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Figure 1.
Comparison of Fixed- and Variable-Threshold Models of Assessing DMC

- Low-risk decisions are much more common than high-risk decisions.
- The fixed-threshold model generates more errors of finding competent people incompetent.
- The variable-threshold model generates more errors of finding incompetent people competent.

Table 1.
Each Threshold Model’s Relative Rates of Two Error Types

<table>
<thead>
<tr>
<th>Competent judged incompetent</th>
<th>Low-risk decisions</th>
<th>High-risk decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competent</td>
<td>Higher rate with a fixed threshold</td>
<td>Higher rate with a variable threshold</td>
</tr>
<tr>
<td>Incompetent judged competent</td>
<td>Higher rate with a variable threshold</td>
<td>Higher rate with a fixed threshold</td>
</tr>
</tbody>
</table>

- 0-100: range of scores on a DMC abilities measurement; 100 = perfect abilities; 0 = coma.
- Gray bar = zone of uncertainty. Cases in green area are obviously competent or incompetent.
- The fixed-threshold model is insensitive to risk, so the threshold must be risk neutral. This will be at the midpoint.
- Variable thresholds: LR = low-risk threshold; HR = high-risk threshold. Variable thresholds will vary depending on the scenario. In the diagram, they are given as examples of where the thresholds might be when risks are low or high.