How Data Can Shape A Department

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Introduction

- OT departments:
  - High patient caseloads
  - Limited resources
  - Diverse patient populations
- Allocating resources and prioritizing services can prove challenging
Chris Hani Baragwanath Academic Hospital (CHBAH)
Soweto, Johannesburg, South Africa
Largest hospital in Africa
Central academic hospital
Tertiary and quaternary services
2888 beds
Soweto population approx. 1.2 million
31 OTs; four sub-sections
Objectives

- Analyse patient demographics and statistics of patient management
  - In order to improve understanding of services
- Improve efficiency of OT services
  - Whilst addressing needs of broad population
Approach

- Data collected on Microsoft Excel:
  - 31 OTs
  - Patient demographics
  - Services rendered
  - Frequency and length of treatment sessions
  - In- and outpatients
  - July 2016 – December 2017
- Descriptive statistics used to analyse data
Group and individual attendances

![Graph showing group and individual attendances for different categories: Neuro, Ortho, Paeds, Psych. The graph is for July 2016.]
Number and length of individual sessions

Length of individual session (minutes)

Individual sessions

- Neuro
- Ortho
- Paeds
- Psych

Jul 2016
Outpatient sessions
## Allocation of therapists

<table>
<thead>
<tr>
<th></th>
<th>July 2016</th>
<th>December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult neurology</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Adult orthopaedics</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
Most common diagnoses

- Burns
- Hands
- Neonatal condition
- Mood disorder
- Stroke

Number of diagnoses

Time
## Quadruple burden of disease

<table>
<thead>
<tr>
<th>Common diagnoses seen in OT at CHBAH</th>
<th>Quadruple burden of disease in SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>All 5 diagnoses</td>
<td>HIV, AIDS and TB</td>
</tr>
<tr>
<td>Neonatal complications</td>
<td>Mother and child morbidity and mortality</td>
</tr>
<tr>
<td>Strokes</td>
<td>Non-communicable diseases</td>
</tr>
<tr>
<td>Mood disorders</td>
<td></td>
</tr>
<tr>
<td>Hands</td>
<td>Injury and violence</td>
</tr>
<tr>
<td>Burns</td>
<td></td>
</tr>
</tbody>
</table>
Assistive devices

Number of assistive devices

Time
Practice Implications

- WHO: Universal coverage in health care
  - SA: National Health Insurance (NHI)

- Highlight needs:
  - Training
  - Research
  - Specialized clinics

- This has shaped the allocation of staff and resources
  - To improve the efficiency of the department
Conclusion

- Data analysis can be used as a tool to:
  - Provide the largest impact to a diverse patient population
  - Allocate resources
  - Align OT services with NHI levels of healthcare and packages of service
  - Monitor and adjust clinical priority areas

- The OT department can maximize the efficiency of services rendered
Reference

Thank you to the CHBAH OT Department for your ongoing dedication to the patients you serve.