

Improving Influenza Vaccination Rates: Evaluation of Pharmacy Vaccination Model Project during COVID-19 Pandemic in Germany

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1. Background

- The WHO and the European Council recommend a national influenza vaccination rate of at least 75% for people at high risk, but vaccination rates remain low worldwide and enhanced public health initiatives are necessary to achieve this target.¹
- In Germany, the vaccination coverage for vulnerable groups amounted only to 34.9% in 2019.²
- Pharmacists are already authorized to administer vaccinations in several countries worldwide and such efforts have proven successful in increasing overall vaccination rates while lowering healthcare costs.
- COVID-19 has reinforced the need for pharmacist involvement to improve vaccination accessibility and rates in Germany.
- A prior health economic model calculation demonstrated the potential of the implementation of influenza vaccinations in German pharmacies and found that an increase in the vaccination rate by twelve percentage points to be realistic in the short to medium term.³
- With the entry into force of the Act for Protection Against Measles and for Strengthening Vaccination Prevention on 1 March 2020 and the corresponding legal framework (§ 132j SGB V), model projects for influenza vaccination in pharmacies are enabled in Germany. This is serving as a gateway for pharmacist-administration of other vaccines (e.g. COVID-19).

2. Objectives

- The legal framework stipulates that a scientific evaluation of the pharmacy-led influenza vaccination model projects must take place in order to decide whether this should be included in the standard care setting in Germany.
- The first model project was initiated between the Pharmacists' Association North Rhine e.V. and the health insurance company AOK Rhineland Hamburg in 2020.
- The authors carried out the scientific evaluation to assess influenza vaccination services in German pharmacies during the two seasons (2020/21 & 2021/22) of the model project.
- The objectives of the evaluation are to assess safety aspects, access related aspects, patient satisfaction and experience of influenza vaccination services in the German pharmacy setting.

3. Method

- A standardised patient questionnaire was developed by the Robert-Koch-Institute (RKI) and the Federal Chamber of Pharmacists.
- A digital version of this questionnaire was used to determine whether the potential vaccination candidate belonged to the target group. This also included checking possible contraindications in advance.
- Following counselling, education and vaccination, the pharmacist completed the first part of the digital questionnaire with the patient. The second part was answered solely by the pharmacist.
- All survey results were digitally collected and evaluated using IBM SPSS-Software for the 2020/21 and 2021/22 influenza vaccination seasons.

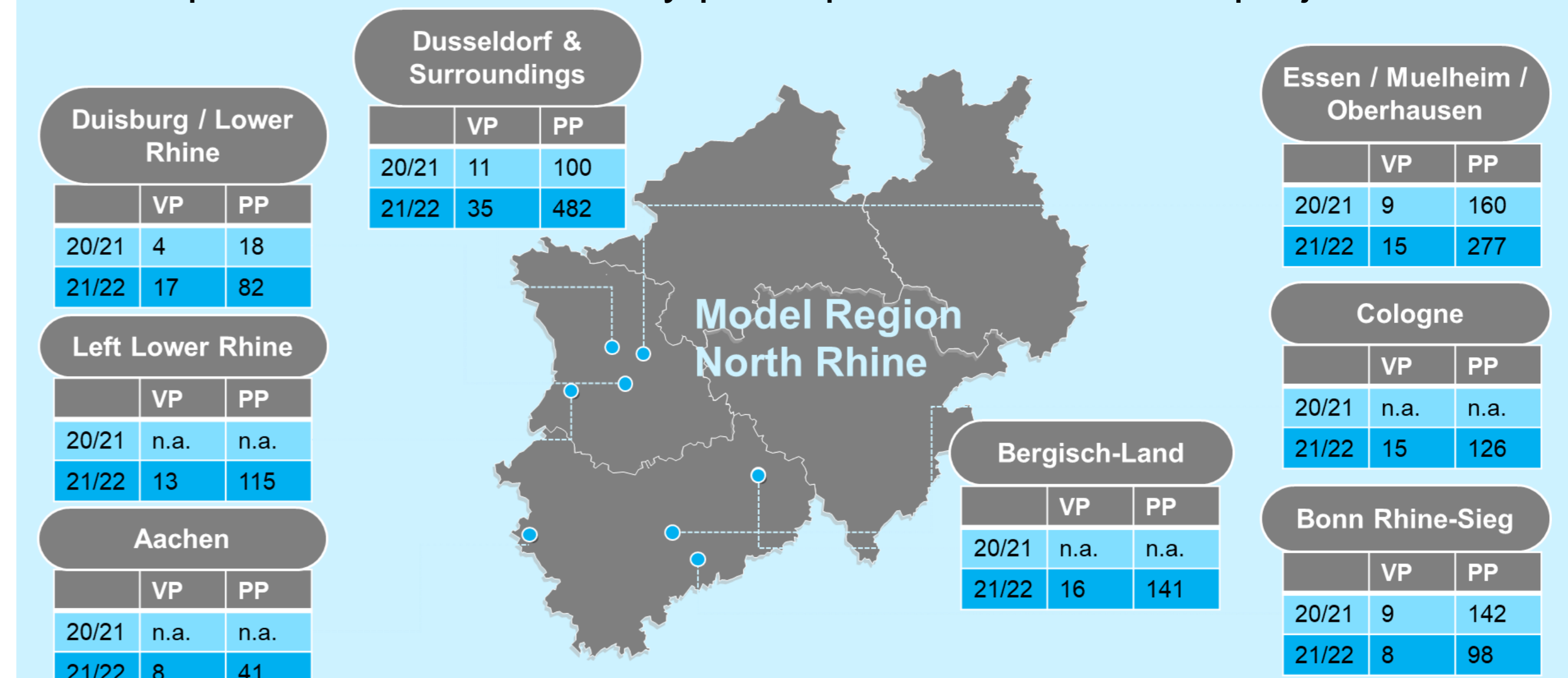
5. Discussion & Conclusion

Our analysis supports prior health economic and health services supply research: Pharmacy-led influenza vaccination is well accepted by pharmacists and patients and consequently has the potential to help increase the vaccination rate.

It should be emphasised in particular that pharmacy vaccinations reach previously unvaccinated people and expand vaccination coverage to people who otherwise would not have been vaccinated in the corresponding season. It was found that this is due to low-threshold access, high level of trust in pharmacists' competence and high levels of safety. These positive results of the evaluation supported the health policy decision in Germany in 2021 to allow pharmacists to vaccinate against COVID-19 and to include the pharmacy vaccination service in the German standard care in January 2022.⁴

4. Results

- A total of 420 patients from 33 pharmacies (2020/21) and 1,371 patients from 127 pharmacies (2021/22) across the North Rhine-Westphalia state in Germany participated in this model project.

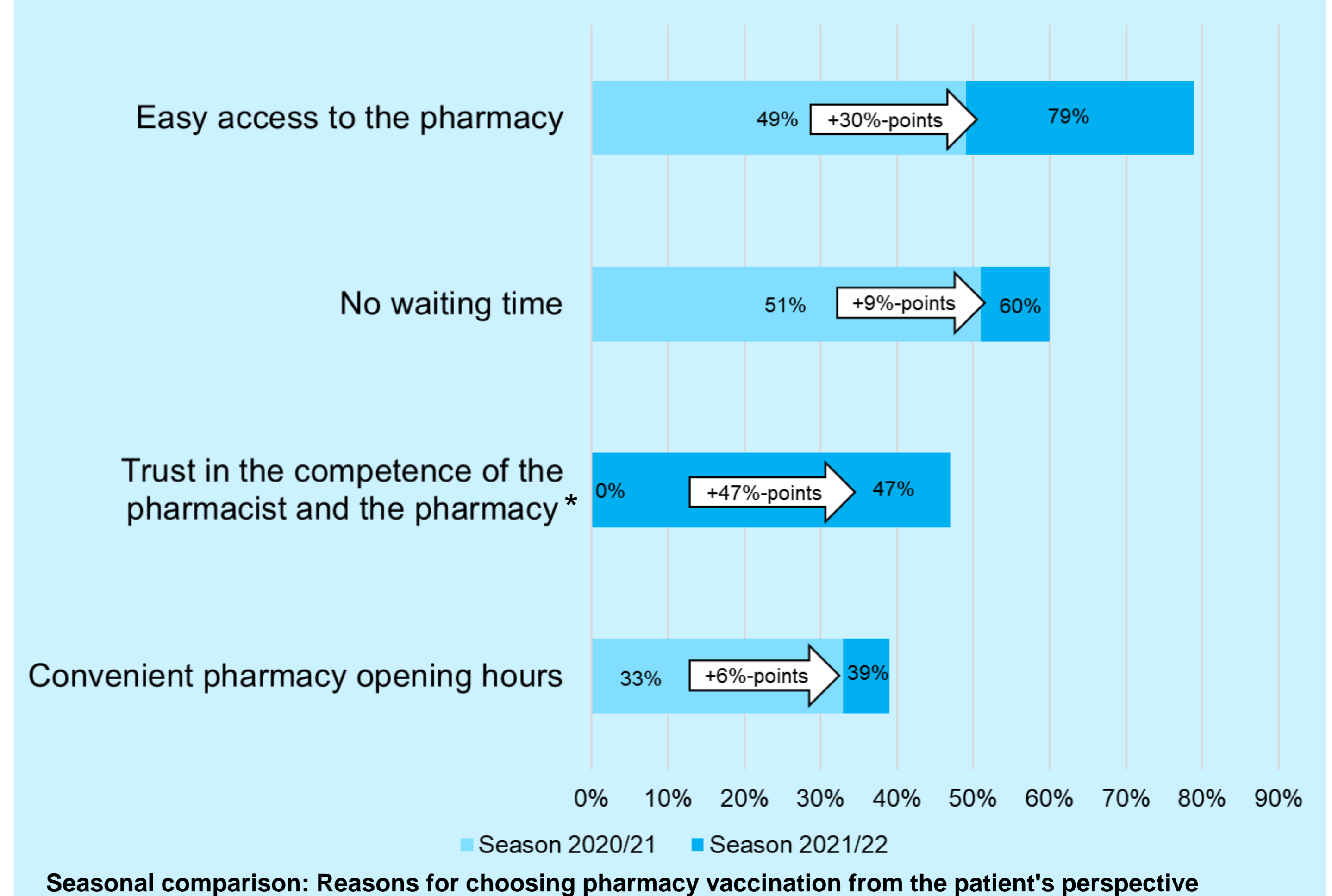


Number of vaccinating pharmacies (VP) and participating patients (PP) in the first pharmacy-led influenza vaccination model project

*Of the total of 420 (2020/21) and 1,371 (2021/22) participating patients, 6 respectively 11 patients were not vaccinated at the pharmacy

** Not all pharmacies registered in the model project actually vaccinated (due to vaccine shortage)

- For 30% (2020/21) and 19% (2021/22) of patients participating in the model project, it was their first influenza vaccination.
- The pharmacy vaccination service convinced 12% (2020/21) and 14% (2021/22) of patients who would not have been vaccinated without the pharmacy service and a further 13% (2020/21) and 16% who were unsure.
- In 2020/21, no adverse reactions or emergency situations occurred. Three mild incidents were recorded and professionally handled without any consequences for patients or pharmacists in 2021/22.
- Patient satisfaction with pharmacy-led vaccinations was exceptionally high (99%, 2020/21; 100%, 2021/22). Almost all patients would get vaccinated again at the pharmacy (98%, 2020/21; 99%, 2021/22).
- The vast majority of patients would get vaccinated against other illnesses (e.g. TBE, pneumococci) (78%, 2020/21; 98%, 2021/22).
- Good accessibility, vaccination without long waiting times and trust in the competence of pharmacists were found to be the key criteria in favor of pharmacists administering influenza vaccinations.



¹ WHO (2018): <https://www.who.int/europe/news-room/fact-sheets/item/influenza-vaccination-coverage-and-effectiveness>

² RKI (2020): https://www.rki.de/DE/Content/Infekt/EpidBull/Archiv/2020/Ausgaben/47_20.pdf?__blob=publicationFile

³ BVDK (2022): <https://www.bvdak.de/wp-content/uploads/2022/07/pub-umsetzungskonzept-grippeimpfung-apotheke-30.01.2020-fin-003.pdf>

⁴ Bundesrat (2021): https://www.bundesrat.de/SharedDocs/drucksachen/2021/0801-0900/830-21.pdf?__blob=publicationFile&v=1