TELEHEALTH TO PROVIDE SUPPORT AND PROMOTE CONTINUED EDUCATION FOR PRIMARY CARE PRACTITIONERS IN MINAS GERAIS, BRAZIL

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Introduction

Brazil is a continental country that has many contrasts, with concentration of healthcare professionals and resources in the largest cities.
Introduction

Telehealth was implemented to reduce the inequality in Brazilian healthcare system.
Minas Gerais State, Brazil
Telehealth Network of Minas Gerais

- In 2005, was created to connect the 6 university hospitals network with municipal health departments of remote cities.

- Since 2007, has been performing for a broad range of medical and non-medical specialties.

- Nowadays, it attends primary care practitioners of 660* of the 853 municipalities of the state.

*87% with less than 14,000 inhabitants
Benefits

Reduce unnecessary referrals

Offer a second opinion for a broad range of medical and non-medical specialties

Improve the access of small and remote cities to specialized care

Reduce professional isolation

TELEHEALTH
Objective

To demonstrate the importance of the telehealth to support remote and small cities’ healthcare professionals and promote continued education.
Methods

- All teleconsultations performed between April 2007 and December 2013 were classified according to:
  - Professional who requested
  - Specialist who answered

- Teleconsultations performed between January 2012 and March 2012 were analyzed based on:
  - Type of query
  - ICD-10 chapter
Results

57,619 teleconsultations were performed between April 2007 and December 2013

Nurses (52.4%) and Physicians (35.3%) requested the highest number of teleconsultations
Results

Healthcare specialists who answered most queries:

- Family physicians/internal medicine physicians (33.0%)
- Dermatologists (18.7%)
- Nurses (12.6%)
- Obstetricians and gynecologists (10.3%)
- Pediatricians (6.7%)
- Dentists (3.5%)
- Physiotherapists (2.0%)

Subspecialists (other than dermatologists) answered less than 10%
Results

From January 2012 to March 2012 (n=2,027):

- 77.7% of teleconsultations were related to patients’ assistance
- 22.3% were general doubts
# Type of query from January to March 2012

<table>
<thead>
<tr>
<th>Type of query</th>
<th>Physicians (N=666)</th>
<th>Nurses (N=1264)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Etiology</td>
<td>37.9</td>
<td>34.1</td>
</tr>
<tr>
<td>Pharmacological treatment</td>
<td>36.6</td>
<td>20.3</td>
</tr>
<tr>
<td>Propaedeutic</td>
<td>31.8</td>
<td>13.5</td>
</tr>
<tr>
<td>Non pharmacological treatment</td>
<td>18.3</td>
<td>21.3</td>
</tr>
<tr>
<td>Patient follow-up</td>
<td>12.4</td>
<td>14.7</td>
</tr>
<tr>
<td>Medical or nurse advice</td>
<td>10.8</td>
<td>17.2</td>
</tr>
<tr>
<td>Surgical treatment</td>
<td>6.5</td>
<td>5.7</td>
</tr>
<tr>
<td>Assistance to pregnancy</td>
<td>4.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Others</td>
<td>7.7</td>
<td>20.8</td>
</tr>
</tbody>
</table>

*The sum is higher than 100%, as each teleconsultation could contain more than one query*
Results

Most frequent Teleconsultations, sent by healthcare professionals, according to the ICD-10 classification:

- Skin and subcutaneous tissue diseases (15.4%)
- Infectious and parasitic diseases (10.8%)
- Digestive diseases (7.8%)
- Genitourinary diseases (7.1%)
The study highlighted the potential of telehealth to:

- Provide support for primary care practitioners
- Promote continued education for professionals who are isolated from education centers
Discussion

Clinical case discussions based on the questions from healthcare professional’s daily practice

Reduce the sensation of professional isolation and helps improving the quality of healthcare
The study revealed that:

- Specialists of basic areas answered most queries: Family physicians, nurses, obstetricians and gynecologists and pediatricians

- Most questions were about etiology, pharmacological treatment and non-pharmacological treatment
Discussion

- Skin and subcutaneous tissue diseases, infectious and parasitic diseases, digestive and genitourinary diseases had higher demand.

This information is very useful to develop focused training strategies.
Conclusion

The large number of teleconsultations shows that the service has already been incorporated into the healthcare system.

Improve the assistance to healthcare professionals in remote municipalities.
Conclusion

This study also shows the telehealth potential to:

- Provide support
- Promote continued education
- Improving the access of the population to specialized care

For primary care practitioners in remote cities
References


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Thank You !