Guidelines for Prescribing Glasses in Children

Preschool-Aged Children

<table>
<thead>
<tr>
<th>Condition</th>
<th>Refractive Errors</th>
<th>Age &lt; 1 year</th>
<th>Age 1-2 Years</th>
<th>Age 2-3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isoametropia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myopia</td>
<td>≥ -5.00</td>
<td>≥ -4.00</td>
<td>≥ -3.00</td>
<td></td>
</tr>
<tr>
<td>Hyperopia (no strabismus) ★</td>
<td>≥ +6.00</td>
<td>≥ +5.00</td>
<td>≥ +4.50</td>
<td></td>
</tr>
<tr>
<td>Hyperopia with esotropia ★</td>
<td>≥ +2.50</td>
<td>≥ +2.00</td>
<td>≥ +1.50</td>
<td></td>
</tr>
<tr>
<td>Astigmatism</td>
<td>≥ 3.00</td>
<td>≥ 2.50</td>
<td>≥ 2.00</td>
<td></td>
</tr>
<tr>
<td>Anisometropia without strabismus ♠</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myopia</td>
<td>≥ -4.00</td>
<td>≥ -3.00</td>
<td>≥ -3.00</td>
<td></td>
</tr>
<tr>
<td>Hyperopia</td>
<td>≥ +2.50</td>
<td>≥ +2.00</td>
<td>≥ +1.50</td>
<td></td>
</tr>
<tr>
<td>Astigmatism</td>
<td>≥ 2.50</td>
<td>≥ 2.00</td>
<td>≥ 2.00</td>
<td></td>
</tr>
<tr>
<td>Oblique Astigmatism ♦</td>
<td></td>
<td></td>
<td></td>
<td>≥ 1.00</td>
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</tbody>
</table>

☆ may under-correct by +1.00 to +3.00
★ give full plus
♠ Threshold for correction of anisometropia should be lower if the child has strabismus
♦ Defined as >15 degrees from 90 or 180 meridian

- These values are based on consensus of expert opinion (see AAO source below)
- For children 4 years and older: prescriptions should be based on visual acuity measurements and visual functioning when at all possible

School-Aged Children

General guidelines:

1. Glasses should be prescribed based on visual acuity testing at distance and near.
2. An appropriate screening history should include questions about difficulty with near reading vision and distance vision

Myopia:

Prescribe glasses for children with distance vision worse than 20/30

Astigmatism:

Prescribe glasses for children with distance or near vision worse than 20/30

Children's Eye Wiki - https://childrenseye.org/wiki/
Hyperopia without Esotropia:

1. Prescribe glasses for children with vision worse than 20/30 at near or distance
2. Prescribing glasses for children with 20/20 vision may be appropriate if vision is worse at near viewing or significant reading difficulty that appears to be related to poor accommodative effort.
3. Glasses should have less than the full amount of hyperopia.
   1. The amount of under-correction can be based on the amount of hyperopia that improves vision
   2. The amount of under-correction can be from 1 to 3 diopters to help encourage glasses wear.

Hyperopia with Esotropia:

Prescribe full cycloplegic refraction

Anisometropia:

1. Correct the difference between the two eyes to within 1 diopter
2. If one eye is hyperopic and one is myopic it may be appropriate to undercorrect the hyperopic eye by 0.5 to 1 diopter.
3. When the child has reached visual maturity, glasses may be discontinued if desired by the family.

Sources

- Preschool-Aged children information: Adapted from AAO Preferred Practice Pattern 2012, Pediatric Eye Evaluations p. 19 PDF from AAO Website
- School-Aged Children is consensus from the Pediatric Ophthalmology Section, Department of Ophthalmology and Visual Sciences, University of Iowa