

## **1. Introduction and Who Guideline applies to**

### **INTRAORAL SCANNING**

Intraoral Scanners (IOS) are devices for capturing direct optical impressions in dentistry. Similar to other three dimensional (3d) scanners they project a structured light source onto the object to be scanned, in the case of IOS scanners the dental arches. The images of the dentogingival tissues captured by the image sensors are processed by the scanners software, which generate point clouds. These point clouds are then triangulated by the software, creating a 3D surface model (mesh). The 3D surface models of the dentogingival tissues are the result of the optical impression and are the 'virtual' alternative to traditional plaster models. These virtual models can then be 3D printed if a physical model is required.

This guideline is for Prosthetists, Reconstructive Scientists and Specialist Dental Nurses working in the Maxillofacial Department. Referrals will be accepted internally from Maxillofacial consultants, Oncology consultants and any other staff from their team.

## **2. Guideline Standards and Procedures**

### **2.1 Provision of scan request**

An intraoral scan request form must be completed and signed by Maxillofacial Consultants, Oncology Consultants and any other staff from their team, with details of the final bespoke Medical device to be constructed.(appendix 1)

### **2.2 Competency**

A standard of competency and training for Prosthetists, Reconstructive Scientists and specialist Dental Nurse is required to be completed on an annual basis. This is peer reviewed and is set out As indicated in (appendix 2)

### **2.3 Monitoring the Standard of Competency**

## **WHAT SHOULD BE MONITORED?**

1. The Practitioner's knowledge of:
  - Oral Anatomy and physiology
  - Infection prevention
  - Sterilisation procedures for Trios5 scanning tips
  - Rationale for techniques/procedures
  - Potential for complications
  - Professional considerations and legal requirements

2. Did the Practitioner complete an appropriate training programme and a plan of action to develop competence in this procedure?
3. Can the Practitioner assure themselves of their competence and show evidence of the action plan relating to their competence?
4. Is their evidence of competency being maintained?
5. Audit of satisfaction of the patient to be undertaken after treatment completed.
6. Results to be made available to directorate Clinical Governance Manager.

### **3. Education and Training**

All practitioners will complete a number of intraoral scans under supervision until deemed competent. They will then sign to confirm their competence and be signed by a peer reviewer.

### **4. Monitoring Compliance**

<b>What will be measured to monitor compliance</b>	<b>How will compliance be monitored</b>	<b>Monitoring Lead</b>	<b>Frequency</b>	<b>Reporting arrangements</b>
Peer Review Competency Assessment	Annual Assessment	M.Pilley	Annual	CMG Compliance Lead
Patient Satisfaction Audit	Audit Assessment Tool	K.Spooner	Annual	Audit Lead

### **5. Equality Analysis Assessment**

- 5.1 The Trust recognises the diversity of the staff and local community it serves. Our aim therefore is to provide a safe environment free from discrimination, harassment and victimisation and treat all individuals fairly with dignity and respect and, as far as is reasonably possible, according to their needs.
- 5.2 As part of its development, an Equality Analysis on this policy have been undertaken and its impact on equality have been reviewed and no detriment was identified.

OR if 5.2 above does not apply seek wording from The Head of Equality on [equality@uhl-tr.nhs.uk](mailto:equality@uhl-tr.nhs.uk)

### **EDI Statement**

We are fully committed to being an inclusive employer and oppose all forms of unlawful or unfair discrimination, bullying, harassment and victimisation.

It is our legal and moral duty to provide equity in employment and service delivery to all and to prevent and act upon any forms of discrimination to all people of protected characteristic: Age, Disability (physical, mental and long-term health conditions), Sex, Gender reassignment, Marriage and Civil Partnership, Sexual orientation, Pregnancy and Maternity, Race (including nationality, ethnicity and colour), Religion or Belief, and beyond.

We are also committed to the principles in respect of social deprivation and health inequalities.

Our aim is to create an environment where all staff are able to contribute, develop and progress based on their ability, competence and performance. We recognise that some staff may require specific initiatives and/or assistance to progress and develop within the organisation.

We are also committed to delivering services that ensure our patients are cared for, comfortable and as far as possible meet their individual needs.

**6. Supporting References (maximum of 3)**

none

**7. Key Words**

Intra oral scanning

CONTACT AND REVIEW DETAILS	
<b>Guideline Lead (Matt Pilley, Specialist In Clinical Prosthetics)</b>	<b>Executive Lead Nahul Patel Consultant Orthodontist/Head of Service</b>
<b>Details of Changes made during review:</b>	

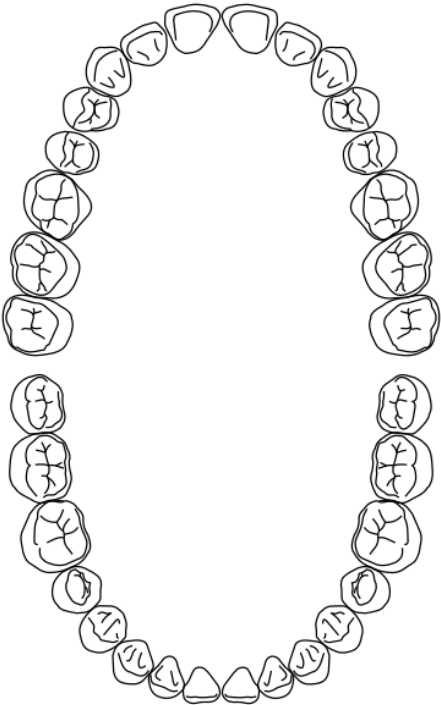
# MAXILLOFACIAL LABORATORY INTRA-ORAL SCANNING REQUEST FORM

Email: ReconstructiveScienceReferrals@uhl-tr.nhs.uk

**CONSULTANT/CONTACT NAME:**

**DATE OF REQUEST:**

**APPOINTMENT BOOKED (PLEASE TICK)**   
**DATE & TIME:**



**PLEASE TICK:**  
**INTRA-ORAL SCAN**   
**ALGINATE IMPRESSIONS**

**ADDITIONAL NOTES:**

**SYNERGY HEALTH REF STICKER:**

.....  
.....  
.....  
.....

**SIGNED BY CONSULTANT:**

**CONSENT TO TREATMENT**  
I hereby consent to having intra-oral scans and/or intra-oral impressions and take full responsibility for any complication that may arise during or following this procedure.  
Print name:.....Sign:.....Date:.....

## Standard of Competency. Intra Oral Scanning

Name of Practitioner ..... Role .....

### STANDARD STATEMENT

The practitioner will be competent in performing intraoral scanning

A qualified practitioner, (Clinical Prosthetist, Reconstructive Scientist or Specialist Dental Nurse) who has undertaken a 3Shape Certificate of completion or in house training.

1. With sound knowledge of oral anatomy and physiology, surgical reconstruction techniques and trismus.
2. Trained and instructed in the use of intraoral scanning techniques.
3. With knowledge of the rationale and possible complications of the procedure.
4. With knowledge and skills required to achieve accurate scan data
5. With sound knowledge and understanding of professional and legal considerations in relation to expanded roles and scope of practice.

### WHAT WILL HAPPEN?

The Practitioner will:

1. Achieve 3Shape certificate of completion, or in house training on the use of the 3Shape TRIOS intraoral scanner and digital workflow.
2. Will be able to use scan strategies for full arch, quadrant and bite
3. Will be competent in using key tools to add information and review scans and print models.
4. Will have an understanding of required maintenance of a 3Shape Trios

### OUTCOME

Patients who require an intraoral scan will have it performed safely by a competent practitioner.

### COMPETENCY STATEMENT

I feel competent in carrying out intraoral scanning procedures. I have completed appropriate training and accept responsibility for my practice:

Evidence of competency seen by:

..... Date

Approved by:

(Person providing training)

..... Date

Review date:

..... Date