

Smile Design: 2D

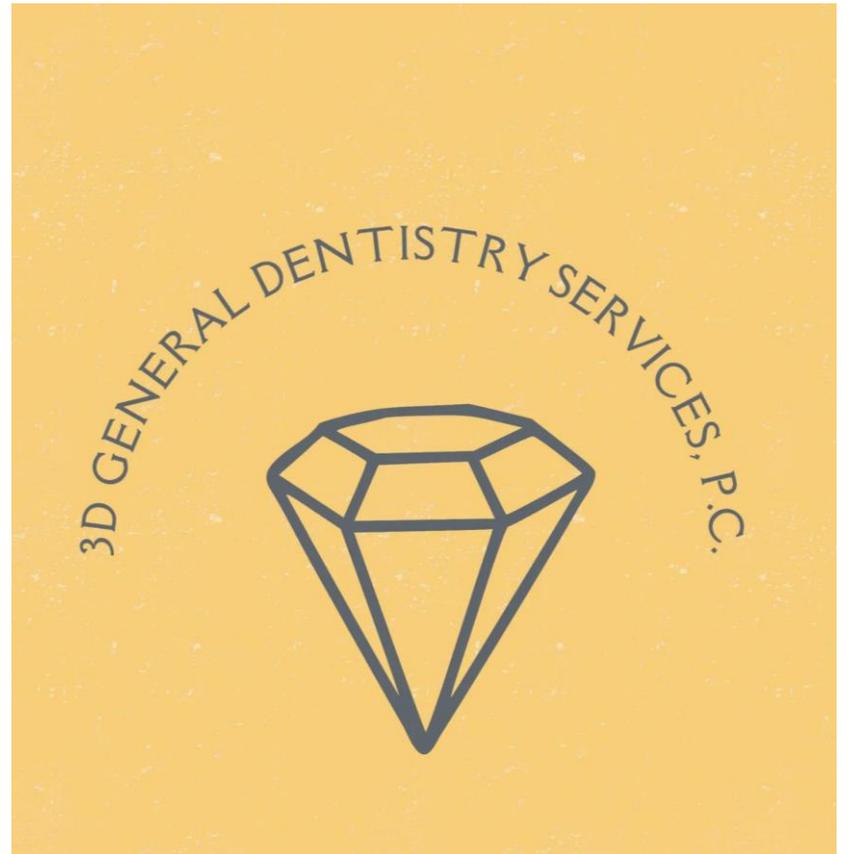
UAB Alumni Meeting

February 6, 2025

Hyatt Regency Birmingham-The Winfrey Hotel

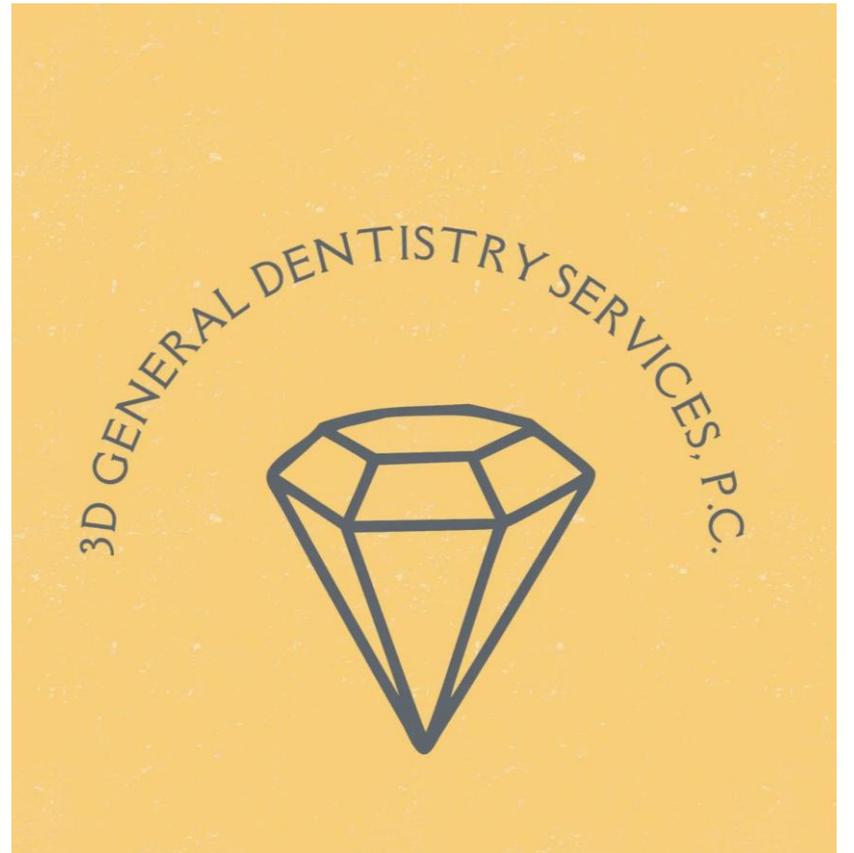
Barry E. Goodspeed, DDS

3D General Dentistry Services, P.C.



Quick Poll

1. Digital Scanner offices?
2. Digital Printer offices?
3. CEREC offices?



Disclosure

NO CONFLICT OF INTEREST:

Neither 3D General Dentistry Services, P.C., nor Barry E. Goodspeed, DDS have a personal interest or financial investment in any company or product included in this presentation.

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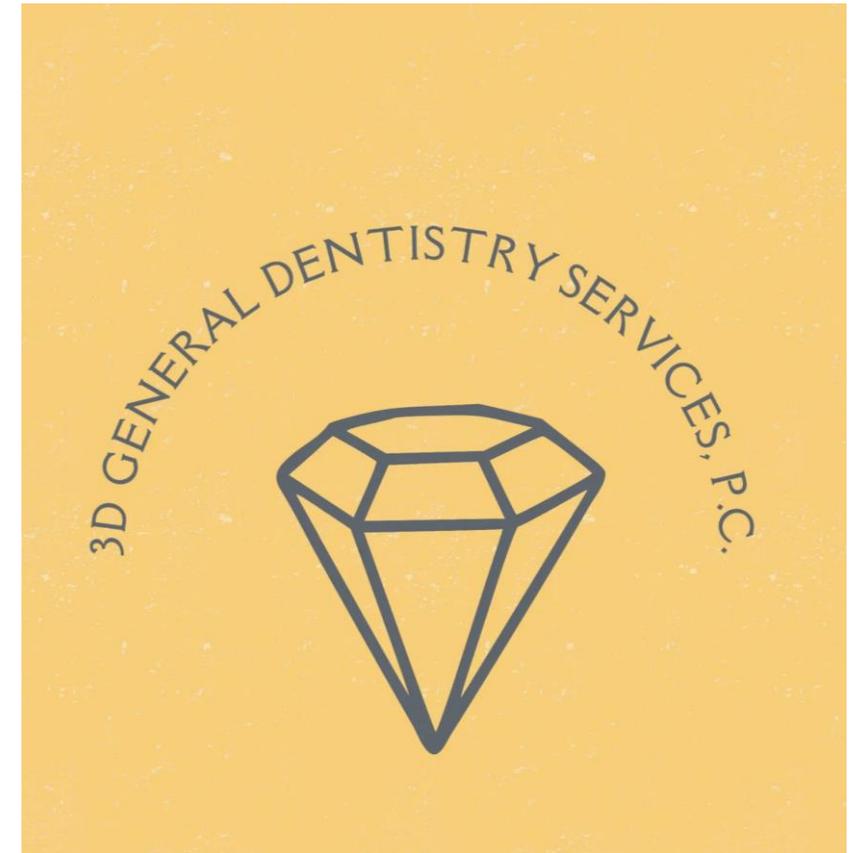
OTHER

UAB Alumni Association is providing an honorarium for Dr. Barry Goodspeed's presentations.

Smile Design: 2D

Educational Objectives:

1. Understand records necessary for a “Facially Generated Treatment Plan.”
2. Understand Old School 2-Dimensional Smile Design methods.
3. Review details and see examples of a New Digital 2D Smile Design Option.
4. Understand that this 2D Smile Design is a step prior to 3D Smile Design accomplished with software options such as CEREC and CEREC inLab 22.



Special Credits and Acknowledgements

Dr. Nate Lawson

Dr. Augusto Robles

Dr. Chin-Chuan Fu

Dr. Dan Givan

****Jahnvi****

Karla Wright

Markettea Reed

James Bradley

Nellie Baghaei

Lauren Brashear

Kaytlyn Carlson

Brandon Englert

Brandon Hardy

Josh Huff

Henry Kendrick

Andrew Lisy

Bobby Patel

Turner Shirley

Brooklyn Williamson

CDOCS

Dentsply Sirona inLab 22

Medit Smile Design

Trios Scanners

3Shape Smile Design

Records Summary for a “Facially Generated Treatment Plan” (ref. #9, Spear)

Panorex

FMX



Records Summary for a "Facially Generated Treatment Plan"

Photo Set 8 (ref. #3)

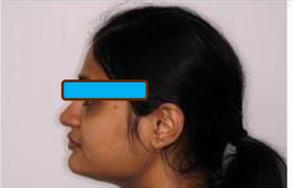
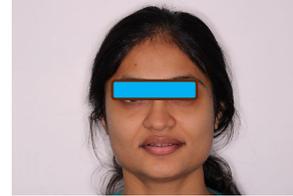
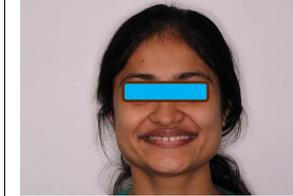
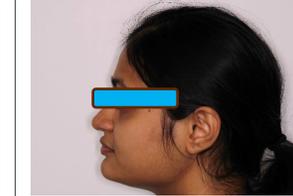
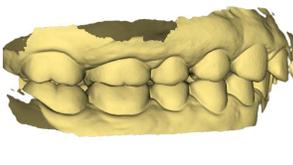
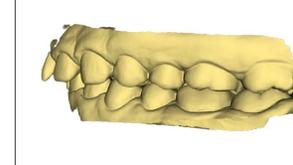
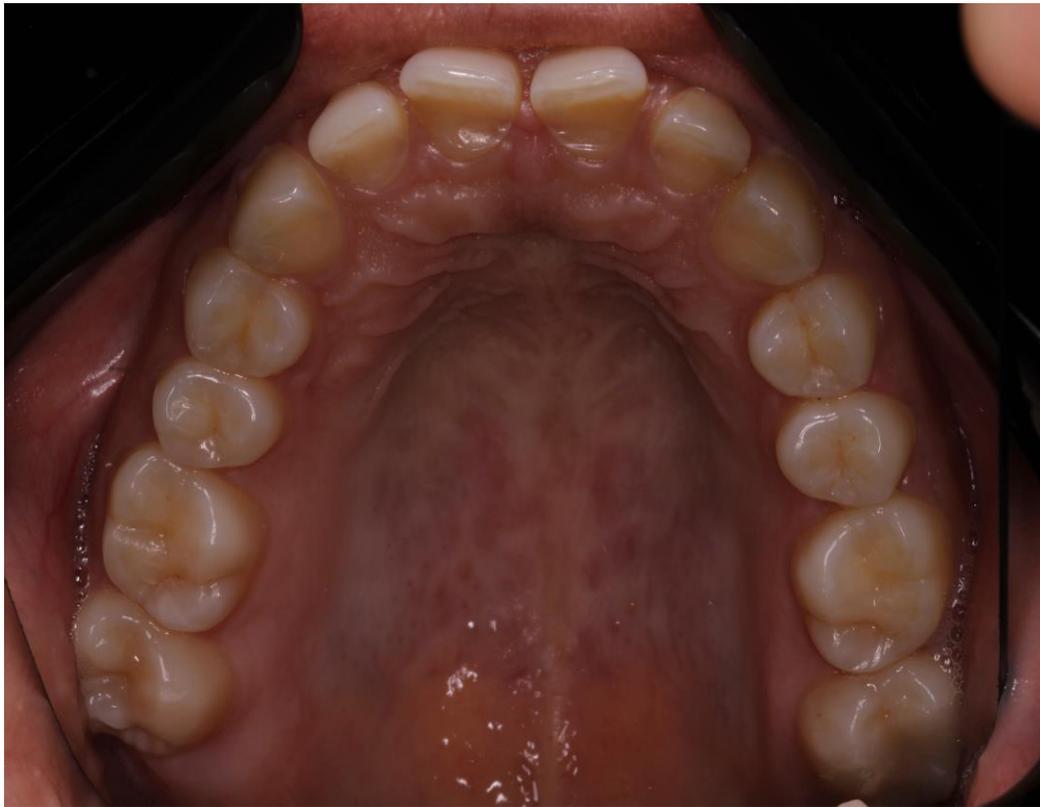
	PHOTO SET 8 Orthodontic/Esthetic Evaluation	UAB SOD Esthetics Club
EO Frontal Repose	EO Frontal Full Smile	EO Profile
		
IO Retracted Occlusal Maxillary	Doctor: UAB SOD Esthetics Club Patient: Jahnvi DOB/Age Date: November 3, 2023	IO Retracted Occlusal Mandibular
		
IO Retracted Closeup Buccal Right	IO Retracted Closeup Anterior	IO Retracted Closeup Buccal Left
		

Photo Set 8. Alternative

	PHOTO SET 8 Orthodontic/Esthetic Evaluation	UAB SOD Esthetics Club
EO Frontal Repose	EO Frontal Full Smile	EO Profile
		
IO Retracted Occlusal Maxillary	Doctor: UAB SOD Esthetics Club Patient: Jahnvi DOB/Age Date: November 3, 2023	IO Retracted Occlusal Mandibular
		
IO Retracted Closeup Buccal Right	IO Retracted Closeup Anterior	IO Retracted Closeup Buccal Left
		

Records Summary for a “Facially Generated Treatment Plan”

Mirrored Photographs...



Must be Edited. Flipped Horizontal

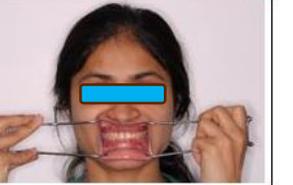


Records Summary for a “Facially Generated Treatment Plan”

Photo Set 8

3:1 Photoset (ref. #1b, CDOCS)

	PHOTO SET 8 Orthodontic/Esthetic Evaluation	UAB SOD Esthetics Club
EO Frontal Repose	EO Frontal Full Smile	EO Profile
		
IO Retracted Occlusal Maxillary	Doctor: UAB SOD Esthetics Club Patient: Jahnvi DOB/Age Date: November 3, 2023	IO Retracted Occlusal Mandibular
		
IO Retracted Closeup Buccal Right	IO Retracted Closeup Anterior	IO Retracted Closeup Buccal Left
		

	3:1 SMILE DESIGN PHOTOS	UAB SOD Esthetics Club
EO Frontal Relaxed Incisal Display	EO Frontal Full Smile	EO Frontal Full Smile Retracted
		
IO Retracted Occlusal Maxillary	Doctor: UAB SOD Esthetics Club Patient: Jahnvi DOB/Age: Date: 11/03/2023	IO Retracted Occlusal Mandibular
		
IO Retracted Closeup Relaxed Inc Dis	IO Retracted Closeup Other	IO Retracted Closeup Anterior
		

Records Summary for a “Facially Generated Treatment Plan”

3:1 Photos How to Do:

- Camera set on Tripod
- Camera on Portrait Settings
- Patient Seated on Stool if possible
- Cardboard Box placed Behind patient's head
- Patient Eyes and Camera Parallel to Horizon (no tilting)
- Camera Perpendicular to Mid-Center-Face (nose)

3:1 Photos How to Do (ref. #7)

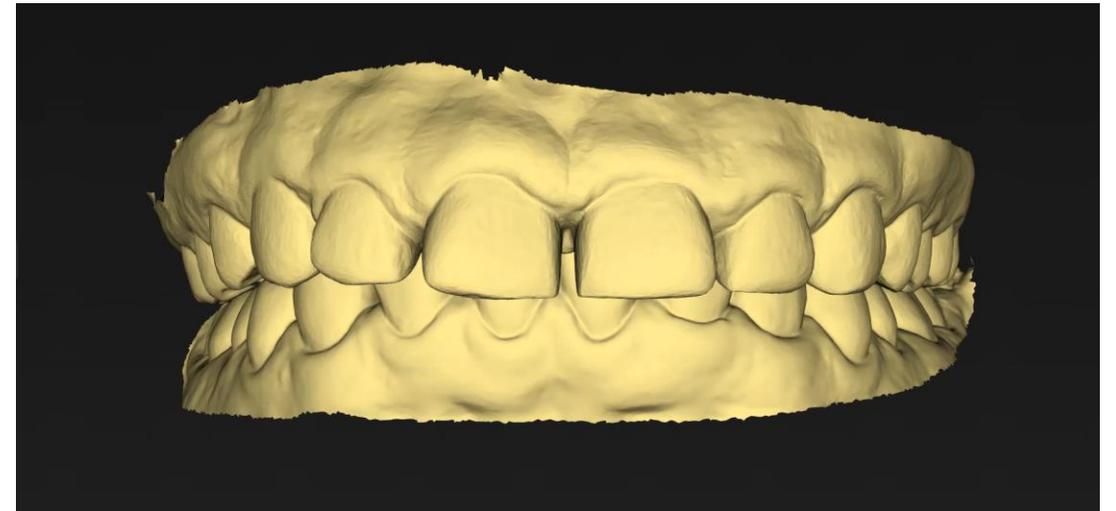
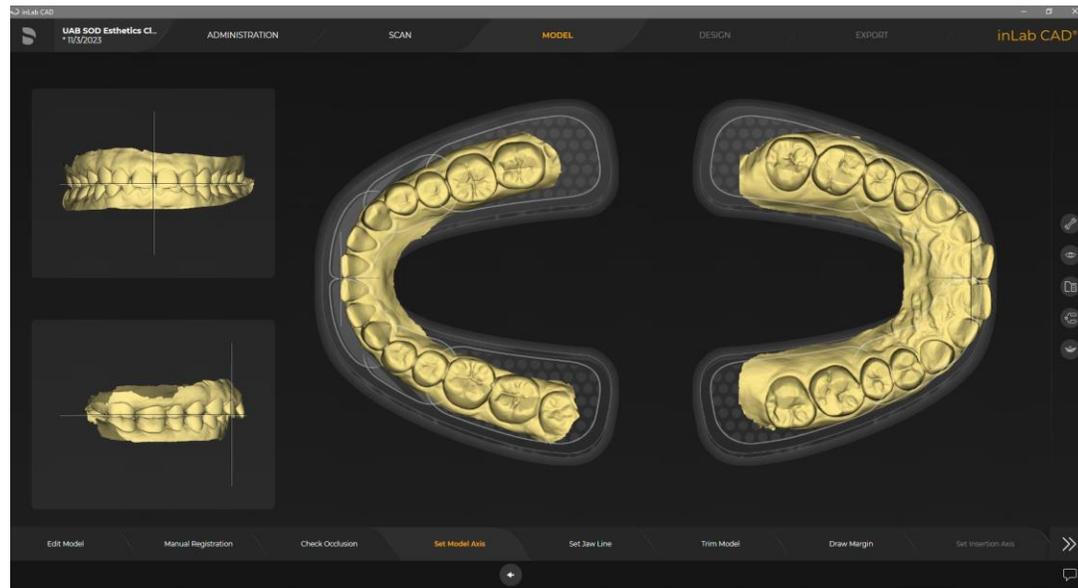


Medit You Tube link: <https://www.youtube.com/watch?v=u89Sobp0hM4>

Records Summary for a “Facially Generated Treatment Plan”

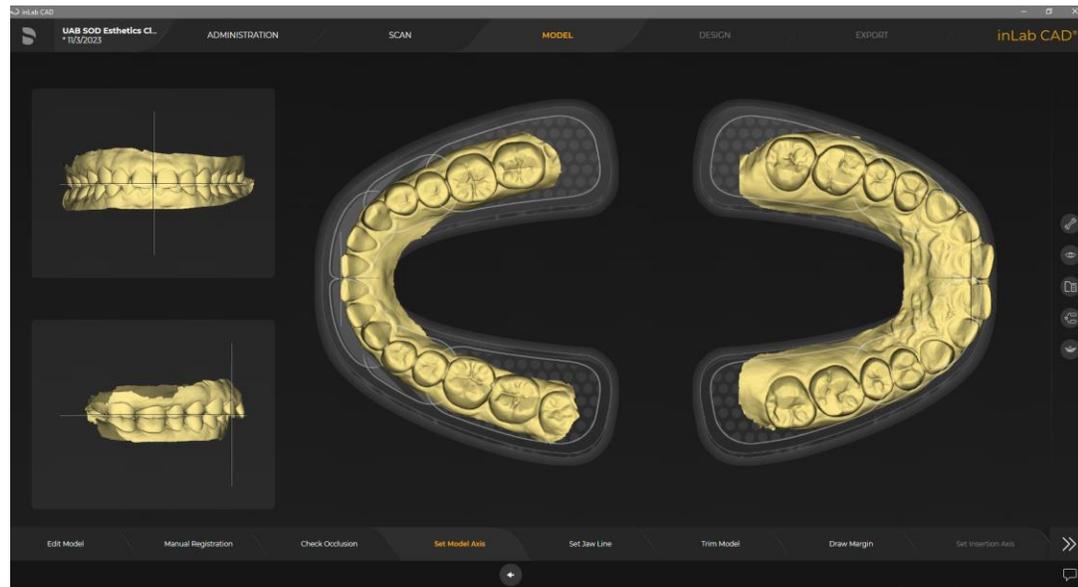
Digital Scan with Accurate
Model Axis* recorded

Immediate Digital Models are so
convenient! (see video below:)



Records Summary for a “Facially Generated Treatment Plan”

Digital Scan with Accurate
Model Axis* recorded



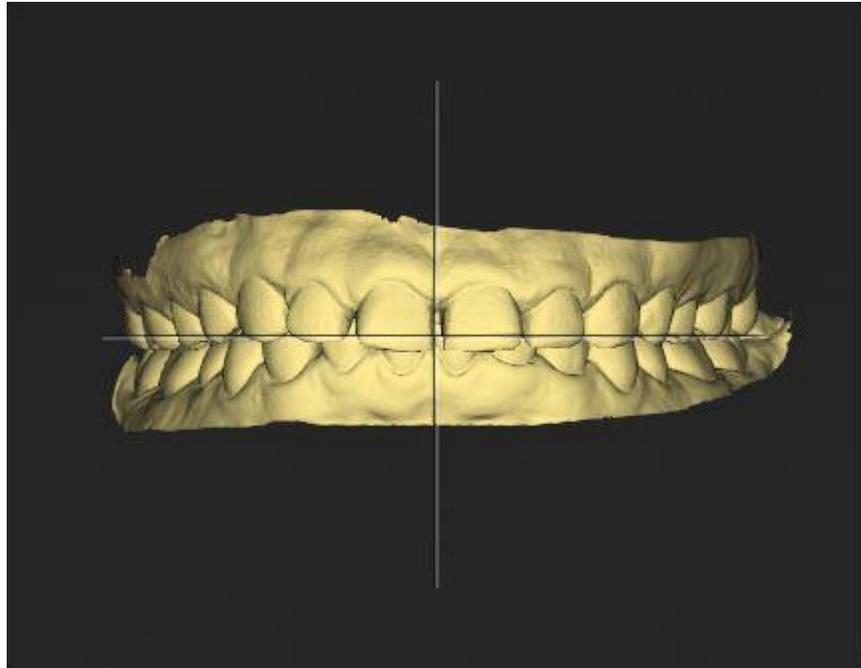
Alternative Alginates with Accurate
Facebow* Mounting



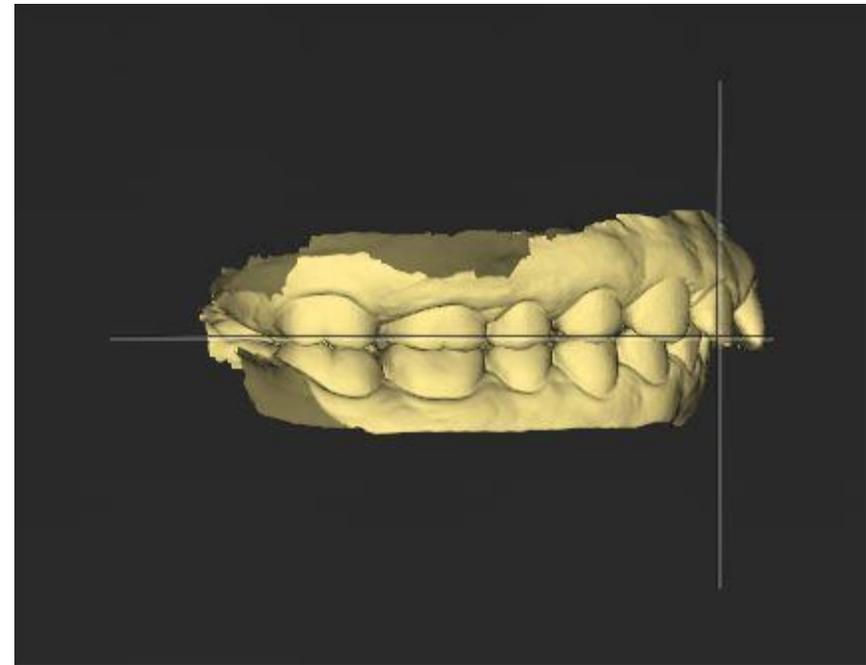
Quickmount FaceBow With Screw, Model 8645
Whip-Mix Corporation
Patterson Item #: 727-6959
Mfg Item #: 15911

Records Summary for a “Facially Generated Treatment Plan”

Curve of Wilson



Curve of Spee



Records Summary for a “Facially Generated Treatment Plan”

Orthodontic/Esthetic Exam (ref. #2)

Perio Chart

Orthodontic/Esthetic Consultation Sheet
UAB School of Dentistry Esthetics Club

Patient Name		Date: November 3, 2023	Phone #:
Email		Age/DOB	26
Chief Concern(s):	Gaps, Diastemata	Teeth are too small	Muscles tired
Doctor Concern(s):	Max Incisor lingual attrition	Altered Passive Eruption	Rotations
Other	Deep Bite		

	MAXILLARY	MANDIBULAR
Occlusion	Midline #8 M is on	1 mm Right
Class	1 L, II R	Crowding none
CR CO	Spacing #5-11	Lower Anteriors
Overbite	3.5 mm	Crossbite none
Over Jet	4.5 mm	Cant none
Perio Stage, Grade	2, B	Rotations #7, 8, 9
TMJ	Movement, DOO Whitening Present Shade D2-3	Tooth # (mm): 7(0.5), 8(1), 9(1.5), 10(1)
Latent Cuspal Distance	90 mm	Incisal Display Negative 2-3 mm
Other	H x W Central	#8 HxW = 6.3 x 7.3 mm
	Restorative	

ORTHODONTIC	TREATMENT
Method	SureSmile
Limitations	Full Case
Time Estimate	Fee Estimate
NEXT VISIT	Comp Exam
Ortho Records:	IO Scan
Photographic Records:	Photo Set 8 up

Reviewed: Initial, Date	
IPR	To create space, teeth may need to be slenderized.
Attachments	Tooth colored bonding may be placed on teeth to move selected teeth more readily.
OA	Teeth may need to be adjusted before, during, &/or after treatment to make bite line up just right.
Retainers	Will need to be worn indefinitely when treatment is completed to prevent relapse and to protect your investment.
Refinement	At end of initial treatment Dr. or patient may request an additional set of trays to obtain a more optimum result; We often see about 90% of anticipated programmed result.
22 hrs/Day	Trays must be worn 22 hours (all the time except eating then brushing and flossing teeth) every day for treatment to be successful. Only water can be consumed with trays in place.

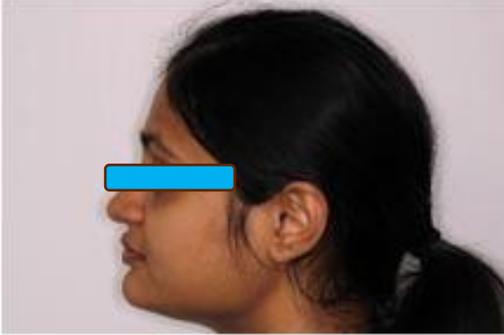
Periodontal Examination

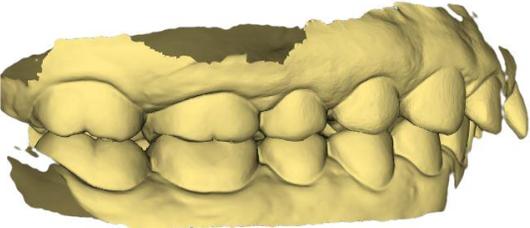
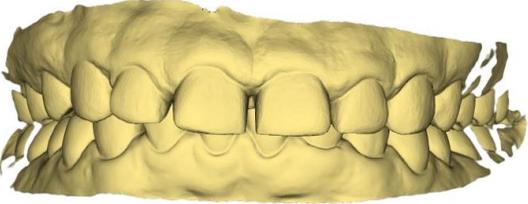
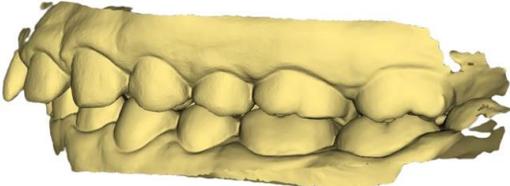
Patient Information:
Hospital No _____
Patient Name _____

	Maxillary	Mandibular	Case Analysis	Diagnosis	Treatment Plan	Questionnaire	Questionnaire Summary	Review									
Probing Depth				2 1 2 2 1 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2												
Recession				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Attachment level				2 1 2 2 1 2 2 2 2 2 2 2 2 2 2 2													
Keratinized Gingiva			3	3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2													
Plaque				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Gingival Bleeding				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Buccal																	
Lingual																	
Gingival Bleeding	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Plaque						0	0	0	0	0	0	0	0	0	0	0	
Attachment level						1	1	2	1	1	2	1	1	3	2	1	2
Recession						0	0	0	0	0	0	0	0	0	0	0	
Probing Depth						1	1	2	1	1	2	1	1	3	2	1	2

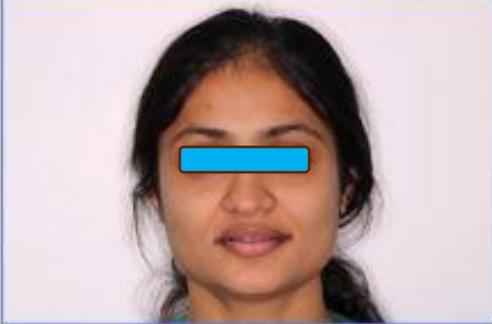
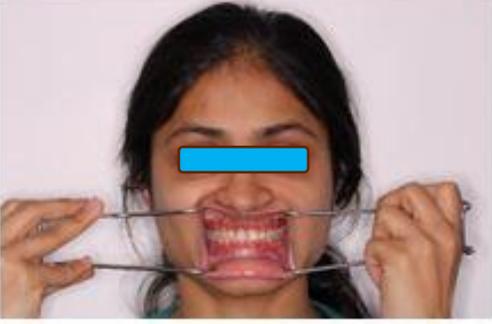
Scores
 No. of sites PD >= 4mm: 0
 No. of sites with BOP: 0
 % of sites with BOP: 0
 O'Leary Plaque Index: 0



	<p align="center">PHOTO SET 8 Orthodontic/Esthetic Evaluation</p>	<p align="center">UAB SOD Esthetics Club</p>
<p align="center">EO Frontal Repose</p>	<p align="center">EO Frontal Full Smile</p>	<p align="center">EO Profile</p>
		
<p align="center">IO Retracted Occlusal Maxillary</p>	<p align="center">Doctor: UAB SOD Esthetics Club</p> <p align="center">Patient: Jahnvi</p> <p align="center">DOB/Age:</p> <p align="center">Date: November 3, 2023</p>	<p align="center">IO Retracted Occlusal Mandibular</p>
		
<p align="center">IO Retracted Closeup Buccal Right</p>	<p align="center">IO Retracted Closeup Anterior</p>	<p align="center">IO Retracted Closeup Buccal Left</p>
		

	<p align="center">PHOTO SET 8 Orthodontic/Esthetic Evaluation</p>	<p align="center">UAB SOD Esthetics Club</p>
<p align="center">EO Frontal Repose</p>	<p align="center">EO Frontal Full Smile</p>	<p align="center">EO Profile</p>
		
<p align="center">IO Retracted Occlusal Maxillary</p>		<p align="center">IO Retracted Occlusal Mandibular</p>
	<p align="center"> Doctor: UAB SOD Esthetics Club Patient: Jahnavi DOB/Age: Date: November 3, 2023 </p>	
<p align="center">IO Retracted Closeup Buccal Right</p>	<p align="center">IO Retracted Closeup Anterior</p>	<p align="center">IO Retracted Closeup Buccal Left</p>
		



	3:1 SMILE DESIGN PHOTOS	UAB SOD Esthetics Club
EO Frontal Relaxed Incisal Display	EO Frontal Full Smile	EO Frontal Full Smile Retracted
		
IO Retracted Occlusal Maxillary		IO Retracted Occlusal Mandibular
	Doctor: UAB SOD Esthetics Club Patient: Jahnvi DOB/Age: Date: 11/03/2023	
IO Retracted Closeup Relaxed Inc Dis	IO Retracted Closeup Other	IO Retracted Closeup Anterior
		





Patient Information:
 Hospital No _____
 Patient Name _____

Maxillary	Mandibular	Case Analysis	Diagnosis	Treatment Plan	Questionnaire	Questionnaire Summary	Review									
Probing Depth			2 1 2 2 1 2 2 2 2 2 2 2 2 2 2													
Recession			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Attachment level			2 1 2 2 1 2 2 2 2 2 2 2 2 2 2													
Keratinized Gingiva		3	3 2 2 2 2													
Plaque			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Gingival Bleeding			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Buccal																
Lingual																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Gingival Bleeding						0 0 0 0 0 0 0 0 0 0 0 0 0 0 0										
Plaque						0 0 0 0 0 0 0 0 0 0 0 0 0 0 0										
Attachment level						1 1 2 1 1 2 1 1 3 2 1 2 1 1 1 2 1 2										
Recession						0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0										
Probing Depth						1 1 2 1 1 2 1 1 3 2 1 2 1 1 1 2 1 2										

0	1	2	3	B
4	5	6	7	S
8	9	10	11	N
12	13	14	15	+/-

- Furcation
- Frenum
- Mark Plaque for All Sites

Notes

Scores

No. of sites PD >= 4mm	0
No. of sites with BOP	0
% of sites with BOP	0
O'Leary Plaque Index	0

Orthodontic/Esthetic Consultation Sheet
UAB School of Dentistry Esthetics Club

Patient Name			
Email			
Chief Concern(s):	Gaps, Diastemata	Teeth are too small	Muscles tired
Doctor Concerns:	Max Incisor lingual attrition	Altered Passive Eruption	Rotations
Other	Deep Bite		

			MAXILLARY	MANDIBULAR
Occlusion		Midline	#8 M is on	1 mm Right
Class	I L, II R	Crowding	none	none
CR CO	~	Spacing	#5-11	Lower Anteriors
Overbite	3.5 mm	Crossbite	none	none
Over Jet	4.5 mm	Cant	none	none
Perio Stage, Grade	2, B	Rotations	#7, 8, 9	
TMJ	Movement, DOO	Whitening	Present Shade D2-3	D2-3
Lateral Canthi Distance	90 mm	Incisal Display	Tooth #(mm): 7(0.5), 8(1), 9(1.5), 10(1)	Negative 2-3 mm
Other		H x W Central	#8 HxW = 6.3 x 7.3 mm	
		Restorative		

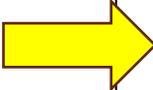
ORTHODONTIC	TREATMENT		
Method	SureSmile	Invisalign, Clear Correct	Refer
Limitations	Full Case	Anterior	
Time Estimate		Fee Estimate	
NEXT VISIT	Comp Exam	Perio Exam	Px
Ortho Records:	IO Scan	CBCT Panx FMX	
Photographic Records:	Photo Set 8 up	3:1 (Smile, Retracted, Lips at Rest)	

Reviewed: Initial, Date		
	IPR	To create space, teeth may need to be slenderized.
	Attachments	Tooth colored bonding may be placed on teeth to move selected teeth more readily.
	OA	Teeth may need to be adjusted before, during, &/or after treatment to make bite line up just right.
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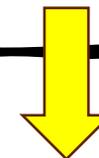
Orthodontic/Esthetic Exam

Orthodontic/Esthetic Consultation Sheet
UAB School of Dentistry Esthetics Club

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Email		Age/DOB	
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Other	Deep Bite		



Orthodontic/Esthetic Exam



			MAXILLARY	MANDIBULAR
Occlusion		Midline	#8 M is on	1 mm Right
Class	I L, II R	Crowding	none	none
CR CO	~	Spacing	#5-11	Lower Anteriors
Overbite	3.5 mm	Crossbite	none	none
Over Jet	4.5 mm	Cant	none	none
Perio Stage, Grade	2, B	Rotations	#7, 8, 9	
TMJ	Movement, DOO	Whitening	Present Shade D2-3	D2-3
Lateral Canthi Distance	90 mm	Incisal Display	Tooth #(mm): 7(0.5), 8(1), 9(1.5), 10(1)	Negative 2-3 mm
Other		H x W Central	#8 HxW = 6.3 x7.3 mm	
		Restorative		

Orthodontic/Esthetic Exam

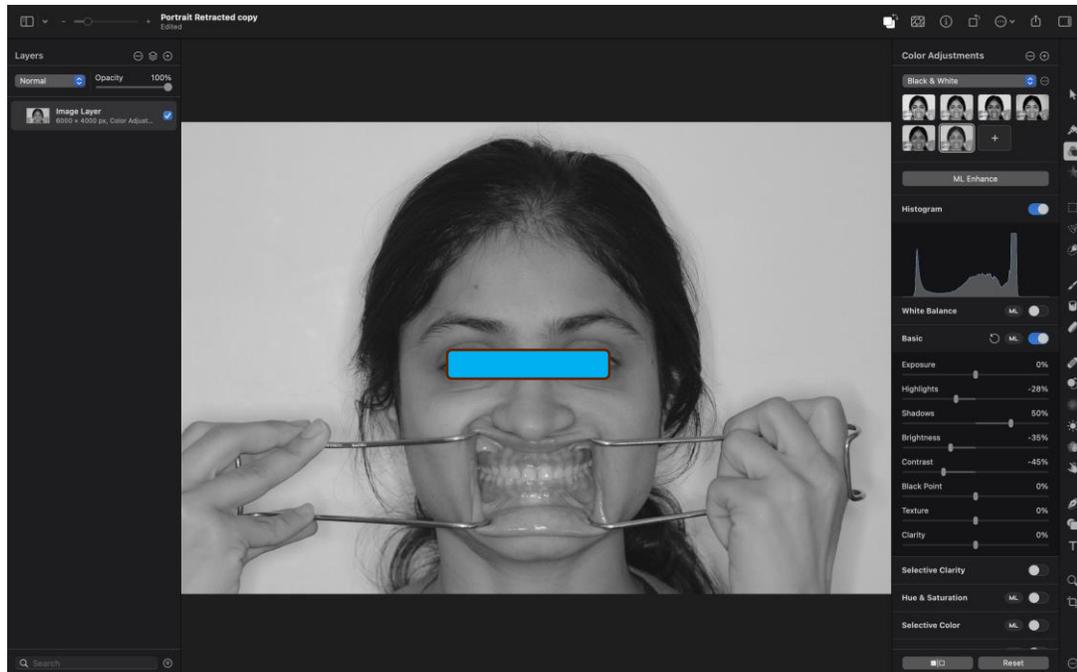
ORTHODONTIC	TREATMENT		
Method	SureSmile	Invisalign, Clear Correct	Refer
Limitations	Full Case	Anterior	
Time Estimate		Fee Estimate	
NEXT VISIT	Comp Exam	Perio Exam	Px
Ortho Records:	IO Scan	CBCT Panx FMX	
Photographic Records:	Photo Set 8 up	3:1 (Smile, Retracted, Lips at Rest)	

Orthodontic/Esthetic Exam

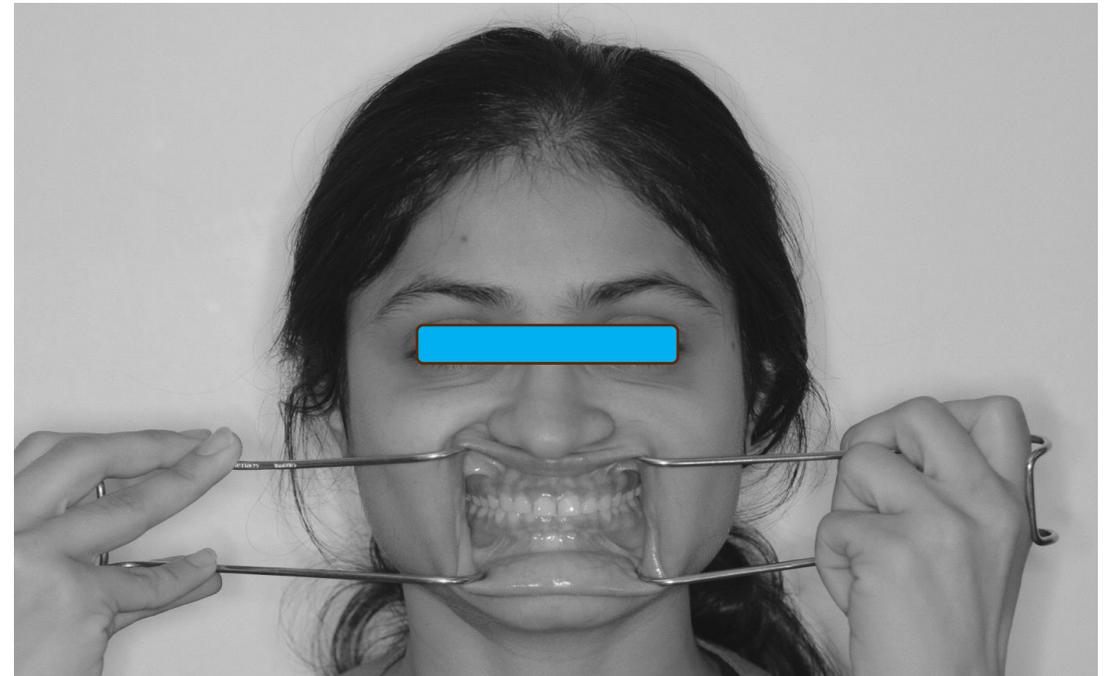
Reviewed: Initial, Date		
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Old School Paper Design

B+W to print

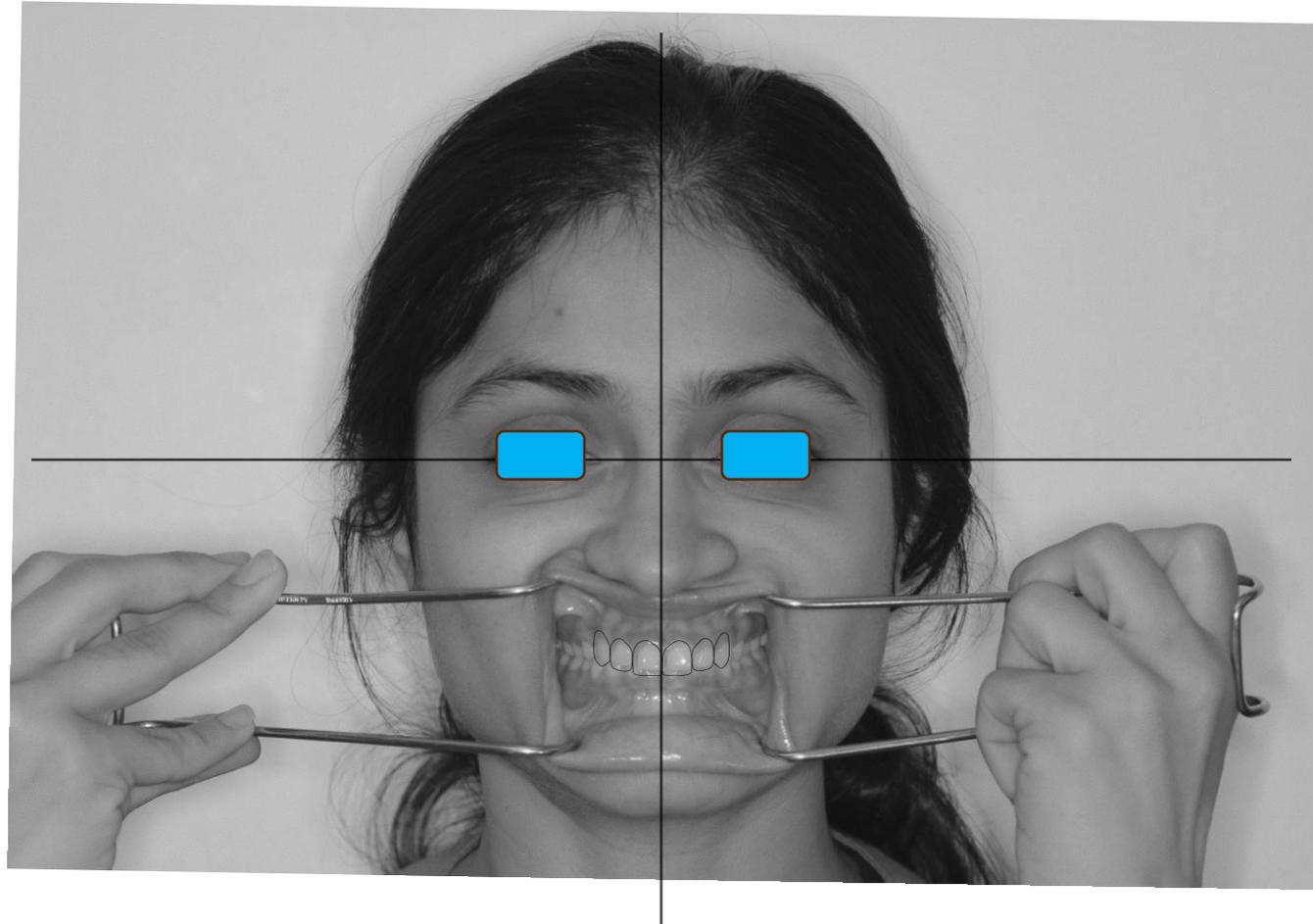


B+W to Sketch

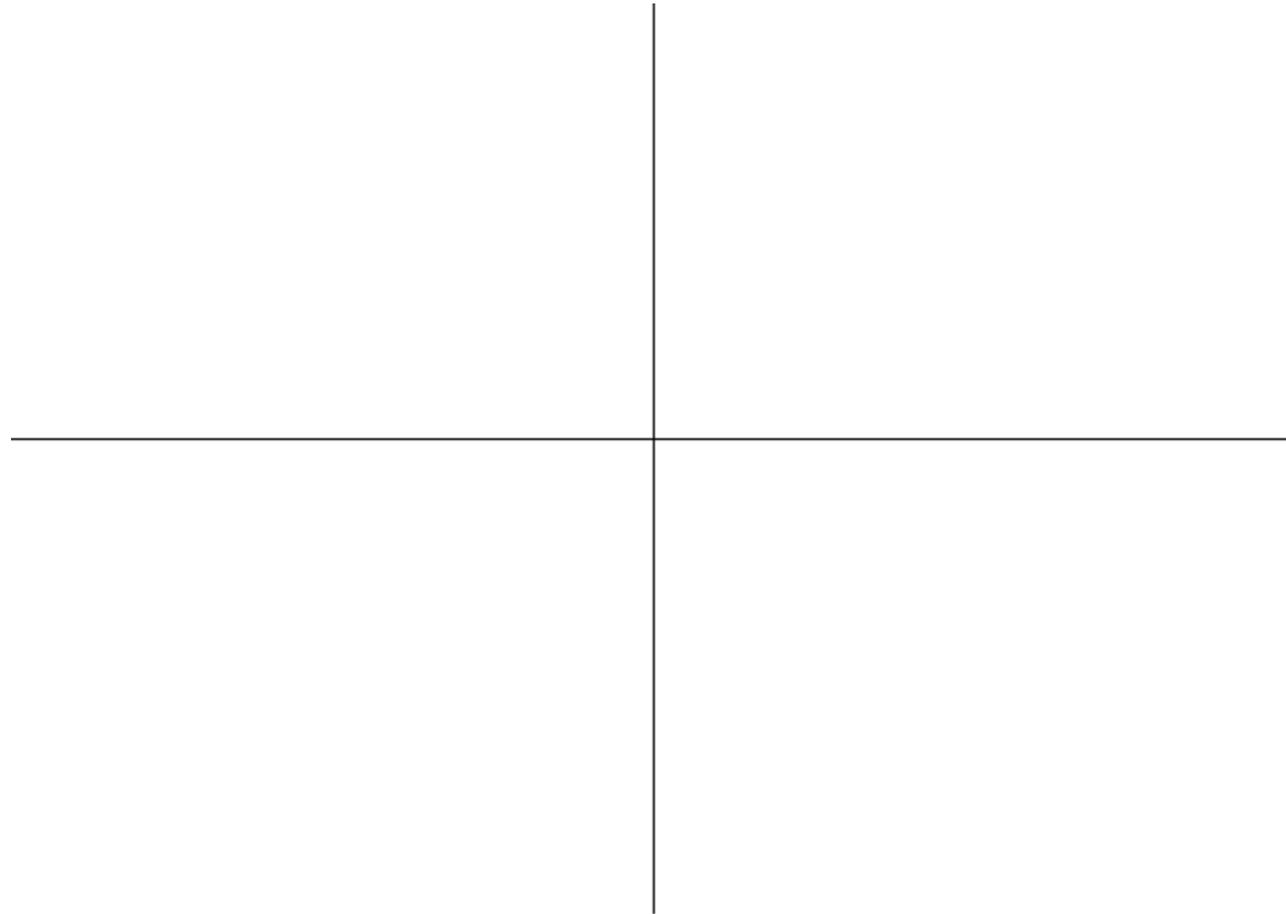


MAC Pixelmator Pro, Color Adjustments (3 overlaying circles), Black and White, select best option to print.

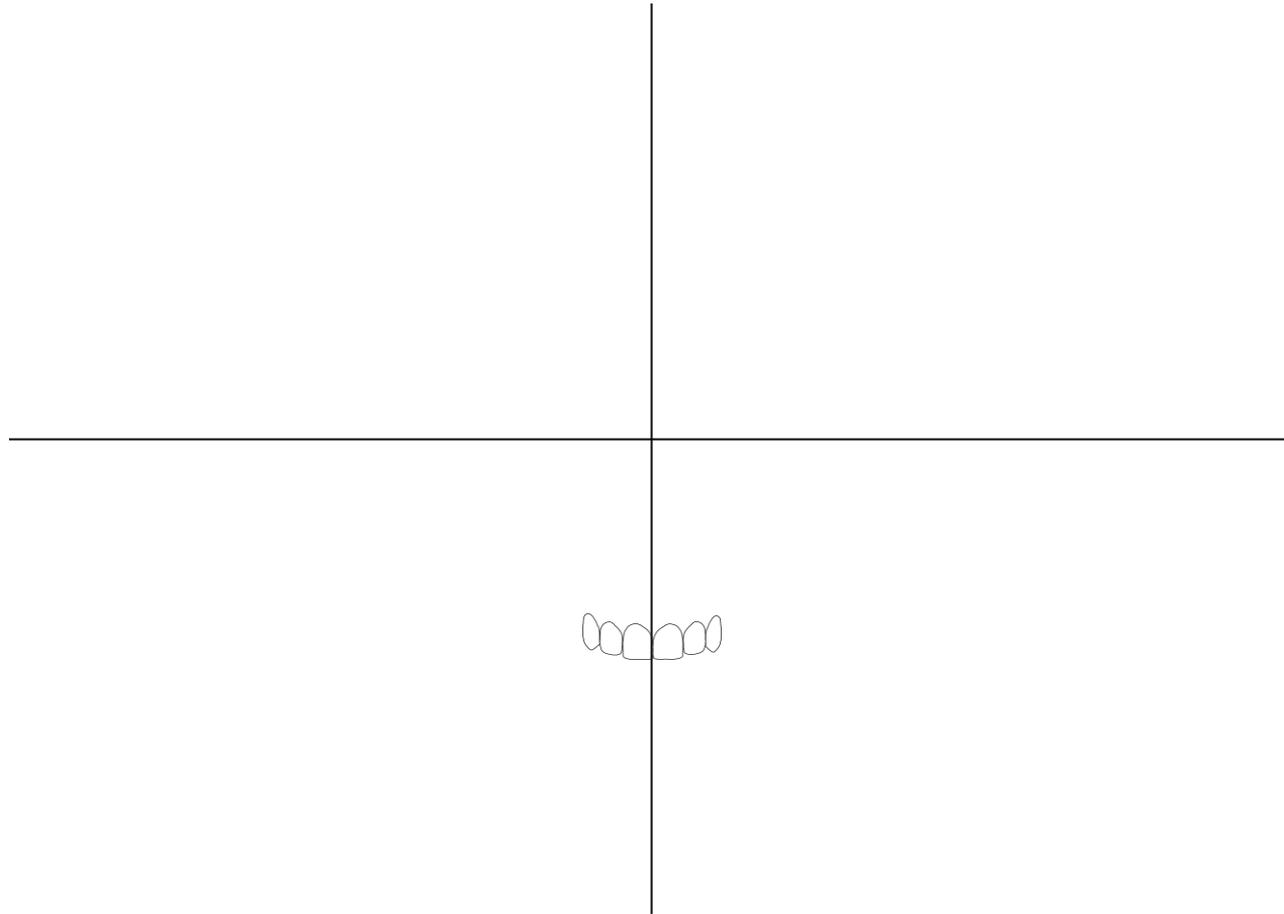
Old School Design + Spear Templates (ref. #1b, 10)



Old School Design + Spear Templates

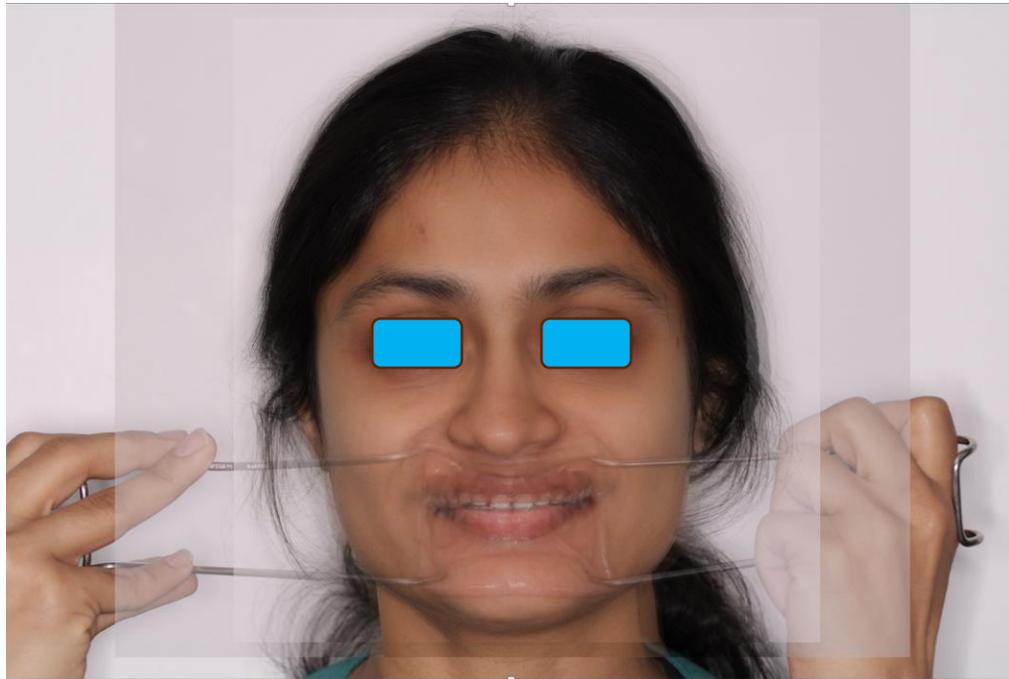


Old School Design + Spear Templates

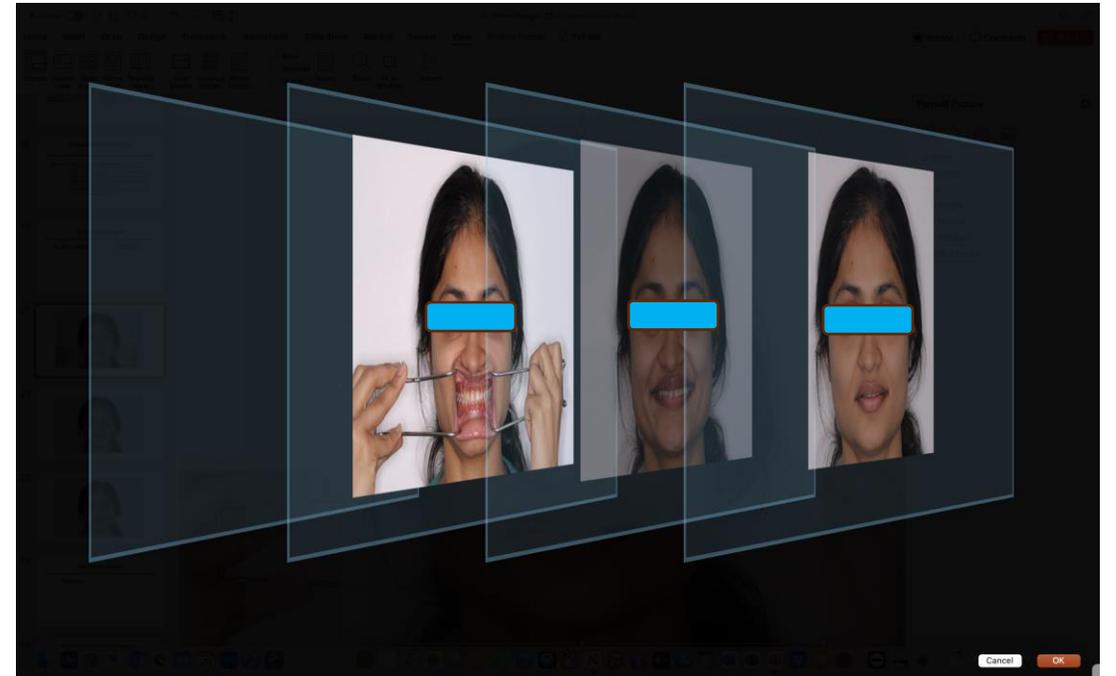


Old School Design. Powerpoint Layered Photos

3:1 Photo Merge (ref. #1b)



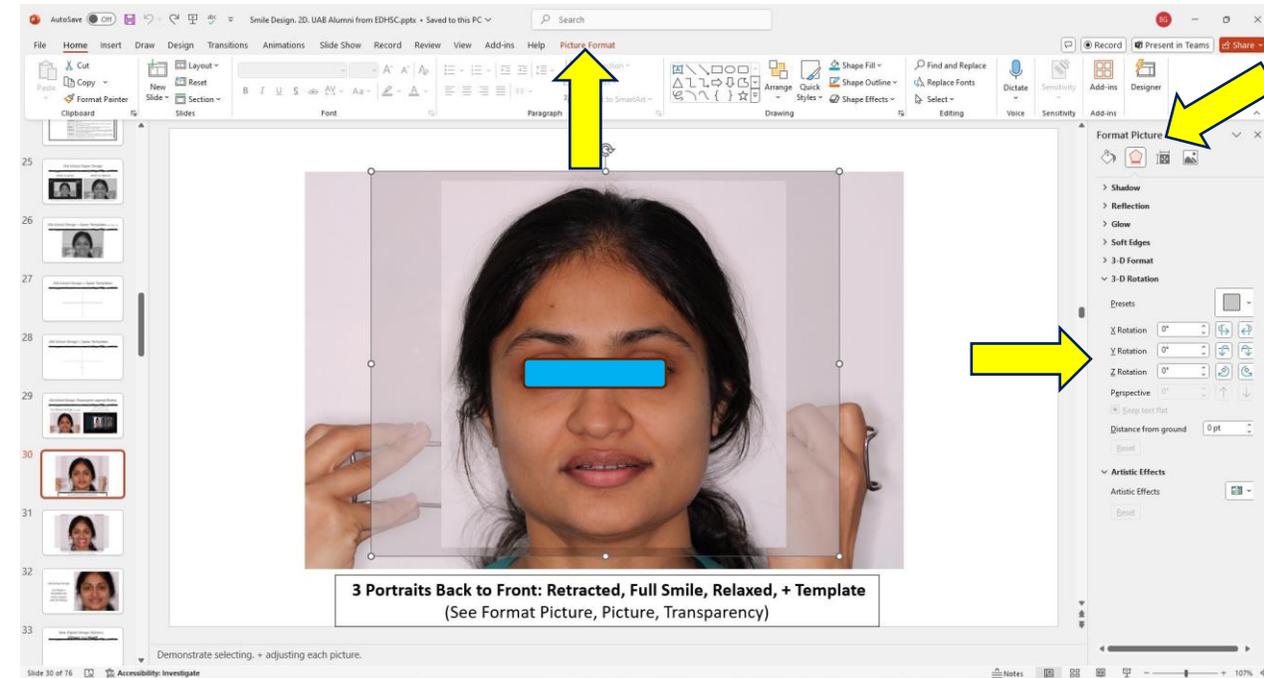
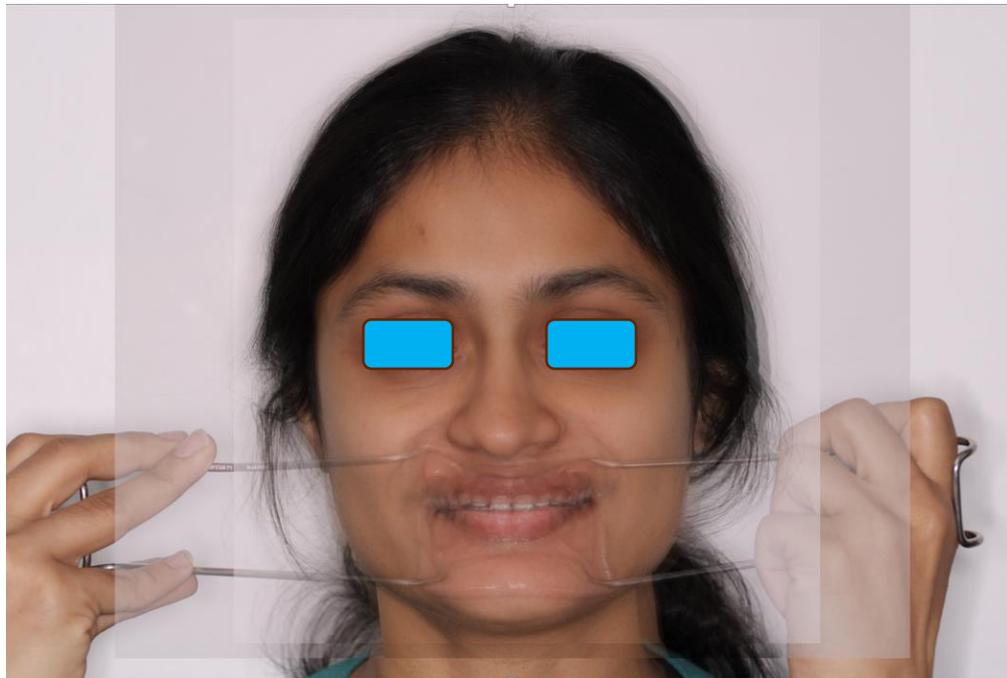
3 Portraits Back to Front: Retracted, Full Smile, Relaxed



Old School Design. Powerpoint Layered Photos

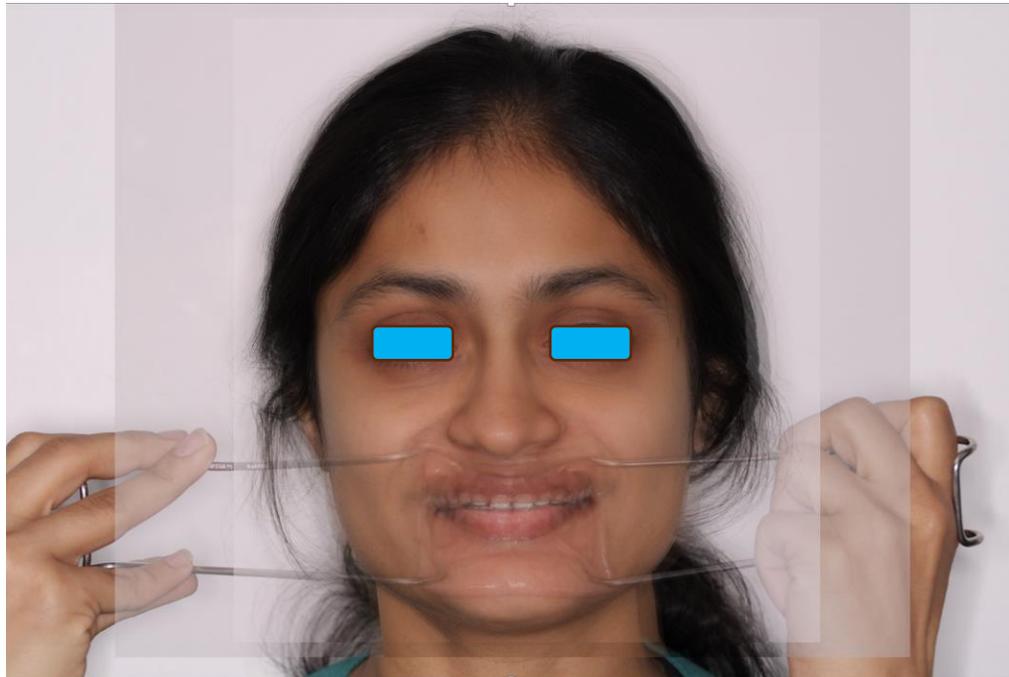
3:1 Photo Merge (ref. #1b)

3 Portraits: Retracted, Full Smile, Relaxed.
Align and Rotate as needed
(Much easier when 3:1 photos taken perfectly!)



Old School Design. Powerpoint Layered Photos

3:1 Photo Merge (ref. #1b)



3 Portraits Back to Front: Retracted, Full Smile, Relaxed. Powerpoint: **moving objects** instructions

Move an object to the back or front

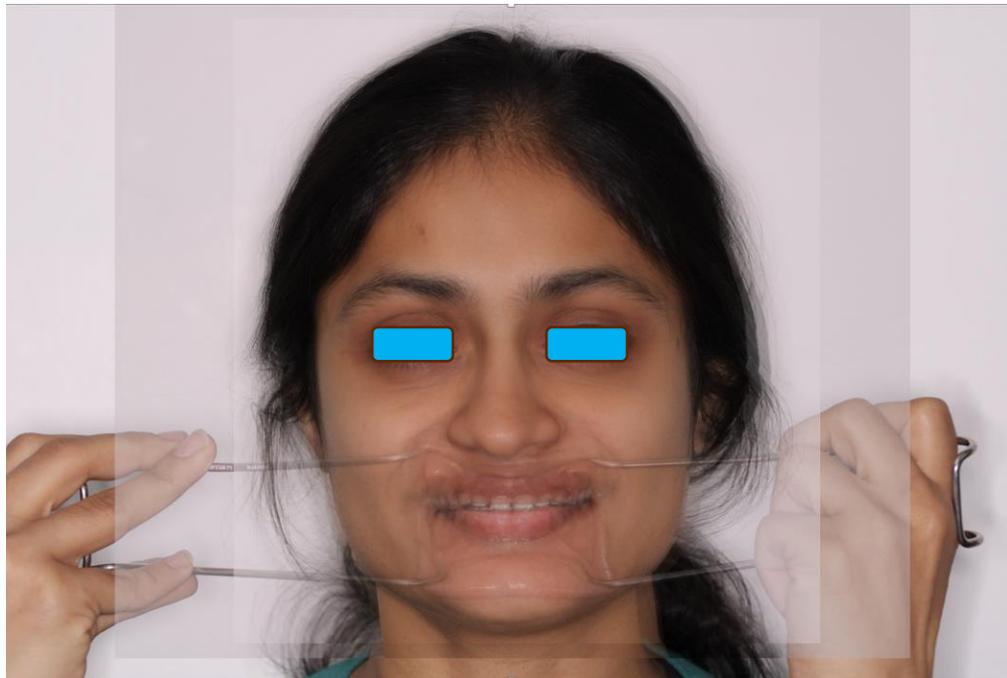
1. Select the object.
2. Right-click and select an option:
 - **Bring to Front** - to move the object in front of all other objects.
 - **Send to Back** - to move the object behind all other objects.
3. Or, to move an object in-between layers:
 - **Bring to Front > Bring Forward** - to move the object in front of another object.
 - **Send to Back > Send Backward** - to move the object behind, or in back of another object.

Use the Selection Pane to find hidden objects

1. If an object is hidden behind other objects, select **Home > Select > Selection Pane**.
2. In the **Selection Pane**, reorder the objects how you want. The front object is listed at the top. You can turn objects off/on by selection the "open eye" icon or lock them.

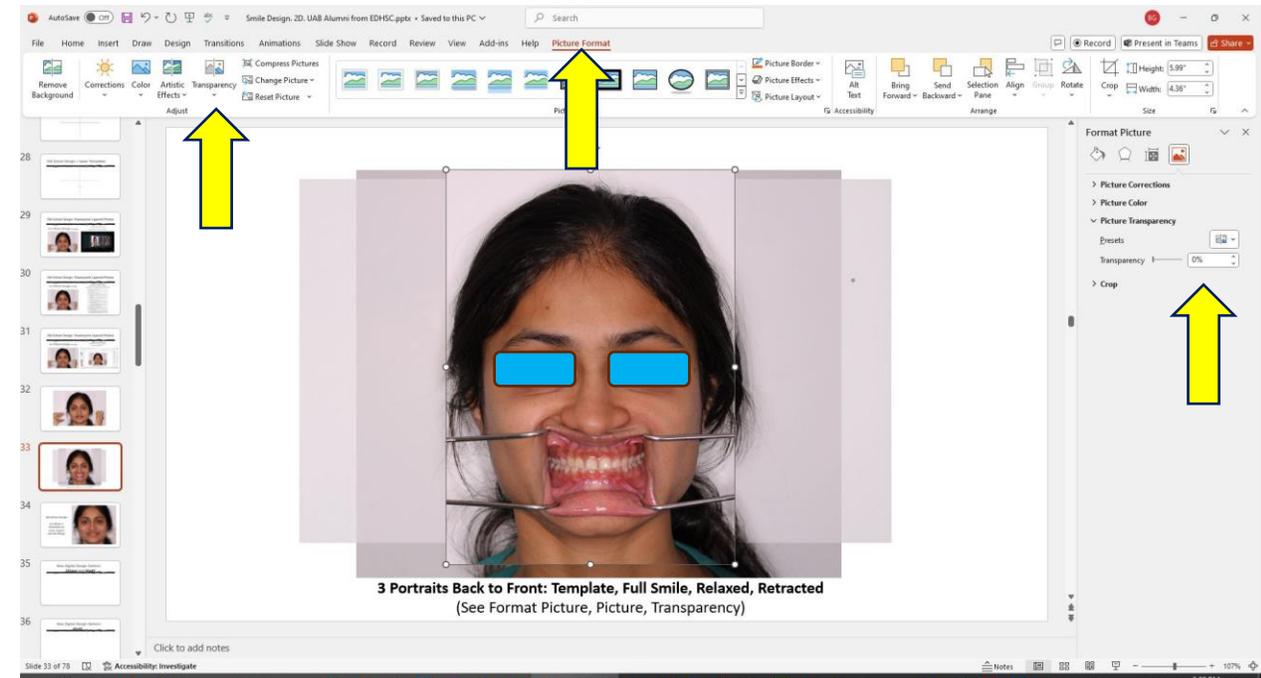
Old School Design. Powerpoint Layered Photos

3:1 Photo Merge (ref. #1b)



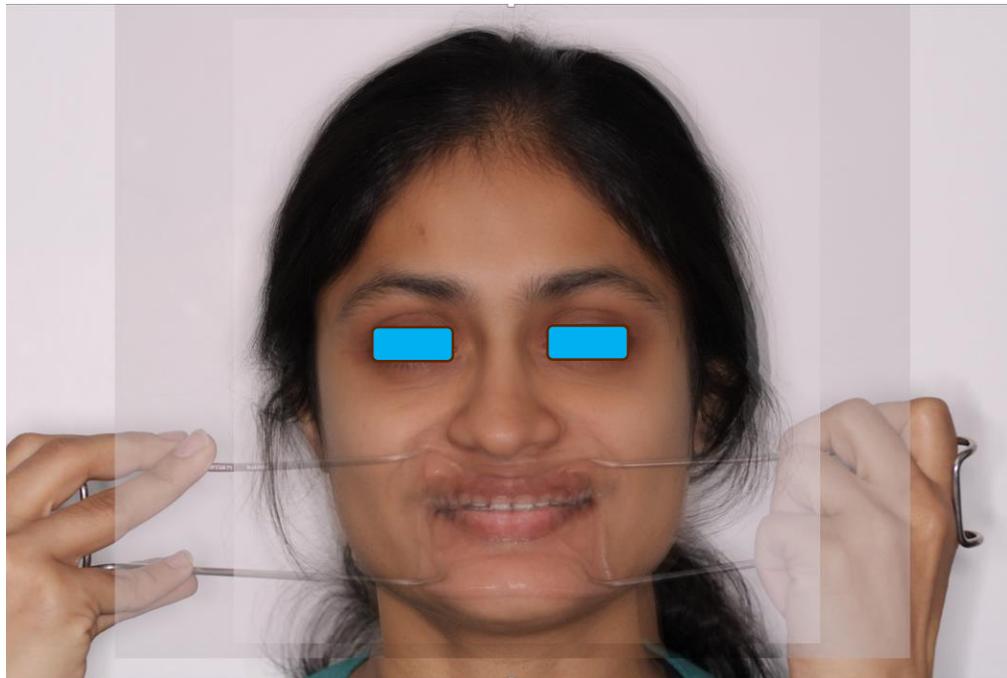
3 Portraits: Retracted, Full Smile, Relaxed.

Set Transparency as needed.



Old School Design. Powerpoint Layered Photos

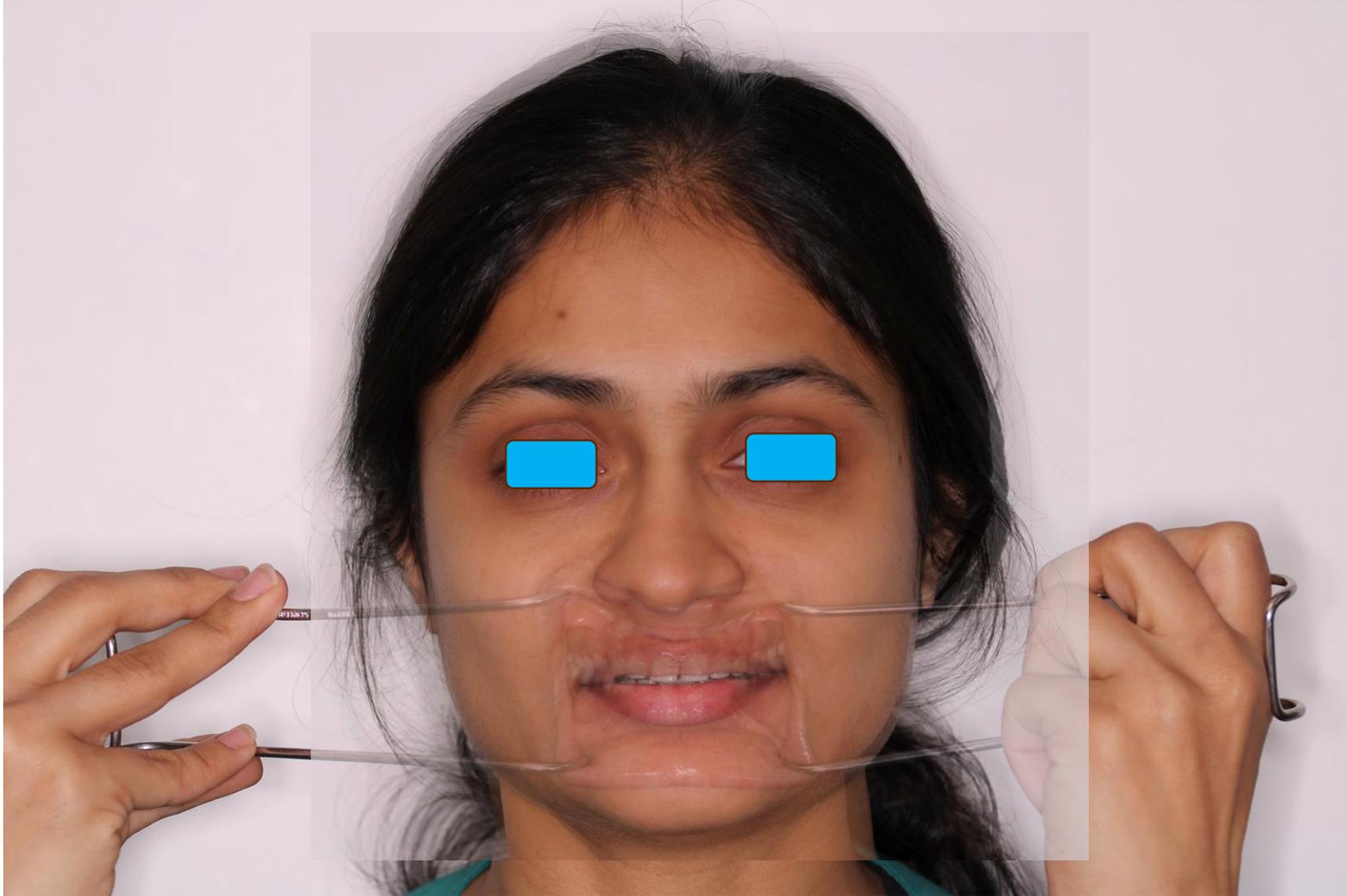
3:1 Photo Merge (ref. #1b)



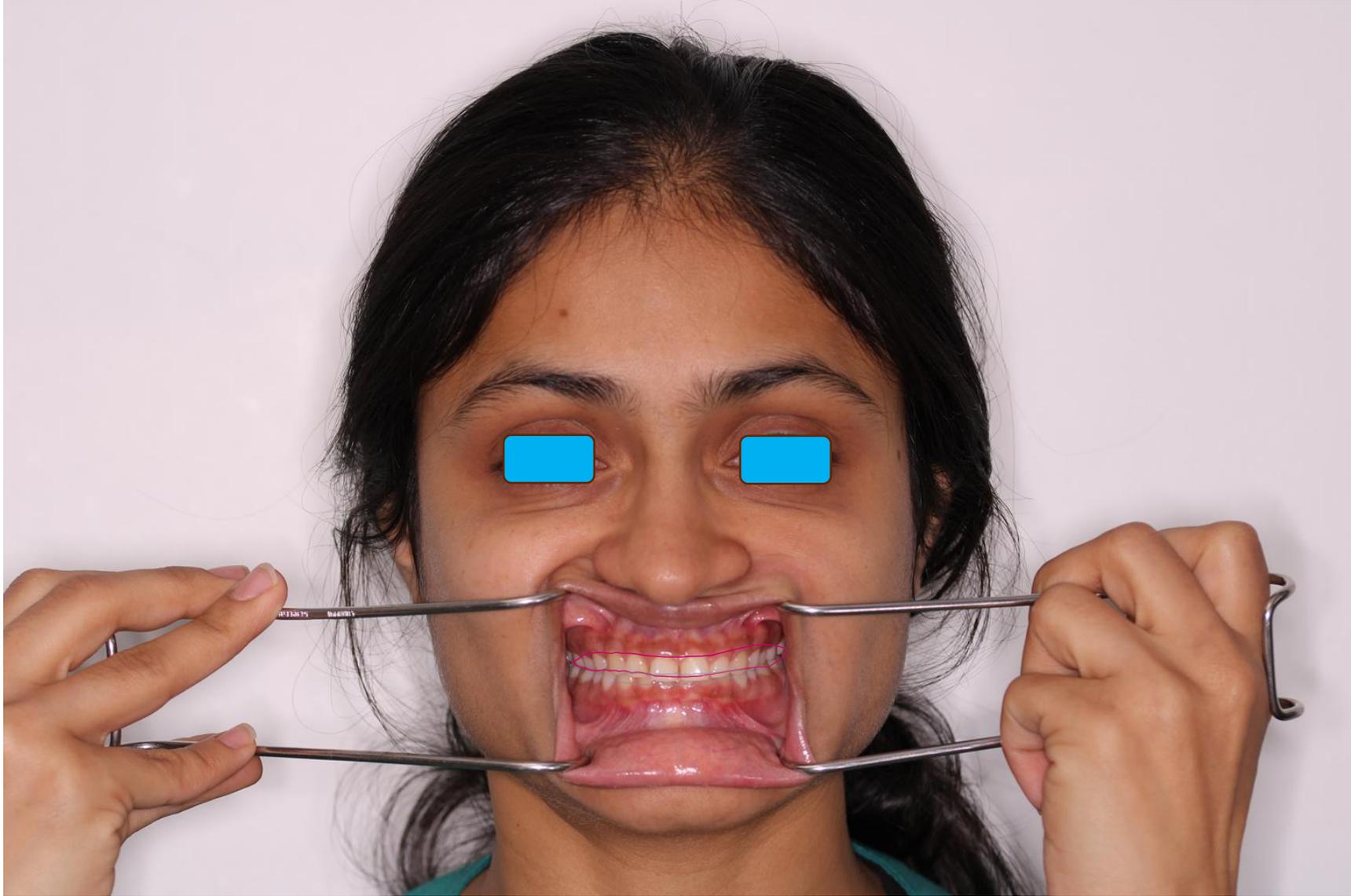
3 Portrait: Retracted, Full Smile, Relaxed.
Arrange Pane. **Select/Toggle Off/On PRN**

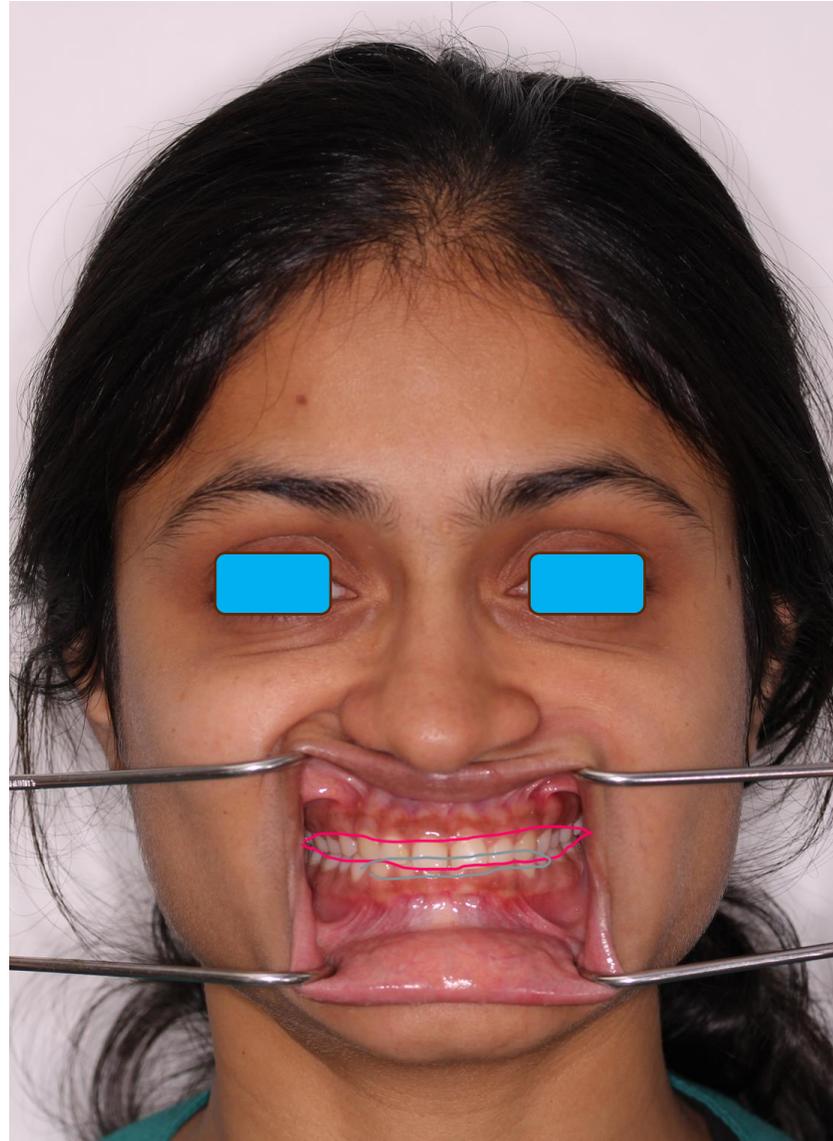
3 Portraits Back to Front: Retracted, Full Smile, Relaxed, + Template
(See Format Picture, Picture, Transparency)

Slide 34 of 80 Accessibility: Investigate



3 Portraits Back to Front: Retracted, Full Smile, Relaxed, + Template
(See Format Picture, Picture, Transparency)

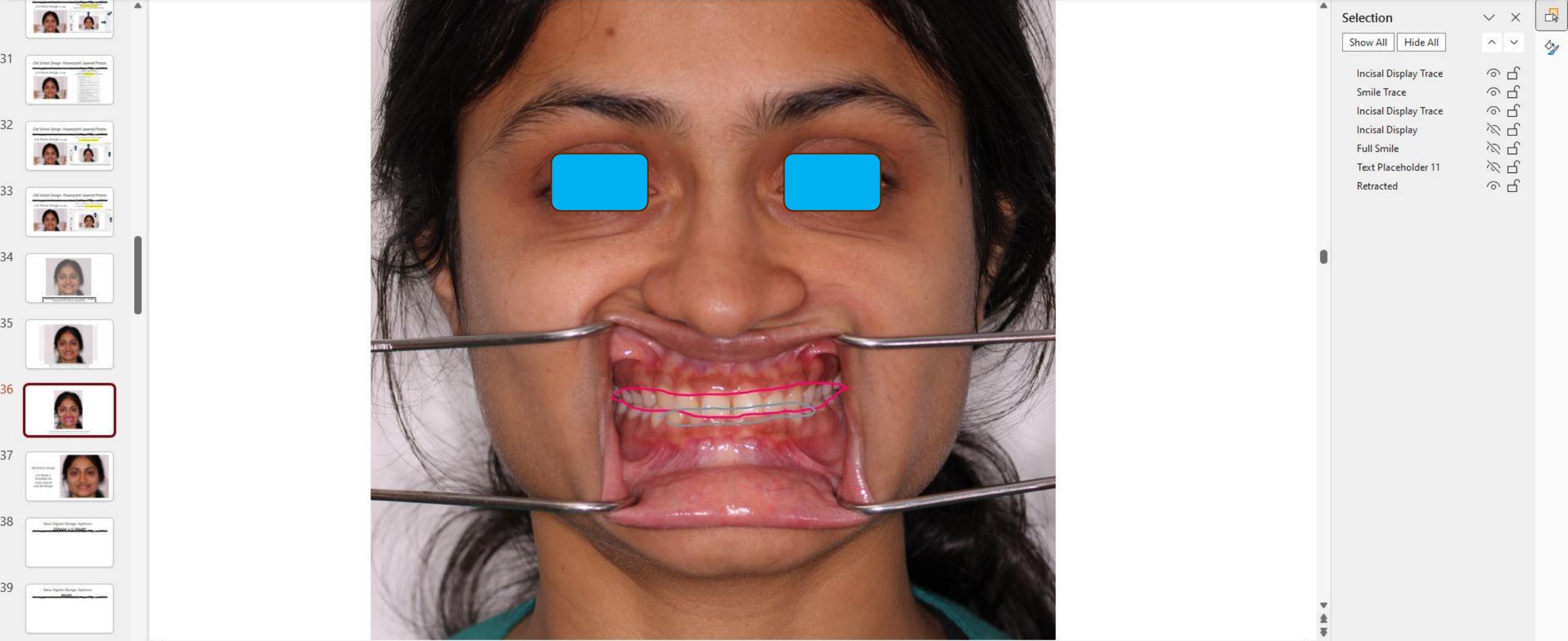




3 Portraits Back to Front: Retracted, Full Smile, Incisal Display
(See Format Picture, Picture, Transparency, Selection Panel)

Drawing Tools: Selection tools (arrow, lasso), pens (black, red, blue), eraser, ruler, and stencils (text, shape, math).

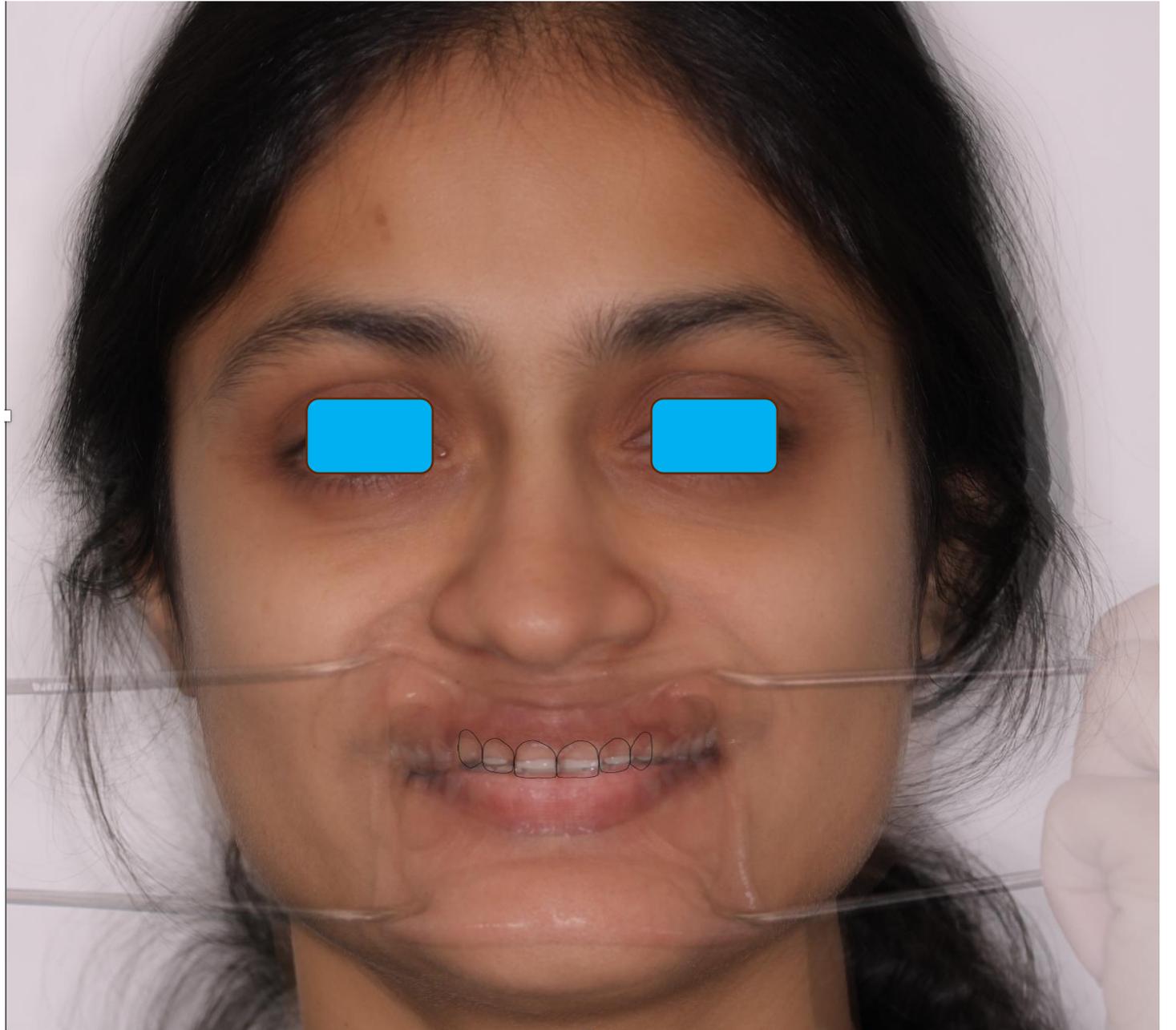
Stencils: Ink to Text, Ink to Shape, Ink to Math, Ink Replay, Ink Help.



Selection panel with 'Show All' and 'Hide All' buttons. A list of objects is shown with corresponding icons:

- Incisal Display Trace
- Smile Trace
- Incisal Display Trace
- Incisal Display
- Full Smile
- Text Placeholder 11
- Retracted

*Old School Design
3:1 Photo + Templates
for
Cerec Import
and 3D Design...
Theoretically!*



New Digital Design Options:
3Shape and Medit

New Digital Design Options:

Medit (ref. #6)

New Digital Design Options: **Medit** (ref. #6)

MEDIT Link 3.2.0 Barry Goodspeed

Work Box

Dashboard In Box Work Box Case Talk App Box Trash Box

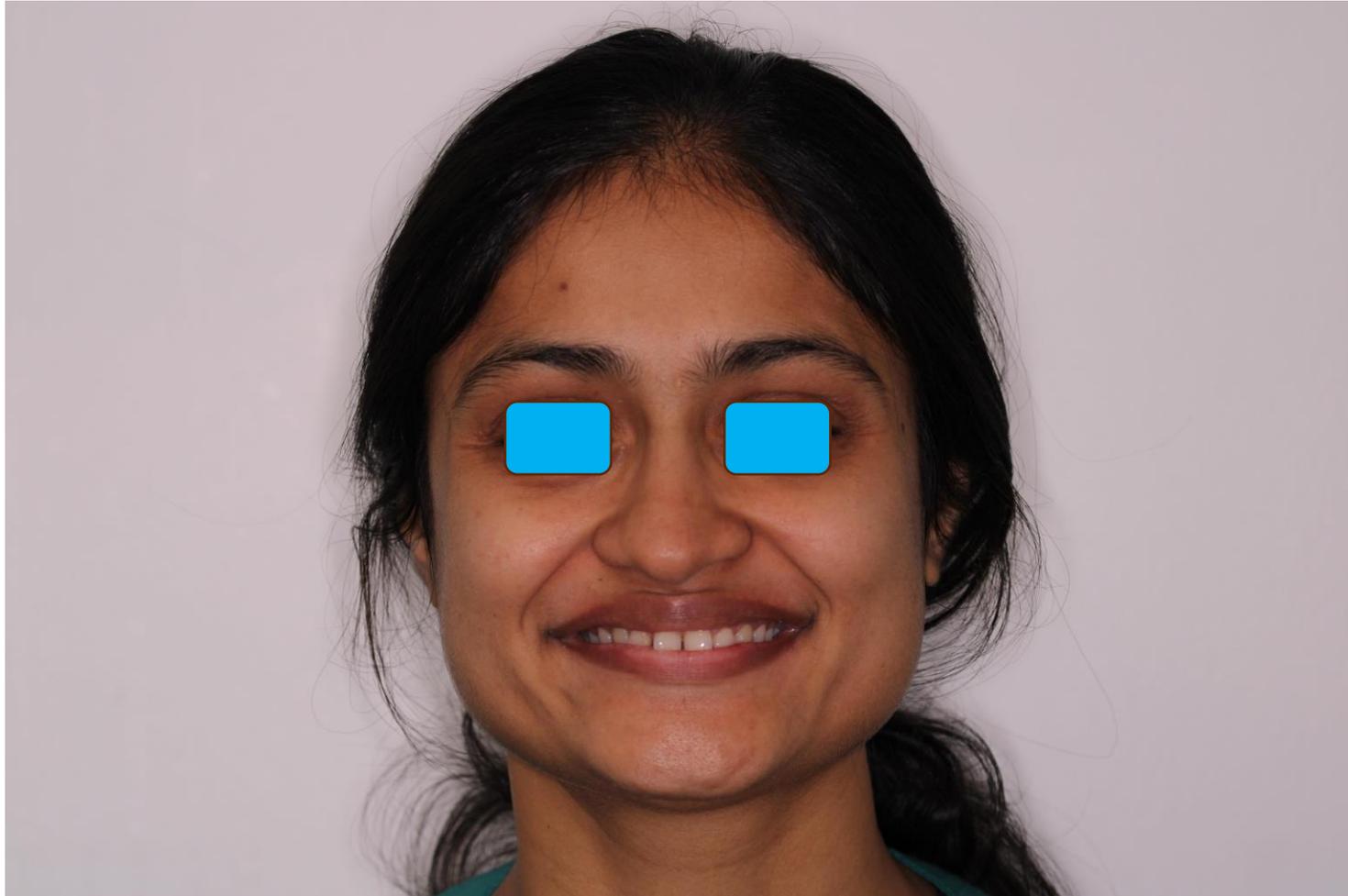
✓ All | Form Only | Need Processing | Scan Completed | CAD | CAM | Mill | Done

Total Cases: 2 Refresh 1/1/2018~12/29/2023 Patient Name Patel

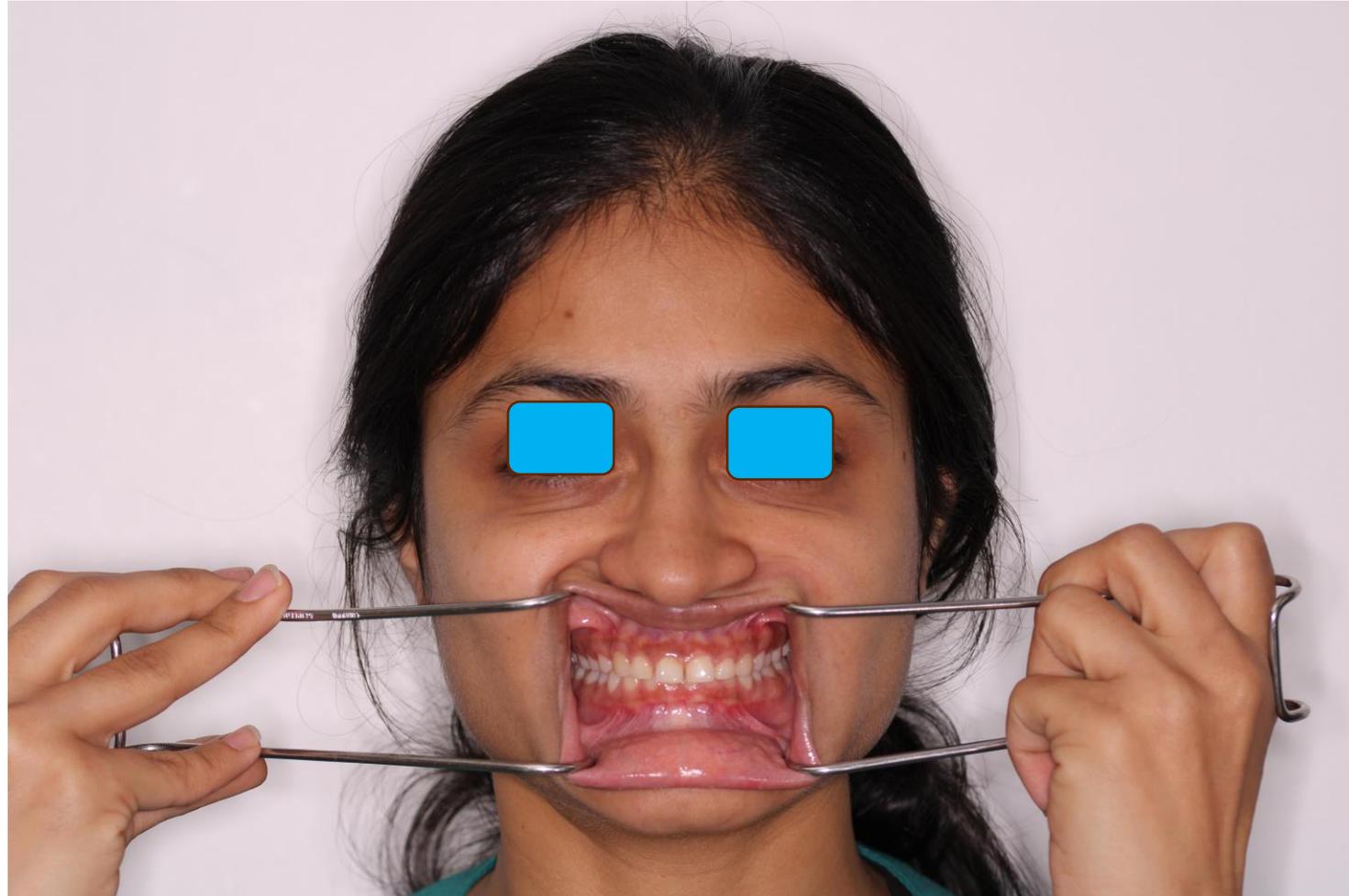
Status	Case Name	Patient Name ↑	Form Information	Last Modified Date	Requested Delivery Date	Clinic Name	Order ID
Form Only	Jahnvi	-	-	12/29/2023 12:12 PM	11/11/2023 12:00 AM	UAB School of Dentistry	-
Form Only	Jahnvi	-	8-Veneer / 9-Veneer	12/29/2023 11:58 AM	11/15/2023 12:00 AM	UAB School of Dentistry	-

12:45 PM

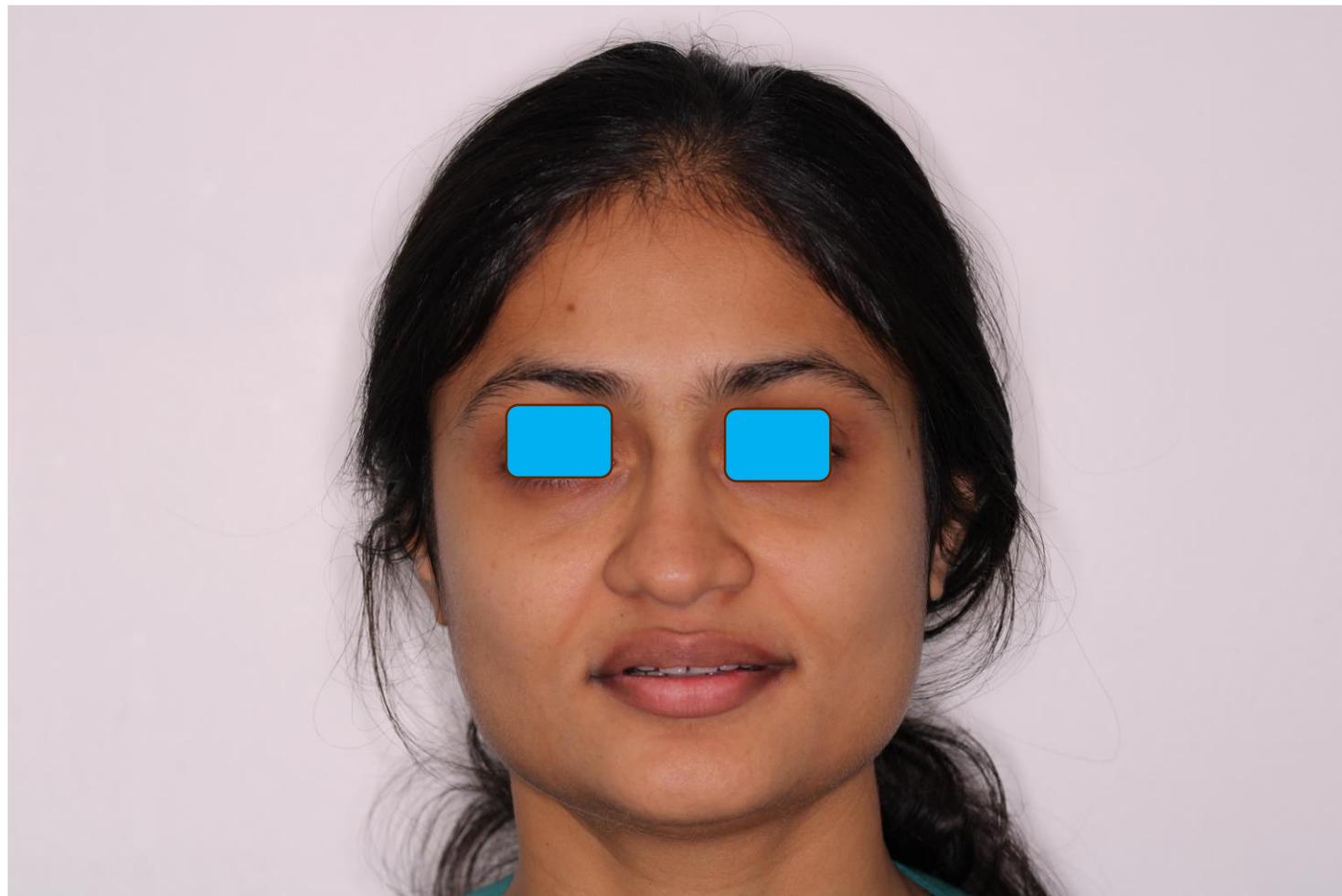
Medit: Import Images. Portrait



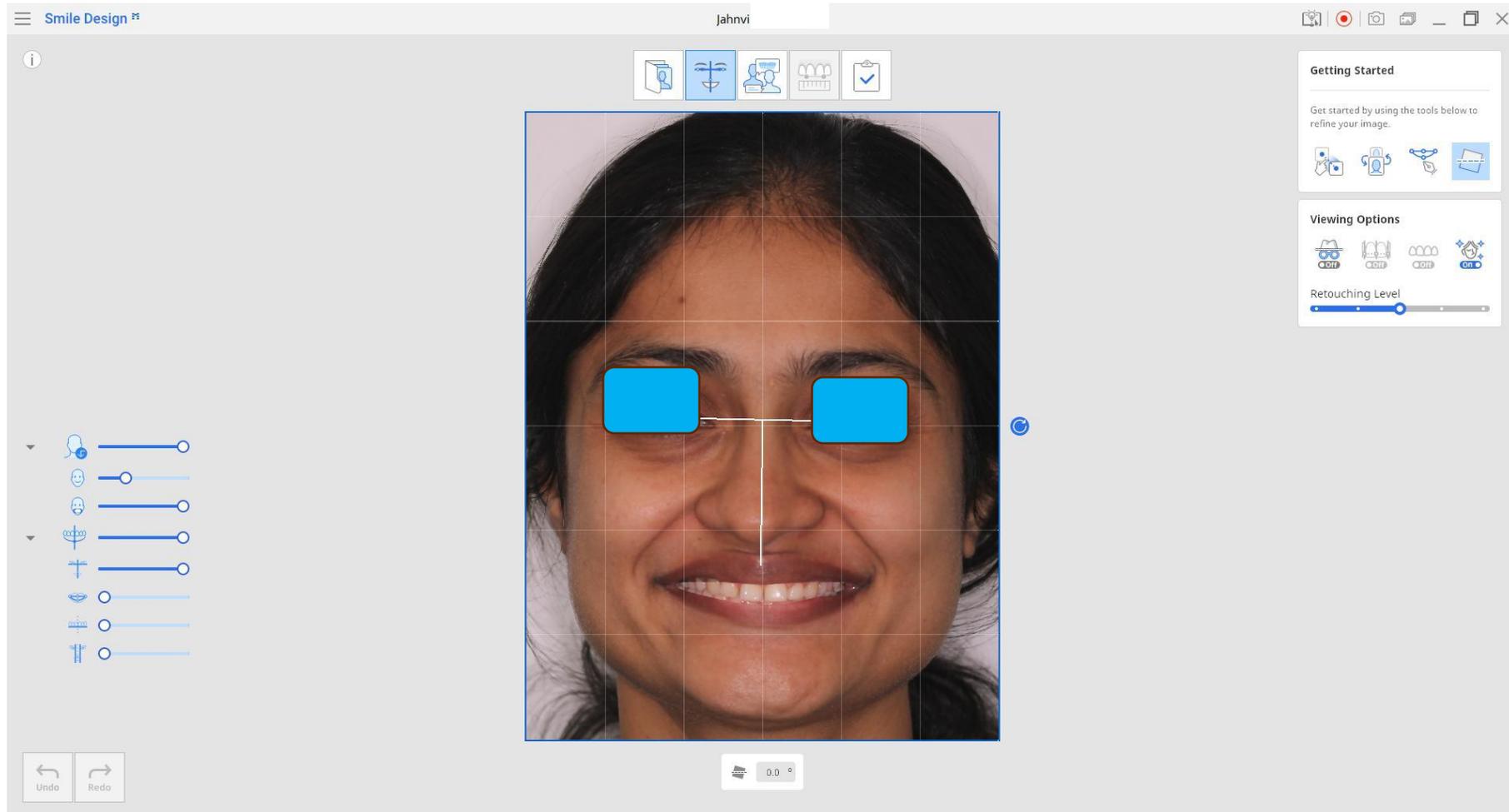
Medit: Import Images. Portrait. Retracted



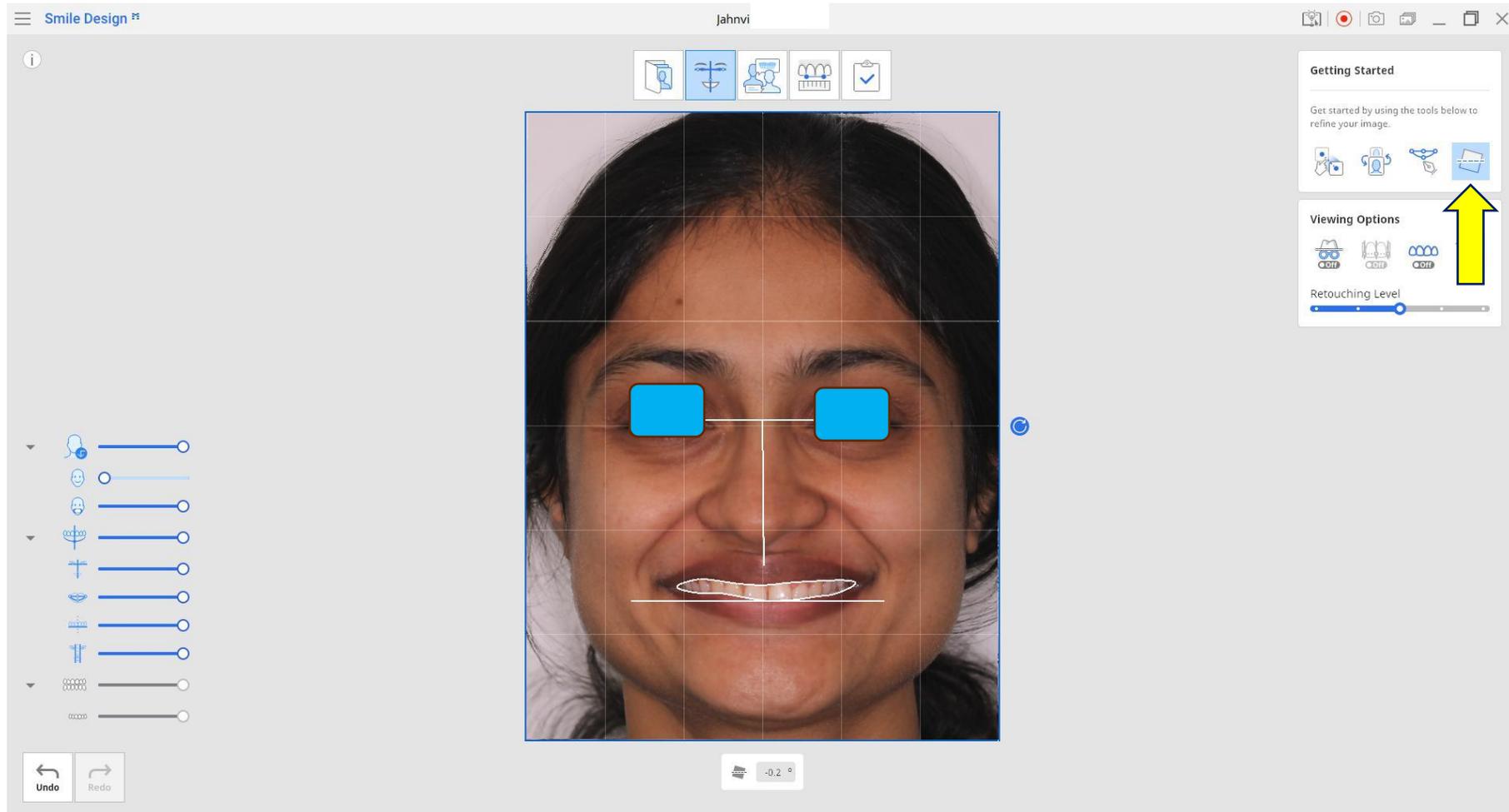
Medit: Import Images. Portrait.
(Lips at Rest)



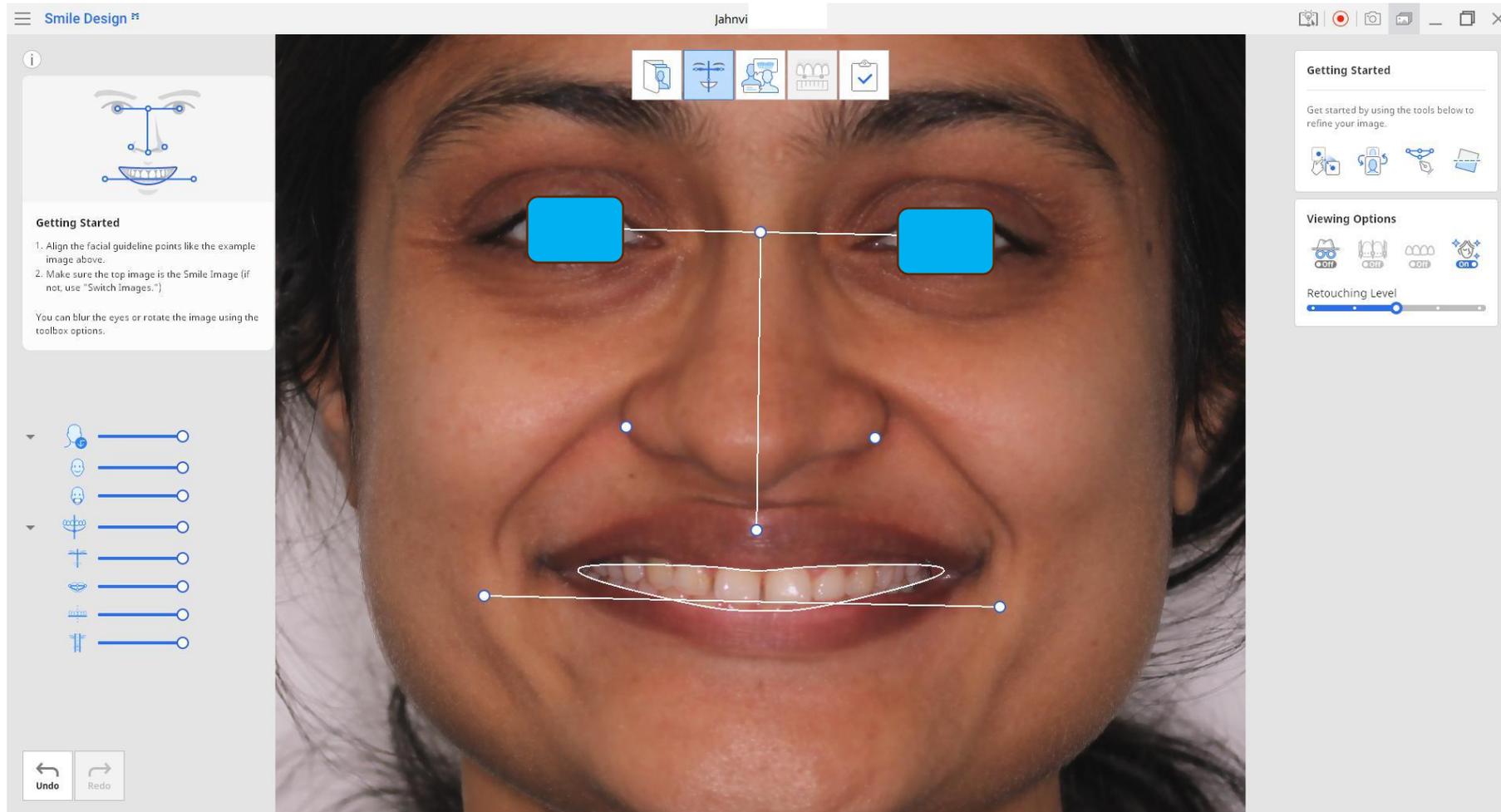
Medit: Align



Medit: Rotate PRN (subtle and important!)



Medit: Align Pupils, Alae, Midline, Smile Outline, Incisal Edge



Medit: Manual Align PRN



Medit: Modify Lipline PRN



Medit: Change Template PRN

Smile Design Jahnvi

Consultation Mode

Choose from various teeth templates and textures or try a braces simulation. Compare the options in Preview Options.

1. Select template.
2. Turn on color and adjust shade.
3. Use golden proportion guide line, if needed.
4. Choose a preview option to compare the design with the original picture.
5. Double-click on the tooth to adjust its shape.

Viewing Options

Retouching Level

The effects of Image Retouching are only visible in Smile Image.

Preview

Triangle Oval Square Triangle M **Oval M** Square M

Medit: Click and Drag to Draw 5-11 Box

The screenshot displays the Smile Design software interface in Consultation Mode. The central focus is a patient's photograph with a digital overlay of a tooth model. The interface includes several key components:

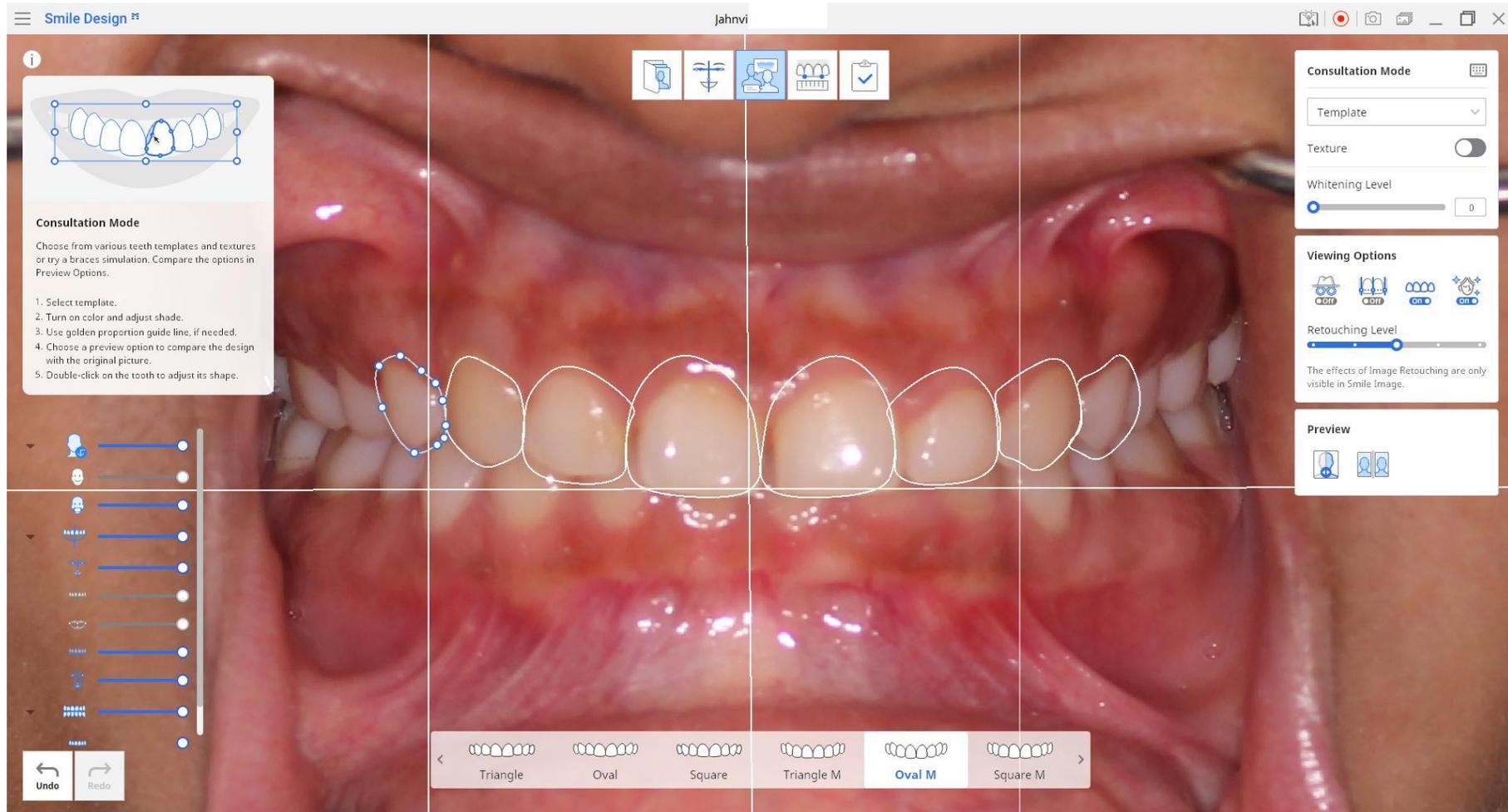
- Top Bar:** Shows the patient's name "Jahnvi" and standard window controls.
- Left Panel:**
 - Info:** A diagram of a tooth model with a blue box highlighting a specific area.
 - Consultation Mode:** A text box providing instructions: "Choose from various teeth templates and textures or try a braces simulation. Compare the options in Preview Options." followed by a 5-step process: 1. Select template, 2. Turn on color and adjust shade, 3. Use golden proportion guide line, if needed, 4. Choose a preview option to compare the design with the original picture, 5. Double-click on the tooth to adjust its shape.
 - Sliders:** A vertical stack of sliders for adjusting various parameters like color, shade, and shape.
 - Undo/Redo:** Buttons for navigating between design iterations.
- Central Image:** A patient's photo with a blue box over the eyes and a digital tooth model overlaid on the mouth. A white grid is visible over the image. A toolbar with icons for selection, rotation, and zoom is positioned above the image.
- Right Panel:**
 - Consultation Mode:** A dropdown menu for "Template", a "Texture" toggle, and a "Whitening Level" slider.
 - Viewing Options:** Four icons representing different viewing perspectives: 3D, 2D, 3D, and 2D.
 - Retouching Level:** A slider for adjusting the retouching effect.
 - Preview:** Two small icons for comparing the original and designed images.
- Bottom Bar:** A row of six tooth templates: Triangle, Oval, Square, Triangle M, **Oval M** (selected), and Square M.

Medit: Macro-Movements First

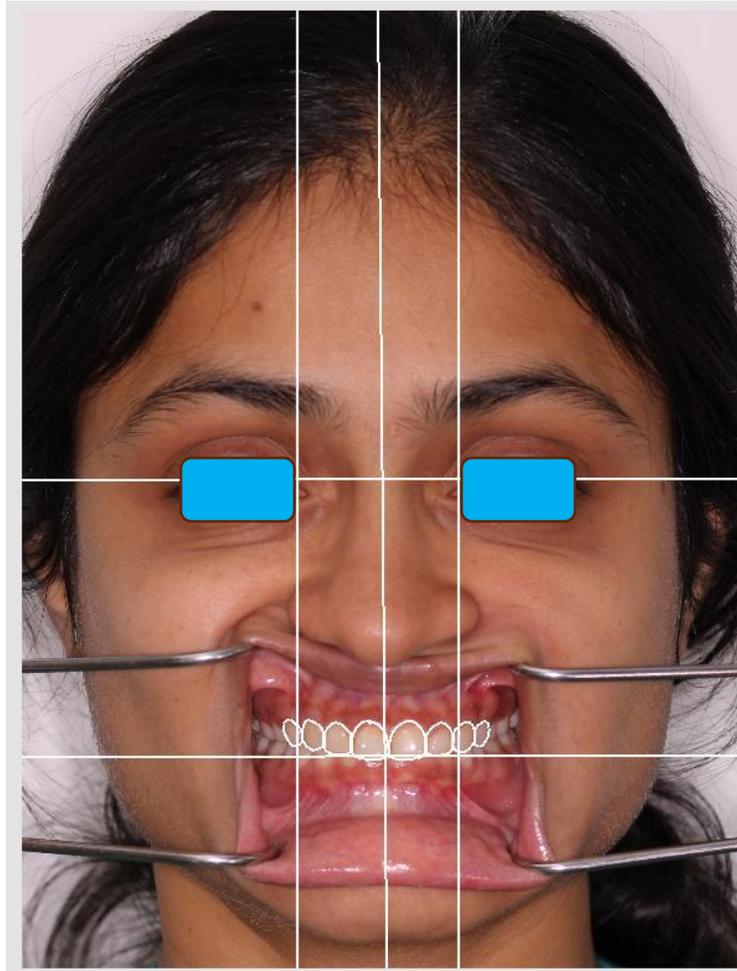
The screenshot displays the Smile Design software interface for a patient named Jahnvi. The central focus is a photograph of the patient's smile, overlaid with a digital model of teeth. The interface includes several key components:

- Top Bar:** Shows the patient's name "Jahnvi" and standard window controls (minimize, maximize, close).
- Left Panel:**
 - Information:** A diagram of a tooth with adjustment points.
 - Consultation Mode:** A section with instructions: "Choose from various teeth templates and textures or try a braces simulation. Compare the options in Preview Options." It lists five steps: 1. Select template, 2. Turn on color and adjust shade, 3. Use golden proportion guide line, if needed, 4. Choose a preview option to compare the design with the original picture, 5. Double-click on the tooth to adjust its shape.
 - Adjustment Sliders:** A vertical list of sliders for various parameters like color, shape, and texture.
 - Undo/Redo:** Buttons for navigating between design states.
- Central Image:** The patient's smile with a digital tooth overlay. A blue box obscures the eyes. A horizontal line with a slider is positioned across the teeth. A toolbar above the image includes icons for selection, rotation, and zoom.
- Right Panel:**
 - Consultation Mode:** A dropdown menu for "Template", a "Texture" toggle, and a "Whitening Level" slider.
 - Viewing Options:** Four icons representing different viewing modes (e.g., 3D, 2D).
 - Retouching Level:** A slider for image retouching, with a note: "The effects of Image Retouching are only visible in Smile Image."
 - Preview:** Two small icons for previewing different design options.
- Bottom Bar:** A row of six tooth templates: Triangle, Oval, Square, Triangle M, **Oval M** (selected), and Square M.

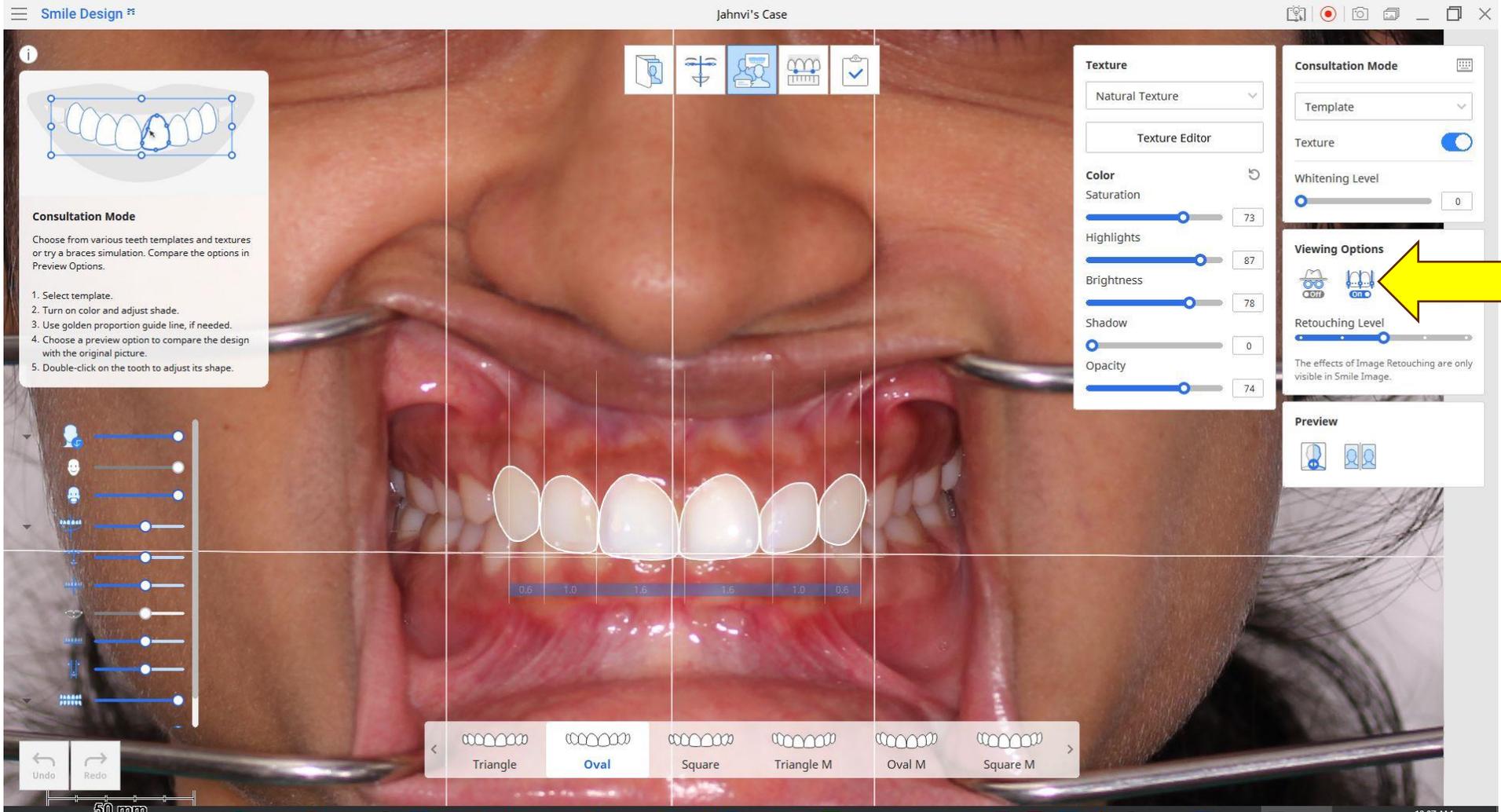
Medit: Smaller Movements Second



Medit: Grid and Template View



Medit: Golden Proportions View



Golden Proportions (Literature)

"The **Golden Ratio** uses a mathematical formula to define a proportional and harmonic relationship between the maxillary anterior teeth and is expressed by the irrational number **1.618**."

e.g. Width of Lateral/Central=

5.2mm/8.4mm=

1.6

Determining the widths of the maxillary anterior teeth for esthetics:
Comparison of the Mondelli and Albers formulas, esthetic proportion,
and golden ratio.

Garrido, Magalhaes, Mamani, and Mondelli.

General Dentistry, May/June 2024, Pgs. 26-32

Golden Proportions (Literature)

The **Golden Ratio** can be utilized by "checking if the **height and width** of the maxillary lateral incisors and canines are in the correct ratio and are proportional to the central incisors."

Determining the widths of the maxillary anterior teeth for esthetics:
Comparison of the Mondelli and Albers formulas, esthetic proportion, and golden ratio.

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Golden Proportions (Literature)

The **Golden Ratio** can be utilized by "checking if the **height and width** of the maxillary lateral incisors and canines are in the correct ratio and are proportional to the central incisors."

Table 2: Mean width and height of 50 participants

TOOTH	Width, mm	Height, mm	Esthetic Proportions=W/H
Central	7.99	9.53	83.55
Lateral	6.07	7.96	77.00
Canine	7.18	9.01	80.40

Garrido, Magalhaes, Mamani, and Mondelli.
General Dentistry, May/June 2024, Pgs. 26-32

Golden Proportions (Literature)

"The formulas and the proportions available in the literature can assist in esthetic planning, but the **individual characteristics** of each patient and **expertise of the dentist** should guide treatment for each case."

"..making correlation between **function** and **esthetics** an important consideration..."

Determining the widths of the maxillary anterior teeth for esthetics: Comparison of the Mondelli and Albers formulas, esthetic proportion, and golden ratio.

Garrido, Magalhaes, Mamani, and Mondelli.
General Dentistry, May/June 2024, Pgs. 26-32

Golden Proportions (Literature)

"...rather than relying on a single, fixed ratio of 78% to 80% suggested by researchers for anterior teeth, the clinician should adopt different crown width-height ratios to restore teeth with the optimum aesthetic outcome."

An Analysis of Maxillary Anterior Teeth Crown Width-Height Ratios: A Photographic, Three-Dimensional, and Standardized Plaster Models Study.

Ahmed N, Halim MS, Aslam A, Ghani ZA, Safdar J, Alam MK

Biomed Rest Int. 2022 Feb 7; 2022:4695193

Golden Proportions (Literature)

MIDR = Maxillary Incisal Display at Rest

"Incisal display at rest was generally greater in females than males."

"The maxillary incisor display at rest: analysis of the underlying components"

Jeelani W, Fida M, Shaikh A.

Dental Press J Orthod. 2018 Nov-Dec; 23(6):48-55

Medit: Calibrate. Software or Caliper Measurement

inLab Measurement. Distance Tool



Harbor Freight Digital Caliper

<https://www.harborfreight.com/hand-tools/measuring-marking/calipers-micrometer/calipers/6-in-digital-caliper-with-sae-and-metric-fractional-readings-63731.html>



Medit: Calibrate

The screenshot displays the Smile Design software interface for a patient named 'Jahnvi'. The main window shows a dental photograph with a vertical dashed line indicating a measurement point. A yellow arrow points to the 'Calibrate' icon in the top toolbar. On the left, a 'Measure Mode' help box provides instructions: 'Calibration is required for accurate measurements. 1. Select two points on the tooth in the image that corresponds to the tooth in real life. 2. Measure the actual tooth and enter this length (mm) in "Actual Length." If you made a mistake or want to remeasure, click "Recalibrate." 3. Click "Calibrate" to receive your measurements. Measure Wizard quickly calculates the teeth's width and height using the initial calibration information. You can make additional measurements by selecting two points on the image. MEDIT Tip: Right-click the line to delete measurement results.' On the right, a 'Measure Helper' dialog box is open, showing 'Calibrate Measurement' with 'Actual Length' set to 7.30 mm and a 'Calibrate' button. The 'Measure Wizard' is also visible with a toggle switch.

Smile Design ^{RS} Jahnvi

Measure Mode

Calibration is required for accurate measurements.

1. Select two points on the tooth in the image that corresponds to the tooth in real life.
2. Measure the actual tooth and enter this length (mm) in "Actual Length." If you made a mistake or want to remeasure, click "Recalibrate."
3. Click "Calibrate" to receive your measurements.

Measure Wizard quickly calculates the teeth's width and height using the initial calibration information. You can make additional measurements by selecting two points on the image.

MEDIT Tip
Right-click the line to delete measurement results.

Measure Helper

Calibrate Measurement

Actual Length: 7.30 mm

Calibrate

Measuring Tool

Measure Wizard:

Want to save measurements?

Undo Redo

Medit: Measure Mode Calibrated

Smile Design Jahnvi

Measure Helper

Calibrate Measurement

Actual Length: 7.30 mm

Calibrate

Measuring Tool

Measure Wizard:

Want to save measurements?

Measure Mode

Calibration is required for accurate measurements.

1. Select two points on the tooth in the image that corresponds to the tooth in real life.
2. Measure the actual tooth and enter this length (mm) in "Actual Length." If you made a mistake or want to remeasure, click "Recalibrate."
3. Click "Calibrate" to receive your measurements.

Measure Wizard quickly calculates the teeth's width and height using the initial calibration information. You can make additional measurements by selecting two points on the image.

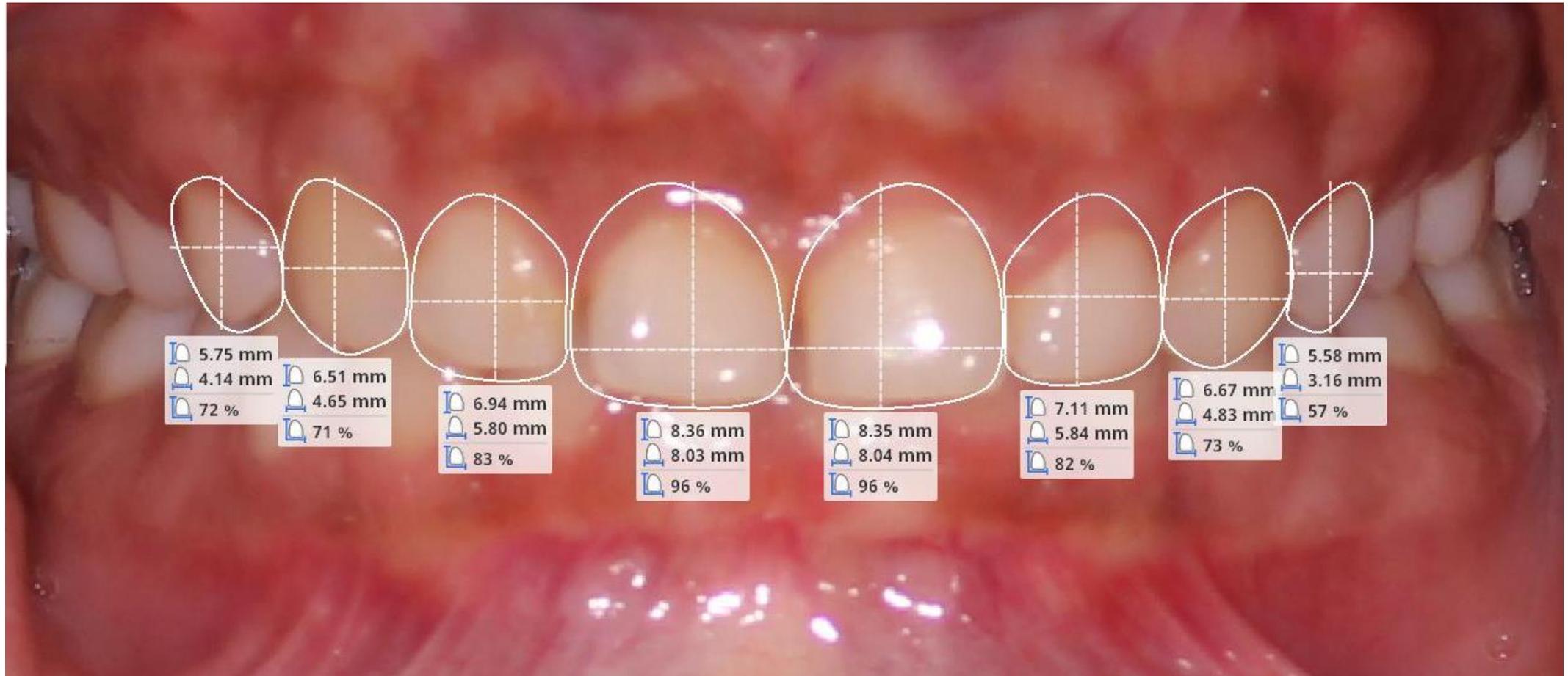
MEDIT Tip

Right-click the line to delete measurement results.

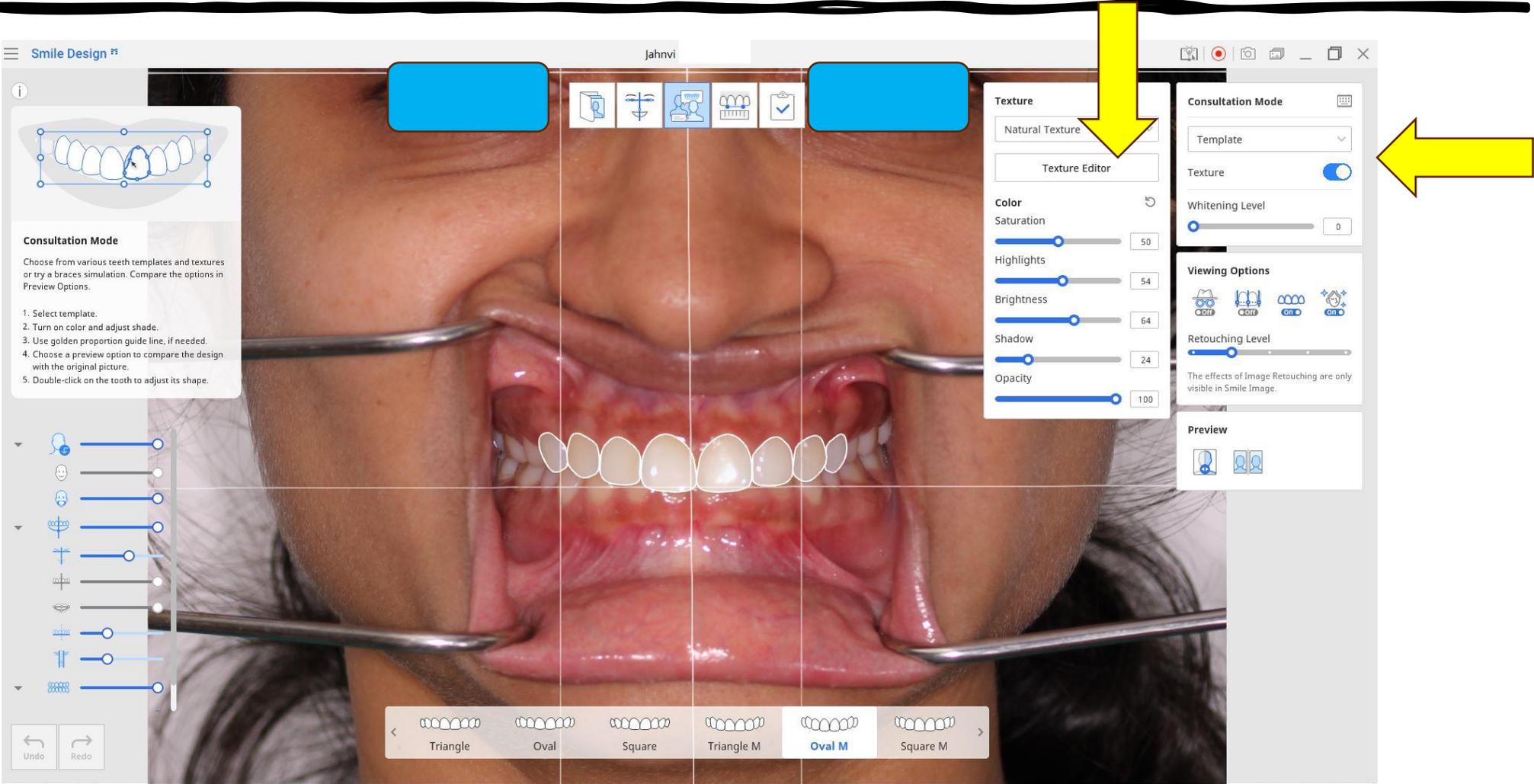
Undo Redo

Teeth	Width (mm)	Height (mm)	%
1st (Left)	5.75	4.14	72%
2nd (Left)	6.51	4.65	71%
3rd (Left)	6.94	5.80	83%
4th (Left)	8.36	8.03	96%
5th (Left)	8.35	8.04	96%
6th (Left)	7.11	5.84	82%
7th (Left)	6.67	4.83	73%
8th (Left)	5.58	3.16	57%

Medit: Calibrated *Money \$hot* for Lab



Medit: Natural Texture. Texture Mode



Medit: Texture Mode: outline within tooth outline and best color

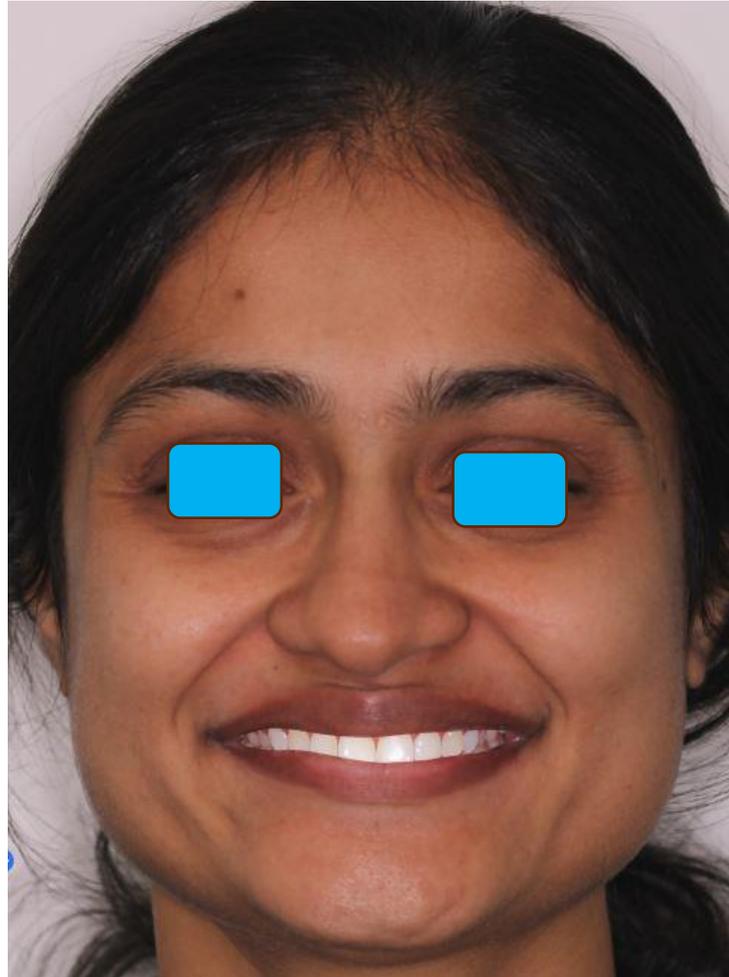
Texture Editor

1. Move the points to match the shape of each tooth.
2. After you're done, press "Confirm" to save the results and return to working on the template.

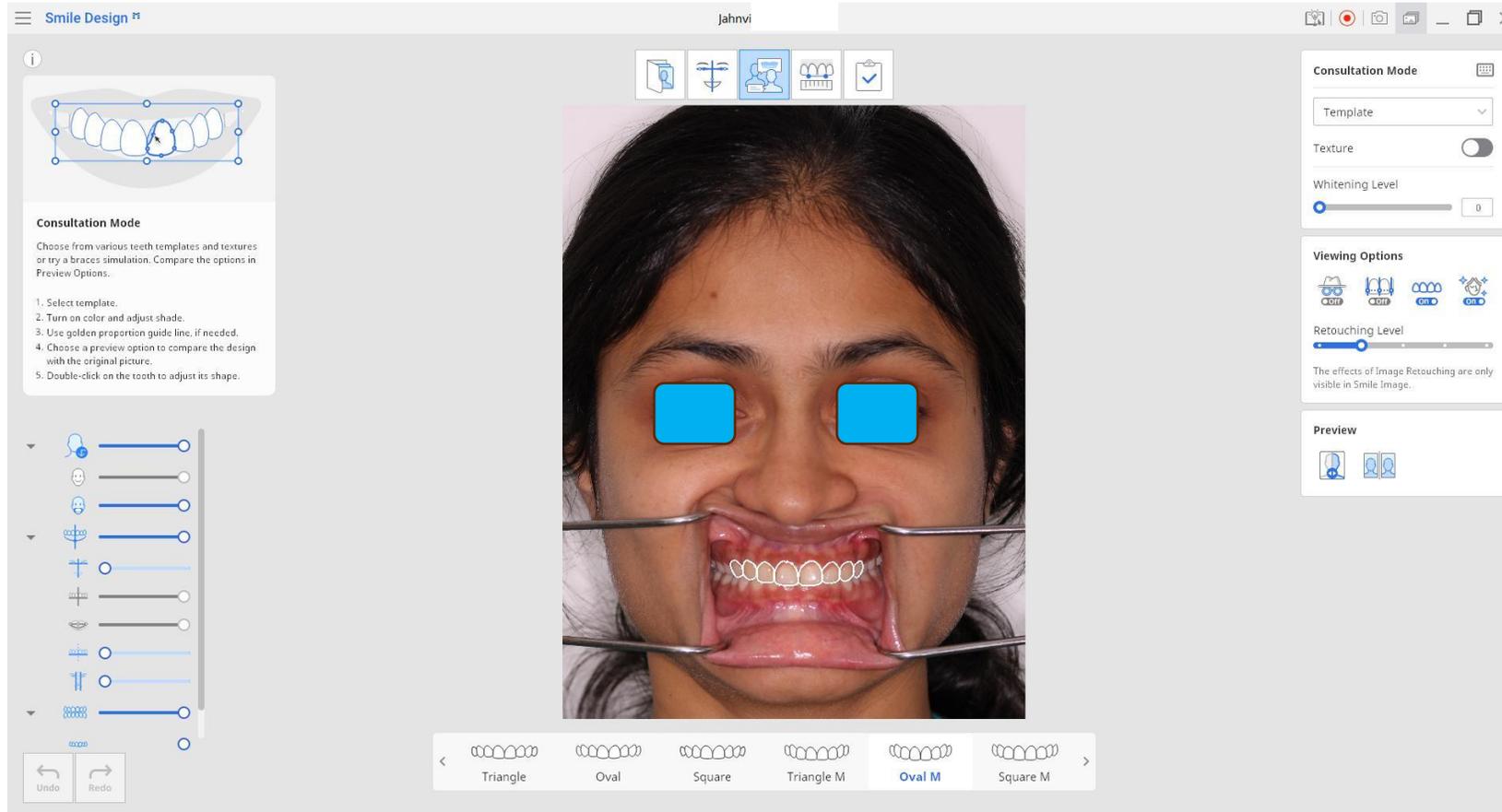
Tips on Editing



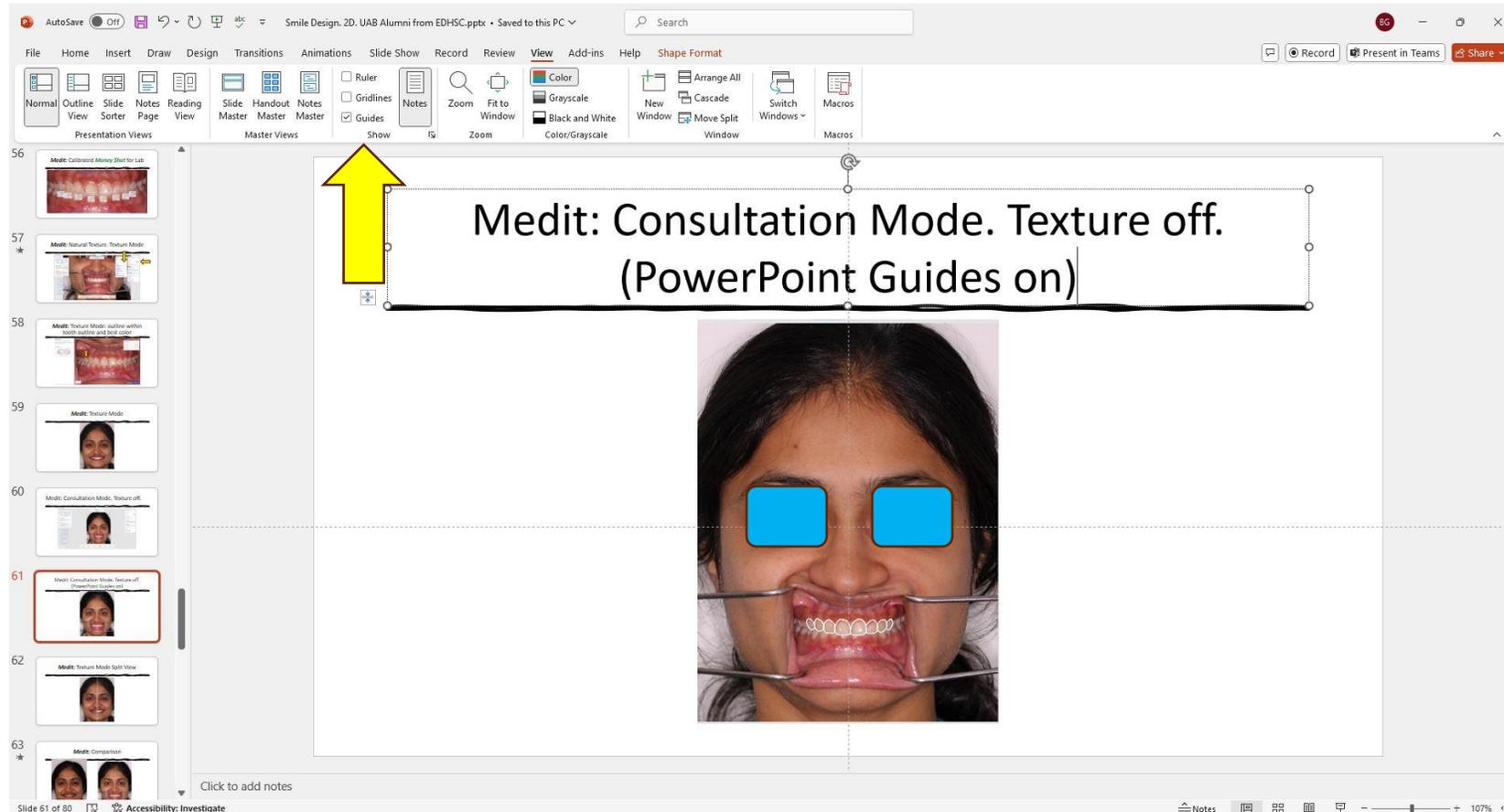
Medit: Texture Mode



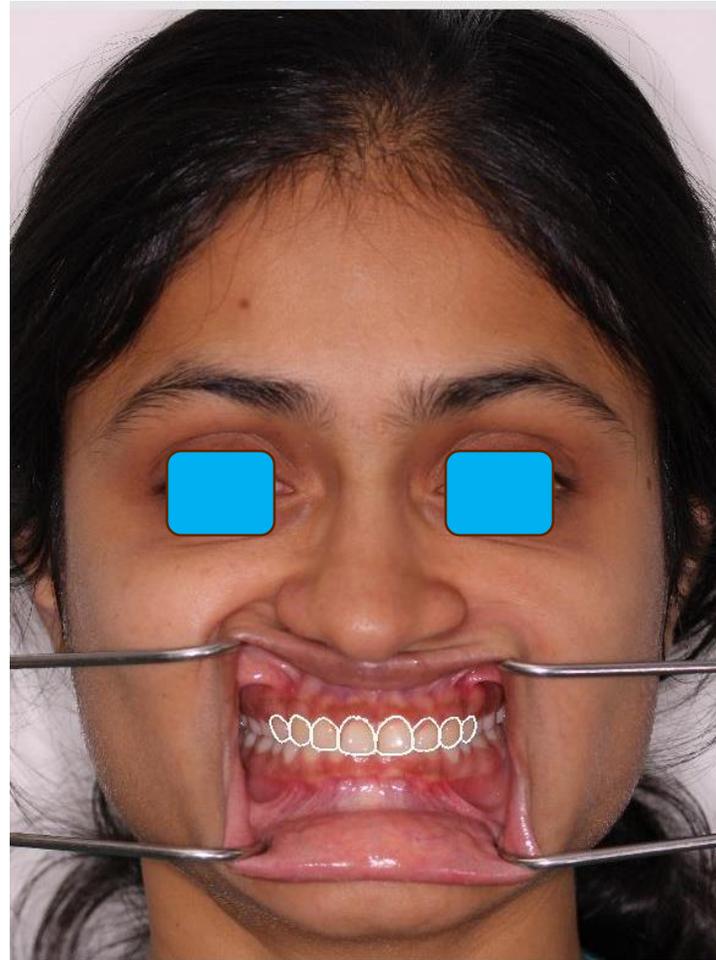
Medit: Consultation Mode. Texture off.



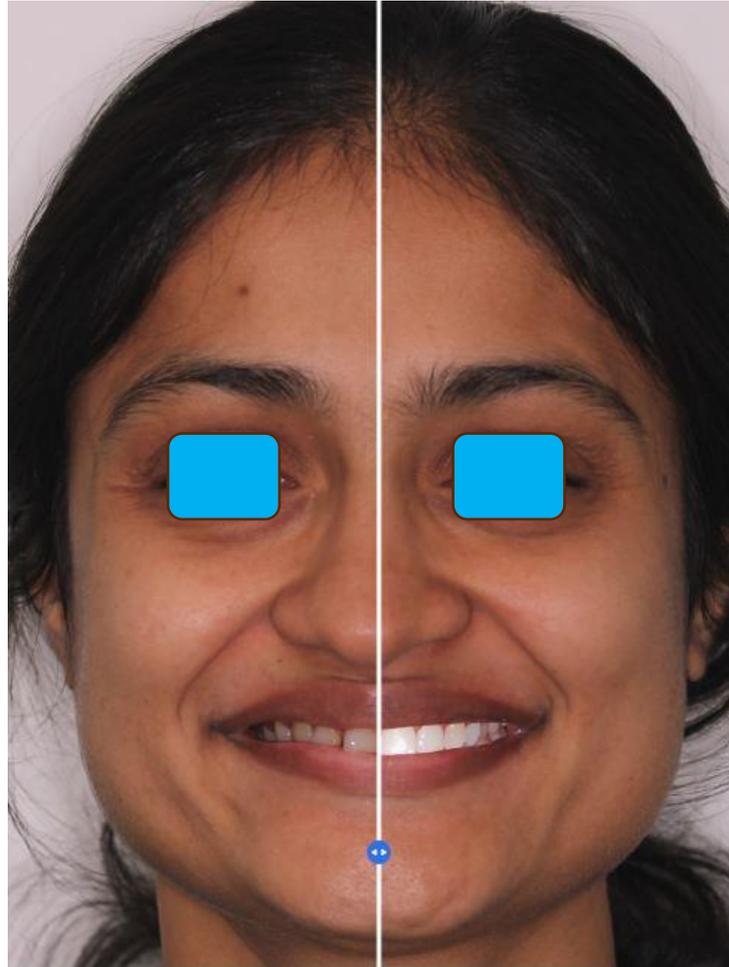
Medit: Consultation Mode. Texture off. (turn PowerPoint Guides on)



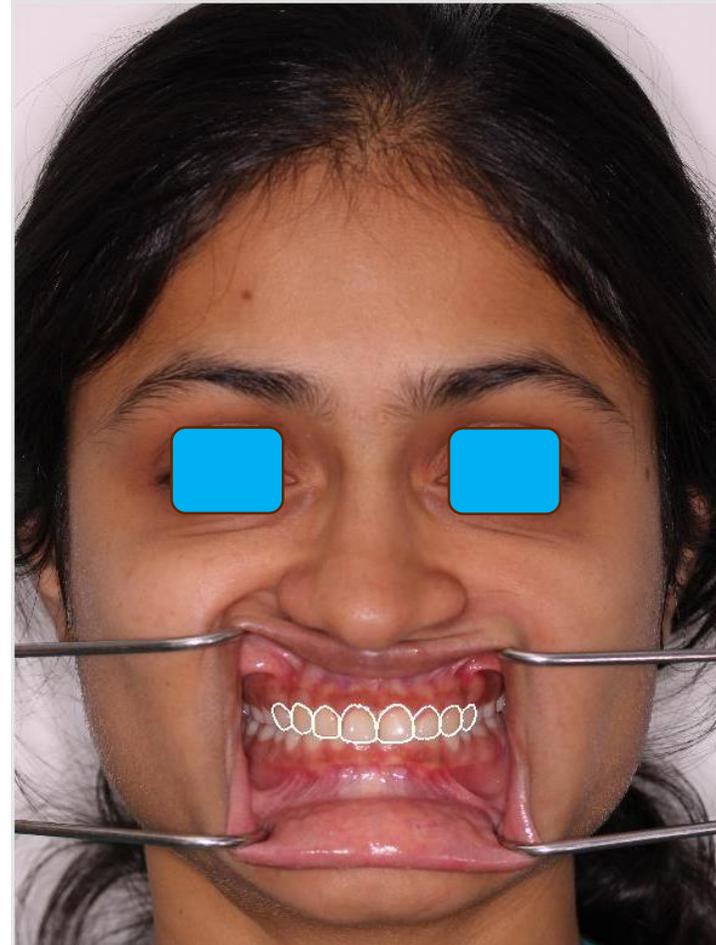
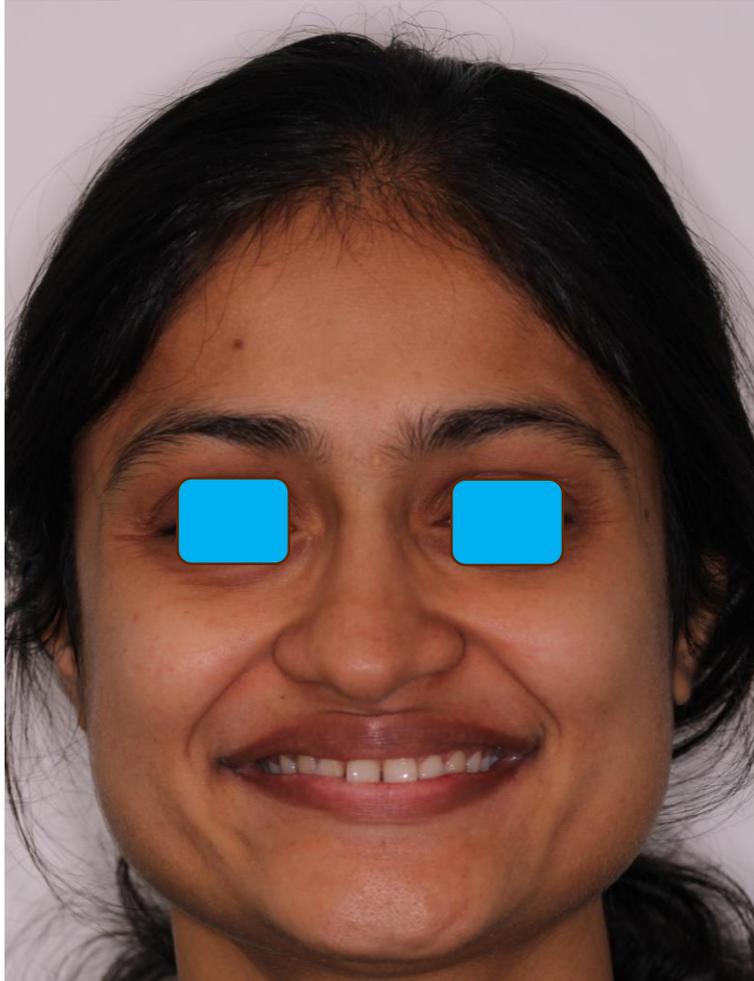
Medit: Consultation Mode. Texture off.
(View. Guides on)



Medit: Texture Mode Split View

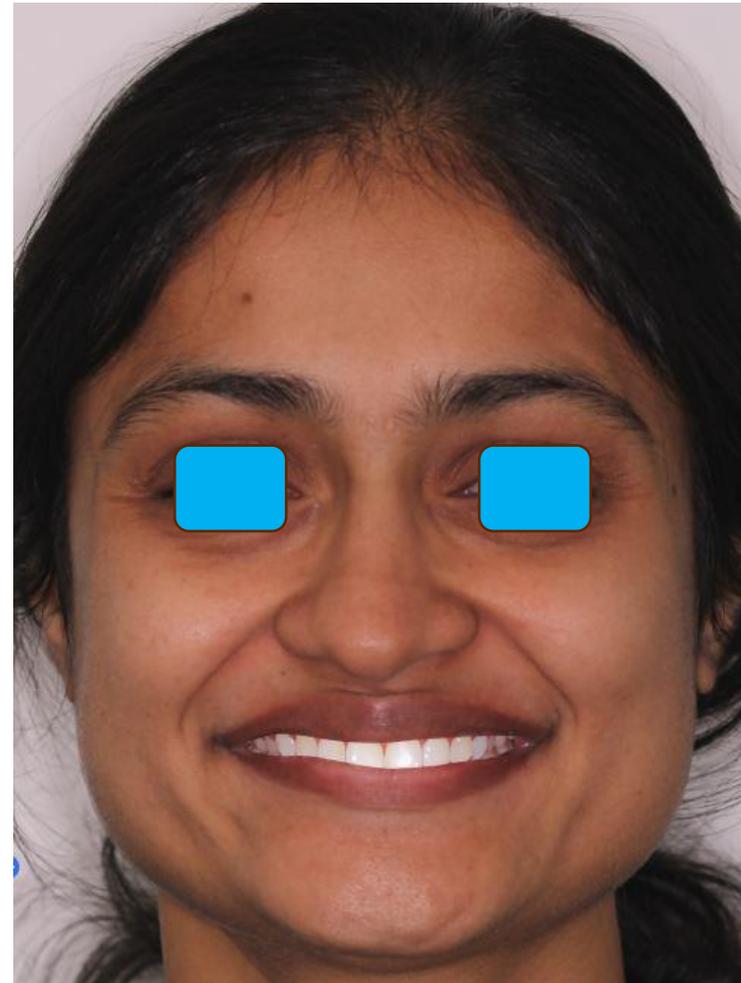
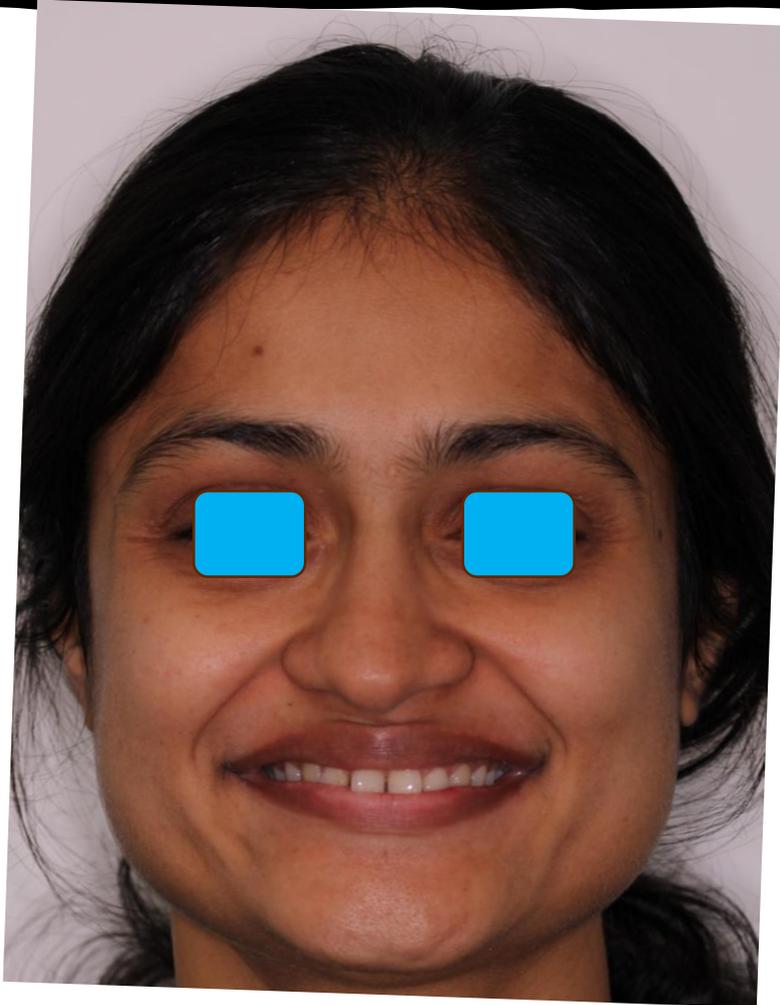


Medit: Comparison



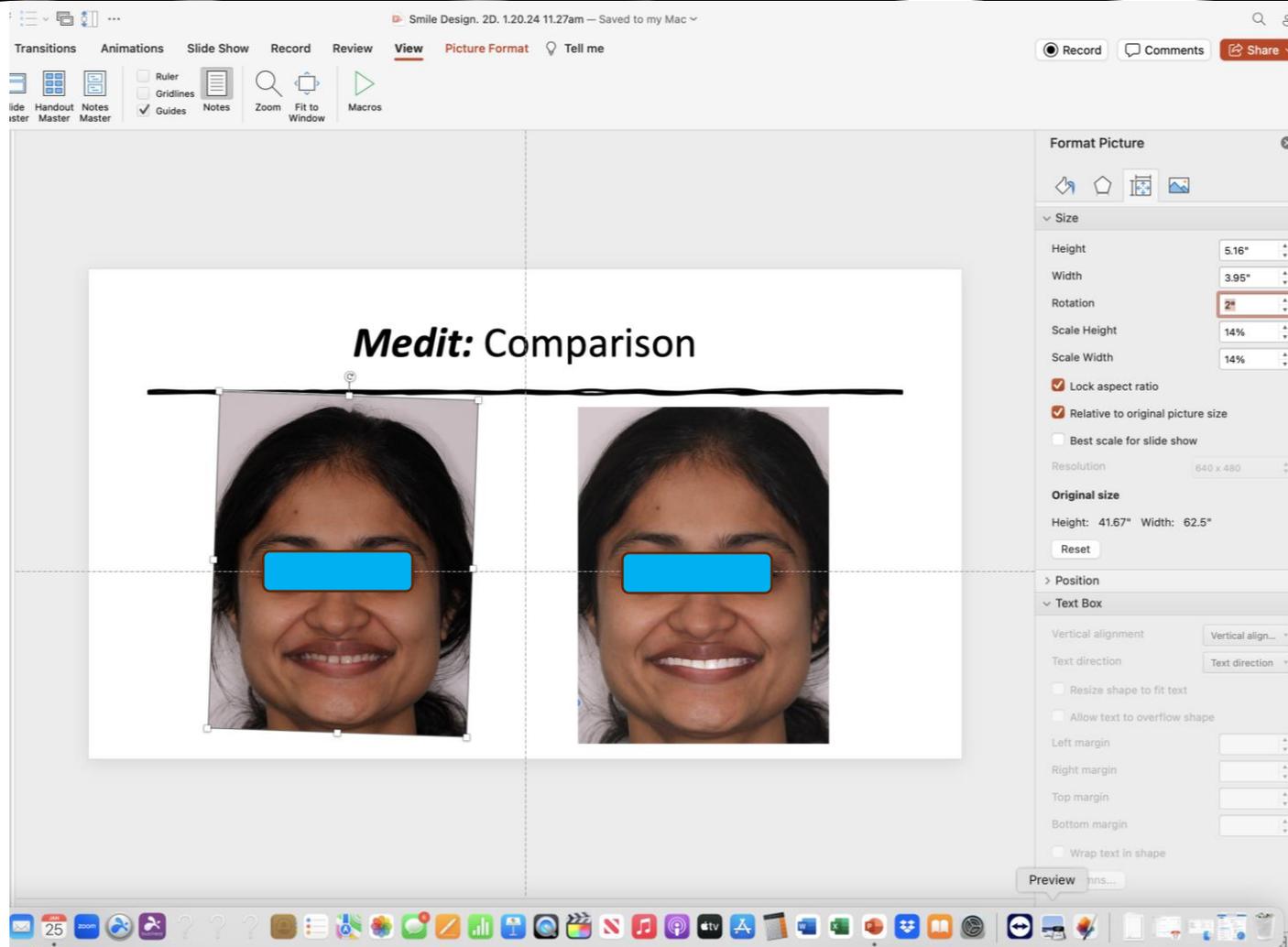
***Medit:* Comparison**

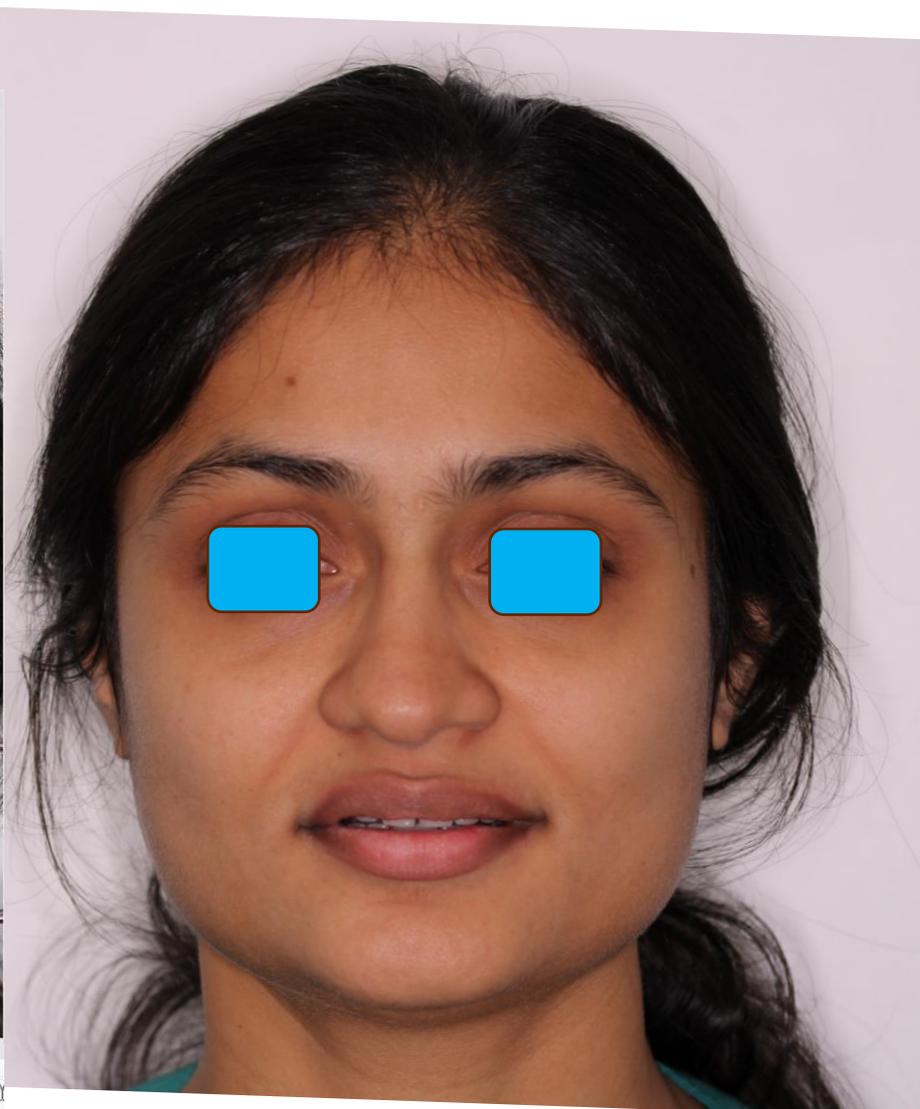
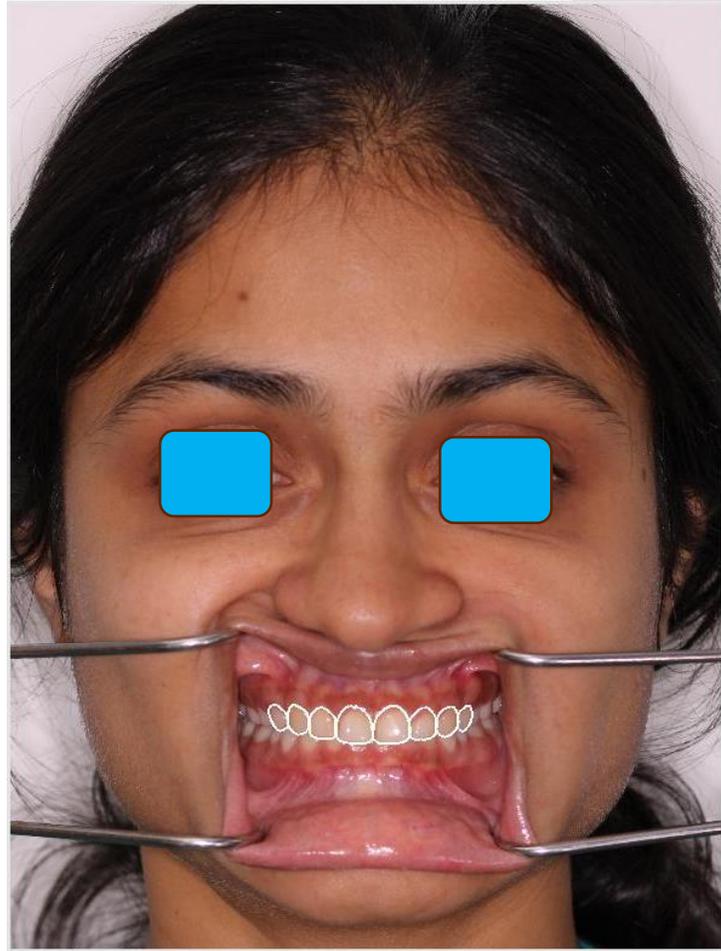
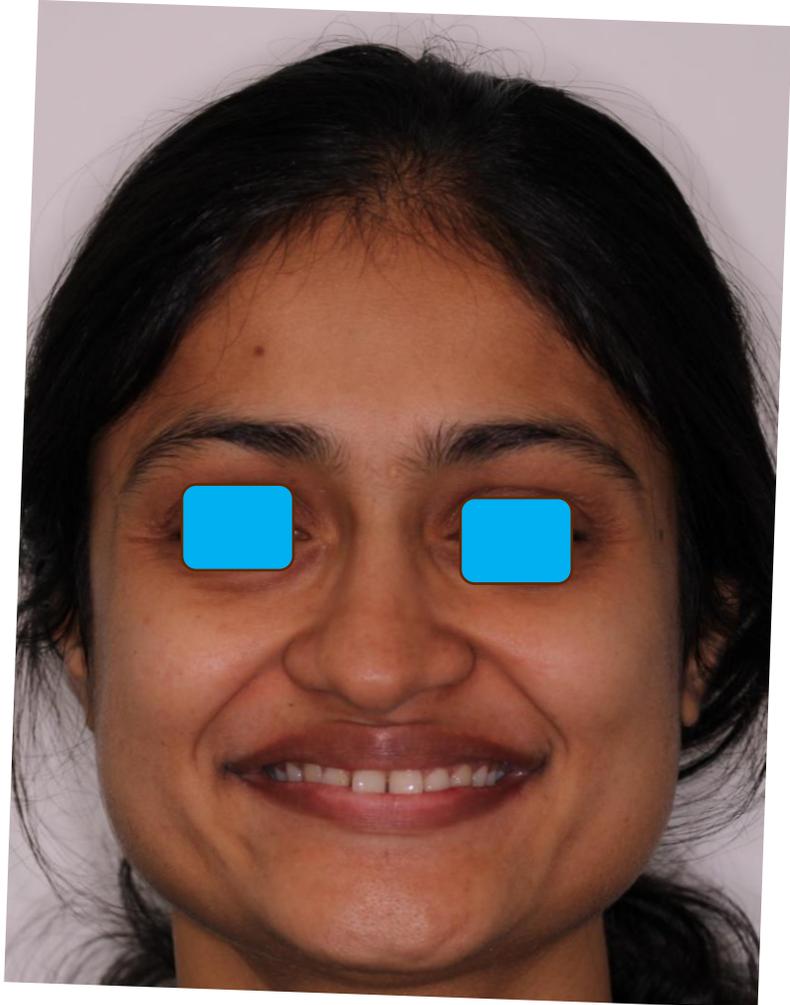
(Pre Op smile rotation corrected)



Medit: Comparison

(rotation corrected in PowerPoint, View, Guide on)



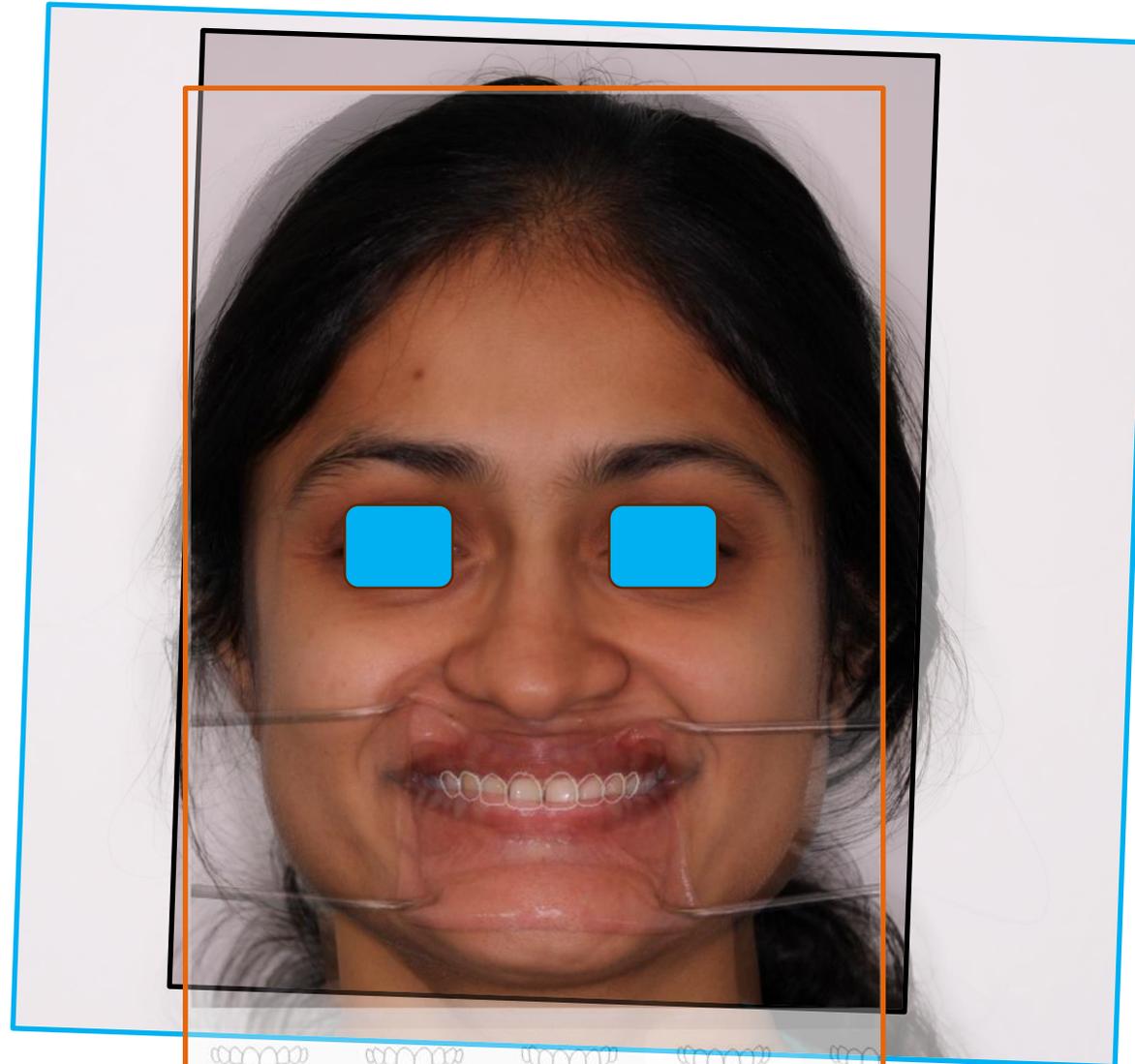


Color Coded Photo Line Fill Boxes (Back to Front)

Blue=Lips At Rest

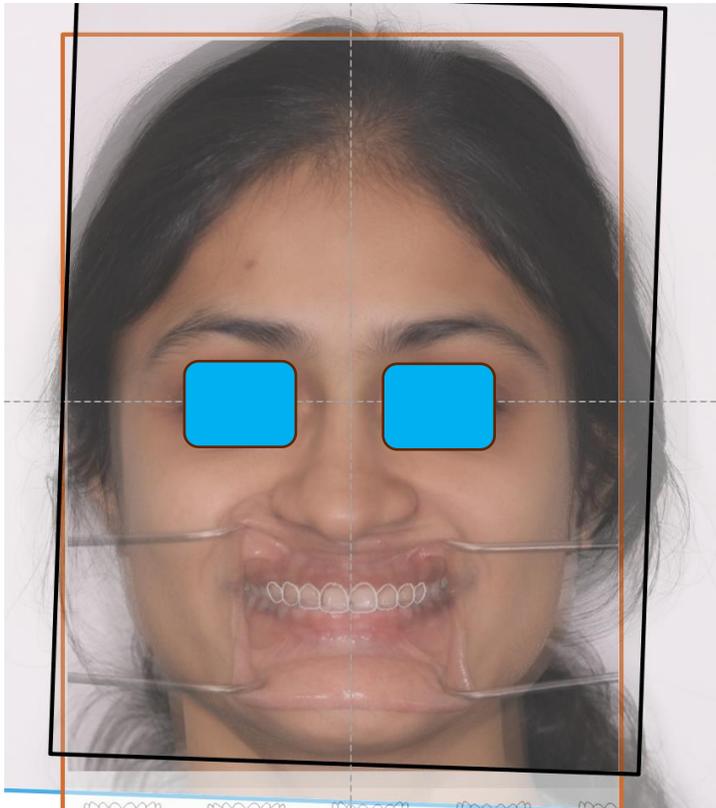
Black=Full Smile

Red=Retracted Template

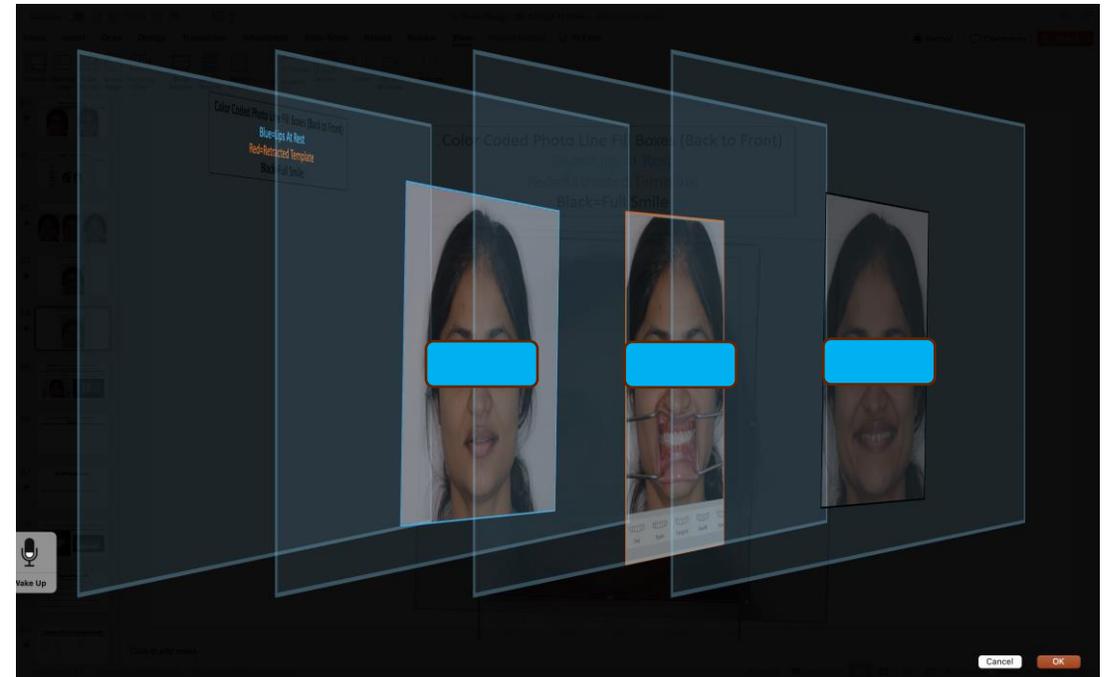


Medit Link. Powerpoint Layered Photos.

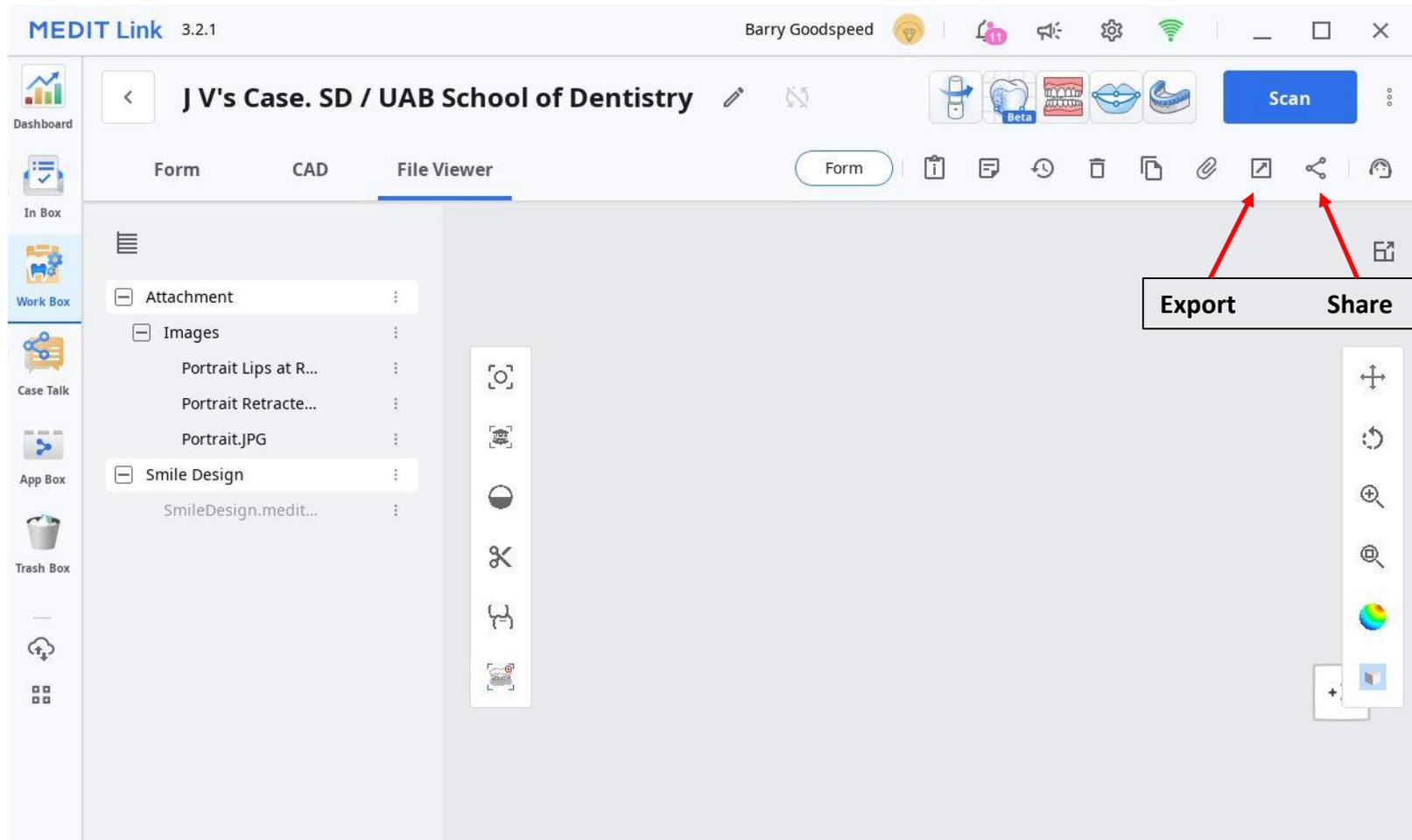
3:1 Photo Merge



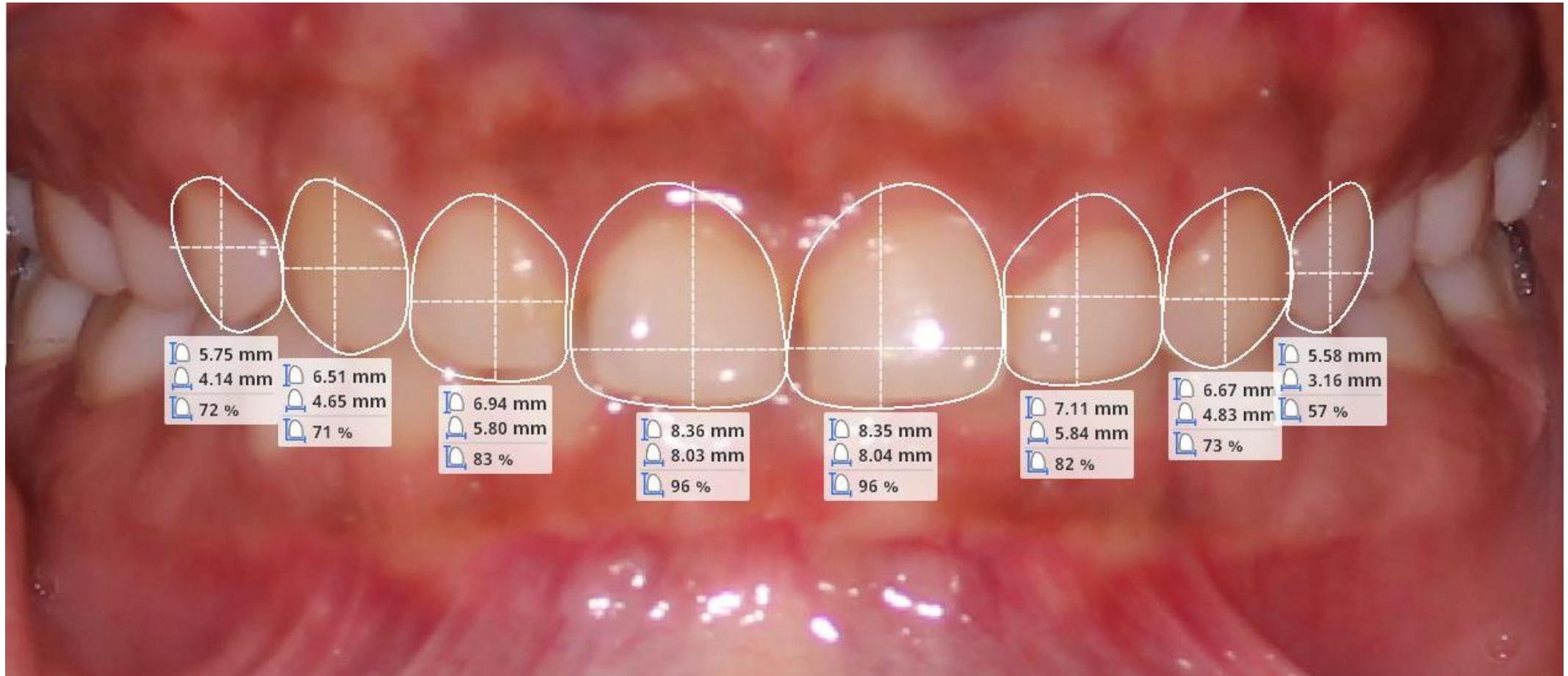
3 Portraits Back to Front: Lips at Rest, Retracted, Full Smile



Medit: Final Export or Share files as needed



Medit: Calibrated ***Money \$hot*** for Lab



3Shape: Proportions for Lab (ref. #5)



New Digital Design Options:

Medit (ref. #6) *Play Video Summary*



Jahnvi's Case / UAB School of Dentistry



Scan



Form

File Viewer

Form Only



Smile Design

SmileDesign.medit...

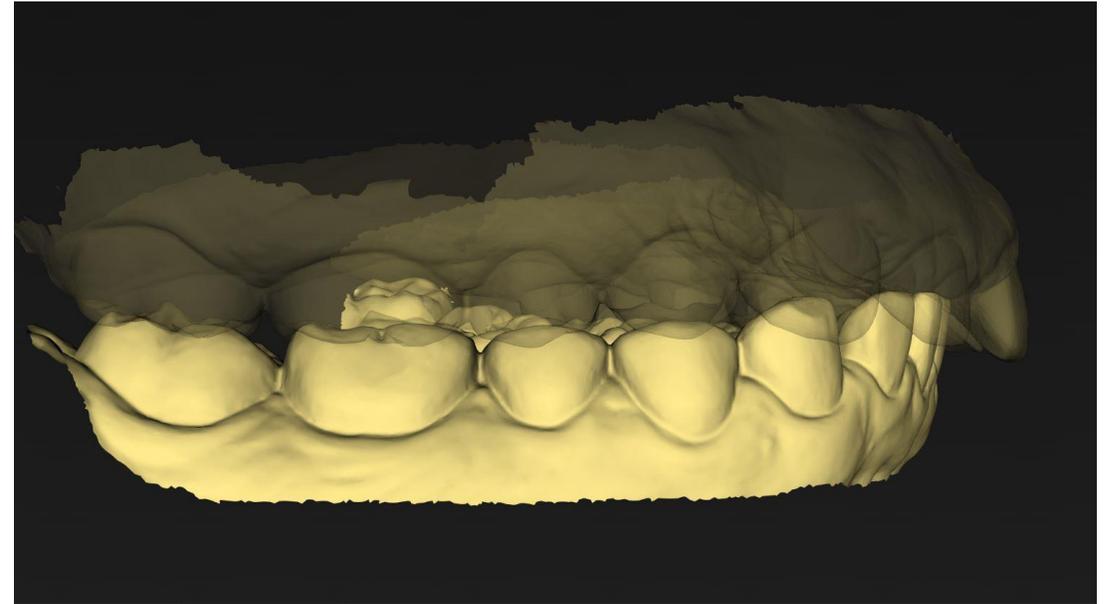
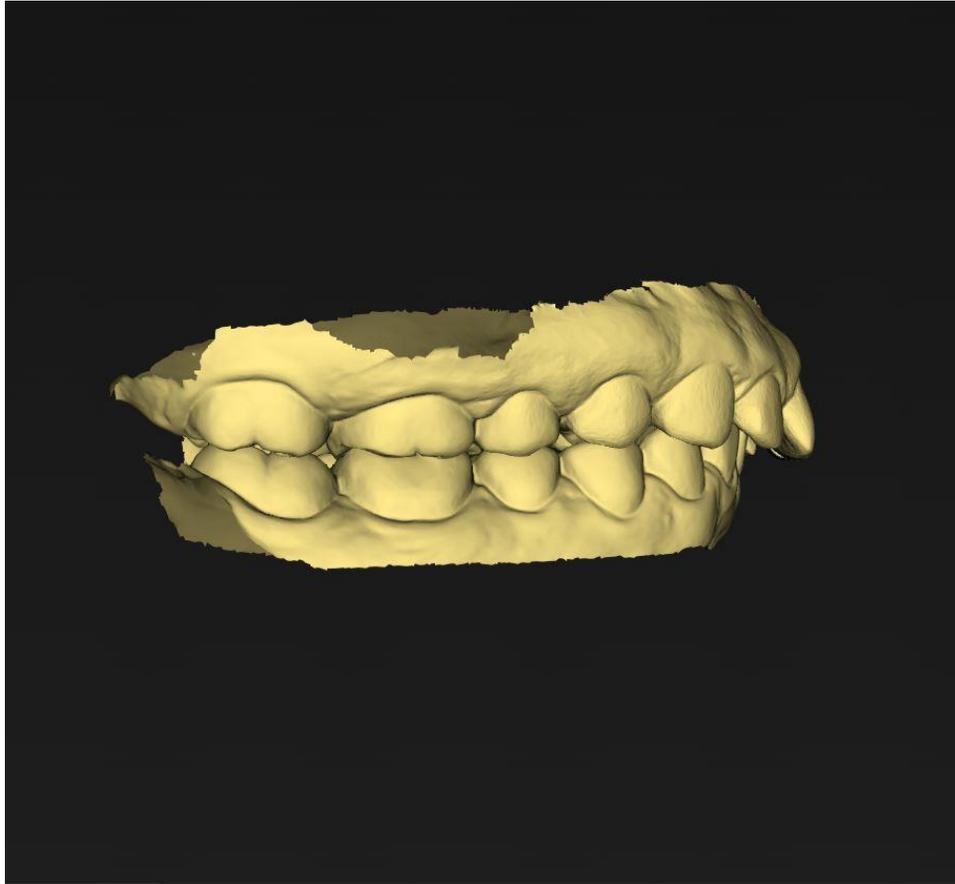


+Z

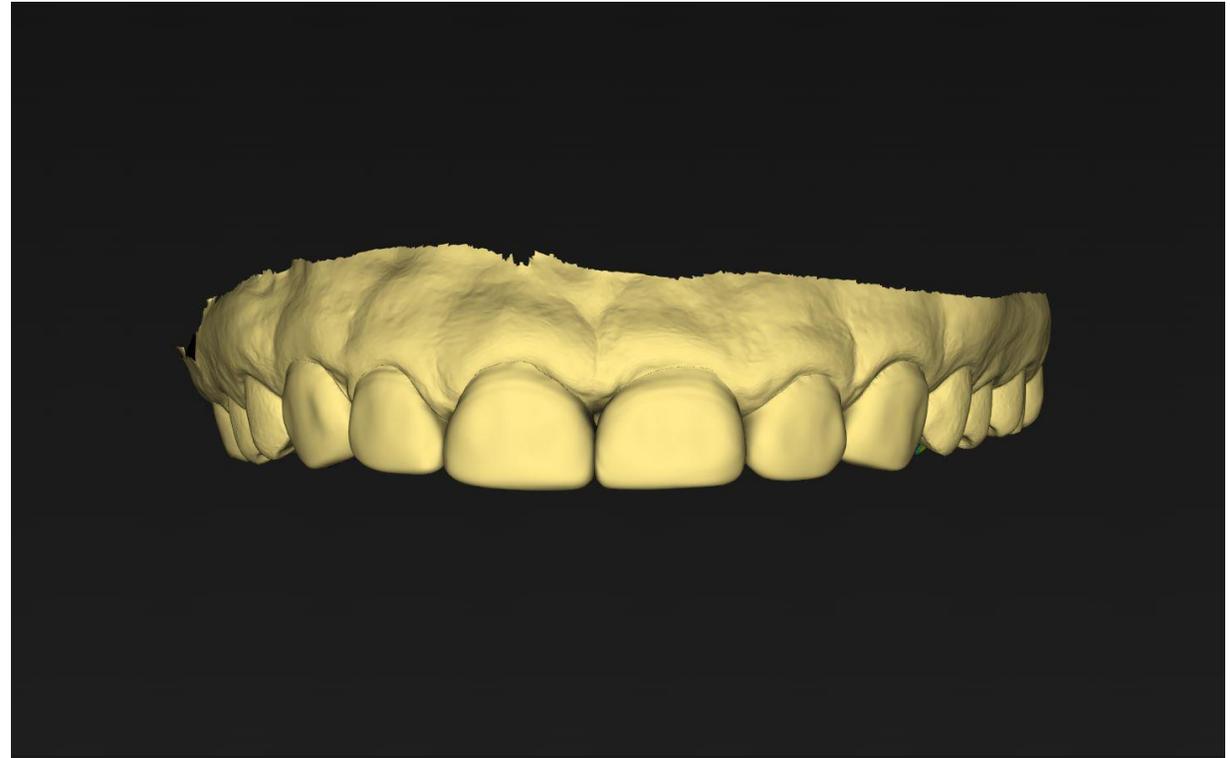
The BIG Question is...

Can we promise this **2D** Design to our patient?!!

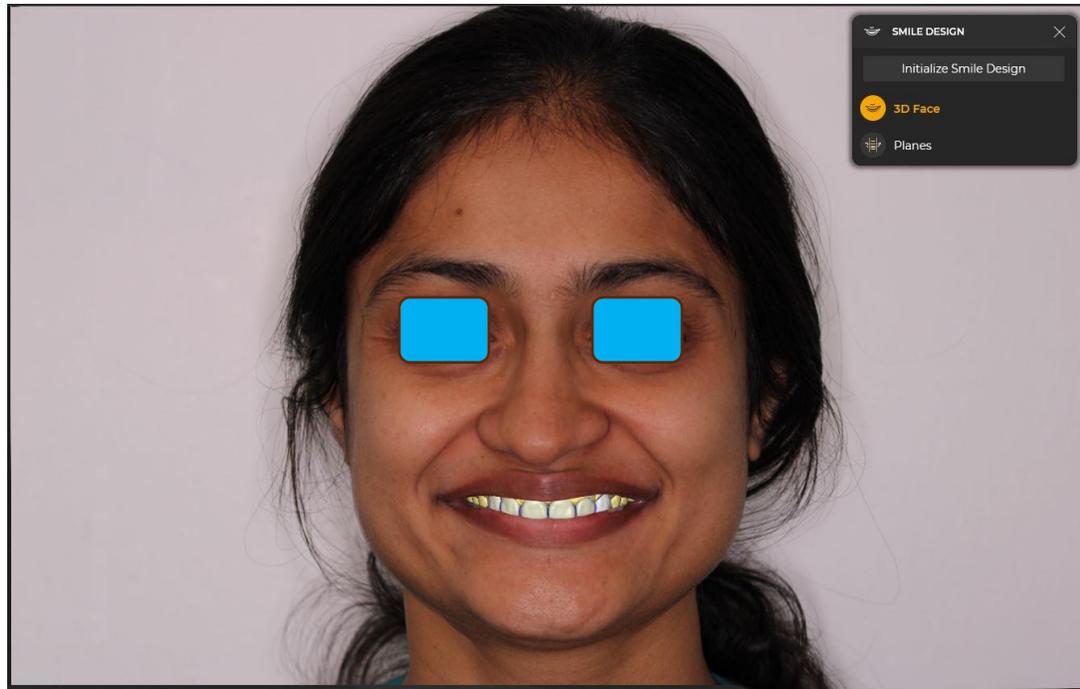
Hint: Look at the Overjet, Curve of Spee, Etc.



Dentsply Sirona inLab 3D Design



Dentsply Sirona inLab 3D Design (ref. #10)



Smile Design Overview

Objectives for You

Pay attention to your patient's chief complaint.

Learn some efficient and professional photography skills.

Learn and refine your Full Arch Intra-Oral Digital Scans.

Learn and practice (**Medit** or **3Shape**) 2D Design Software if available.

Special Credits and Acknowledgements

Dr. Nate Lawson

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Dr. Dan Givan

****Jahnvi****

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Markettea Reed

James Bradley

Nellie Baghaei

Lauren Brashear

Kaytlyn Carlson

Brandon Englert

Brandon Hardy

Josh Huff

Henry Kendrick

Andrew Lisy

Bobby Patel

Turner Shirley

Brooklyn Williamson

CDOCS

Dentsply Sirona inLab 22

Medit Smile Design

Trios Scanners

3Shape Smile Design

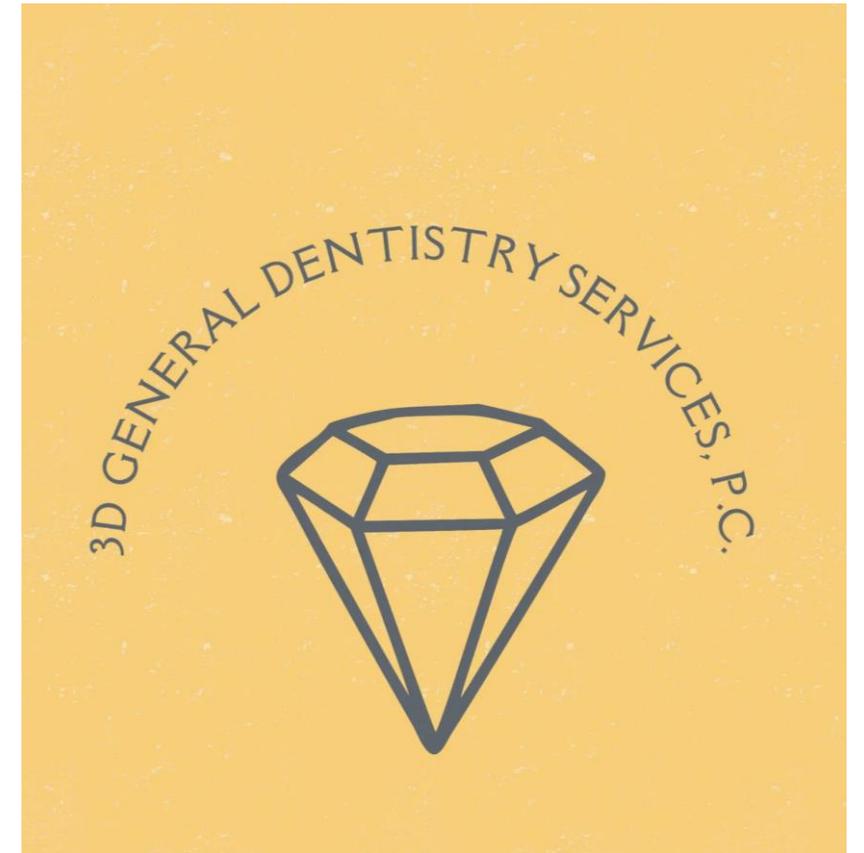
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 - a. Level 4 Anterior Esthetics,
 - b. Level 5 Comprehensive Restorative Care with a Digital Workflow. CDOCS and Spear Education
 - c. Level 6 Advanced Cerec Software Mastery
2. Orthodontic/Esthetic Consultation Sheet based off of Align Technologies certification Orthodontic Quick Check form distributed by CE presenting doctor, 10/3/2008.
- 3.. Photo Set 8 based on Invisalign composite creator, c. 2008.
4. Quickmount FaceBow With Screw: Model 8645 Whip-Mix Corporation, Patterson Item #: 727-6959, Mfg. Item #: 15911
5. Trios 3 **Shape** Smile Design You Tube Tutorial link:
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6. [MeditLink.com](https://www.meditlink.com). Smile Design Application
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[Medit App_Medit Smile Design v1.2 \(ENG\) - YouTube](https://www.youtube.com/watch?v=omuAeyFOmto)
[Workflow guide on how to design smile with Medit 'Smile Design' App - YouTube](https://www.youtube.com/watch?v=omuAeyFOmto)
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9. Frank Spear, Spear Education. “Facially Generated Treatment Plan” concept and Spear Templates.
10. Dentsply Sirona inLab 22 Software. <https://www.dentsplysirona.com/en-us>
11. Determining the widths of the maxillary anterior teeth for esthetics: Comparison of the Mondelli and Albers formulas, esthetic proportion, and golden ratio. Garrido, Magalhaes, Mamani, and Mondelli. General Dentistry, May/June 2024, Pgs. 26-32

Smile Design: 2D

Door Prize!!!!

2D Smile Design (6-10 Teeth)





2025 ALUMNI WEEKEND

FEBRUARY 6-9

The University of Alabama School of Dentistry Alumni Association

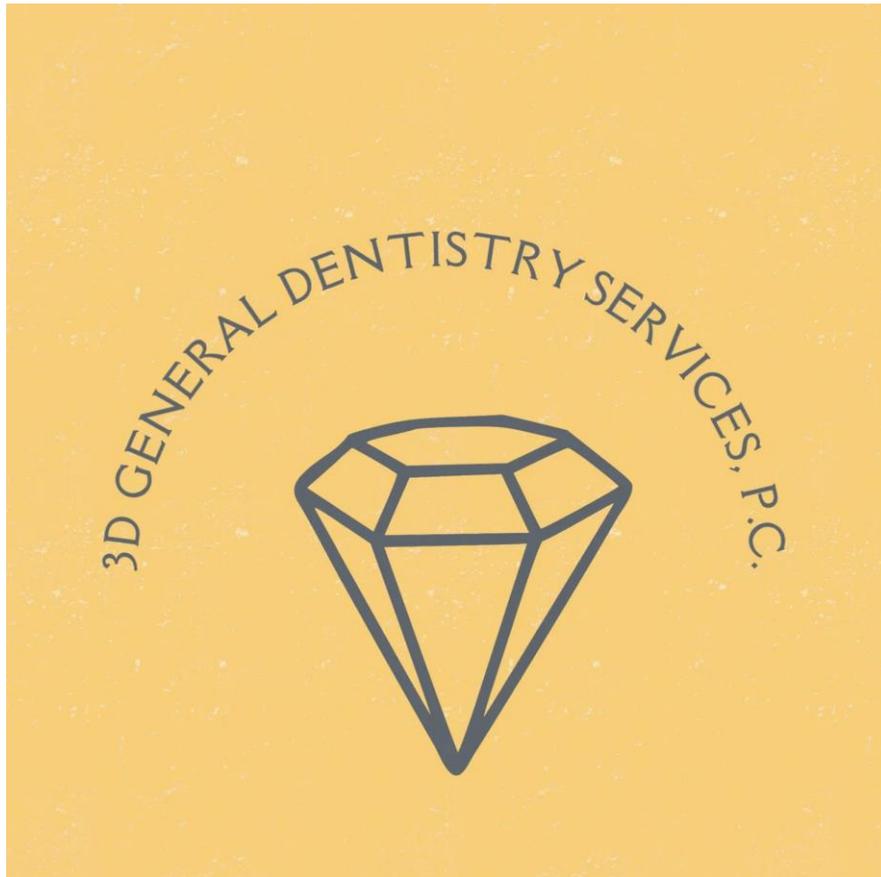
Thank You UAB Alumni Meeting!!!

Scott Huffman, UAB SOD Alumni Association Executive Director

Charlene Phillips, Development & Alumni Relations Coordinator

Kerry Chestnut, Ben Moffatt, Abby Vinson, Cherri West

Thank you for your attention!!!



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