Flu vaccination in pharmacies in Portugal

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Infarmed

Luxembourg,
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European Comission
High-level hearing on the implementation of the Council Recomendation
Summary

Perliminary information

Legislation

Guidelines and Certification - OF

Procedures - ANF

Results – INSA
Preliminary information

- ≈ 10 million inhabitants in Portugal
- 2780 pharmacies and 175 pharmacy extensions ratio - 3 400 I/P

Pharmacy distribution in Portugal

<table>
<thead>
<tr>
<th>Region</th>
<th>Farmácias</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTE</td>
<td>800</td>
</tr>
<tr>
<td>CENTRO</td>
<td>600</td>
</tr>
<tr>
<td>LISBOA E VALE do TEJO</td>
<td>1000</td>
</tr>
<tr>
<td>ALENTEJO</td>
<td>200</td>
</tr>
<tr>
<td>ALGARVE</td>
<td>100</td>
</tr>
</tbody>
</table>

habitantes

- 3.600.000
- 3.000.000
- 2.400.000
- 1.800.000
- 1.200.000
- 600.000
Número de Habitantes por Farmácias

- Norte: 4000
- Centro: 3500
- Lisboa e Vale do Tejo: 3500
- Alentejo: 2500
- Algarve: 4000
- Nacional: 5000
Legislation

- Pharmacies can provide the population with pharmaceutical services
  [Decree-Law n.º 307/2007, 31st August]

- Pharmaceutical services should promote health and well-being
  [Decree-Law n.º 171/2012, 31st August]
Regulation

Infarmed

Deliberation nº 139/2010

Profissional Qualification
Premises
Equipement
Records
Background

2007

• New legislation allowing pharmacies to expand their scope of activity onto new areas → immunization

• Vaccines not included in the National Vaccination Plan

2008

• Training program, intervention model and recommendations

  • Massive training program for pharmacists all over the country in a short period of time
  • List of necessary materials to treat an anaphylactic event
  • List of nurses (external providers) for interested pharmacies

Flu Season 2008/2009
First Nationwide Pharmacy-Based Influenza Immunization Campaign
Pharmaceutical services

a) Home-based care
b) First aid
c) Administration of medicines
d) Use of in vitro medical devices
e) Administration of vaccines not included in the National Vaccination Programme
f) Pharmaceutical care programmes
g) Information campaigns
h) Collaboration in programmes of education for health
GUIDELINES

Who is Responsible?

- Technical director (pharmacist) of community pharmacy

Who executes?

- Pharmacists
  (specific training endorsed by the Portuguese Pharmaceutical Society)

- Nurses
  (exclusive and specifically hired to perform this task)

- Process of competence acknowledgement delegated on the Portuguese Pharmaceutical Society by the Government
Vaccination training

- Administration technique
- Immunology fundamental concepts
- Legislation and good practices
- Vaccine administration
- Parenteric administration
- Safety
- Patient approach

THEORY 75%
PRACTICE 25%
Certification and recertification

✓ In 2013 the Portuguese Pharmaceutical Society published *guidelines* on Immunization Services certification

✓ Guidelines establish minimum *requirements for accreditation* of initial training and also for recertification training

✓ **Certification** to provide the service:
  - Complete initial training
  - Complete recertification training every 5 years
  - Evidence of continued activity

The National Association of Pharmacies (ANF) training model fulfilled all the requirements for the Pharmaceutical Society certification
Certification

- Valid for 5 years, issued by the Portuguese Pharmaceutical Society
- Certification on Basic Life Support also necessary

**Recertification** (after 5 years):

- Proof of experience in vaccine and injectable administration for 5 years
- Specific knowledge update
PROCEDURES
Training program for pharmacists

• Training model based on the American Pharmacists’ Association (APhA) Certificate Training Program for Pharmacists (Pharmacy-Based Immunization Delivery)

Currently:
- More than 2,000 Portuguese pharmacies providing the service of vaccination
- More than 3,600 pharmacists certified for administering vaccines by the Pharmaceutical Society
First Pharmacy-Based Influenza Immunization Campaign

- Intervention model based on **US experience**
- Model and tools developed, including **immunization delivery and emergency procedures and immunization records**, to support pharmacists in the provision of this new service
- **All pharmacies invited** to participate
- Pharmacists requested to **target service to adults presenting a prescription of influenza vaccine**, namely 65-year-old patients
Objectives of campaigns

- Raise public awareness of the availability of this service in community pharmacies
- Inform target population about influenza and the benefits of immunization
- Determine the % of vaccines administered in pharmacies and the contribution of pharmacies for the overall influenza immunization coverage
Tools and materials

- Card for the patient
- Leaflet for the patient
- TV and Radio spots
- Poster to promote the service in the pharmacy

Pharmacist intervention Protocol in case of an anaphylactic event
Pharmacists’ intervention

- **Vulnerable patients without prescription**
  - Inform patients about influenza, preventive measures and the benefits of immunization
  - Refer to a doctor

- **Patients with prescription**
  - Dispenses the vaccine
  - Suggests immunization at the pharmacy
  - Delivers immunization according to procedure
  - Records the immunization provided
Vaccination in the pharmacy

✓ Mandatory records:

✓ Identification and date of vaccination
✓ Identification of the medicinal product (lot number and administration route)
✓ Patient ID (name, age, gender)
✓ Identification of the pharmacist (who administered)
Vaccination in the pharmacy

Identification & date of vaccination

Pharmacist name

Patient ID (name, sex, age)

Identification of the medicinal product/administration route/dose administered/lot number

Registry of anaphylactic reactions:
If YES – follow pharmaceutical intervention procedure
Records

- 2008 - Data recorded in the spreadsheet used by pharmacists to document the intervention
- Since 2012 on software (Sifarma)
  - Patient name, age and sex
  - Vaccines trade name
  - Vaccines lot
  - Route of administration
  - Date of administration
  - Name of who administered

The CEFAR makes the evaluation of the service based on the records of SIFARMA sent anonymously and automatically to ANF.
The Government decided to provide free vaccines to patients aged ≥65 years in health centers for the 2012/13 season...
### Results (I)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. Participating Pharmacies</strong></td>
<td>1.588</td>
<td>1.622</td>
<td>1.703</td>
<td>1.785</td>
<td>1.945</td>
</tr>
<tr>
<td></td>
<td>(59.5%)</td>
<td>(59.7%)</td>
<td>(61.7%)</td>
<td>(64.8%)</td>
<td>(70.3%)</td>
</tr>
<tr>
<td><strong>No. Pharmacies which sent data</strong></td>
<td>775</td>
<td>1.033</td>
<td>1.053</td>
<td>1.227</td>
<td>971</td>
</tr>
<tr>
<td></td>
<td>(49%)</td>
<td>(63.7%)</td>
<td>(61.8%)</td>
<td>(68.7%)</td>
<td>(49.9%)</td>
</tr>
<tr>
<td><strong>% Flu vaccines administered by pharmacists</strong></td>
<td>91%</td>
<td>92.2%</td>
<td>92%</td>
<td>93.5%</td>
<td>98.9%</td>
</tr>
<tr>
<td><strong>Average number of Flu shots administered per pharmacy</strong></td>
<td>206</td>
<td>284</td>
<td>218</td>
<td>230</td>
<td>117</td>
</tr>
<tr>
<td><strong>% of Flu vaccines administered in pharmacies (max. point estimate)</strong></td>
<td>36.4%</td>
<td>49.7%</td>
<td>44.2%</td>
<td>49.0%</td>
<td>38.0%</td>
</tr>
<tr>
<td><strong>Influenza immunization coverage in patients aged 65 years and older</strong></td>
<td>50.4%</td>
<td>53.7%</td>
<td>45%</td>
<td>43.3%</td>
<td>20.48%</td>
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</tbody>
</table>

Source: CEFAR, Centre for Health Evaluation & Research (ANF Group)
Flu vaccine demands after free vaccination offer for 65+ population

Flu vaccine acquisition in Pharmacies

- All risk groups
- 65+ population
- 60 to 64 y

Free for 65+
## Results (II)

<table>
<thead>
<tr>
<th>Reported place of influenza vaccination</th>
<th>2008/9 % (n=171)</th>
<th>2009/10 % (n=129)</th>
<th>2010/11 % (n=150)</th>
<th>2011/12 % (n=135)</th>
<th>2012/13 % (n=135)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Center</td>
<td>42.8</td>
<td>22.1</td>
<td>25.8</td>
<td>21.2</td>
<td>47.2</td>
</tr>
<tr>
<td>Nursing Center</td>
<td>3.8</td>
<td>13.9</td>
<td>6.2</td>
<td>6.5</td>
<td>1.20</td>
</tr>
<tr>
<td>Hospital / Clinic</td>
<td>4.8</td>
<td>4.4</td>
<td>7.0</td>
<td>2.9</td>
<td>2.50</td>
</tr>
<tr>
<td>Work</td>
<td>12.3</td>
<td>5.0</td>
<td>7.9</td>
<td>7.2</td>
<td>6.60</td>
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<tr>
<td>Home</td>
<td>6.2</td>
<td>8.0</td>
<td>8.0</td>
<td>3.0</td>
<td>4.80</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>26.8</td>
<td>43.2</td>
<td>42.4</td>
<td>55.1</td>
<td>33.9</td>
</tr>
<tr>
<td>Other</td>
<td>3.3</td>
<td>3.4</td>
<td>2.7</td>
<td>5.0</td>
<td>3.80</td>
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</tbody>
</table>

Flu vaccine coverage 2007/8 – 2014/15

<table>
<thead>
<tr>
<th>Year</th>
<th>Centro Saúde</th>
<th>Posto Enfermagem</th>
<th>Hospital/Clínica</th>
<th>Local de Trabalho</th>
<th>Domicílio</th>
<th>Farmácia</th>
<th>Outro</th>
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</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>50,3</td>
<td>1,1</td>
<td>5,1</td>
<td>12,8</td>
<td>9,5</td>
<td>18,6</td>
<td>2,5</td>
</tr>
<tr>
<td>2008-2009</td>
<td>42,8</td>
<td>3,8</td>
<td>4,8</td>
<td>12,3</td>
<td>6,2</td>
<td>26,8</td>
<td>3,3</td>
</tr>
<tr>
<td>2009-2010</td>
<td>22,1</td>
<td>13,9</td>
<td>4,4</td>
<td>5,0</td>
<td>8,0</td>
<td>43,2</td>
<td>3,4</td>
</tr>
<tr>
<td>2010-2011</td>
<td>25,8</td>
<td>6,2</td>
<td>7,0</td>
<td>7,9</td>
<td>8,0</td>
<td>42,4</td>
<td>2,7</td>
</tr>
<tr>
<td>2011-2012</td>
<td>21,2</td>
<td>6,5</td>
<td>2,9</td>
<td>7,2</td>
<td>3,0</td>
<td>55,1</td>
<td>5,0</td>
</tr>
<tr>
<td>2012-2013</td>
<td>47,2</td>
<td>1,2</td>
<td>2,5</td>
<td>6,6</td>
<td>4,8</td>
<td>33,9</td>
<td>0,0</td>
</tr>
<tr>
<td>2013-2014</td>
<td>55,7</td>
<td>5,0</td>
<td>1,2</td>
<td>8,7</td>
<td>5,1</td>
<td>24,3</td>
<td>0,5</td>
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<tr>
<td>2014-2015</td>
<td>62,1</td>
<td>0,8</td>
<td>2,1</td>
<td>5,7</td>
<td>3,0</td>
<td>25,8</td>
<td></td>
</tr>
</tbody>
</table>

Source: ECOS Board, Epidemiology Department, INSA
Sales data in national market - Pharmaceutical Industry report
<table>
<thead>
<tr>
<th>Profissão</th>
<th>Europa (%)</th>
<th>Portugal (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombeiros</td>
<td>92</td>
<td>75</td>
</tr>
<tr>
<td>Pilotos de aviação</td>
<td>88</td>
<td>75</td>
</tr>
<tr>
<td><strong>Farmacêuticos</strong></td>
<td><strong>85</strong></td>
<td><strong>73</strong></td>
</tr>
<tr>
<td>Enfermeiros</td>
<td>84</td>
<td>71</td>
</tr>
<tr>
<td>Médicos</td>
<td>82</td>
<td>70</td>
</tr>
<tr>
<td>Professores</td>
<td>76</td>
<td>63</td>
</tr>
<tr>
<td>Agricultores</td>
<td>75</td>
<td>61</td>
</tr>
<tr>
<td>Polícias</td>
<td>62</td>
<td>50</td>
</tr>
<tr>
<td>Meteorologistas</td>
<td>57</td>
<td>49</td>
</tr>
<tr>
<td>Taxistas</td>
<td>47</td>
<td>31</td>
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<tr>
<td>Judges</td>
<td>47</td>
<td>23</td>
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<tr>
<td>Padres</td>
<td>46</td>
<td>36</td>
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<tr>
<td>Advogados</td>
<td>43</td>
<td>16</td>
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<tr>
<td>Agentes de viagens</td>
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<td>23</td>
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<tr>
<td>Consultores financeiros</td>
<td>29</td>
<td>16</td>
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<tr>
<td>Jornalistas</td>
<td>27</td>
<td>22</td>
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<tr>
<td>Líderes sindicais</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>Futebolistas</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Vendedores de automóveis</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Políticos</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Trusted Brand 2010, Reader’s Digest
Thank you

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