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**Function: President of the Board**

**Main expertise: Pharmacist**



# Adult Immunization Board – Country meeting:

*Session 4: Implementation and delivery of  
adult vaccination services in Portugal*

**Adult Immunization in Portugal: successes, lessons learned and the way forward**



*A collaboration of*



UNIVERSITÀ  
DEGLI STUDI  
FIRENZE  
**DSS**  
DIPARTIMENTO DI  
SCIENZE DELLA SALUTE



**University  
of Antwerp**

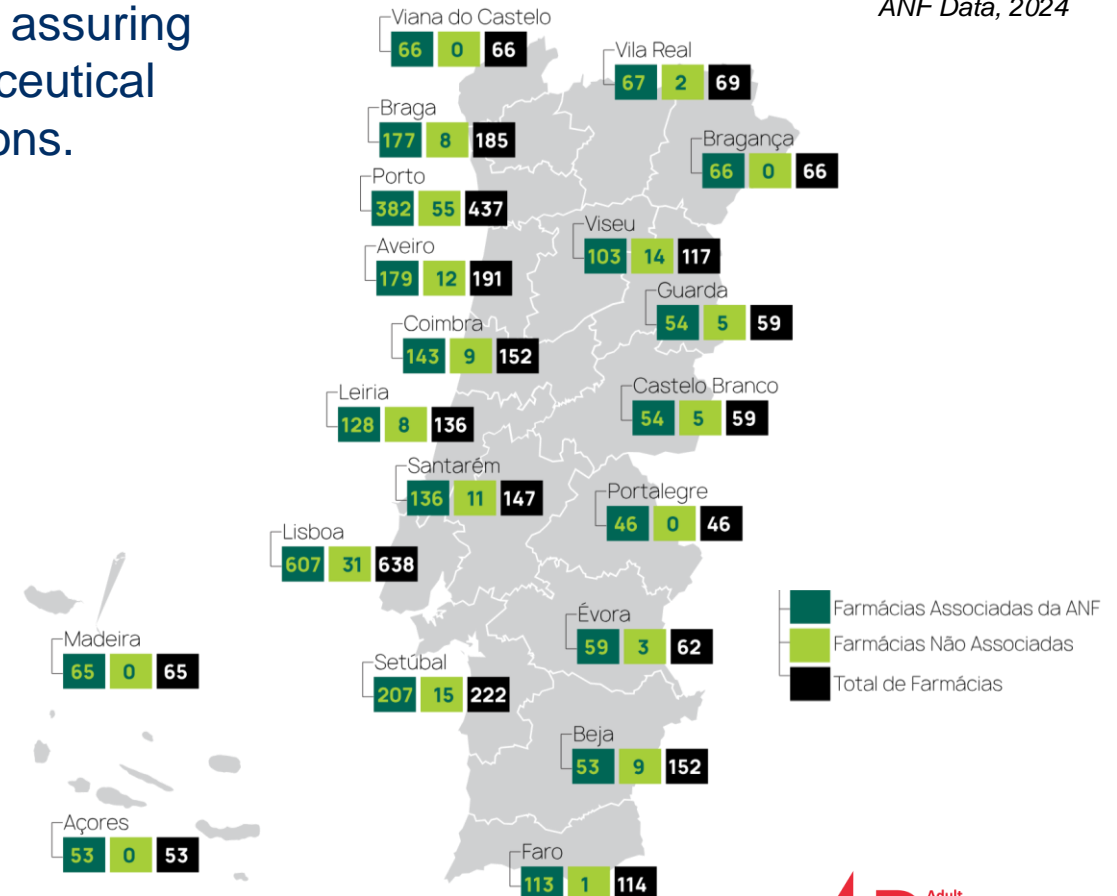
# Pharmacies in Portugal

Pharmacies are distributed evenly throughout the country, assuring **equitable access** to medicines, medical devices, pharmaceutical services and other healthcare technologies and interventions.

ANF Data, 2024



farmácias  
portuguesas



## Starting point

2007

### New Legislation

**New scope of services** provided by pharmacies:

- Information campaigns
- Health education programmes
- Pharmaceutical Care programmes
- Provision of first aid
- Home care
- Medicines administration
- **Vaccines administration**



### VACCINES NOT INCLUDED IN THE NATIONAL VACCINATION PROGRAM

<b>Cholera</b> (Vaxchora®)
<b>COVID-19</b> (Comirnaty®****)
<b>Dengue</b> (Qdenga®)
<b>Diphtheria, Tetanus and Pertussis</b> (Boostrix®*)
<b>Meningococcal</b> (Menveo®; Bexsero®; Trumenba®; Nimenrix®; Menjugate®)
<b>Pneumococcal</b> (Pneumovax 23®; Prevenar 13®; Prevenar 20®; Vaxneuvance®)
<b>Tick-borne Encephalitis</b> (FSME-IMMUN®)
<b>Japanese-Encephalitis</b> (Ixiaro®****)
<b>Yellow Fever</b> (Stamaril®**)
<b>Typhoid Fever</b> (Typhim Vi®**, Vivotif®)
<b>Influenza</b> (Influvac Tetra®; Vaxigrip Tetra®; Fluarix Tetra®; Fluenz®; Efluelda®)

<b>Haemophilus Type b</b> (Hiberix®*)
<b>Hepatitis A</b> (Havrix® 720; Havrix® 1440; VAQTA®25 U/0,5 mL, VAQTA®50 U/1 mL)
<b>Hepatitis B</b> (Engerix B® 20 µg/1mL*)
<b>Hepatitis A and B</b> (Twinrix®)
<b>Human Papillomavirus</b> (Gardasil 9®*)
<b>Rabies</b> (Rabipur®)
<b>Human rotavirus</b> (Rotarix®; RotaTeq®)
<b>Varicella</b> (Varivax®; Varilrix®)
<b>Respiratory Syncytial Virus</b> (Abrysvo®; Arexvy®)
<b>Herpes Zoster</b> (Shingrix®)

\* - These vaccines are included in the PNv but may be administered in pharmacy for groups out of the PN

\*\* - These vaccines are only available in international vaccination centers

\*\*\* - This vaccine is only available by authorization for exceptional use (AUE)

\*\*\*\* - This vaccine is only available in Pharmacies during NHS Campaign, at the same time as the flu

## Starting point

2007

Who?

- Qualified **Pharmacists** by the Portuguese Pharmaceutical Society
- **Nurses** (hired to perform this task)

Certification

- Portuguese Pharmaceutical Society established minimum requirements for **professional competence**:
  1. Complete mandatory initial training [eLearning, with final exam – 20h; Live Training – 8h]
  2. Recertification each 5 years [eLearning, with final exam – 10h]
  3. Evidence of continued activity
  4. Certification on Basic Life Support also necessary [4h]

# Vaccination Service in Community Pharmacies

## Starting point

2007

### Equipment and materials

- Adequate facilities
- Mandatory materials to vaccinate
- Response to anaphylactic event (e.g. epinephrine, oxygen)



# Vaccination Service in Community Pharmacies

## Technology

Pharmacy



Vaccine  
Administration



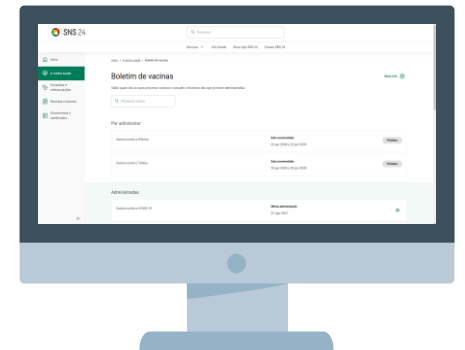
Registration and access to  
information (e-Bulletin)



Pharmacy Software



e-Vaccination Bulletin



Patient Health Data Platform  
(NHS)

Since 2017

# Vaccination Service in Community Pharmacies

## Building Capacity

2008

1 588 pharmacies



1st Nationwide Pharmacy-  
Based Influenza  
Vaccination Campaign  
2008-2009

2025

2 500 pharmacies (> 80%)



Seasonal Vaccination Campaign  
2024/2025

≈ 7 000 qualified pharmacists



# Vaccination Service in Community Pharmacies

## Expanding Pharmacy-based vaccination

**2007**

**Pharmacies were legally authorized to administer vaccines**

Portugal was one of the first European countries to achieve this.

**From 2012/13**

**Influenza campaigns were centralized in public healthcare facilities (NHS)**

Eligible population was able to get free vaccination only on primary care facilities

**2020/21**

**2022/23**

**Influenza vaccination in collaboration with National Health Service (NHS)**

Pharmacies collaborated with NHS in the vaccination of different population subgroups, vaccinating a maximum of 200 000 patients

**2008/09**

**First influenza vaccination campaign**

1600 pharmacies vaccinated  
159.700 people above 65yo

**2018/19**

**2019/20**

**Collaborative projects in one municipality**

These projects generated evidence on how collaboration between community pharmacies and primary health care facilities increase influenza vaccination coverage and patient satisfaction

## Expanding Pharmacy-based vaccination

### Influenza and COVID-19 vaccines

2023/24

2024/25

2025/26

Reimbursed seasonal vaccination at  
community pharmacies free of charge and  
available to the entire eligible population



**2.488** pharmacies  
(88.8% of pharmacies in mainland Portugal) / 278  
municipalities (98.6%)<sup>1</sup>

**+ 7.000** Pharmacists  
with competency on administering vaccines and injectable  
medicines<sup>2</sup>

**+ 65** weekly hours  
of Vaccination Capacity Provided by Pharmacies

**3.500**

Vaccination locations

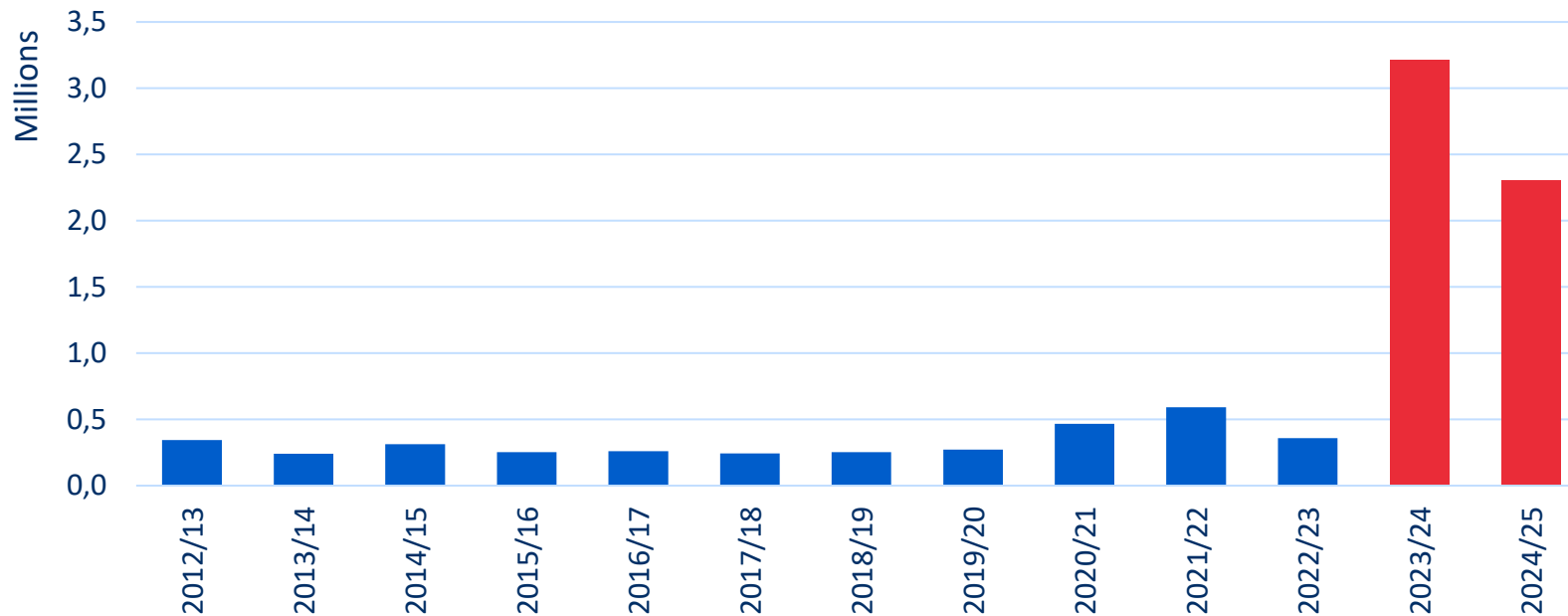


**+400%**

Increase in the number of locations  
available for vaccination compared  
to 2022/23

# Vaccination Service in Community Pharmacies

## Vaccines administered at community pharmacies



### NHS Influenza and COVID-19 vaccines

2023/24: eligible population aged  $\geq 60$  years

2024/25: eligible population aged 60-85 years

## Main Motives for choosing Community Pharmacies

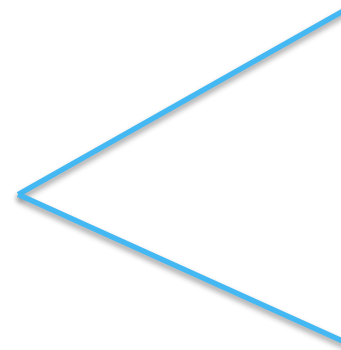


**7 out of 10 COVID-19 and Influenza vaccines were administered in pharmacies**

Proximity and quick access were the main reasons for choosing the pharmacy (2023/24)

**67,4%** for Influenza vaccination

**63,3%** for COVID-19 vaccination



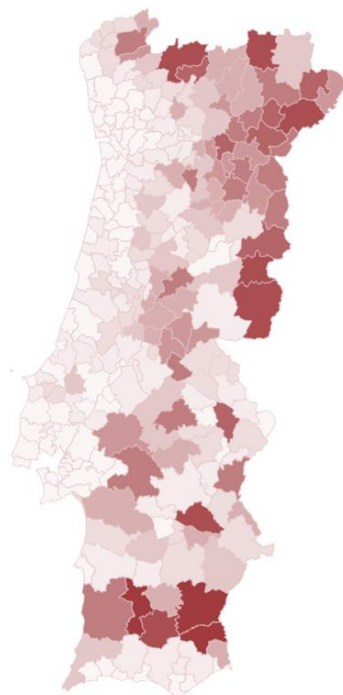
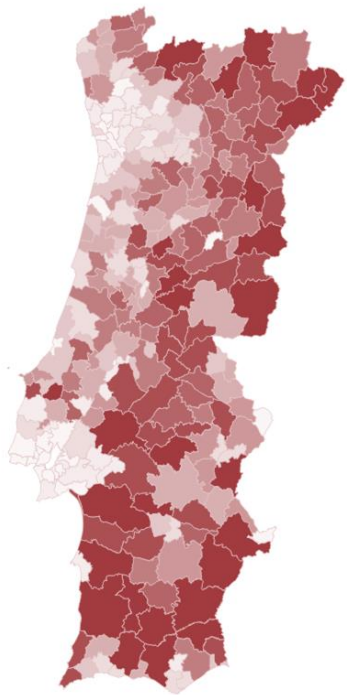
# Vaccination Service in Community Pharmacies

## Decrease Distances and Increase Influenza vaccination coverage

### 2023/24 Seasonal Campaign

NHS vaccination units\*  
(n = 844)

NHS vaccination units (n=844)  
+ pharmacies (n = 2488)



Average distance  
(Kms)



Average distance (km) from resident population for each municipality, to the nearest vaccination site.

\* NHS list extracted from [Lista de Centros de Vacinação - Covid 19 \(min-saude.pt\)](#), in November 2023.

Increase in the average number of vaccination sites per municipality from 3.0 (sd=4.4) to 12.0 (sd=20.5) with pharmacies **(4x higher)**

Excluding pharmacies, the average national distance to the nearest NHS vaccination site was **2.4 km**, **decreasing to 1.2 km** with the inclusion of pharmacies.

Distance reduction of -50.5%

Average variation in influenza coverage (aged ≥ 65 years), 2023/24 versus 2022/23, in the 10% of municipalities with the greatest and lowest reduction in the average distance (Km) from the resident population to the vaccination sites.

March 31st, 2024	Impact on distance reduction	Impact on influenza coverage
10% of municipalities (n=28) with the most significant percentage reduction in distance	> 66.5%	+ 1.3 pp
10% of municipalities (n=28) with the most minor reductions in distance decrease in distances	< 10.3%	- 4.5 pp

# Vaccination Service in Community Pharmacies

## Economic, environmental sustainability, and public health impact

 **70%** vaccinated against influenza in community pharmacies

There was also a significant shift in the transportation patterns:



The average travel time decreased:

**19.3 min** 2022/23

**14.7 min** 2023/24



The proportion of individuals using **cars** decreased:

**69.0%** 2022/23

**43.1%** 2023/24



The average **travel distance** (by car) slightly decreased:

**8.1 Km** 2022/23

**7.6 Km** 2023/24



The total number of **Kilometers** decreased:

**10.3 Million** 2022/23

**6.1 Million** 2023/24



The proportion of individuals **walking** to reach vaccination sites increased:

**20.3%** 2022/23

**54.4%** 2023/24



Estimated **CO<sub>2</sub> emissions** from car-based transportation dropped:

**1,253** 2022/23

**739** 2023/24



**- 41.0%** CO<sub>2</sub> emissions

**- 1,100**

round-trip flights  
between Lisbon and  
Brussels\*



Savings for users

**~€2.4 million saved on travel<sup>5</sup>**

## Main challenges in the funding model

The funding model for pharmacy-based vaccination (PBV) in Portugal presents some challenges:



### **Vaccines outside the national vaccination program:**

- Patients must obtain a prescription to access the co-payment system.
- The administration fee must be paid out-of-pocket.

### **Seasonal vaccination campaigns (Influenza and COVID-19):**

- Annual negotiation of service fees.
- Limited autonomy for pharmacies as the current system does not allow pharmacies to procure vaccines directly, making them dependent on government allocations.
- Additional fee to reduce waste may lead to not all opportunities to vaccine being seized.

## Reimbursement rates

### **Vaccines not included in the National Vaccination Program:**

Each pharmacy can set its own PBV (administration) service fee.

### **Seasonal vaccination campaigns (Influenza and COVID-19):**

Remuneration is subject to renegotiation by authorities, with terms and conditions for population immunization set accordingly.

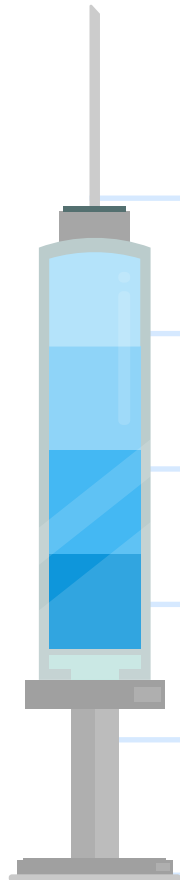
For the 2025-2026 seasonal campaign, pharmacies are reimbursed by the NHS at a rate of €3.00 each per influenza and COVID-19 vaccine administration for individuals aged 60 to 84 (the vaccine is provided by public authorities).





# Vaccination Service in Community Pharmacies

## Key-learnings from our experience and policy recommendations



Progressive **expansion of pharmacy involvement**



Importance of **pharmacist training and certification**



Public **communication strategies**



Collaboration with **healthcare professionals and authorities**



**Digital infrastructure** for vaccine records



**Evidence-based policymaking**



**Reimbursement system**

# Vaccination Service in Community Pharmacies

## Expanding PBV

In Portugal, both the Portuguese Pharmaceutical Society and ANF aim to enhance pharmacists' competencies in vaccination.

To achieve this, ANF engages in political advocacy, focusing on Real World Evidence to demonstrate to the government and political parties that community pharmacies can administer vaccines under the same conditions as the NHS, without any cost to the patient.



Vaccination in  
complementarity with  
the NHS

Currently, ANF is advocating to:

- Providing **booster vaccine for tetanus and diphtheria in adults**;
- Providing vaccination against **whooping cough during pregnancy**;
- Consultation and viewing by the pharmacist of the complete patient history in the eVaccination bulletin of their Electronic Health Record (pharmacies can only view last immunization records of flu and COVID-19 vaccine);



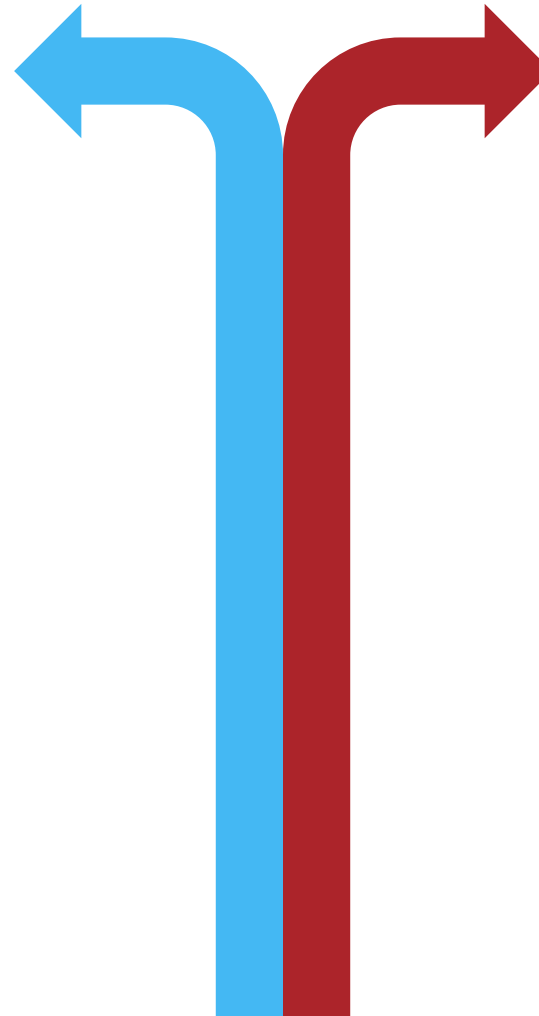
For more information, please check the  
[Portuguese Pharmacies' White Book](#).



## Future

### Strengths

- Valuable healthcare resource
- Collaborative model with Healthcare Centers
- Highly Qualified Professionals
- Accessibility
- Convenience and proximity



### Threats

- Increase in vaccine **hesitancy**
- Equity of access to vaccines
- Vaccine shortages
- Unequal conditions for patients who choose pharmacies

# Vaccination Service in Community Pharmacies

Thank you

