Usability and workflow integration of the PE Dx CDS

Date of interview:
Time of interview: Beginning: End:
Total duration of interview:
Interviewers (circle initials): MS BH MW other
Interviewee service:
Interviewee role:
Participated in Spring 2018 experiment: Yes No

Before we begin, could you login to UW Health and access the HealthLink playground environment [help participant login to playground if needed].

Thank you for being willing to be interviewed for this AHRQ-sponsored research project! We are interested in understanding your experience using the pulmonary embolism clinical decision support tool, called the PE Dx tool or PE Dx CDS, that Dr. Brian Patterson has been involved in designing. The PE Dx CDS was implemented in HealthLink in December 2018.

The interview should take around 30 minutes.

Is it okay if I audio-record the interview?

Do you have any questions before we begin?

- How long have you worked as an Emergency Medicine physician *including* residency?
- How long have you worked at this ED?

1. In the HealthLink playground, please select any patient. Now, click on the ED navigator and then you can select the button "PE Dx tool" in the left side bar to open the PE Dx. Here you can see the PE Dx CDS in the Epic playground.

• Are you familiar with the PE Dx CDS?

- 2. Do you use the PE Dx CDS for patients suspected of PE?
 - If no,
 - o Why not?
 - If yes,
 - How often would you say you use the CDS? For most patients you suspect of PE? About half? Only a handful?
 - Thinking about the last time you used the PE Dx CDS for a patient in the ED, can you describe your work and workflow in using the CDS for that patient?
 - Does it always happen like that?
 - Where do you typically use the PE Dx CDS? (e.g., patient room)
 - How does the PE Dx CDS fit with other technologies you use such as the EHR or CPOE?
 - Do you usually interact with anyone (e.g., the patient, other clinicians) while using the tool?
 - Do interruptions occur when you use the CDS? Do they impact your use of the PE Dx CDS?
 - o How do you remember to use the tool?
 - When have you forgotten to use the tool?
- 2. Is there anything about the CDS that does not fit with your work and workflow...with how you do your work in the ED? Please provide examples and feel free to demonstrate in the playground.
 - Does the **environment** in the ED affect how the CDS fits in your workflow?
 - Do **patient characteristics** affect how the CDS fits in your workflow?
 - Do other **clinicians** affect the CDS fit in your workflow?
 - Do your other **clinical tasks**, such as ordering tests and reading notes, affect how the CDS fits in your workflow?
 - Do the use of other **technologies**, such as the computer or HealthLink affect how the CDS fits in your workflow?
 - Does **time pressure** affect how the CDS fits in your workflow? **Is there anything else about the PE Dx that does not fit with your**

Is there anything else about the PE Dx that does not fit with your workflow or that you do not like?

[can ask participant to demonstrate what they are describing in HealthLink if unclear]

- 3. Is there anything about the CDS the fits well with your work and workflow in the ED? Please provide examples and feel free to demonstrate in the playground.
 - Does the **environment** in the ED affect how the CDS fits in your workflow?
 - Do **patient characteristics** affect how the CDS fits in your workflow?
 - Do other **clinicians** affect the CDS fit in your workflow?
 - Do your other **clinical tasks**, such as ordering tests and reading notes, affect how the CDS fits in your workflow?
 - Do the use of other **technologies**, such as the computer or HealthLink affect how the CDS fits in your workflow?

Is there anything else about the PE Dx that fits with your workflow or that you like?

- 4. How does the PE Dx tool compare to other CDS you use or have used in the past (e.g., SEPSIS BPA)?
 - What is better about those CDS?
 - O What is better about the PE Dx CDS?
- 5. Do you have suggestions for how the PE Dx CDS can be better designed and integrated into clinical workflow? **Please feel free to demonstrate in the playground.**
- 6. Do you have any questions for us?

Thank you for your participation!