A personalized Life-Course Vaccination Overview makes sense!

personalized life-course vaccination overview could be a valuable tool to ensure that individuals receive timely vaccinations throughout their lives, tailored to their specific medical needs. This approach not only protects the individual's health but also contributes to the overall well-being

of society and provides a significant return for the government. This is the 'crowdsourced' conclusion of the challenge on adult vaccination during the **2024 Hack Healthcare** initiative with the participation of, amongst others, Helan and pharma.be.

Key features

The vaccination overview is customized **based** on age and individual health profile (e.g. including comorbidities). This approach **covers all stages of life**, from infancy to old age, ensuring life course protection against vaccine-preventable diseases. It maintains a **detailed record of all vaccinations received**, along with **alerts for upcoming recommended vaccinations** and boosters, building upon an already existing platform.

The individual and its healthcare providers have access to the overview. In addition, health care providers can collaborate effectively and can update vaccination records.

Benefits

The convenience of easy access to vaccination records consolidated in a single location, along with timely reminders for upcoming vaccinations, allows individuals to manage their health proactively. It empowers the patient to initiate a conversation with their healthcare provider about vaccination.

Healthcare providers benefit from efficient record-keeping, as the streamlined process for recording and accessing vaccination data reduces administrative burdens. This enables providers to offer personalized advice, enhancing the quality of preventive care provided to patients.

For authorities and society, the increased vaccination coverage achieved through better tracking and reminders leads to a reduction in the incidence and related costs of vaccine-preventable diseases thereby improving public health. Authorities can make data-driven decisions for public health planning and resource allocation.

First steps to success

First and foremost, the government must create incentives for or impose mandatory data registration by all vaccinators to collect structured, standardised, high-quality data in Vaccinnet/Vaccicard on vaccine coverage rates for all available vaccines, independent of the pathway (regional program, reimbursement or out of pocket payment).

Secondly, the Superior Health Council should receive the **clear mandate and resources to develop the lifecourse vaccination calendar**, that will be reviewed and updated based on new recommendations and population needs. Finally, the government should ensure data exchange between healthcare systems and aggregation of data, based on a public health data strategy. A **user-friendly e-health interface needs to be developed** (refer to example prototype below) to serve both patients and healthcare providers.

Healthcare providers must be trained on the use of the platform. Public awareness campaigns will be essential to highlight the benefits of the personalized vaccination overview and to educate users on how to access and utilize it effectively.

Conclusion

A personalized life-course vaccination overview represents a transformative approach to vaccination management. By ensuring individuals receive the right vaccines at the right time, this approach improves overall public health and reduces the burden and costs of vaccine-preventable diseases. This approach operates within a broader framework for life-course vaccination, complementing other strategies aimed at achieving comprehensive vaccination coverage and improving health outcomes across all age groups.



