

DTP

DIGITAL TREATMENT PLANNING



STEP-BY-STEP CLINICAL GUIDE — PATIENT RECORDS

— For Use in the Fabrication of Surgical Guides for the —

Dentate Arch | Partially Dentate Arch | Edentulous Arch

STEP-BY-STEP CLINICAL GUIDE — PATIENT RECORDS

This step-by-step clinical guide applies to the full range of **Digital Treatment Planning (DTP) services** and **surgical guides** available through Glidewell. Please adhere to the steps outlined in the section that applies to your case to ensure that the patient information and scans you collect and submit to Glidewell’s DTP team are sufficient to produce a highly accurate digital treatment plan and surgical guide that meet the surgical and esthetic requirements of your case, while avoiding requests for additional information.

Dentate Arch.....**Page 3**

Partially Edentulous Arch.....**Page 6**

Edentulous Arch.....**Page 8**



Tooth-Supported Surgical Guide



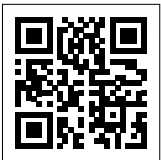
Tissue-Supported Surgical Guide



Bone-Supported Surgical Guide



Multi-Level Surgical Guide



To upload your scans and get your case started, scan the QR code below or visit glidewell.com/start-DTP



To access the dual-arch CT scan protocol required for full-arch cases, scan the QR code below or visit glidewell.com/dtp-dual-scan

DENTATE ARCH

PHOTOGRAPHS

For Esthetic Evaluation and Ideal Smile Design



Full Smile



Exaggerated Smile

PHOTOGRAPHING TIPS:

- Have the patient look directly at the camera
- Capture images prior to physical impressions (if applicable) to keep lips and teeth clean

NOTE: *If an immediate-load provisional is desired, be sure to capture the tooth shade.*

IMPRESSIONS

Maxillary and Mandibular Impressions (Digital or Analog)

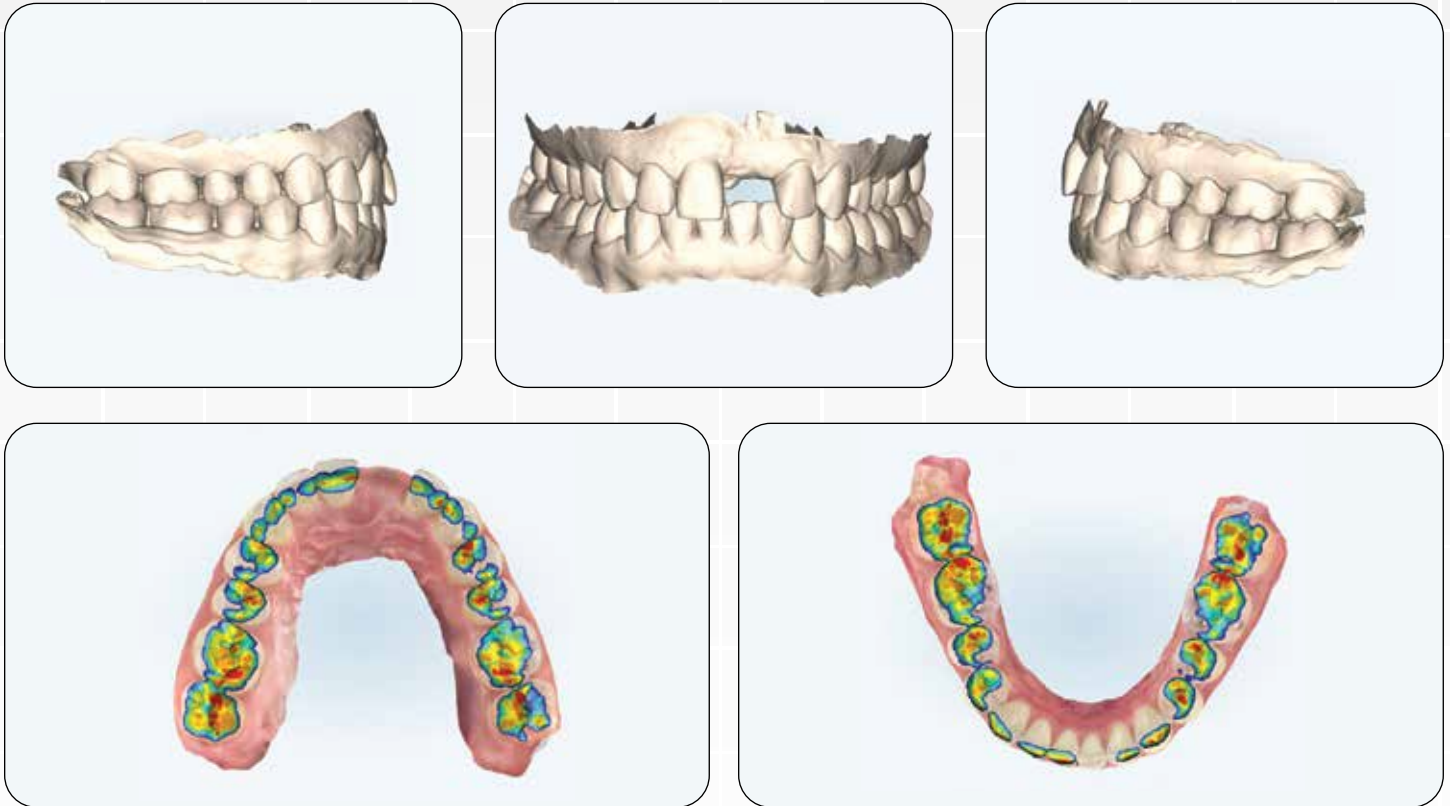


IMPRESSION TIPS:

- Capture all surface areas of the arch requiring treatment, including the teeth and soft tissue
- Capture full-arch impressions for ideal fabrication of the surgical guide
- Capture teeth of opposing dentition (non-surgical arch)

□ BITE REGISTRATION

Full-Arch Bite Scan in Centric Occlusion or Centric Relation



BITE REGISTRATION TIPS:

- Verify that the bite scan is correct
 - Digital scan should be evaluated post-processing and compared to the patient
- If an analog registration is being taken, use a stable material, such as vinyl polysiloxane (VPS)
 - Analog registration should be evaluated for distortion and intraoral accuracy

□ CBCT SCANS

Take the CBCT scan with the patient in an **open** position (utilize the CBCT bite fork if available)



CBCT ACQUISITION TIPS:

- A voxel size of 250 μm is recommended
- For the maxillary surgical arch, the field of view (FOV) should include the complete maxilla and sinuses
- For the mandibular surgical arch, the FOV should include the complete mandible
- If the FOV only allows one arch, send individual scans of each surgical arch
- Verify scan quality prior to dismissing the patient

NOTE: *We do not recommend sending a CBCT scan generated from two or more images stitched together.*

— After CBCT Acquisition —

1. Export DICOM files from the CBCT scanner into a patient folder
2. Create a zip file of the patient folder and upload via the *My Account* Digital Treatment Planning portal, or send on a flash drive with printed Rx

PARTIALLY EDENTULOUS ARCH

□ PHOTOGRAPHS

For Esthetic Evaluation and Ideal Smile Design



Full Smile



Exaggerated Smile



Retracted Bite

PHOTOGRAPHING TIPS:

- The patient should wear any existing prosthesis in the photos
- Have the patient look directly at the camera
- Capture images prior to physical impressions (if applicable) to keep lips and teeth clean

NOTE: *If an immediate-load provisional is desired, be sure to capture shade.*

□ IMPRESSIONS

Maxillary and Mandibular Impressions (Digital or Analog)

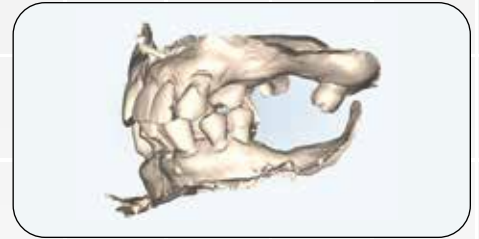
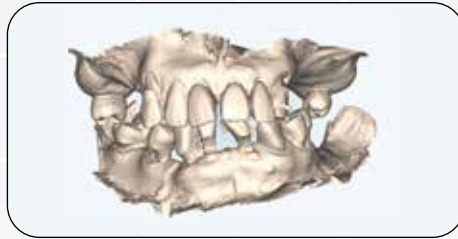


IMPRESSION TIPS:

- Capture all surface areas of the arch requiring treatment, including the teeth and soft tissue
- Capture full-arch impressions for ideal fabrication of the surgical guide
- Capture teeth of opposing dentition (non-surgical arch)
- If partial dentures are utilized to stabilize bite, capture the **impression and bite** with the partial in place
- For fabrication of an immediate removable prosthesis, the full palate must be captured

□ BITE REGISTRATION

Full-Arch Bite Scan in Centric Occlusion or Centric Relation



BITE REGISTRATION TIPS:

- If partial dentures are utilized to stabilize bite, capture the **impression and bite** with the partial in place
- If vertical dimension must change due to missing posterior tooth support, it is recommended to either:
 - Capture the digital bite at the desired vertical dimension
 - Order a bite rim, adjust accordingly and capture the centric relation bite position using the wax rim
- Verify that the bite registration is correct
 - Digital scan should be evaluated post-processing and compared to the patient
- If an analog registration is being taken, use a stable material, such as VPS
 - Analog registration should be evaluated for distortion and intraoral accuracy

□ CBCT SCANS

Take the CBCT scan with the patient in an **open** position (utilize the CBCT bite fork if available)



CBCT ACQUISITION TIPS:

- A voxel size of 250 μm is recommended
- The FOV should include the whole maxilla and sinuses as well as the complete mandible
- For the maxillary surgical arch, the FOV should include the complete maxilla and sinuses
- For the mandibular surgical arch, the FOV should include the complete mandible
- Verify scan quality prior to dismissing the patient.

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EDENTULOUS ARCH

□ PHOTOGRAPHS

For Esthetic Evaluation and Ideal Smile Design



Full Smile



Exaggerated Smile



Retracted Bite

PHOTOGRAPHING TIPS:

- The patient should wear any existing prosthesis in the photos
- Have the patient look directly at the camera
- Capture images prior to physical impressions (if applicable) to keep lips and teeth clean

NOTE: *If an immediate-load provisional is desired, be sure to capture shade.*

❑ IMPRESSIONS

Maxillary and Mandibular Impressions (Digital or Analog)



IMPRESSION TIPS:

- Existing prosthesis is utilized as a reference – it should be **well-fitting**
 - Reline the denture prior to obtaining patient records by following the dual-scan CT protocol, available at glidewell.com/dtp-dual-scan
- Capture all surface areas of opposing arch
- For fabrication of an immediate prosthesis, the full palate must be captured
- Capture cameo and intaglio surfaces of the existing prosthesis for the arch being treated

❑ BITE REGISTRATION

Full-Arch Bite Scan in Centric Occlusion or Centric Relation



BITE REGISTRATION TIPS:

- Verify that the bite registration is correct
 - Digital scan should be evaluated post-processing and compared to the patient
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 - Analog registration should be evaluated for distortion and intraoral accuracy

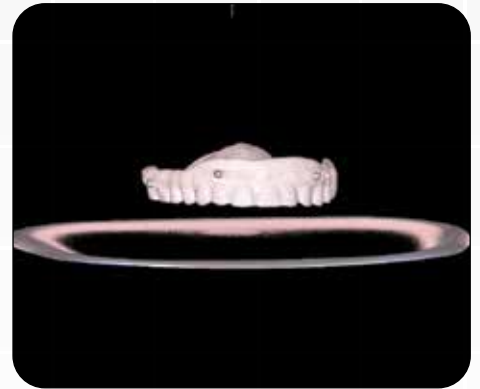
□ CBCT SCANS: DUAL-SCAN CT PROTOCOL

In order to produce an accurate surgical guide and an esthetic prosthetic outcome, it is important to follow the dual-scan CT protocol, in which the patient's well-fitting prosthesis is scanned both inside and outside the mouth.



To access this protocol visit glidewell.com/dtp-dual-scan or scan the QR code.

CBCT Scan No. 1: Prosthesis Only



CBCT ACQUISITION TIPS — APPLIANCE SCAN OUTSIDE THE MOUTH:

- Place the prosthesis, which should include fiducial markers and be well-fitting, on a foam pad or cardboard box in the CBCT scanner
- A voxel size of 250 μm is recommended
- Verify scan quality prior to moving to the next step

CBCT Scan No. 2: Prosthesis and Patient Together in **Centric Occlusion**



CBCT ACQUISITION TIPS – PATIENT SCAN:

- Be sure the fiducial markers have not moved since scan No. 1
- Patient should be in an exaggerated smile position during scanning
- A voxel size of 250 μm is recommended
- For the maxillary surgical arch, the FOV should include the complete maxilla and sinuses
- For the mandibular surgical arch, the FOV should include the complete mandible
- If the FOV only allows one arch, send individual scans of each surgical arch
- Verify scan quality prior to dismissing the patient

NOTE: We do not recommend sending a CBCT scan generated from two or more images stitched together.

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