


What Makes Eyeglasses Fit Badly And What To Do About It

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Introduction

- Factors affecting fit
- Frame terminology
- Frame material and design (on all parts of the frame)
- The fitting triangle
- Frame measurements
- Anatomical considerations

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Course Description

Being able to fit and adjust eyewear may appear to be simple, and it well could be, but not every dispenser has been able to master this particular art. This course will discuss the reasons that eyeglasses fit badly and some solutions for solving these challenges. Included in the discussion will be the fitting triangle, facial anatomical differences, sensitivities, prescription challenges with frames and certain materials, as well as individual preferences. Effectively being able to communicate with the patient will also be discussed.

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Introduction

- Other considerations
- Visualizing the good fit
- What is the problem?
- How to determine the problem and what to do to fix it
- Whose fault is it?
- Patient education
- Conclusion

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Learning Outcomes

- At the completion of this course, the participant should have a better understanding of:
 - Communication with the patient to determine what is the problem
 - Frame terminology
 - Frame materials, including all parts of the frame
 - The fitting triangle
 - Frame measurements and other considerations about anatomical measurements
 - Visualizing a good fit
 - Patient education

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Professionalism Demands Responsibility

- Patient's/customers expect
 - Good vision
 - Safety
 - Comfortable fit
 - Improved cosmetics
- Professional Challenge
 - Every one
 - Every Time

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Major Complaints

- The Kintner study found that the overwhelming majority of patient complaints related to the physical fit of the frame.
- Many wearers were more likely to wear a comfortable frame even if the prescription was a "little off".
- And a wearer was not likely to tolerate spectacles if the frame fit poorly.

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Adjustments

- ALWAYS – Start at the front and work your way back
- Tighten screws first
 - Except for occasionally on rimless
- Bench adjustment

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Most Common Complaints?

- Eyeglasses slipping down.
- Pressure behind the ears.
- Pressure on the nose.

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The Ideal Fit

- Closest fit ensures best vision
- Best vision results from the closest fitting lens
- Central viewing zone of a lens = keyhole effect

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Observation

- It never occurs that the fit of a pair of glasses gets better between the time of frame selection and the time of delivery.
- Ensure that the fit is right, to begin
- Many problems can be avoided if the person selling the frame uses good judgement

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Factors Affecting Fit

- Lens material
- Lens size
- Frame material
- Frame size
- Bridge design
- Bridge size
- Temple design
- Temple size
- Shape of nose pads
- Size of Nose pads
- Shape of temple tips
- Size of temple tips
- Frame tilt
- Frame face-form
- Frame tightness
- Anatomical problems

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Frame Terminology

- Patients say.....
 - Leg
 - Arm
 - Side piece
 - Earpiece
 - Nosething
 - Others
- Dispensers say...
 - Frame front
 - Bridge
 - Nosepad
 - Temple
 - Temple tips
- Don't insult your patients by their use of words or phrases...just listen

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Frame Design

- Will the frame design contain the Rx adequately?
- Is the frame design appropriate for the intended use of the eyewear?

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Frame Material and Design

- No...We aren't discussing all frame materials
- We ARE discussing proper materials for use and Rx

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Checklist

- Front
- Eyewire – Cheeks
- Bridge (Nose)
- Temple length

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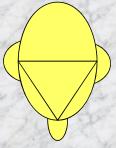
Frame Material

- Will the frame material contain the Rx adequately?
- Is the frame material appropriate for the intended use of the eyewear?
- What other materials are used on the frame...Nosepad, etc.?

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The Fitting Triangle

- All adjustments revolve around the fitting triangle.
 - Bridge
 - Tops of ears
- Basics of plane geometry



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Frame Measurements

- Eye Size
 - Width
 - "B" measurement
- Bridge Size
- Temple Length
- Remember that style/design is also important

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Bridge

- If the guard arms, or more than 1mm of the pad assembly is visible then the bridge is too wide.
- A smaller bridge should be selected or on rare occasions the bridge of the frame can be curved more to reduce the dbl.

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Frame Front

- Width of frame
 - Not too wide and not too narrow
 - Too wide or too narrow can alter temple fit, making the glasses too tight or slip constantly
 - Temples should fit smoothly from frame front to temple tip with no abnormal curve inward or outward.
- "B" Measurement
- Majority of weight is on the frame front
 - Bridge

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Three Angles of the Nose

- Frontal Angle
- Splay or Transverse Angle
- Crest Angle

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Bridge

- How can you tell if the bridge is the correct size on a frame with adjustable nose pads.
- When the pads are adjusted properly about 1/2 to 1 mm of the front of the pad should be visible.

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Frontal Angle

- The angle with which each side of the nose deviates from the vertical.

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Splay or Transverse Angle

- The splay or transverse angle of the nose is the angle formed by the side of the nose as viewed from the top.

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Frontal Angle

- When the pad is adjusted for the proper frontal angle the top of the pad and the bottom of the pad will lie flat (or parallel to the nose).

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Crest Angle

- Observing the face from the side, it's the angle of the nose from the tip of the nose up to the top of the bridge, compared with a vertical plane roughly parallel to the brows and checks.

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Splay or Transverse Angle

- When the pads is correctly adjusted for the splay or transverse angle the front and back of the pad will be parallel to the nose.
- The front edge won't be digging in to the nose.
- And the front edge won't be lifting off of the nose.

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Three Angles of the Nose in English

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Crest Angle

- When viewed from the side the pad will form an angle that is perpendicular to the floor.

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Steps In Fitting and Adjusting Nose Pads

- Make sure that the bridge is the proper size.
- How much of the pad do you see when adjusted for proper width?

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Steps In Fitting and Adjusting Nose Pads

- Is the pad perpendicular to the floor?
- Does the top need to go towards the frame?
- Does the bottom need to go towards the frame?

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Steps In Fitting and Adjusting Nose Pads

- Check the pad for how the top and bottom line up with the nose.
- Does the bottom need to go towards the nose?
- Does the top need to go towards the nose?

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Frame Adjustment

- Avoid excessive lateral temple pressure.

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Steps In Fitting and Adjusting Nose Pads

- Check the pads front to back.
- Does the front edge need to go towards the nose?
- Does the back edge need to go towards the nose?

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Frame Adjustment - Temples

- The temple bend should follow the contour of the ear.
- A space on top of the ear indicates a temple bend that is too early or a temple that is too short.
- A space behind the top of the ear indicates a temple that is too long or a bend that is too late.

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Temple

- Temple bend
 - Above ear and slightly behind top of ear gently following the contour of the ear
- Temple length
 - About 1" to 1 1/2" longer than bend
 - Should not extend way beyond mastoid process/bend
- Could be other considerations

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Other Considerations

- Lifestyle
- Intended use of eyewear

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Anatomical Considerations

<ul style="list-style-type: none"> □ Face shape <ul style="list-style-type: none"> - Width of skull - Width of patient's bridge - Need to consider face form □ Skin type <ul style="list-style-type: none"> - Medications... 	<ul style="list-style-type: none"> □ Position of ears <ul style="list-style-type: none"> - High - Low - Medium Can temples be adjusted for proper face form □ Long lashes
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Visualizing The Good Fit

- Know when to say no
- Will it be a poor choice?

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Anatomical Considerations

- Deep set or prominent eyes
- Wide PD
- High cheekbones
- Mastoid process
- Abnormal facial anatomy
 - Surgical
 - Injury
 - Genetic
 - Others

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How to Determine the Problem and How to Fix It

- Observe
- Ask questions
- Listen
- Watch patient
- Observe again

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What is the Problem?

Common Complaints

- Frame slips
- Frame too tight
- Red marks on nose
- Poor bridge fit/adjustment
- Frame is lopsided
- Frame touches cheek

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Frame is Too Tight

- Frame too small
- Temple bend wrong
 - In wrong place
 - Incorrect curve
- Temple size wrong
- Bridge style/size wrong
- Incorrect face form

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What is the Problem?

Common Complaints

- Frame is too loose
- Causes sore spots on or behind ears
- Segments are unequal
- Incorrect tilt or face-form
- Out of plane
- Patient doesn't "like" choice

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Red Marks on Nose

Poor Adjustment?

- Where?
 - Observe
 - Ask
- Side of nose
 - Bridge too narrow
 - Poor nose pad adjustment
 - Incorrect pad size
 - Poor face form
- Top of bridge
 - Wrong style
 - Bridge too wide
 - Poor weight distribution
- **Could be material of either frame or nose pads**

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Frame Slips/Loose

Observe and Ask Questions

- Temples spread too wide – no contour
- Temples too short
- Temple bend in wrong place
- Temples too tight on side of head
- Bridge too wide
- Frame too large/small for head
- Negative face-form
- Lenses too heavy for frame
- **Patient "likes" to wear them high or low**

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Frame Lopsided

- X'd
- Not bench aligned
- Temple high or low
- Eyewire bent
 - Crooked front to back
 - Lens twisted in frame or not inserted correctly at all
- Start at front and work your way back
 - Tighten all screws, first
 - Check nose pads
 - Observe
 - Work your way back

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Touches Cheek/Cheeks

<ul style="list-style-type: none"> □ Both Cheeks <ul style="list-style-type: none"> - Incorrect size - Incorrect B/measurement - Too much pantoscopic tilt - Too much face form - May need nosepads 	<ul style="list-style-type: none"> □ One Cheek <ul style="list-style-type: none"> - Could be some of the same problems as lopsided frame - Patient could have swelling on one side - temporary - Could even be anatomical
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Segments Unequal

- Could be incorrectly measured
 - Remake one lens
- Could be twisted/lopsided
 - Could be missing a nose pad
 - Could be missing a temple
- Could be anatomical
- Observe "FIRST"

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Patient Doesn't Like "Choice"

- Ask questions
- Patient may not just "tell" you they don't like eyewear
 - May mention everything but that fact
 - People don't like to believe that they made poor choice

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Conclusion

- Above all consider the problem
- Even if the patient is responsible for the problem, "YOU" need to take care of it
- **"TEACH" 'em and "KEEP" 'em**

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Whose Fault Is It?

- | | |
|-----------------|-------------------------------|
| □ Patient | □ Dispenser |
| - Poor handling | - Incorrect frame size |
| - Poor storage | - Incorrect temple size |
| - Poor choice | - Incorrect bridge size/style |
| | - Poor adjustment |
| | - Poor choice |

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Questions
THANK YOU

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Patient Education

- Educate the patient on selection
- Educate the patient on care and handling
- Educate the patient on lifestyle choices
 - One size does NOT fit all

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