Qualitative Interview Questions for Electronic Health Record Implementation

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This is an interview guide designed to be conducted with administrators, clinical staff, implementers, and office staff across a health care system. The tool includes questions to assess user's perceptions of electronic health records.

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INTERVIEW QUESTIONS PRIOR TO EHR IMPLEMENTATION

CEO/Physician/Nurse Practitioner Leader

- 1. What are your reasons for implementing an EHR?
- 2. What is your vision for the EHR?
- 3. What are your goals and expectations for the EHR?
 - a. In relation to quality of care
 - b. In relation to clinic efficiency and cost savings
 - c. Patient safety
 - d. Other goals/expectation
- 4. What skills and resources does your organization have that make you believe the project will be successful?
- 5. Describe your leadership and communication styles.
- 6. Describe your understanding of what will be needed for the EHR implementation
 - a. How did you gain this understanding?
- 7. Describe the steps you have taken to prepare for the EHR
- 8. Describe your action plan for implementing the EHR. Please include the following:
 - a. What milestones you have identified
 - b. Plans for addressing challenges that may arise
 - c. Who was key in identifying the milestones and plans to reach them?
- 9. How have you prepared your staff for the implementation process? What has been their reaction?
- 10. What incentives have been discussed or are being planned for staff for implementation?
- 11. What do you feel will be the key challenges to implementation?
- 12. Who do you feel will be the key facilitators to implementation?
- 13. Describe the desired impact of the EHR on the organization.
- 14. Describe the areas where you think workflow will need to be addressed (lab results, prescription refills, tracking referrals etc)

Members of the guiding team

- 1. Why is your organization implementing an EHR?
- 2. What is the organization's vision for the EHR?
- 3. What are your organization's goals and expectations for the EHR?
 - a. Specifically in relation to quality of care
 - b. Efficiency and cost reduction
 - c. Patient safety
 - d. Other issues
- 4. What is the leadership style of your CEO/Physician/Nurse Practitioner leader?
- 5. How do you describe the effectiveness of his/her leadership style?
- 6. Describe how you communicate with the CEO/Physician/Nurse Practitioner leader
- 7. Describe your role in the organization
- 8. What skills and resources does your organization have that make you believe the project will be successful?
- 9. How has the EHR project been presented to the staff? What discussions have been held? How has this information been shared/disseminated?
- 10. What is your perception of the consequences of the success or failure of this project?
- 11. Describe your organization's action plan for implementing the EHR. Please include the following:
 - a. What milestones you have identified
 - b. Plans for addressing challenges that may arise

- c. Who was key in identifying the milestones and plans to reach them?
- 12. How have you prepared your staff for the implementation process? What has been their reaction?
- 13. What do you feel will be the key challenges to implementation?
- 14. What do you feel will be the key facilitators to implementation?
- 15. Is front-line staff aware of the implementation plan and do they have the same perception of the importance impact of the implementation on the organization?
- 16. Describe the areas where you think workflow will need to be addressed (lab results, prescription refills, tracking referrals etc)

Front-line staff

- 1. What is the leadership style of your CEO/Physician/Nurse Practitioner leader
- 2. Describe the effectiveness of the leadership style
- 3. How do you communicate with the CEO/Physician/Nurse Practitioner leader
- 4. Talk about the EHR project. What do you understand about the system, the implementation process and expectations for you? Can you describe the action plan for implementation?
- 5. How will the EHR implementation impact your job?
- 6. What are your organization's goals and expectations for the EHR?
- 7. How important do you feel the EHR project is to you and your job?
- 8. How has the EHR project been presented to the staff? What discussions have been held? How has this information been shared/disseminated?
- 9. What is your perception of the consequences of the success or failure of this project?
- 10. Describe your action plan for implementing the EHR. Please include the following:
 - a. What milestones you have identified
 - b. Plans for addressing challenges that may arise
- 11. How has your organization prepared you for the implementation process? What has been your reaction?
- 12. What incentives do you have for implementing the EHR?
- 13. What do you feel will be the key challenges to implementation?
- 14. What do you feel will be the key facilitators to implementation?
- 15. Describe the areas where you have the most difficulty with workflow (lab results, prescription refills, tracking referrals etc)

INTERVIEW QUESTIONS DURING THE IMPLEMENTATION PROCESS

CEO/Physician/Nurse Practitioner leader

- 1. Has there been any change in your leadership style? If yes what has changed?
- 2. Has your leadership style been effective in the context of this project?
- 3. Has there been a change in your communication style?
- 4. Have you found your communication style to be effective?
- 5. Has the significance of the EHR project for your organization changed?
- 6. Describe where you are in your action plan. Have you met and or exceeded expected milestones? How have challenges encountered been addressed?
- 7. Will this project be a success or a failure? What is contributing to its success? What is contributing to its failure?
- 8. How are your incentives for staff participation working?
- 9. What impact has the implementation process had on your organization?
- 10. What have been the key challenges and facilitators that you have faced so far?
- 11. Are your goals and expectations being met? Why/why not?

12. How is workflow being addressed during the implementation period? What areas of workflow have you worked on specifically?

Members of the guiding team

- 1. Has the significance or reason for implementing EHR changed?
- 2. Has there been any change in the leadership style of your CEO/Physician/Nurse Practitioner leader?
- 3. Are you finding the leadership style to be effective?
- 4. Has communication with the CEO/Physician/Nurse Practitioner leader changed in the context of this project?
- 5. Has your role in the organization changed? If yes how?
- 6. Has your relationship with the CEO/Physician/Nurse Practitioner leader changed? If yes, how?
- 7. Will this project be a success or a failure? What is contributing to its success? What is contributing to its failure?
- 8. Has the awareness of the implementation plan changed at all for the front-line staff?
- 9. What impact has the implementation process had on your organization?
- 10. Describe where you are in your action plan. Have you met and or exceeded expected milestones? How have challenges encountered been addressed?
- 11. How are the incentives for staff participation working?
- 12. What have been the key challenges and facilitators that you have faced so far?
- 13. Are your goals and expectations being met? Why/why not?
- 14. How is workflow being addressed? Have the areas that you feel are important been addressed? If not are they on the list to be addressed? Why/why not?
- 15. Has working with Alliance of Chicago/INC Partnership affected any of the following aspects of implementation, and if so, how?
 - a. Your Center's vision for the EHR (How?)
 - b. The skills and/or other resources you are using to implement the EHR (how?)
 - c. The implementation process (how?)
- 16. Do you think that working with Alliance/INC Partnership will have an effect on the success or failure of this project?
 - a. Positive or Negative
 - b. How significant?
 - c. What do you think would have been done differently if you were not implementing EHR in partnership with Alliance/INC?

Front-line staff

- 1. Has there been any change in the leadership style of your CEO/Physician/Nurse Practitioner leader?
- 2. Are you finding the leadership style to be effective?
- 3. Has communication with the CEO/Physician/Nurse Practitioner leader changed in the context of this project?
- 4. Talk about the EHR project. What do you understand about the system, the implementation process and expectations for you?
- 5. How important do you feel the EHR project is to you and your job?
- 6. What impact has the implementation process had on your organization?
- 7. What have been the key challenges and facilitators that you have faced so far? How have the challenges been addressed?

- 8. How are the incentives for participation working?
- 9. Are your goals and expectations being met? Why/why not?
- 10. How is workflow being addressed? Have the areas that you feel are important been addressed? If not are they on the list to be addressed? Why/why not?

INTERVIEW QUESTIONS 90 - 120 DAYS AFTER GO-LIVE

CEO/Physician/Nurse Practitioner Leader

- 1. Has the project been a success or a failure or some combination? Describe where you have realized success and where it is deemed a failure.
- 2. Has the EHR met the goals and expectations originally set forth?
 - a. In relation to quality of care
 - b. In relation to clinic efficiency and cost savings
 - c. Patient safety
 - d. Unexpected outcomes
 - e. Other issues
- 3. How well did your action plan work? Did you meet or exceed expected milestones? What were the major challenges and how were they addressed?
- 4. How well were staff prepared for the implementation process? How did they react during the implementation?
- 5. What incentives were the most effective for obtaining and maintaining participation?
- 6. What impact has the EHR had on your organization?
- 7. What have been the key challenges to success?
- 8. What have been the key facilitators to success?
- 9. Describe how workflow was impacted (lab results, prescription refills, tracking referrals etc). How have these changes benefited your practice?
- 10. Has your leadership style remained constant? If no, why not and how has it changed?
- 11. Has your perception of effectiveness changed?
- 12. Has your communication style remained consistent and constant? If no why not and how has it changed?
- 13. Has this project changed your goals for the organization?
- 14. Has the significance of the EHR project changed now that the implementation is complete?
- 15. Now that the implementation is complete was your interpretation of needed resources accurate? If not, how is it different? What advice do you have for others about to go through this process?
- 16. Has the desired impact of HER been realized? When do you expect to realize the full impact?
- 17. Who deserves credit for the success/or failure of the EHR project?

QUALITATIVE INTERVIEW REGARDING USE OF MEDICATION NOTICES ON EHRS

- 1. Can you talk about your experience with the medication alert system in the EHRS?
- 2. Please talk about how often in a typical session (4 hours) you receive a drug alert and if this is changing since you went live with the EHRS?
- 3. Can you give some examples of how you respond when you do receive a drug interaction alert?

- 4. Are you finding the medication alerts to be helpful? If positive or negative, probe:
 - a. Can you give us a few examples when the medication alerts are not helpful to you?
 - b. Do they interfere with your care or documentation?
- 5. How does the EHRS assist you in making prescribing decisions?
 - a. Do you find that your decisions are different when using EHR?
- 6. What features or functionality do you find in the EHR that are particularly helpful for your practice?
 - a. Please address patient safety in your comments.
- 7. Are there any changes or recommendations you have in terms of the EHRS?
 - a. Do you have any advice to site that are just going live now?

Guiding team members

- 1. Has the project been a success or a failure or some combination? Describe where you have realized success and where it is deemed a failure.
- 2. Who holds responsibility/accountability for the success/failure?
- 3. Has the EHR met the goals and expectations originally set forth?
 - a. In relation to quality of care
 - b. Patient safety
 - c. Unexpected outcomes
 - d. Other issues
- 4. What impact has the EHR had on your organization?
- 5. How well did the action plan work? Did you meet or exceed expected milestones? What were the major challenges and how were they addressed?
- 6. How well were staff prepared for the implementation process? How did they react during the implementation?
- 7. What incentives were the most effective for obtaining and maintaining participation?
- 8. What have been the key challenges to success?
- 9. What have been the key facilitators to success?
- 10. Describe how workflow was impacted (lab results, prescription refills, tracking referrals etc). How have these changes benefited your practice?
- 11. Has your communication with the CEO/Physician/Nurse Practitioner leader and staff remained consistent and constant? If no why not and how has it changed?
- 12. Has your relationship with the CEO/Physician/Nurse Practitioner leader changed? If yes, how?
- 13. Has your role in the organization been transformed? If yes to what and in what way has it changed?
- 14. Has the significance of the EHR project changed now that the implementation is complete?

- 15. What are staff perceptions of the success/failure of the EHR project?
- 16. Was the implementation more or less difficult or about what was expected? What was more difficult? What was less difficult than expected?
- 17. Who is taking credit for the success/or failure of the project?
- 18. Do you think that working with Alliance/INC Partnership had an effect on the success or failure of this project?
 - a. What sort of effect? (good/bad, how significant)
 - b. What do you think would have been done differently if you were not implementing EHR in partnership with Alliance/INC?
 - c. (Assuming benefits from EHR are being experienced) Do you think you would have been just as successful in achieving the benefits you have described if your Center implemented EHR independently?
 - d. What role did Alliance/INC partnership play in overcoming any barriers or challenges that you experienced? Can you please provide some examples?

Front-line Staff

- 1. Has the project been a success or a failure or some combination? Describe where you think it has been a success and where it is deemed a failure.
- 2. Has the EHR met the goals and expectations originally set forth?
 - a. In relation to quality of care
 - b. In relation to clinic efficiency and cost savings
 - c. Patient safety
 - d. Unexpected outcomes
 - e. Other issues
- 3. What impact has the EHR had on your organization?
- 4. How well did your action plan work? Did you meet or exceed expected milestones? What were the major challenges and how were they addressed?
- 5. How well were staff prepared for the implementation process? How did they react during the implementation?
- 6. What incentives were the most effective for obtaining and maintaining participation?
- 7. What have been the key challenges to success?
- 8. What have been the key facilitators to success?
- 9. Describe how workflow was impacted (lab results, prescription refills, tracking referrals etc). How have these changes benefited your practice?
- 10. Has there been any change in the leadership style of your CEO/Physician/Nurse Practitioner leader?
- 11. What did the leadership style of the CEO/Physician/Nurse Practitioner leader contribute to the success and/or failure of the EHR project?
- 12. Has communication with the CEO/Physician/Nurse Practitioner leader changed now that the project is complete?
- 13. Has your role in the organization been transformed? If yes to what and in what way has it changed?
- 14. How important do you feel the EHR is to you and your job?
- 15. Who is taking credit for the success/or failure of the project?