

### 3-1 Hygienist Baseline Questionnaire

Instruction: Please answer the following questions regarding your thoughts on the **Standard Hygiene Exam Model** where dentists conduct an in-person examination for your patient in the hygiene room.

1. How much time does the dentist in your office spend on conducting a routine hygiene recall exam?
  - A. 1-4 minutes
  - B. 5-10 minutes
  - C. More than 10 minutes
  - D. The dentist in my office does not conduct routine hygiene recall exams during the hygiene appointment
  
2. How much time do you usually wait for the dentist in your office to conduct a routine hygiene recall exam?
  - A. 1-4 minutes
  - B. 5-10 minutes
  - C. More than 10 minutes
  - D. The dentist in my office does not conduct routine hygiene recall exams during the hygiene appointment
  
3. How do you communicate with the dentist in your office when you need a hygiene recall exam? (Choose all that apply)
  - A. Review hygiene schedule with the dentist prior to hygiene visit
  - B. Via electronic messaging tools during hygiene visit, e.g. instant messaging apps on office computers, messages in electronic dental records, emails, etc.
  - C. Via physical messaging tools during hygiene visit, e.g. Walkie-talkie, buzzer, etc.
  - D. Physically find the dentist during hygiene visit
  - E. Other (Please specify \_\_\_\_\_)
  
4. Approximately what percentage of your patients refuse a routine hygiene recall exam?
  - A. <1%
  - B. 1-10%
  - C. 11-25%
  - D. 26-50%
  - E. 51-75%
  - F. >75%
  - G. I don't know
  
5. What are the common reasons that your patients would refuse a routine hygiene recall exam? (Choose all that apply)
  - A. Waiting time is too long
  - B. Cost of the exam
  - C. Patients do not think it's needed
  - D. Patient's dentist is not available

- E. I don't know
6. How well do you feel your patients understand what the dentist explains about their oral health and/or the treatment the dentist recommends during the routine hygiene recall exam?
- A. Very well
  - B. Somewhat well
  - C. Fair
  - D. Poor
  - E. Very poor
7. How many of your patients follow through with the advice and treatment plan recommended by the dentist during the routine hygiene recall exam?
- A. < 25%
  - B. 26-50%
  - C. 51-75%
  - D. >75%
  - E. I don't know

**Electronic Device Use**

8. Do you have a smartphone?
- A. Yes (Continue with Question 9)
  - B. No (Skip to Question 11)
9. Do you use medical care apps on your phone (e.g. MyChart, eClinicalWorks, SimplePractice)?
- A. Yes
  - B. No
  - C. I am not sure what apps you are referring to
10. Do you use dental care apps on your phone?
- A. Yes (Please specify \_\_\_\_\_)
  - B. No
  - C. I don't know of any dental care related apps
11. Do you routinely take intraoral images for your patients during hygiene visits?
- A. Always
  - B. Very often
  - C. Sometimes
  - D. Rarely
  - E. Never
12. Do you use oral or teeth images to facilitate patient education and/or treatment planning?
- A. Always
  - B. Very often
  - C. Sometimes
  - D. Rarely
  - E. Never

### 3-2 Hygienist Post-eHygiene System Usability Scale (SUS)

**Instruction:** For each of the following statements, mark one box that best describes your reactions to the eHygiene exam model. **In the eHygiene model**, you (hygienist) will take a set of teeth photos for your patient during the regular hygiene visit. It might take 5-8 minutes. The dental office will then schedule a virtual visit between the dentist and your patient to review exam findings using these teeth photos. The dentist will also review the treatment plan with your patient at the virtual visit. Depending on the complexity of your patient’s oral health, the virtual visit might take 10-30 minutes.

#	Question description	Strongly disagree				Strongly agree	Score
1	I think that I would like to use the eHygiene exam model frequently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	I found the eHygiene exam model unnecessarily complex.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	I thought the eHygiene exam model was easy to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	I think that I would need the support of a technical person to be able to use the eHygiene exam model.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	I found the various steps in the eHygiene exam model were well integrated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	I thought there was too much inconsistency in the eHygiene exam model.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	I would imagine that most people would learn to use the eHygiene exam model very quickly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	I found the eHygiene exam model very awkward to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	I felt very confident using eHygiene exam model.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	I needed to learn a lot of things before I could start with the eHygiene exam model.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Score: \_\_\_\_

### 3-3 Hygienist Post-eHygiene Questionnaire

Instruction: Please answer the following questions regarding your thoughts on the **eHygiene Exam Model**.

A. Visit Checklist: Mark Yes or No for each visit task listed below?

A1. Patient Consented?

A. Yes

B. No

A2. Patient data collection complete?

A. Yes

B. No

A3. Intraoral photos taken?

A. Yes

B. No

A4. Virtual visit scheduled?

A. Yes

B. No

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1. How much time did you spend setting up the device and software before you start taking intraoral photos during the eHygiene visit? Please provide your answer in estimated number of minutes: \_\_\_\_ \_\_\_\_
  2. How much time did you spend taking intraoral photos during eHygiene virtual visit? Please provide your answer in estimated number of minutes: \_\_\_\_ \_\_\_\_
  3. How was your patient's experience when you took intraoral photos?
    - A. Extremely uncomfortable
    - B. Very uncomfortable
    - C. Slightly uncomfortable
    - D. Quite comfortable
    - E. Completely comfortable
  4. When did you take intraoral photos during the eHygiene visit? (Choose all that apply)
    - A. Before I started the prophylaxis
    - B. After I completed the prophylaxis
    - C. Other (Please specify \_\_\_\_\_)
  5. How do you think the eHygiene exam will impact your daily schedule, in comparison to the standard exam (including waiting for the dentist to come to the hygiene room and conducting the recall exam)?
    - A. Definitely run smoother

- B. Probably run smoother
  - C. No difference
  - D. Probably slow me down
  - E. Definitely slow me down
  - F. I don't know
6. Which types of patients do you think should be considered for eHygiene virtual visits? (choose all that apply)
- A. None
  - B. Patients with good oral health who had no restorative/periodontal treatment in the past 1+ year
  - C. Patients with poor oral health who had ongoing untreated caries or periodontal disease.
  - D. Patients with non-urgent oral diseases (e.g. caries, periodontal pocket deeper than 4mm, etc.) identified by hygienists during cleaning.
  - E. Patients with urgent oral needs, e.g. pain, orofacial swelling, etc.
  - F. Patients with oral mucosal lesions identified by hygienists during cleaning.
  - G. All patients



## 3-5 Hygienist Qualitative Interview Guide (Semi-structured)

### Notes:

- This is a semi-structured interview guide designed to be conducted with hygienists in a 30-min phone-interview setting.
- This interview includes questions to assess users' perceptions of the eHygiene exam model.
- The phone interview will be conducted by a research assistant trained by Dr. Kevin Fiscella, MD, MPH (Co-Investigator), who has expertise in mhealth and qualitative research.

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_ (mm/dd/yyyy)

**Interviewer:** \_\_\_\_\_

**Practitioner ID number:** \_\_\_\_\_

**Study participant role**  Dentist  Hygienist  Patient

### Introduction (script)

*"Hello, my name is \_\_\_\_\_. I am with the eHygiene study group and I would like to talk with you about your experience of using the eHygiene virtual exam."*

*"Thank you for agreeing to speak with me! This interview will take approximately 30 minutes."*

*"What we talk about in this interview will be confidential and used for study purposes only."*

*"Your participation is completely voluntary. If you do not wish to answer any question you do not have to do so. You are free to end the conversation at any time"*

*"Before I turn on the tape recorder, do you have any questions?"*

*"Now I am going to turn on the tape recorder, is that ok?"*

*"The questions I am about to ask you are related to the eHygiene exam model. The eHygiene exam model refers to the study you participated in, in which the hygienist in the dental office takes a set of teeth photos for patients during the regular hygiene visit. The dentists then conducts a virtual visit with the patient to review exam findings using these teeth photos and discusses the treatment plan."*

## Hygienist portion

### Perception

1. Can you talk about your overall experience of using the eHygiene virtual exam?
2. Please tell us any challenges or frustrations you encountered while using the eHygiene virtual exam.

*Prompts – What kind of challenges / frustrations*

*Did you resolve it?*

*How did you resolve it?*

*Are there other challenges? Any more (until no more challenges)*

3. What do you think are the benefits of the eHygiene virtual exam?

*Prompts – Benefits to dental practice?*

*Benefits to patients?*

*Any other benefits (until no more)?*

4. What do you feel are the drawbacks of the eHygiene virtual exam?

*Prompts – Patient communication*

*Workflow*

*Technical problem*

*Anything else (until no more)?*

5. What do you see as the role of the eHygiene virtual exam in your practice, if any?

*Prompts – If yes, or no, could you please tell me why?*

### Service strengthening

1. What would you suggest to improve the eHygiene virtual exams?
2. What support do you need to feel comfortable using the eHygiene virtual exams?
3. Are there any system changes that you think might be needed to improve use of the eHygiene virtual exam model?

*Prompts – Insurance reimbursement*

*Use mass media or social media*

### Smart phone application use

1. What is your view on using smart phone applications to deliver oral health education to patients?
2. What suggestion do you have for using smart phones to manage patient oral health?

### Conclusion

*“What other things you would like us to know about your experience or thoughts about eHygiene virtual exams?”*

“Thank you!”