MVF congress ‚Vaccination status 2023 - Vaccinating in times of pandemic and endemic'

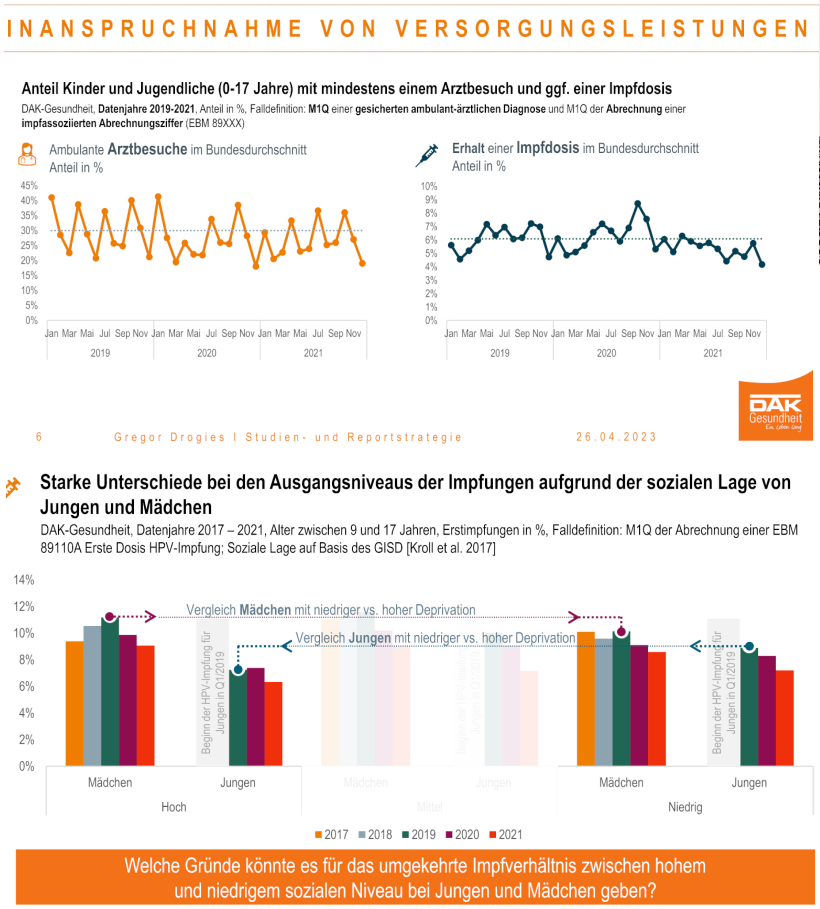
Innovationsfund creates vaccination knowledge

While the first two events of the MVF congress series ‚Vaccination Status' in 2021 and 2022 focused more on the medical perspective, the thematic cycle was expanded this year to include that of the scientific community as well as pharmacists. The first experiences from two innovation fund projects on the topic of vaccination were highlighted and a project was presented that was carried out in cooperation between a private health insurance company and an association of pharmacists.

>> 'According to the RKI vaccination surveillance, a vaccination rate of 47% has been achieved nationwide for influenza among people aged 60 and over. Is that good or bad?' With this question, MVF editor Prof. Dr. Reinhold Roski opened what was already the 3rd MVF specialist congress in the ‚Vaccination Status' series, this time with the subtitle ‚Vaccinating in times of pandemic and endemic'. His rhetorical answer: ‚We are 28 percentage points below the target in Germany'. His demand: ‚Vaccination rates must be increased until the respective targets for the respective diseases are reached. Our health system cannot remain passive here. Missed or postponed routine vaccinations and booster doses must be made up.' Special attention must be paid to the vulnerable target groups that are not reached by the established vaccination procedure at general practitioners and adolescents' doctors.



Fig. 1: From lecture by Gregor Drogies, DAK: ‚DAK-Kinder- und Jugendreport - Impfungen von Kindern und Jugendlichen in Zeiten der Pandemie', MVF-Fachkongress ‚Impfstatus 2023' on 26.04.23.



Drogies: Social situation as vaccination factor

Gregor Drogies from DAK Gesundheit, Hamburg, then responded to Roski's introduction with two counter-questions: ‚How did the vaccinations of children and adolescents develop during the pandemic?' And: ‚What influence does the socio-economic situation of the parental home have on vaccination behaviour during the pandemic?' He provided the answers with a deep look into the current DAK Children and Adolescents Report of the DAK, which was able to analyse 3.3 million doctor visits of 782,000 DAK-insured children and adolescents between 0 and 17 years of age in 2021 with the help of the health insurance company's own routine data. Here, Drogies pointed out two system peculiarities of health insurance data. Firstly, this data could only ever offer retrospective analysis possibilities, and secondly, it could only provide information about vaccination quantities that resulted from the vaccination numbers billed to the respective statutory health insurance - but then very precisely and with the possibility of establishing links, for example, between a service utilisation and other anonymised, personal characteristics. On the basis of the figures available to him, one can see that during the Corona pandemic - with the exception of the lockdown phases - there was no lasting change in the general vaccination uptake This is due to the fact that the U-preventive check-up series provides

children and adolescents with a process that is both closely monitored and fundamentally anchored in terms of vaccination and its control as well as the approach during a doctor's contact, which is stable even during crises. According to Drogies, the picture is similar for pneumococcal vaccination, where ‚no real differences between boys and girls' were discernible based on the available data, and a constant pneumococcal vaccination rate was recorded during the pandemic.

The situation is somewhat different for HPV vaccinations, which are voluntary and therefore not firmly anchored in the U-preventive examination series. Based on the data room, one can see that with the start of reimbursement of HPV vaccination for boys in January 2019, boys caught up with girls' vaccination rates fairly quickly. But, he said, there was a larger drop during the first pandemic period and a smaller one during the second pandemic period; furthermore, he said, there was again a significant drop in first HPV vaccinations from the third quarter of 2021 onwards. In addition - and this was emphasised by Drogies - the decline in HPV vaccination among boys was greater than among girls, which means nothing other than that ‚those responsible are no longer reached as well as they should be'. This is precisely why his fund is very proactive with such information and has also brought this data into a working group.

Here, too, Drogies pointed out a difference between the data rooms of the health insurance funds and those of the RKI. In its evaluation system, the Robert Koch Institute considers HPV vaccination to be completed only when the second vaccination has taken place and the actual vaccination coverage has been achieved. Drogies: ‚If we see a slump in voluntary first vaccination in our data, that is a very central and important point.' Because the first vaccinations administered can be seen in the cash register data, ‚we can see very early on that something has changed so that we can react.

Because you can only see whether the vaccination series has really been completed at the end of the next year or even later after the first vaccination. The vaccination shortfall detected by the DAK would basically have to show up in the RKI evaluations at some point. Furthermore, it is unclear whether catch-up effects will show up, especially in 2022; this remains to be seen due to the delayed availability of data.

According to Drogies, it is also important to analyse the social situation of the parental home in such evaluations. Since cash register data do not show these parameters, the German Index of Socioeconomic Deprivation (GISD) was used to describe the social situation of the parental home. When matching both data streams, it becomes clear that ‚things happened in the Corona period that led to the social situation as a factor increasing'. Using obesity as an example, it is particularly clear that during the pandemic period, social situation became a significant factor in determining an incidence of obesity for boys aged 15 to 17.

A decline in HPV vaccinations was also observed, irrespective of the social situation of the parental home. According to Drogies, this was accompanied by an astonishing additional finding: contrary to the assumption that children in the higher social classes would consistently show a better vaccination rate, this was not the case - it was those in the middle social classes. It was also surprising that boys from lower social classes were vaccinated more often than those from higher social classes. Drogies: ‚Unfortunately, we don't have a really handy explanation for this, we are still looking for an explanatory pattern here.'

Schneider: Vaccinations in SHI routine data difficult to depict

Dr. Udo Schneider from the TK also dealt with possible explanatory patterns. The innovation fund project VIPER, in which the Technikker is a consortium partner, deals - hence the acronym - with a comparison of vaccination strategies for the prevention of illness caused by respiratory syncytial viruses (RSV) and their effects on the burden of disease and costs. In addition to the TK, the RKI as consortium leader and the London School of Hygiene and Tropical Medicine, an institute with - according to Schneider - very extensive experience in the modelling of vaccination strategies, are involved in this project, which started in March 2019. Since the end of the funding in February 2023, the results report has been compiled and will be handed over to the G-BA in August.

The special feature of this project is the fact that there is no vaccination for RSV; this was the case at the time of the project start and is still the case today, although this could soon change due to a current EMA recommendation. ‚With this project, we wanted to show that it is possible to model vaccination strategies on the basis of routine SHI data,' explained Schneider. This, he said, was linked to the hope of being able to contribute to vaccination decision-making. For this purpose, epidemiological and health economic effects of different strategiesagainst the virus should beexamined and the most effective favourable strategy should beproposed.

A major challenge in this project was already to describe an RSV-specific group on the one hand and an RSV-probable subpopulation on the other hand from the collective of insured persons. We already knew at the

IMPFSTATUS 2023
Impfen in Zeiten der Pandemie/Endemie



Fig. 2: From the lecture by Dr. Udo Schneider, TK: ‚Innovationsfondsprojekt VIPER', MVF congress ‚Impfstatus 2023' on 26.04.23.

Übertragbarkeit auf andere Impfstoffe

- Methodik eignet sich vor allem für Indikationen, für die noch keine Impfstoffe verfügbar sind: Abbildung von vergangenen Impfungen in GKV-Routinedaten nur teilweise möglich.
- Populationsaufgriff für betrachtete Indikation muss in GKV-Routinedaten abbildbar sein.
- Finden sich in einer einzelne Kasse genug Fälle?
- Gibt es bereits R&D-Aktivitäten für die entsprechende Indikation?
- Gibt es bereits entwickelte Impfstoffe oder Medikamente?

beginning of the project that there is a large number of unreported cases because many of these infections are not correctly coded as such,' said Schneider and also immediately provided the answer for this: ‚Because they are hidden under a whole range of possible respiratory diseases.' It became clear that the ratio of insureds with a specific diagnosis to insureds with a probable diagnosis is quite different, so for every insured with a specific diagnosis there would be about 100 with a probable or potentially possible diagnosis.



Fig. 3: From lecture by Dr Thomas Grüter, Ruhr University Bochum: ‚Vaccination and infection rates in multiple sclerosis, chronic inflammatory rheumatic diseases or chronic inflammatory bowel diseases', MVF congress ‚Vaccination status 2023' on 26.04.23.

VAC-MAC

Impfen bei Immunerkrankungen

Projektziele und Durchführung – Ziel 1

- Analyse der Inanspruchnahme von Impfungen, der Impfwirksamkeit und des Auftretens von Impfreaktionen sowie eine gesundheitsökonomische Auswertung zu vermeidbaren Folgekosten

→ Analyse von GKV-Routinedaten

- Vergleich der Inanspruchnahme der Impfungen zwischen MAC- und nicht-MAC-Patient:innen
- Untersuchung der Impfwirksamkeit hinsichtlich impfpräventabler Infektionen
- Untersuchung von Impfreaktionen innerhalb der ersten 6 Wochen nach Impfung
- Kosten-Kosten-Analyse (Vergleich Kosten für geimpfte vs. nicht geimpfte Versicherte)

→ Zwischenstand: >50.000 MS-Patient:innen identifiziert

According to Schneider, a first general finding of this project is that vaccinations are difficult to represent completely in SHI routine data. In the case of children and adolescents, as Drogies has already shown, this is still quite possible because there are much firmer vaccination schedules. However, the health care research of the Techniker Krankenkasse has had to make the experience that the vaccination history of the adult population is difficult to almost impossible to comprehensively map.

One of the reasons for this is that there are relatively long intervals between the basic immunisation and the booster, which often go far beyond the health insurance fund-specific data storage, which is strongly regulated by data protection. However, the health insurance data would be quite suitable for generating questions for possible vaccination recommendations, especially if no vaccination existed yet. In the expert's opinion, the answer to the question of which subpopulation could benefit the most from a vaccination that has yet to be developed is particularly decisive.

Grüter: Sufficient vaccination protection in MAC patients?

VACcinierung von MS/Arthritis/Colitis-Patient:innen, VAC-MAC for short, is the name of an innovation fund project to increase the vaccination rate in patients with autoimmune diseases by developing recommendations for action based on evaluations of primary and secondary data from BARMER. Similar to VIPER, an attempt has been made here for about a year under the direction of Prof. Kerstin Hellwig (Catholic Hospital Bochum - Ruhr University Bochum) to find out why vaccinations are particularly important for the approximately five million patients with immune-mediated diseases in German-speaking countries. The reason for this was explained by project member Dr Thomas Grüter, who is responsible for the medical project management, to the online audience of the vaccination congress ‚Vaccination Status 2023' with reference to the vulnerability of MAC patients. For example, patients with rheumatoid arthritis (RA) have the highest prevalence, and RA in turn can increase both the incidence of influenza and its complication rate, such as stroke and heart attack. According to Grüter: ‚The underlying disease and the therapy we use lead to a risk of infections and severe courses. Since it is known that infectious diseases can increase the risk of disease progression, sufficient vaccination protection is particularly important for these people. Thus, it is necessary to consider special vaccination strategies for these patient groups, such as additional vaccinations , sequential vaccination, additional controls or also deviating age limits (example: herpes zoster).

It remains unclear whether there is sufficient vaccination protection in these patient groups, because the studies on vaccination rates in MAC patients are still very limited, and according to Grüter, influencing and promoting factors as well as potential barriers are not yet known. This is exactly what the VAC-MAC project, which runs until 31 March 2025, aims to change. Grüter: ‚We want to analyse the uptake of vaccinations, their effectiveness as well as the occurrence of vaccination reactions after vaccination.'

The project task area is supplemented by a health economic evaluation of avoidable follow-up costs. For this purpose, an analysis of SHI routine data with a comparison of the utilisation of vaccinations between MAC and non-MAC patients will be carried out, including the

- Investigation of vaccination effectiveness with regard to vaccine-preventable infections
- Investigation of vaccination reactions within the first 6 weeks after vaccination .

Arnold: Pharmacists definitely want more vaccinations

Mathias Arnold, Vice President of the Federal Association of German Pharmacists (Bundesvereinigung Deutscher Apothekerverbände e. V.), brought in a completely different perspective. He spoke about the status of and experiences with vaccination in pharmacies from the perspective of his association, which represents all 17 state chambers of pharmacists as well as all 17 state associations of pharmacists. According to Arnold, vaccination in pharmacies is a global goal and has long been a global reality. Germany is actually a bit behind and one of the positive effects of Corona is that pharmacists are now also allowed to vaccinate here. And even with the entry into force of the Gas Price Brakes Act on 8 April 2023 as part of standard care. However, this is something that has been possible in at least 20 countries around the world since 2016, with 36 more countries joining the list since 2020, because during the Corona peak many countries were loo-

king for additional places where vaccinations could be offered, and pharmacies were welcome partners for many health systems. Globally, the vaccines that can be administered in pharmacies are also wide-ranging, from hepatitis A and B to diphtheria, measles, mumps, pertussis, pneumococcus, rubella and influenza, although only the latter vaccine (in addition to Corona) is also administered in German pharmacies.

This was also necessary, said Arnold. Although, according to the European Union, 75% of older people should be vaccinated, in Germany only 47% of people over 60 should be vaccinated. However, there are large regional differences, from 44% in western federal states to 62% in eastern federal states.

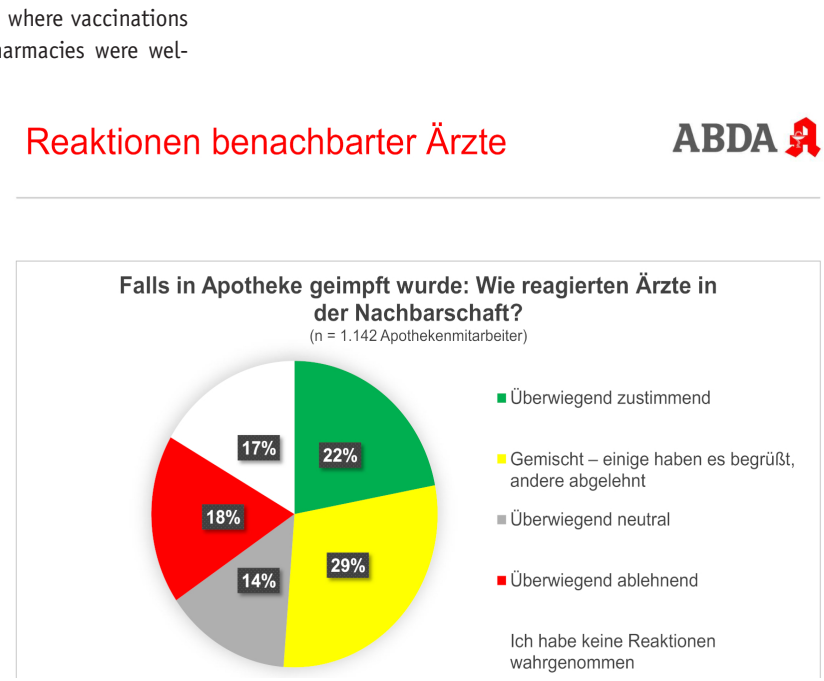




Fig 4: From the lecture by Mathias Arnold, ABDA: ‚Status und Erfahrungen zum Impfen in Apotheken aus Sicht der ABDA', MVF congress ‚Impfstatus 2023' on 26.04.23.

According to ABDA figures presented by Arnold, there are currently about 13,200 vaccine-trained pharmacists and about 1,174 pharmacies offering flu vaccinations and 1,572 pharmacies offering Covid 19 vaccinations, each of which would fulfil the necessary requirements including the necessary further training. The experience of the patients was positive, as the flu vaccination pilot project had shown:

- easy access to the pharmacy
- convenient opening hours
- no waiting times
- trust in the competence of the pharmacists
- very high satisfaction with information and vaccinations in pharmacies

In the current season 2022/2023 alone, 58,000 flu vaccinations were carried out in pharmacies, Arnold continued. It should be noted that this vaccination was the first flu vaccination ever for 20%, 13% had not taken advantage of a vaccination without an offer in the pharmacy and over 90% had expressed willingness to have another flu vaccination in the pharmacy as well as over 90% willingness for other protective vaccinations in the pharmacy. No wonder, Arnold said, because: ‚A pharmacy is practically one metre from the kerb, doesn't actually have a waiting room and waiting times are actually hardly to be expected.'

‚Is this now a substitution of a medical service or a supplement?' Arnold answered this rhetorical question with a look at the above-mentioned survey data, which would clearly show that vaccinations in pharmacies are obviously a supplement and not a substitution in many cases. Arnold: ‚If for 20% of these people who were vaccinated in pharmacies, this was the first flu vaccination ever, they probably had no GP contact in that sense and also no doctor's practice that they would regularly visit for vaccinations.' And if 13% of the respondents stated that they would not have received a vaccination without the pharmacy's offer because they were simply not willing to visit a doctor's office or make an appointment for it or whatever the inhibition threshold was, it should be clear that this vaccination offer is gladly accepted by a certain clientele. In part, these are vulnerable groups that certainly do not belong to the classic clientele that visits the doctor's office every four weeks. However, this also means that a vaccination campaign in pharmacies is certainly able to reach certain vulnerable population groups, which in turn is certainly very desirable from a health policy point of view.

According to Arnold, a flash online survey of the ABDA in February/March of this year dealt with an outlook on the coming flu season. 2,736 participants, including 1,994 pharmacy managers, from all over Germany took part and were asked about their state of affairs and planning for the covid and flu vaccination. According to the survey, 27% and 28% have already been offered both Covid and flu vaccinations. And another 7% (Covid) and 13% (influenza) are planning to do so.

Reasons for vaccinations in pharmacies, according to the survey, are:

- easier access to vaccinations from the patient's perspective (e.g. opening hours): 76%
- active contribution to prevention: 61
- sharpening the profile of the pharmacy profession: 55%
- Meeting consumer expectations: 35
- Additional income for pharmacies: 26%

However, the survey also asked for reasons against vaccinations in pharmacies. These were:

- additional personnel requirements in the pharmacy: 71%
- Additional spatial requirements in the pharmacy: 69%
- The relationship with neighbouring doctors could suffer: 62% .
- Vaccinations are a medical task, not a pharmacy task: 28%

Arnold explained that it is also important how the medical profession in the neighbourhood views vaccination in pharmacies, which was also surveyed among 1,142 pharmacy employees. According to the survey, 22% of the doctors in the neighbourhood were mostly in favour, 14% were neutral and another 29% were mixed - some welcomed it, others rejected it. But only 18% were mostly negative and another 17% had no reaction at all. It is therefore no wonder that the pharmacists surveyed want to vaccinate more than

Citation
Stegmaier, P.: Innovationsfund creates vaccination knowledge, in „Monitor Versorgungsforschung“ (03/23), PP. 30–34. http://doi.org/10.24945/MVF.03.23.1866-0533.2509

just influenza. Thus, 32% voted for vaccinations for selected indications and 19% even for vaccinations for all possible indications. 15%, on the other hand, do not consider any other vaccinations in pharmacies besides influenza and Covid-19 to be useful, and 29% do not consider vaccinations in pharmacies to be useful at all. According to Arnold, the latter figure roughly corresponds to the percentage (28%) who consider vaccinations to be a medical and not a pharmacy task.

Tscholl: from vaccine quota to vaccination campaign

Someone who loves to vaccinate and would also like to vaccinate more is Martin Beutling, owner of the Glocken pharmacy in Oberhausen. Together with the Linda umbrella brand association of stationary owner-managed pharmacies, which now includes around 600 pharmacies, he carried out a project in 2021 that was intended to simplify the path to vaccination for privately insured people in particular, as vaccination is somewhat more complicated for this clientele than for those with statutory insurance.

According to Linda's Head of Marketing & Communication, Vanessa Tscholl, the aim was to increase the number of privately insured people receiving flu vaccinations.

To achieve this, the insurer, Axa, sent out a letter to their customers. The customers then had the option of ordering a flu vaccination or reserving a vaccination appointment either directly via the Linda app or via Linda pharmacies in the vicinity of their place of residence. However, it was also possible to simply call or drop by and redeem the prescription at the pharmacy or to take the vaccine to the respective GP's practice or have it delivered. For this purpose, a cooperation partner from the pharmaceutical industry ensured in advance that an appropriate vaccine contingent was available to ensure that the pharmacies had enough vaccine on hand.

In addition, Linda put together a communication package. This ranged from an information presentation, internal mailings and newsletters to order forms and a podcast explaining exactly how to activate customers and what to look out for. Tscholl: ‚We provided the pharmacies with the corresponding documents so that it was ensured that everything was neatly documented procedurally according to the pharmacy operating regulations and a flawless process could be guaranteed.‘

And with success. Over 3,000 active searches were documented in the Linda pharmacy finder, for example, and in addition there were 84% action views in the Axa customer portal, resulting in a total of 4.55% of customers:inside taking advantage of the service offer. ‚We were very surprised that it went so well right from the first time and then repeated it again in 2022,‘ Tscholl explained.

Among others, in the Oberhausen pharmacy of Martin Beutling. However, he already started with the flu vaccination in 2020 as part of the model project ‚Flu vaccination in the pharmacy‘ between AOK Rheinland and Apothekerkammer Nordrhein.

For this purpose, a training course was held by the AK-Nordrhein in the summer of the model start year 2020, so that Beutling was only able to carry out 14 vaccinations in the first flu season - slowed down by Corona; in the following year, however, it was already 24 and in 2022 already 312. According to Beutling, those willing to be vaccinated praised both the low-threshold accessibility, especially with regard to the longer opening hours compared to doctor's practice to pharmacy, as well as the quick appointment allocation, whereby in some cases even an on-the-go vaccination was possible. This is particularly useful for people who do not actually have a family doctor and therefore ‚would not even be tempted‘ to get vaccinated there. Beutling: ‚I think that vaccinations will continue to take place in the pharmacy, if only because the patients were consistently enthusiastic about them.‘ <<

by: MVF Editor-in-ChiePeter Stegmaier







Fig 5: From the presentation by Vanessa Tscholl, Linda; Martin Beutling, Glocken-Apotheke Oberhausen: ‚Cooperation project flu protection‘, MVF congress ‚Vaccination status 2023‘ on 26.04.23.