30 MILLION AMERICANS AFFECTED BY HEARING LOSS

For many, it's untreated, leading to even more health issues

“This is not something to be ignored.”

Dr. Dan Blazer, Duke University, chair of advisory group that studied hearing loss

1 Problem
What
- Problem(s)
- Hearing loss

When
- Date
- Ongoing
- Different, unusual, unique

Where
- Facility, site
- US
- Task being performed
- Suffering hearing loss

Impact to the Goals
- Patient Safety
  - Risk of social isolation/ depression
  - Risk of cognitive dysfunction/ dementia
- Patient Services
  - Patients unable to hear properly
- Financial
  - Out-of-pocket expense of hearing aids

2 Analysis
Cause Map
Add detail as information becomes available.

Why?

Effect
- Patients suffer from hearing loss

Cause
- Risk of social isolation/ depression

Possible Solution:
- More research into effects of untreated hearing loss on physical health

Evidence: Extra work by brain with hearing loss results in reduction of thinking skills

Strain on brain
- Dealing with more garbled sound

Evidence: Extra work by brain with hearing loss results in reduction of thinking skills

Parts of brain shrink?
- Reduced auditory input

Evidence: New research indicates brain shrinkage from auditory input

Unable to fully participate in activities

Evidence: Identified by advisory group as a growing public health problem

3 Solutions

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Item</th>
<th>Cause</th>
<th>Owner(s) (Names)</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>More research into effects of untreated hearing loss on physical health</td>
<td>Risk of cognitive dysfunction/ dementia</td>
<td>Science/ medical community</td>
</tr>
<tr>
<td>2</td>
<td>Allow over-the-counter sales of simple devices</td>
<td>Only available by prescription</td>
<td>FDA</td>
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<tr>
<td>3</td>
<td>Evaluate coverage for hearing aids &amp; related care</td>
<td>Medicare doesn’t pay for hearing aids</td>
<td>Medicare/ other insurance providers</td>
</tr>
<tr>
<td>4</td>
<td>Provide consumers access to their hearing tests</td>
<td>Patients may not have access to their hearing tests</td>
<td>Hearing evaluation providers</td>
</tr>
<tr>
<td>5</td>
<td>Provide consumers itemized prices</td>
<td>Device/ service costs typically bundled</td>
<td>Hearing evaluation/ aid providers</td>
</tr>
<tr>
<td>6</td>
<td>Disclose if hearing aids can only be programmed by certain providers prior to purchase</td>
<td>Some devices can only be programmed by certain providers</td>
<td>Hearing aid providers</td>
</tr>
</tbody>
</table>

Possible Solution:
- Allow over-the-counter sales of simple devices

Possible Solution:
- Evaluate coverage for hearing aids & related care

Possible Solution:
- Provide consumers itemized prices

Possible Solution:
- Disclose if hearing aids can only be programmed by certain providers prior to purchase

Possible Solution:
- Patients may not have access to their hearing tests

Possible Solution:
- Limited ability to shop around for devices/ switch care

Possible Solution:
- Device/ service costs typically bundled

Possible Solution:
- Some devices can only be programmed by certain providers

Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

Step 1 Problem
What's the problem?

Step 2 Analysis
Why did it happen?

Step 3 Solutions
What will be done?

Investigate Problems. Prevent Problems.

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Hearing air providers

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