ABSTRACT
According to the World Health Organization, there are 39 million blind individuals worldwide. Ninety percent of them live in poverty in the developing world and four out of every five blind people could be cured at any modern eye clinic, but those in developing nations lack access to modern eye care. Due to this need of modern eye care in impoverished nations, the Moran Eye Center has made it a mission of theirs to visit and assist those in these nations.

While working in these rural areas, ophthalmologists currently have to rely on a steady hand and a still patient when performing common eye exams and other basic procedures due to travel constraints. This causes the quality of the exams to suffer over time, as the ophthalmologist gradually fatigues.

WHAT DO OPHTHALMOLOGISTS NEED IN RURAL AREAS?
A head/chinrest that ophthalmologists can utilize to increase the quality of eye exams performed under non-ideal conditions experienced on outreach ventures. This device must:
• Hold the patient’s head steady while receiving an eye examination
• Include an attachment that will hold the handheld slit-lamp steady while being used by the doctor performing the eye examination
• Have a simple, rigid, durable, light, and portable design that minimizes set-up/disassembly time
• Be easily collapsible to facilitate ease of travel

REQUESTED HALO DEVICE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Design Specification</th>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Collapsed Dimensions</td>
<td>26&quot; x 18&quot; x 11.5&quot;</td>
<td>Fit in a standard carry on suitcase</td>
</tr>
<tr>
<td>Total Weight</td>
<td>&lt; 10 lbs</td>
<td>Low weight for easy transportation</td>
</tr>
<tr>
<td>Slit Lamp Adjustment</td>
<td>8° Vertical 5° Horizontal 1.5&quot; Forward/Back</td>
<td>Necessary movement for eye examinations</td>
</tr>
</tbody>
</table>

RESULTS & CONCLUSIONS
• Total Weight: 8.1 lbs
• Collapsed Dimensions: 23" x 12" x 11"
• Slit lamp adjustment: 7.3" vertical 8" horizontal 8" forward/back

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- "The worst job in America" for working with us throughout the design process
- "And others at Moran Eye center that have assisted us on our journey"