

# 7 SEASONS OF INFLUENZA IMMUNIZATION CAMPAIGNS IN PORTUGUESE PHARMACIES

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## 1. INTRODUCTION

In 2007, the Portuguese legislation extended pharmacies' role, by allowing the provision of immunization services. At that time was defined a complimentary role for pharmacies in immunization without overlap with public and mandatory National Vaccination Plan. Pharmacies were entitled to provide immunization services with vaccines not covered by National Vaccination Plan. The Association of Portuguese Pharmacies (ANF) developed a complete training program, a specific intervention model and recommendations to support pharmacies and pharmacists in the provision of this service. Pharmacies have implemented, since 2008, a Nationwide Influenza Immunization Campaign on an annual basis.



Fig. 1 – Key-visual of 7 Influenza Immunization Campaigns

## 2. AIMS

To provide an overview of the % of vaccines administered in pharmacies and other indicators over the years.

## 3. SETTINGS

Community pharmacies.

## 5. RESULTS

The estimated % of vaccines administered (on total vaccines dispensed) was 36.4% (2008/9), 49.7% (2009/10), 44.2% (2010/11) and 49% (2011/12). In 2012/13, the % was the lowest ever (38%) but increasing (40.9% in 2012/13, 49.2% as preliminary estimate for 2014/15). The preference for pharmacies was established. Until 2011/12, flu vaccines were administered almost solely in pharmacies.

Comparing Flu Seasons	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
<b>No. Participating Pharmacies</b>	1.588 (57.5%)	1.622 (58.7%)	1.703 (61.7%)	1.785 (64.8%)	1.945 (70.3%)	1.818 (65.7%)	2.125 (76.4%)
<b>No. Pharmacies which sent data</b>	775	1.033	1.053	1.227	971*	2.344*	2.383*
<b>% Flu vaccines administered by pharmacists</b>	91%	92.2%	92%	93.5%	98.9%	98.5%	98.7%
<b>Average number of Flu shots administered per pharmacy</b>	206	284	218	230	117	42	59
<b>% of Flu vaccines administered in pharmacies (max. point estimate)</b>	36.4%	49.7%	44.2%	49.0%	38%**	40.9%**	49.3%**
<b>Influenza immunization coverage in patients aged 65 years and older</b>	50.4%	53.7%	45.0%	43.3%	20.5%	9.8%	10%

\* Data recorded exclusively in Sifarma® regardless of joining the Vaccination Campaign

\*\* Changes in the methodology for calculating the influenza immunization coverage in pharmacies since 2012/13.

## 6. CONCLUSIONS

The first 4 seasons demonstrate an increase in major indicators. Since 2012/13, flu vaccines are administered for free in health centers to individuals aged 65 and over with no need for a prescription. By contrast, the NHS financing of vaccines and service does not occur for pharmacies. The last Government's Report (2013/14) reports influenza coverage of 49.9% in the 65 and over subgroup, lowest than in 2008/9. In 2014, the Ministry of Health and ANF signed an agreement which foresees possible incentives for pharmacies' collaboration in public health objectives, including immunization service. This could be an opportunity to integrate pharmacies in a National Influenza Immunization Campaign.

## 4. METHODS

A cross-sectional study was performed at each influenza season (Oct.-Mar.) based on data recorded in pharmacies from 2008/9 to 2014/15. First data based on paper records and spreadsheet since 2008 and from 2012 on directly in pharmacy's specific software (SIFARMA). All records are anonymously (regarding patients and pharmacy individual data) and automatically transmitted for evaluation purposes by ANF. Vaccination records include patient name, age and sex, vaccine and batch used, route of administration, date and pharmacist name.

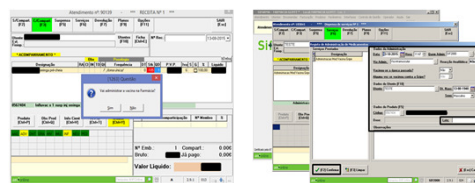


Fig. 2 - Pharmacy's specific software (SIFARMA)

Campaigns were targeted to adults with prescribed influenza vaccine.

Main outcome measures:

- % of influenza vaccines administered in pharmacies = Number of influenza vaccines administered in pharmacies / Number of influenza vaccines sales in pharmacies x 100
- Influenza immunization coverage = Number of influenza vaccines sales in pharmacies / Total population x 100
- Pharmacies contribution to the Influenza immunization coverage = Number of influenza vaccines administered in pharmacies / Total population x 100

Method for estimating % of vaccines administered on total vaccines dispensed has been modified due to this and is now also projected to total number of pharmacies (through cluster analysis).

## 7. REFERENCES

1. Grabenstein JD, Hogue MD, Foster SL. Pharmacy-Based Immunization Delivery. A National Certificate Program for Pharmacists. Self-Study Learning Program March 2006 Revised 10th ed. Washington: American Pharmacists Association; 2006.
2. Hogue MD et al. Pharmacist Involvement with Immunization: A Decade of Professional Advancement. J Am Pharm Assoc 2006; 46(2):168-182.
3. Horta MR, Costa S, Mendes Z, Mendes T, Santos C. Immunization Delivery: a new service provided in Portuguese pharmacies. Part 2: First Nationwide Influenza Immunization Campaign. Poster presented at FIP Congress Set 2009, Istanbul, Turquia.
4. Ministério da Saúde. Instituto Nacional de Saúde Doutor Ricardo Jorge (INSA). Vacinação antigripal da população portuguesa em 2013-2014. Relatório. Lisboa, Junho 2014 (available in Portuguese).
5. CEFAR. Avaliação da Campanha de Vacinação contra a Gripe Sazonal nas Farmácias 2014-2015. Relatório. Lisboa, Agosto 2015.

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