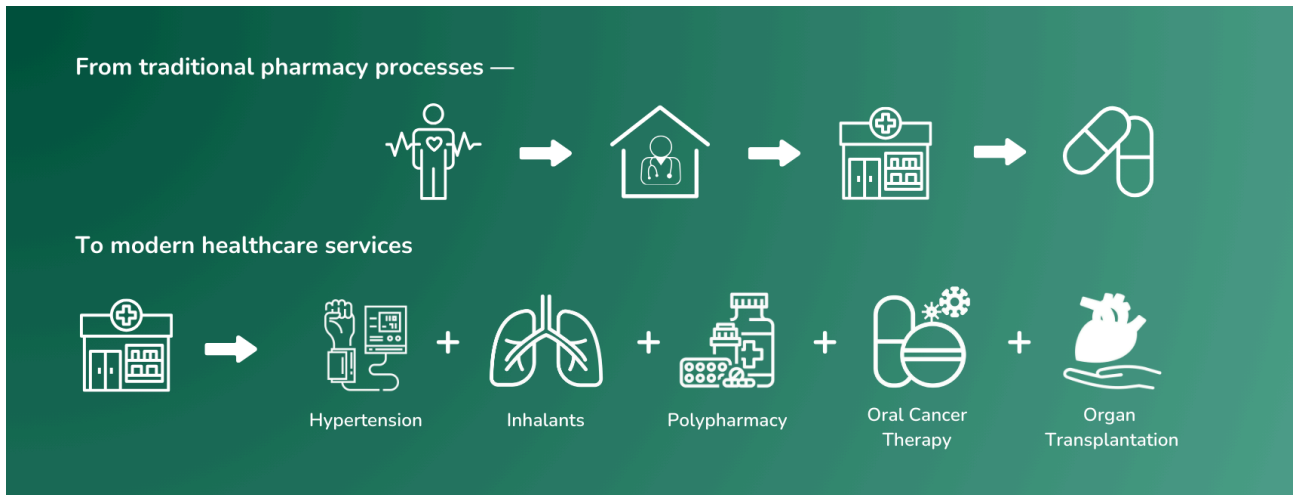


Pharmaceutical Services in the Pharmacy Landscape: Challenges, Opportunities, and Innovative Solutions



Pharmacies in Transition – More Than Just Dispensing Medication

In an era where healthcare faces increasingly complex challenges, pharmacies are emerging as indispensable players. They not only dispense medications but are also increasingly offering specialized pharmaceutical services aimed at enhancing the safety and effectiveness of therapies.¹

Paradoxically, the number of pharmacies in Germany is shrinking drastically. In 2023, it dropped to 17,571—a loss of 497 establishments in just one year, marking the largest decline in the history of the Federal Republic.² The economic burdens are immense: stagnating fees for over a decade and cost increases of 60 percent are putting significant pressure on pharmacies.³ Additionally, pharmacies face high investments in digitalization and immense pressure from mail-order pharmacies, which hold a market share of 20.6 percent.⁴ Moreover, many pharmacy owners of retirement age are struggling to find successors.⁵

¹ Vgl. Bundesministerium für Gesundheit (2020)

² Vgl. Bild (2023)

³ Ebd.

⁴ Vgl. Welt (2023)

⁵ Vgl. Bild (2023)

This trend highlights that pharmacies are not only facing economic challenges but also structural difficulties that threaten their long-term role in the healthcare system. At the same time, however, this transformation presents an opportunity to redefine pharmacies and adapt their services to meet patient needs and the demands of modern healthcare.

But what is the current state of these services, and what obstacles must pharmacies overcome to successfully integrate them into their daily operations? Which innovative technologies can help improve efficiency and optimize patient care?

Pharmaceutical Services: Current Status in the Pharmacy Landscape

With the implementation of the Local Pharmacy Strengthening Act (VOASG) in 2020, the foundation was laid for the introduction of five pharmaceutical services. Since June 2022, patients have had a legal right to these expanded services, which go beyond traditional consultations.⁶

These services include:

- **Standardized Risk Assessment for Hypertension:** Identifying and preventing hypertension-related risks.
- **Training on Proper Inhalation Techniques:** Optimizing medication use for patients with respiratory diseases.
- **Expanded Medication Counseling for Polypharmacy:** Reviewing the entire medication regimen for interactions and creating a personalized medication plan.
- **Pharmaceutical Care for Oral Cancer Therapy:** Enhancing therapy adherence and minimizing side effects.
- **Pharmaceutical Care After Organ Transplantation:** Ensuring effective immunosuppressive therapy.⁷

Although around 150 million euros are allocated annually for the reimbursement of these services, their utilization remains below expectations. A report by the Association of Substitute

⁶ Vgl. Verband der Ersatzkassen (2024)

⁷ Vgl. Deutsches Apotheken Portal (2024)

Health Insurance Funds from December 2024 indicates that the uptake of these services has been low so far.⁸

A key reason for this is bureaucratic hurdles and the extensive documentation requirements, which create additional work for pharmacists without adequate compensation.⁹ Time constraints and staff shortages exacerbate the situation—especially in small pharmacies, where there is little capacity for extensive medication counseling or preventive services.¹⁰

Challenges and Pain Points of Pharmacies in Healthcare

The role of pharmacies in healthcare is shaped by numerous structural and economic challenges.¹¹ Digital assistants and automation can help mitigate many of these issues and make processes more efficient by:

Challenges	Technical Solutions
Staff Shortages and Skilled Labor Deficit: Many pharmacies struggle with a shortage of qualified personnel. As a result, pharmacists must take on additional administrative and counseling tasks, significantly increasing their workload and straining daily operations. ¹²	Solution: Automated processes and digital assistants can help streamline repetitive tasks, increasing efficiency and reducing the workload on pharmacists. ¹³
Bureaucratic Burden: The documentation and billing of pharmaceutical services are often associated with significant effort. This discourages many pharmacies from accessing the available funding. ¹⁴	Solution: Simplified digital systems for automated billing and documentation could provide significant relief.
Financial Uncertainty: Although there are government subsidies for pharmaceutical services, they are rarely utilized in practice	Solution: Adjusting compensation models to reflect the actual time required and expanding

⁸ Vgl. Verband der Ersatzkassen (2024)

⁹ Vgl. APOTHEKE ADHOC (o. J.)

¹⁰ Vgl. Handelsblatt (o. J.)

¹¹ Vgl. ADG (o. J.)

¹² Vgl. Handelsblatt (o. J.)

¹³ Vgl. ADG (o. J.)

¹⁴ Vgl. APOTHEKE ADHOC (o. J.)

because the financial and organizational effort is disproportionate to the compensation. ¹⁵	<i>financial incentives would be effective measures.</i> ¹⁶
Rising Operating Costs and Declining Margins: Pharmacies face significant economic pressure as profit margins on prescription medications stagnate or decline, while expenses for supplies and rent continue to rise. ¹⁷	Solution: <i>Expanding the product and service portfolio with innovative healthcare offerings can create additional revenue streams.</i>
Supply Chain Issues and Medication Shortages: Frequent shortages of certain medications make patient care more challenging. ¹⁸	Solution: <i>Strengthening the connection between pharmacies and suppliers through digital inventory forecasting systems and coordinated stock management.</i> ¹⁹

Example: Medication Analysis

A concrete example of a pharmaceutical service is medication analysis. Patients bring all their medications to the pharmacy, where they are reviewed for interactions, dosages, and potential side effects. This is especially relevant for individuals with chronic conditions or those taking five or more different prescription medications. However, integrating this service into daily pharmacy operations is challenging, as medication analysis is time-consuming and often difficult to efficiently incorporate into existing workflows.

Modern software solutions such as MediCheck or Scholz Online help pharmacies conduct medication analyses more efficiently. These programs allow for the digital recording and evaluation of medication plans, identify potential drug interactions, and provide actionable

¹⁵ Vgl. OBIAUSHV (o. J.)

¹⁶ Ebd.

¹⁷ Vgl. APO-STB (o. J.)

¹⁸ Vgl. OBIAUSHV (o. J.)

¹⁹ Ebd.

recommendations. By using such digital tools, pharmacies can implement their services more quickly and in a more structured manner.²⁰

Innovative Technologies as a Solution: AI-Powered Skin Analysis

In addition to medication analysis, integrating innovative technologies is a promising approach to expanding the service portfolio and reducing the workload for pharmacies. One example is AI-powered skin analysis, as offered by companies like IQONIC.AI. This technology enables pharmacies to conduct detailed assessments of their customers' skin conditions and provide personalized skincare recommendations based on the results:

- **Digital medication analysis** tools like MediCheck and Scholz Online help pharmacies efficiently identify drug interactions, side effects, and patient-specific risks. Based on these insights, they can recommend appropriate therapy adjustments.²¹
- **AI-powered skin analyses**, such as those offered by IQONIC.AI, can help position pharmacies as experts in personalized health consulting while unlocking new revenue streams.²²
- **Automated billing systems** could reduce the bureaucratic burden associated with pharmaceutical services.
- **Inventory management software** for predicting medication shortages can help ensure the availability of essential medications.²³

The use of digital solutions should be well thought out. Implementing a multitude of isolated, unconnected applications can complicate rather than streamline pharmacy processes. In practice, it is often observed that the use of different software solutions leads to incompatibilities, potentially increasing the workload. For instance, a digital medication analysis tool may identify drug interactions, but if it lacks integration with billing systems, the administrative effort remains high. Similarly, inventory management systems could better predict medication availability, but without a connection to the pharmacy's purchasing system, their benefits are limited.

²⁰ Vgl. Deutsches Apotheken Portal (2024)

²¹ Ebd.

²² Vgl. IQONIC.AI (2024)

²³ Vgl. Deutsches Apotheken Portal (2024)

Efficiency requires a holistic integration of all digital tools into a centralized platform that combines medication analysis, billing, inventory management, and customer communication. Without this integrative approach, digitalization risks becoming an additional administrative burden rather than a solution.

Conclusion: The Future of Pharmaceutical Services in Pharmacies

The role of pharmacies is evolving from merely dispensing medications to becoming comprehensive healthcare advisory centers. To overcome existing challenges, pharmacies must invest in innovative technologies, increase awareness of their services, and diversify their economic strategies. Pharmaceutical services hold immense potential for improving healthcare by enhancing therapy safety, increasing patient satisfaction, and strengthening the role of pharmacies within the healthcare system.

However, to fully unlock this potential, it is crucial to address the outlined challenges. Through targeted training, an optimized IT infrastructure, and improved patient communication, pharmacies can secure their long-term position in the healthcare landscape.

According to forecasts, the European pharmacy automation market is expected to grow to \$6.85 billion by 2030, reflecting an annual growth rate of 9.7 percent.²⁴ In parallel, 98 percent of surveyed pharmacists predict that digital billing will become the standard in the coming years. Additionally, 94 percent foresee that computer-assisted diagnostics will become an integral part of daily pharmacy operations in the future.²⁵ Pharmaceutical services are also gaining significance. In the first half of 2024 alone, nearly €11 million was spent on such services in Germany—a clear increase compared to previous years.²⁶

These developments highlight that the pharmacy of the future will not only be a place for dispensing medications but will also serve as a central hub for personalized healthcare services—supported by innovative technologies that enhance both efficiency and service quality.

²⁴ Vgl. Business Market Insights (2024)

²⁵ Vgl. apoBank (2024)

²⁶ Vgl. Deutsche Apotheker Zeitung (2024)

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