://doi.org/10.2807/1560-7917.ES.2019.24.26.1900371>
- ¹⁶ Balmis Conference. November 2020. Roundtable Discussion: The current status of immunisation programs in Europe. <https://www.youtube.com/watch?v=NRtDMMj5Ssq&feature=youtu.be>
- ¹⁷ Warren, M. 2019. Vaccination rates rise in Italy and France after law change. <https://www.nature.com/articles/d41586-019-02193-4>
- ¹⁸ Haviari S, Bénét T, Saadatian-Elahi M, André P, Loulergue P, Vanhems P. Vaccination of healthcare workers: A review. *Hum Vaccin Immunother.* 2015;11(11):2522-2537. doi:10.1080/21645515.2015.1082014
- ¹⁹ Edmond MB. Mandatory Flu Vaccine for Healthcare Workers: Not Worthwhile. *Open Forum Infect Dis.* 2019;6(4):ofy214. Published 2019 Apr 17. doi:10.1093/ofid/ofy214
- ²⁰ CLCI. 2020. World Leadership Dialogue: Life-Course Immunisation: Western concept or global goal?
- ²¹ The Pharmaceutical Society of Ireland. 2014. Report on the Evaluation of the Seasonal Influenza Vaccination Service in Pharmacy 2013-2014.
- ²² International Pharmaceutical Federation. 2019. An overview of current pharmacy impact on immunisation: A global report.
- ²³ Logan, P. 2020 Flu vaccination in challenging times. Irish Pharmacy Union. <https://ipu.ie/wp-content/uploads/2020/05/Flu-vaccination-in-challenging-timesMay2020.pdf>
- ²⁴ Irish Pharmacy Union. 2016. Pharmacists: delivering in the community for the community – Priorities for the New Government.
- ²⁵ World Health Organization Europe. 2017. Tailoring immunization programmes for seasonal influenza (TIP FLU): A guide for promoting uptake of maternal influenza vaccination.
- ²⁶ Opel DJ, Bahta L. How you start the conversation matters. *Minn Med.* 2014 May;97(5):50-1. PMID: 24941597.
- ²⁷ Gagneur A. Motivational interviewing: A powerful tool to address vaccine hesitancy. *Canada Communicable Disease Report = Releve des Maladies Transmissibles au Canada.* 2020 Apr;46(4):93-97. DOI: 10.14745/ccdr.v46i04a06.