Study Optometrists Procedures Checklist

Procedures

1. History Taking

- Why are you attending / how can I help you today?
- Problems seeing far away or close up?
- Previous glasses?
- How old are the glasses?
- Last eye examination?
- [please add any other questions that might be standard practice]

2. Check Distance Visual Acuity (Habitual)

- Check visual acuity (VA) in each eye with what they usually wear for distance vision (can be unaided, if patient does not have spectacles). It is highly recommended each optometrist uses a different type of occluder. For example:
    - Optometrist 1: Use handheld occluder;
    - Optometrist 2: Occlude using a trial frame (therefore most likely unaided);
    - Optometrist 3: Ask USP to occlude with their hand
- Check VA in at least one eye with pinhole occluder
- Then check VA with both eyes together (i.e. no occluder)

3. Check Near Visual Acuity (Habitual)

- Explain that this is a near chart
- Each optometrist should use the same near chart to measure for the baseline refraction.
- Check near VA with both eyes open with what they usually wear for near vision (i.e. no occlude).

4. Focimetry

- Explain to the USP whether it is a manual or automated focimeter
- Conduct focimetry with USPs own spectacles. If the USPs does not have spectacles (emmetrope/low ametrope), demonstrate with an available pair of spectacles (e.g. another USP, optometrist's own, study coordinator, etc.).
- Explain that focimetry can be done at any time (beginning or end of exam or by another staff member)

5. Measure Pupil Distance

- If instruments are available, take the opportunity for each optometrist to show a different technique:
    - Optometrist 1: With a pen torch and ruler

  - Optometrist 2: Pupillometer
  - Optometrist 3: [With ophthalmoscope and ruler] or [Ruler only] or [usual form of practice]

- Explain measuring pupil distance can be done at any time (beginning or end of exam or by another staff member)

6. Retinoscopy

- If possible, show the difference between the retinoscope and direct ophthalmoscope
- Conduct retinoscopy with the trial frame or behind the phoropter (if a phoropter is regularly used in practice and available for training)

7. Distance Subjective Refraction

- Explain to the USP when you are conducting spherical refraction, i.e. finding best vision sphere
- Even if on retinoscopy or autorefraction, the USP does not appear to need cylindrical lenses – still conduct Jackson Cross Cylinder (JCC)
- It is important for USPs to experience different ways subjective refraction can be done. If possible, it is recommended at least 1 baseline subjective refraction should be done on the phoropter.
- Explain to the USP that a trial frame to conduct the refraction is being used.
- If the USP is young (i.e. still has accommodation), please conduct binocular balance. However, the optometrist does not have to explain this technique in detail. USPs are not required to detect this during their visits. Conducting binocular balance is to ensure an appropriate baseline refraction outcome.
- Ensure distance visual acuity with both eyes open at the end of subjective refraction is checked and indicate it is the end of distance subjective refraction

8. Near Subject Refraction

- For presbyopic USPs, conduct near subjective refraction in a trial frame or phoropter (with a near VA chart with reading rod).
- If possible, please expose the USP to both techniques across the three subjective refractions.
- For younger USPs (i.e. those expected to have good near vision with their distance prescription), near subjective refraction might only involve putting the distance prescription in a trial frame and then checking near VA.

9. At the End of Refraction

- Discuss with the USP their vision needs to determine whether the USP needs spectacles for distance, near or constant, and what type of lenses they are suitable for (it might be more than one lens type).

Recording Data

After the optometrist has completed the refraction for the USP, complete Form A: Baseline Data Record Form in Redcap / or as a paper survey form. If Form A is completed on a paper form, they will all need to be entered into Redcap, and ideally a scan/image of the form should be uploaded. Once all forms are entered in, check the Baseline Data Report for the USP to assess whether a fourth refraction is needed.