EMO SpO₂ Specific Aim 2 Interview Guide

Version date: 05/15/2019

Date of Interview: Interviewer: Participant ID:

Introduction

The goal of today's interview is to discuss how you and the nurses, residents, attendings, respiratory therapists, and other clinicians at your hospital use *continuous* pulse oximetry in bronchiolitis patients hospitalized on regular inpatient units, not intensive care units. We are especially interested in a group we will refer to as *stable* bronchiolitis patients. These are patients with bronchiolitis who are stable on room air, not requiring any supplemental oxygen or nasal cannula flow. We will discuss barriers and facilitators to appropriate use of continuous pulse oximetry at your hospital in stable bronchiolitis patients. It's important for you to know that there are NO right or wrong answers. I'm most interested in your opinion, even if it differs from your current practice or hospital policies.

Perform informed consent now before turning on the recorder, using the CHOP consent form for verbal consent. CHOP IRB requires that we keep subject identifiers out of the study data.

Consent should not be recorded.

Before we get started, I'd like to confirm that you are comfortable with me recording this conversation, correct?

TURN RECORDER ON NOW: State date, hospital name, interviewer initials, participant ID into recorder.

Info about role

Q1: Could you tell me a little bit about your job at the hospital and how it relates to bronchiolitis?

What's your official job title?

How many years have you worked there?

How long have you been a (nurse, attending, resident, respiratory therapist, administrator, etc)?

Do you work mostly during the day, during the night, or an even mix of the 2?

Section 1: Understanding the process and exploring general barriers/facilitators

Q2 (Role of oximetry): First, I'd like to hear your general thoughts about the role of continuous pulse oximetry in caring for infants with bronchiolitis at your hospital.

Q3 (Initiation/discontinuation process): Could you tell me about the people and steps involved in the process of <u>initiating</u> continuous pulse oximetry in bronchiolitis patients at your hospital?

How about the process of discontinuing continuous pulse oximetry monitoring?

How do these processes differ from, for example, the way a medication might be initiated and later discontinued in a hospital?

Q4 (Process failures): Have you experienced situations where bronchiolitis patients end up being continuously monitored even though you don't think it's appropriate for the patient?

If so, what are the reasons that this happens?

Section 2: Consolidated Framework for Implementation Research informed questions I. Intervention Characteristics

Q5 (Evidence strength): The American Academy of Pediatrics clinical practice guideline for bronchiolitis, as well as the Choosing Wisely campaign, discourage the use of continuous pulse oximetry in stable bronchiolitis.

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How familiar are you with these guidelines? How relevant are they to the day-to-day care of bronchiolitis patients?

Q6 (Complexity): How complicated do you think it would be to reduce continuous pulse oximetry monitoring in stable bronchiolitis patients on the units where you work?

What would that involve?

Q7 (Relative Advantage) What strategy do you think would be most effective in decreasing the use of continuous pulse oximetry in stable bronchiolitis patients?

What other interventions could replace continuous pulse oximetry that might be more acceptable than simply just telling people to stop using continuous monitoring? For example, replacing continuous monitoring with a protocol for more frequent spot checks, or continuously monitoring just respiratory rate for apnea and heart rate for bradycardia instead of continuous pulse oximetry?

Q8 (Adaptability): What duration of time off supplemental oxygen do you view as safe and appropriate to wait before discontinuing continuous pulse oximetry monitoring?

II. Outer Setting

Q9 (Patient needs & resources): What preferences or expectations do parents express about continuous monitoring?

How do you anticipate parents of bronchiolitis patients served by your hospital might respond to clinicians using less continuous pulse oximetry monitoring? What are some things that could be done to make it easier for parents to accept?

Q10 (External policies & incentives): What *hospital policies, protocols, or pathways* exist at your institution that would affect the success of an intervention to reduce continuous pulse oximetry monitoring in stable bronchiolitis patients?

III. Inner Setting

Q11 (Culture): I have a couple of questions about the culture surrounding continuous monitoring in bronchiolitis. By culture I mean the shared values, expectations, and beliefs that guide a group's practice. Any questions about that definition before I ask some specific questions?

How would you describe the culture within <u>your discipline</u> [e.g. within respiratory therapists at your hospital- customize to the interviewee's role] with respect to continuous monitoring in bronchiolitis?

What about the general monitoring culture where you work, outside of your discipline?

Q12 (Prior experience): What prior experience implementing interventions aimed at reducing pulse oximetry monitoring in bronchiolitis have you or your hospital had?

Can you tell me about them and how they went?

- Probe: What barriers to implementation have you seen or experienced?
- Probe: What factors or techniques have you seen or experienced that helped promote implementation?

Q13 (Organizational readiness and Implementation climate): What do you expect would be the general level of receptivity in your organization to reducing use of continuous pulse oximetry monitoring in stable bronchiolitis patients?

- **Probe:** Who in your organization would be most likely to resist this change, and why?
- Probe: Who in your organization would be most likely to get on board, and why?

Q14 (Available resources): What resources or support would be needed to effectively implement an intervention to reduce use of continuous pulse oximetry monitoring in stable bronchiolitis patients at your hospital?

IV. Characteristics of Individuals

Q15 (Knowledge & beliefs): What, if anything, worries you about using less continuous pulse oximetry in stable bronchiolitis patients at your hospital?

Q16 (Self-efficacy): How confident are you that you and your team could successfully implement an intervention to reduce continuous pulse oximetry monitoring in stable bronchiolitis patients at your hospital?

What could be done to make that process easier?

Q17 (Motivation): How motivated would you be to implement an intervention like this?

Q18 (Priority): How much of a priority is it for you to reduce continuous pulse oximetry monitoring in stable bronchiolitis patients at your hospital?

Section 3: Intervention Mapping (Step 5) questions

In this section, I will be asking you about the people who would be involved if your health system or hospital was considering launching, implementing, and maintaining an intervention to reduce use of continuous pulse oximetry in stable bronchiolitis patients.

Q19 (Adopters): Who, specifically, in your health system would be involved in the decision to adopt a new policy focused on reducing continuous pulse oximetry in stable bronchiolitis patients (e.g., hospital or department leadership, nursing department, chief quality officer)?

Who would ultimately make the decision?

Q20 (Implementers): Who, specifically, in your health system would actually be involved in the implementation of the intervention?

What kind of supports would be needed?
Would there be specific supports needed for any particular roles?

Q21 (Maintenance): Who would be responsible for ensuring that the intervention is implemented correctly and consistently over time?

How would they do that?

Q22 (Role): Tell me about what role, if any, you see yourself playing if this intervention were implemented in your setting.

Section 4: Reaction to data

Q23 (**Reaction to data**): My last question is intended to get your perspective on your own hospital's monitor overuse data. This past winter, we measured how often your hospital used continuous pulse oximetry in stable bronchiolitis patients. We found that the overuse rate was ____%, meaning that ____% of patients age 0-23 months who had a diagnosis of bronchiolitis and were breathing room air were being continuously monitored with pulse oximetry. Can you tell me if that percentage seems to make sense based on what you experience in your role at the hospital or if it is surprising, and why?

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Overall, we observed that three issues were important factors that played into pulse oximetry utilization across the country. I'd like to ask you about each one individually so we can go into a little bit of detail.

First, we noted that the age and gestational age of the baby impacted the use of pulse oximetry such that younger infants and those born at earlier gestational ages were more likely to be continuously monitored. Do you see this at your hospital? What do you think may drive that relationship?

Second, we observed that continuous pulse oximetry was used in stable patients more often during overnight hours than during the day. Do you see this at your hospital? What do you think may drive that relationship? How could we address that difference?

Last, we saw that, after supplemental oxygen was discontinued, there was a lag of several hours before continuous pulse oximetry was stopped. Do you see this at your hospital? What do you think may drive that relationship?

End

Is there anything that we haven't asked about that you feel is important to understanding the use of continuous pulse oximetry in stable bronchiolitis patients at your hospital?

Thank you very much for taking part in this interview. We greatly appreciate the opportunity to learn from your perspectives.

Demographics

1.	Your age?			
2.	Your gender?	Male	Female	☐ Prefer not to disclose
3.	Do you identify as Hispanic and/or Latino?	☐ Yes	□No	☐ Prefer not to disclose
4.	What is your race? you can choose more than one:	☐ American Indian/Alaska Native☐ Asian☐ Black or African American☐ Native Hawaiian or Other Pacific Islander		n

COLLECT DOB AND ADDRESS FOR PAYMENT.

Please electronically complete the interview summary sheet at the conclusion of the interview and return it to Drs. Bonafide and Wolk as soon as possible.