Determining Statutory Blindness and Visual Disability
David Lewerenz, OD, FAAO
AAO October 24, 2013

Disclosure Statement:
• Nothing to disclose

A Brief History
• American Medical Association developed guidelines for "economic blindness" in 1925
• Guidelines modified and adopted as the definition of statutory blindness with the passage of the Social Security Act, signed by FDR August 14, 1935

A Brief History
• Disability insurance added to Social Security in 1954, 1st plan w/ benefits 1956
• New proposed regulations announced in Federal Register August 17, 2005
• Comment period, AOA responded
• Final changes announced Nov. 20, 2006
• Took effect February 20, 2007
• Visual fields clarified July 31,
• Changes proposed Feb. 13, 2012
• Comment period, AOA responded
• Final changes announced March 28, 2013
• Took effect April 29, 2013

Legally Blind Profile
• Rachel Scdoris
• LB from achromatopsia
• Completed Iditarod 1,200 mile Alaska dog sled race in 2006

SSA Definition of Statutory Blindness
"central visual acuity of 20/200 or less in the better eye with the use of a correcting lens. An eye which is accompanied by a limitation in the fields of vision such that the widest diameter of the visual field subtends an angle no greater than 20 degrees shall be considered as having a central visual acuity of 20/200 or less."
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Two Sections of Disability Code

- Title II  
  - Disability insurance through Social Security  
  - To get benefits you need to pass requirements about past employment  
  - Must pass 5-step test of disability, including inability to perform substantial gainful activity (SGA)  
  - Duration requirement of 12 months  
  - Assumption that visual disability will last at least 12 months  
  - Medicare eligible 2 years after disability payments begin

Two Sections of Disability Code

- Title XVI  
  - For disabled or blind with limited income or resources  
  - Supplemental Security Income (SSI)  
  - Can be adult (≥18) unable to perform SGA  
  - Can be child (<18) with marked and severe functional limitations; no test of SGA  
  - No duration requirement, at least for children, but assumption that visual disability will last at least 12 months

Two Sections of Disability Code

- Title II and Title XVI both use the same visual requirements for determining disability eligibility  
  - Part A, Section 2.00 for adults ≥18 yo  
  - Part B, Section 102.00 for children <18 yo  
  - There is a difference between statutory blindness and qualifying for disability  
  - More on that later

Benefits of Statutory Blindness

- Vocational rehabilitation services  
- Employment by Javits-Wagner-O'Day Act employers  
- Job training programs  
- Free mailing and library services (blind materials)  
- Free telephone directory assistance

Benefits of Statutory Blindness

- Monthly income  
  - Disability income payments under Title II  
  - Supplemental Security Income (SSI) under Title XVI  
  - Health coverage through Medicare (Title XVI)  
  - Pay less income tax due to a larger standard deduction  
  - Services and possibly income support from Veterans Administration  
  - Very similar rules for eligibility in the VA

Legally Blind Profiles

- Bob Sobieski  
  - Type 1 DM and LB from PDR  
  - Triathlete

- Dale Davis - Alta, Iowa  
  - LB from AMD  
  - Bowled 300
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2007 Changes: Visual Acuity

- Visual Acuity (Section 2.02*)
  - May continue to use Snellen chart, as before, using better eye with best correction
  - Ignore letters between 20/100 and 20/200
  - Qualifies if no letters correctly identified on the 20/100 line
  - Pinhole and autorefraction not allowed
  - Contact lens is allowed if patient shows ability to use on sustained basis
  - Use of telescope not allowed
  - VER showing no activity can be used to verify statutory blindness, but a VER showing activity cannot be extrapolated to estimate VA or VF
    *102.02 for children

- Visual Acuity (Section 2.02)
  - Can now use ETDRS, Bailey-Lovie or other chart with optotypes between 20/100 and 20/200
  - Qualifies with VA worse than 20/100 and no letters correctly identified on the 20/100 line
  - Disclaimer often seen on low vision medical records, "Not to be used for legal blindness"

Good summary of new regulations at http://www.socialsecurity.gov/disability/professionals/bluebook/2.00-SpecialSensesandSpeech-Adult.htm

2007 Changes: Visual Acuity

- Is eccentric viewing allowed?
  - "...for the purpose of determining 'statutory blindness' with respect to visual acuity under listing 2.02 (or 102.02 for children), we require the measurement of central visual acuity."
  - Office of Medical Listings Improvement, Dallas Region
  - Central visual acuity left in after 2012-2013 comment period
  - Does "central visual acuity prohibit use of eccentric viewing in patients with central scotoma?"
  - Statutory blindness vs. driver license?

2007 SSA Changes

- Depending on method, one could call this
  - 20/125 by "line" method or
  - 20/120 by interpolation between rows
- Even though VA is worse than 20/100, patient does not qualify because 1 optotype was correctly identified on 20/100 line

2007 Changes: Visual Field

- Visual Field (Section 2.03)
  - Section 2.03A - Largest diameter of 20 degrees or less
  - All patients tested with III4e, 31.5 apostils (10 cd/m²) background illumination
  - Previously aphakes were tested with V4e

For children

- May use Landolt C or Tumbling E
- If unresponsive, may use lack of ability to fix and follow in addition to
  - Anatomical evidence
  - Neuroimaging
  - ERG or VER
2007 Changes: Visual Field

- Visual Field (Section 2.03)
  - Goldman III4e
    - May subtract scotoma amount, except for physiological blind spot
  - Automated kinetic test such as the Humphrey "SSA Test Kinetic"
    - Does not test for scotoma in VF, so if scotomas are suspected use either
      - Goldman or
      - Static perimetry

2007 Changes: Visual Field

- Details given in 7/31/07 Federal Register
  - Must have fixation losses of 20% or less and false positive/negative of 33% or less
  - 10 dB is = 4e stimulus, so draw line from 10 dB points on the raw data printout
  - Draw "pseudoisopter" between "seeing" points of 10 dB or more and "non-seeing" points of < 10dB
    - Pseudoisopter is considered a "seeing" area
    - Diameter must go through fixation

2007 Changes: Visual Field

- Hypotenuse is 20.12 degrees
  - Round to nearest degree = 20 degrees
  - Qualifies for statutory blindness
  - 18 degrees
  - 9 degrees

2007 Changes: Visual Field

- Visual Field (Section 2.03)
  - Section 2.03A - Largest diameter of 20 degrees or less with III4e
  - Can also use Humphrey automated static threshold perimetry with 30-2 or 24-2 and size III target and 31.5 apostilbs (10 cd/m²) background illumination, targets must be no more than 6 degrees apart horizontally or vertically

Automated Static Perimetry

- Hypotenuse is 20.12 degrees
  - Round to nearest degree = 20 degrees
  - Qualifies for statutory blindness

- 18 degrees
- 9 degrees

- Doesn't go through fixation
- Isn't the longest line through fixation

- Age discrimination?
  - An 18 yo and 64 yo with same field, 18 yo would have greater MD loss
### 2007 Changes: Visual Field

- Humphrey brand of perimeter not required, but if other brand used, it must have
  - Optical projection of stimulus (no LEDs, no FDT)
  - Normative database and statistical analysis package
  - Demonstrated clinical validity reported in 3 or more independent peer-reviewed papers
  - Screening tests, such as confrontation, tangent screen, automated screening tests are expressly prohibited

### Visual Field Score - The "Normal" Visual Field

Test 8 major meridians

"Normal" total is 500

### Visual Field Efficiency Example

VF efficiency is $\frac{180}{500} = .36$ or 36%

### Visual Field Score With Scotomata

Total score = 285

$\frac{285}{500} = .57$ or 57%

Physiological blind spot not subtracted

Scotomas can be subtracted on 2.03A also

### Does This Patient Qualify for Disability?

- Fails to qualify on 2.03A because largest diameter is > 20 degrees
- Qualifies on 2.03C $\frac{80}{500} = .16$ or 16%
2007 Changes: VA + VF

- **Visual Efficiency** (Section 2.04A) - Visual Efficiency of 20% or less
- Useful when patient doesn’t quite qualify by VA or VF alone, but has loss of both
- VA and VF both considered
  - VA - better eye with best correction, consult chart
  - VF - same as VF efficiency
- **Visual efficiency = VA x VF**

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<thead>
<tr>
<th>VA</th>
<th>VF</th>
<th>Efficiency</th>
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<tr>
<td>20/20</td>
<td>100%</td>
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<tr>
<td>20/25</td>
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<td>60%</td>
<td></td>
</tr>
<tr>
<td>20/100</td>
<td>50%</td>
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</table>

2013 Changes: VA + VF

- **Visual Impairment** (Section 2.04B) - Visual Impairment of 1.0 or more qualifies
- As with 2.04A, both VA and VF both considered
  - VA – logMAR, or consult the visual impairment VA chart
  - VF – Absolute value of Mean Deviation / 22
- **Visual Impairment = VA + VF**

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<thead>
<tr>
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<th>VF</th>
<th>Impairment</th>
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<td>20/20</td>
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<td>20/70</td>
<td>0.54</td>
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<tr>
<td>20/80</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>20/100</td>
<td>0.70</td>
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</tbody>
</table>

2013 Changes

- Changes
  1. Confirms VA as "central", but doesn't define and doesn't disallow eccentric viewing
  2. Provides a second way to combine visual acuity and visual field, this time using static perimetry: Visual Impairment (2.04B)
  3. Removed language "physician or optometrist"
  4. Maintained (even expanded) use of mean deviation, which is an age dependent measure
  5. Fixed error on visual field diagram

2013 Changes: VA + VF

- **Visual Impairment Example (2.04B)**
  - Visual acuity = 20/70 in better eye with correction
  - VA VI score = 0.54
  - Visual field MD = -17
  - VF VI score = 17/22 = 0.77
  - Visual Impairment = 0.54 + 0.77 = 1.31
  - 1.31 is > 1.00, so patient qualifies under 2.04B

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Statutory Blindness vs. Disability Qualification

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<th></th>
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</thead>
<tbody>
<tr>
<td>2.02</td>
<td>VA ≤20/200 (or &lt;20/100)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2.03A</td>
<td>VF ≤ 20°</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2.03B</td>
<td>VF -22 dB</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2.03C</td>
<td>VF ≤ 20%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2.04A</td>
<td>VA x VF ≤ 20%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2.04B</td>
<td>VA + VF ≥ 1.00</td>
<td>No</td>
<td>Yes</td>
</tr>
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**Higher Standard Deduction for Blindness**

If you are blind on the last day of the year and you do not itemize deductions, you are entitled to a higher standard deduction. You qualify for this benefit if you are totally or partly blind.

**Partly blind.** If you are partly blind, you must get a certified statement from an eye doctor or registered optometrist that:

1. You cannot see better than 20/200 in the better eye with glasses or contact lenses, or
2. Your field of vision is not more than 20 degrees.

If your eye condition will never improve beyond these limits, the statement should include this fact. You must keep the statement in your records.

If your vision can be corrected beyond these limits only by contact lenses that you can wear only briefly because of pain, infection, or ulcers, you can take the higher standard deduction for blindness if you otherwise qualify.

IRS Publication 501

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**Legally Blind Profile**

- **Im Dong-Hyun, Seoul, South Korea**
  - Olympic archer, team gold medal at 2004 Athens and 2008 Beijing Olympic games

  Chooses to not wear corrective lenses for myopia. Don't tell your myopes they are "legally blind without their glasses!"

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**The Suspected Malingerer**

- Test at different distances and with different charts
  - Try a different room if possible
  - Look for inconsistency
    - E.g. 10/600 and 20/400 don't correlate
  - Prism dissociation if ≠ VAs
    - Begin with OD in top image, then reverse several times and retest

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**Ethical considerations**

- We don't decide disability, we just report our findings
- Disability system must balance needs of patient with collective societal assets
- Must be totally objective
- Many visually impaired are retired - Have conversation with them
  - Disability payments not a concern
  - Some don't have taxable income
- Obligation to tell patient if they meet statutory blindness criteria?
- Statutory blindness and driving?

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**The Suspected Malingerer**

- Observe behaviors, before arriving, during evaluation and as they leave
  - Do they drive?
  - Do they notice small detail?
  - Are they confident in unassisted mobility?
- Provide a lot of encouragement

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**Documentation of Statutory Blindness**

- How is documentation provided?
  - Form on office letterhead should include
    - Date of exam
    - Date form filled out
    - Patient name and identifying information
      - DOB, address
    - Diagnosis
    - Visual acuities with best correction and/or visual field findings
    - Your opinion about whether condition is capable of improvement
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Legally Blind Profile
- Dave Patterson
  - LB from ear infection that spread to his optic nerves at age 3
  - Governor of New York 2008-2010
  - First ever LB governor was Bob Riley, who was governor of Arkansas for eleven days in January 1975

Certifying Percent Disability
- AMA Guides to the Evaluation of Permanent Impairment
  - Chapter on The Visual System
  - 6th edition available from AMA $194 ($130 on Amazon)
  - 5th edition was available online as a free Google Book, but was not the last time I checked

Certifying Percent Disability
  - August Colenbrander, et al, for International Society for Low Vision Research and Rehabilitation
  - Considers 20/200 as 50% function, not 0%
  - Uses VA OD, OS and OU
  - Evaluates central and peripheral VFs separately
  - Considers inferior VF to have greater value than superior VF
  - Berkeley PowerPoint visual field test for the central VFs requirement

Thanks for your attention!
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