The Economics of Self-Care in Mexico

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Every year, millions of people in Mexico seek treatment for common, non-serious health conditions in the public health care system, despite the availability of effective, cost-efficient over-the-counter (OTC) solutions. This common practice leads to unnecessarily high health care costs.

- These costs may be **as high as $745 million per year across Mexico’s public health care institutions** – Instituto Mexicano del Seguro Social (IMSS), Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE) and Secretaria de Salud (SSA) institutions.

- In comparison, costs associated with **using OTC products to treat the same conditions may be just $120 million per year**.
In order to demonstrate the potential economic and societal benefits of an increase in the number and variety of OTC medicines for consumers and patients in Mexico, Bayer commissioned a study (Sep-Dec´16) to quantify the cost differences between OTC self-care versus the costs for treatment through Mexico’s public health systems for several common, non-serious conditions.

The study also sought to quantify the positive economic impacts associated with the implementation of a preventive supplementary regimen for chronic conditions, such as osteoporosis, to further highlight the benefits of OTC access.
Study Methodology

The study was based on official guidelines and publicly available data on the costs associated with the process of care for these five common conditions through IMSS, ISSSTE and SSA, and a consumer survey was administered to determine the occurrence and costs associated with management of these conditions through the private sector.
Costs Associated with Different Treatment Scenarios

Treatment cost estimates generated as part of the study took into account the specific cost for the clinical practice guidelines and art lexis medica and other potential expenses patients may encounter depending on how they seek care.

For patients receiving treatment within the public health care sector, costs examined included:

- External visit to a family physician and/or specialist
- Specific pharmacological treatment
- Emergency care, if required
- Surgical procedure, if required
- Diagnostic tests, if required
- Hospitalization, if required

For patients treating their condition using OTC medicines, costs analyzed included price paid for the corresponding OTC drug product(s).

For patients in both situations, the study also analyzed the cost of lost labor days due to management of the condition.
The study found that the Mexican public health care sector bears a large burden of cost for conditions that could be easily and effectively treated with OTC medicines.

- The average per capita annual costs for families who self-manage common conditions with OTC drug products was just $22, compared with an average annual per capita cost of $123 for those patients whose care was managed in the public health care sector.

- OTC products help maintain a healthy Mexican workforce, offering $93 million in potential productivity benefits, related to a reduction in lost labor time.

- A portion of the public healthcare budget across IMSS, ISSSTE and SSA is dedicated to treating these common conditions that could be easily and effectively treated with OTC products. This includes:
  - 13.7% in SSA
  - 5.1% in IMSS
  - 9.8% in ISSSTE
Acute upper respiratory tract infection, also known as the common cold, affects nearly 7.5 millions of Mexicans each year, creating a significant burden and avoidable cost when patients seek care in public health systems.

### STUDY RESULTS_ EXEMPLE 1

#### Common Cold

- **7.5M** number of Mexicans treated in public health system each year
- **3x / year** average number of times families experience colds per year
- **$27** total lost labor costs per family each year
- **$27 million** potential national cost savings each year

#### TREATMENT COST BREAKDOWN

<table>
<thead>
<tr>
<th>In the public health care system</th>
<th>an average of $72 per event</th>
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<tbody>
<tr>
<td>Cost of a single OTC treatment</td>
<td>$2</td>
</tr>
<tr>
<td>Total cost difference per event</td>
<td>$70</td>
</tr>
<tr>
<td>in public health care vs. OTC</td>
<td></td>
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<tr>
<td>Potential national cost savings</td>
<td>$67 million</td>
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Nearly 2.8 million patients are treated in Mexico’s public health care sector each year for acute diarrhea. While pharmacological medicines are readily available OTC, patients treated in public institutions for this condition often require costly outpatient laboratory tests.

<table>
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<tr>
<th>STUDY RESULTS_EXEMPLE 2</th>
<th>Acute Diarrhea</th>
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</thead>
<tbody>
<tr>
<td><strong>2.8M</strong> number of Mexicans treated in public health system each year</td>
<td></td>
</tr>
<tr>
<td><strong>2.5x / year</strong> Average number of times families experience acute diarrhea per year</td>
<td></td>
</tr>
<tr>
<td><strong>Economic costs associated with lost productivity</strong> total lost labor costs per family each year</td>
<td></td>
</tr>
<tr>
<td><strong>$7</strong></td>
<td></td>
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### TREATMENT COST BREAKDOWN

- In the public health care system: an average of $41 per event
- Cost of a single OTC treatment: $4
- Total cost difference per event in public health care vs. OTC: $37
- Potential national cost savings each year: $101 million
Study findings demonstrate that managing chronic conditions, like osteoporosis, with a self-managed preventive regimen can reduce public health care costs associated with lengthy and potentially difficult-to-treat complications.

3M number of Mexicans suffering from osteoporosis

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<tbody>
<tr>
<td>Economic and social costs for treatment of osteoporosis in the public health care system</td>
<td>$662 average per fracture event</td>
</tr>
<tr>
<td>Recommended Calcium plus Vitamin D to prevent fracture events</td>
<td>$273 per year</td>
</tr>
</tbody>
</table>

However, studies have shown that in the case of women 50+ years of age with osteoporosis, the risk of suffering a costly pathological fracture is reduced by 19.7% when taking Calcium plus Vitamin D.

In 2015, that would have amounted to about 27,000 fewer fractures.

Potential annual cost savings per capita associated with a preventive regimen $18M

Number of patients who experience complications resulting from osteoporosis 400K
Total Potential Cost Savings

$1 spent on OTC medicines across the five categories measured

$7.5 optimized by the Mexican public health care sector
The Need to Expand OTC social responsibility is clear

The study results are clear. Practicing self-care through the use of OTC products is an affordable, safe and easily accessible way for consumers to manage some frequent health conditions and collaborate with public health system.

The number and variety of self-care treatments should be increased in order to:

• **Optimize public health care sector costs, by shifting treatment of conditions from costly institutional management to inexpensive and accessible drugstore products;**

• **Improve societal productivity, by reducing lost labor days and allowing patients better quality-of-life; and,**

• **Minimize the risk of allowing chronic conditions to worsen over time, by encouraging the use of preventive supplement regimens (e.g., use of Calcium plus Vitamin D in people with osteoporosis).**
A common agenda that expand the benefit of OTC for public:

- Increase the level of information with a more efficient and self-regulated advertising
- Public Communications of the benefits of responsible Self-Care
- Simplification of Administrative Procedures to expand access of new treatments and speed go-to-market
- Increase number of Prescription-to-OTC Switch
- Counterfeiting products: Diminish sanitary risks and economics leak
Let’s built together a healthier life for everyone!