

March 2011

Barriers to Meaningful Use of Electronic Health Records in Medicaid

Pilot Focus Groups—Observations, Findings, and Recommendations

Prepared for

Heather Johnson
Center for Primary Care, Prevention, and Clinical Partnerships
Agency for Healthcare Research and Quality
540 Gaither Road
Rockville, MD 20850

Prepared by

RTI International
and
West Virginia Medical Institute
RTI International
3040 Cornwallis Road
Research Triangle Park, NC 27709

RTI Project Number 0210943.002

RTI Project Number
0210943.002

Barriers to Meaningful Use of Electronic Health Records in Medicaid

Pilot Focus Groups—Observations, Findings and Recommendations

March 2011

Prepared for

Heather Johnson
Center for Primary Care, Prevention, and Clinical Partnerships
Agency for Healthcare Research and Quality
540 Gaither Road
Rockville, MD 20850

Prepared by

**RTI International
and
West Virginia Medical Institute**
RTI International
3040 Cornwallis Road
Research Triangle Park, NC 27709

Contents

Section	Page
1. Executive Summary	1-1
1.1 Purpose of Pilot Study	1-1
1.2 Summary of Findings Based on Pilot Study	1-1
2. Evaluation of Recruitment Processes	2-1
2.1 Recruitment Methods.....	2-1
2.2 Observations and Lessons Learned	2-1
2.2.1 Reaching Individual Subjects to be Screened.....	2-1
2.2.2 Participant Screening Instrument.....	2-2
2.2.3 Recruiting Individual Subjects to Participate.....	2-3
2.3 Recommendations for Main Study Recruitment Processes.....	2-4
3. Evaluation of Focus Group Format and Content	3-1
3.1 Pilot Focus Group and Interview Methods.....	3-1
3.2 Observations and Lessons Learned	3-1
3.2.1 Composition of Focus Groups	3-1
3.2.2 Focus Group Mode, Setting, and Materials.....	3-2
3.2.3 Moderator's Guide	3-4
3.3 Recommendations for Main Study Focus Group Format and Content.....	3-7
4. APPENDICES	
A. Screening Instrument, version dated November 5, 2010	
B. Moderator's Guide, version dated November 5, 2010	
C. Show Cards	

Tables

Number		Page
Table 3-1.	Composition of Pilot Focus Group Sessions	3-2
Table 3-2.	Original Focus Group Configuration*	3-8
Table 3-3.	Revised Focus Group Configuration	3-9

1. EXECUTIVE SUMMARY

1.1 Purpose of Pilot Study

The purposes for conducting this pilot test are to:

- Assess effectiveness of the Moderator's Guide that will be used in the study's focus groups before proceeding with the design and validation of a final Moderator's Guide.
- Assess the effectiveness of various approaches to conducting the focus groups, including in-person focus groups, virtual focus groups, and one-on-one informant interviews.
- Assess methods for identifying and recruiting focus group participants.
- Assess whether and how focus group composition across different types of clinicians and different levels of experience with electronic health records (EHRs) affects data collected.

1.2 Summary of Findings Based on Pilot Study

Based on a final analysis of the pilot process the following findings are submitted for consideration:

- The Moderator's Guide (dated November 5, 2010) will require minor revisions/refinements. The content and form of the questions were generally clear, concise, and sufficiently descriptive to generate responses. Questions flowed well and encouraged a comfortable exchange among and between the facilitator and participants.
- The structure and organization of the Moderator's Guide should be modified to better accommodate the various techniques (in-person focus group, virtual focus group, and one-on-one informant interviews as may be applicable) that will be used.
- It is not necessary that focus groups be configured to separate health care providers who practice in a federally qualified health center (FQHC) or private practice. These providers may be interviewed during the same sessions.
- Both in-person and virtual phone sessions were effective in securing provider responses.
- The identification of prospective participants is a very labor-intensive and time-consuming process. Multiple contacts/follow-up calls, etc. will need to be made to confirm interest and to schedule a time to screen the health care provider for participation. Meeting organizers should expect additional challenges in identifying, screening, and enrolling providers who do not have an EHR system. Expect that these types of providers may not be particularly interested in participating in the study.
- A more direct and clear message regarding the scope, Medicaid orientation, and purpose of the study should be conveyed during the screening process. The

Screening Instrument (dated November 5, 2010) should be edited to ensure health care providers understand the Medicaid orientation. This point should be reinforced in all subsequent communications/exchanges leading up to the scheduled focus group meeting.

- As possible, recruiters should attempt to match participants in focus groups based on level of experience with EHR. There was a definite difference in the amount of information gathered when the focus group had a more homogenous composition and everyone was able to relate to a set of like experiences related to EHR use or non-use.

2. EVALUATION OF RECRUITMENT PROCESSES

2.1 Recruitment Methods

The ultimate success of the study is dependent upon recruiting a diverse, informed, and engaged group of participants. Each participant must understand the scope, purpose, and Medicaid orientation of the research and the importance of their responses to arriving at a final set of conclusions and actionable recommendations that can be submitted to the Agency for Healthcare Research and Quality (AHRQ).

For purposes of the pilot test, a list of potential study participants was secured from several sources, including providers known to be State Medicaid participating providers, providers who had either executed Regional Extension Center (REC) participation agreements or were likely to do so, and various professional associations that offered suggestions and recommendations. Relying on these sources, 28 potential candidates were identified for the pilot study.

The most challenging aspect of the pilot recruitment process was securing participation commitments from providers not currently using or planning to acquire an EHR system. A majority of the health care providers not using an EHR system who were contacted did not seem to recognize or understand the value of their participation in the project. Several mentioned that if the effort does not offer short-term benefit, they did not understand why they should take the time to participate. This challenge may be confronted by meeting organizers as they attempt to secure participants for the main study.

The \$200.00 gift offered to each focus group participant appears reasonable for the effort and time requested, provided sessions are concluded within the 2-hour target range. None of the participants requested additional compensation. The only exception was the response received from physicians who did not plan to acquire an EHR system. Several providers commented that the \$200.00 gift did not seem a sufficient incentive for the time requested. These providers ultimately elected not to participate in the pilot test. However, the amount of the gift was not necessarily the key factor driving their decision. Time and a lack of personal interest in the project seemed to be the more significant factors contributing to their decision.

2.2 Observations and Lessons Learned

2.2.1 Reaching Individual Subjects to be Screened

Main Finding. Rarely will an initial call result in the meeting organizer making direct contact with the health care provider and completing the Study Screening Instrument. In

most instances a specific date/time will need to be scheduled for the Screening Instrument to be completed. Time should be allowed for scheduling conflicts.

Recruiters will need to be persistent in their outreach efforts. During the pilot study most health care providers were not immediately available to receive a call nor had the time to complete the Study Screening Instrument when the initial contact was made. In almost all cases a specific follow-up date and time was scheduled with the provider to complete the Screening Instrument. Health care providers do not generally appreciate “cold calls,” and their daily office schedules rarely afford them the time required to complete the Screening Instrument, unless advance notice and a scheduling arrangement has been made.

Frequently, the initial call will be routed to a voice mail/messaging system or an administrative person. Follow-up calls will almost always be required to schedule a date/time for completion of the Screening Instrument. If possible follow-up calls should be made during non-office/clinic hours. Typically, the person receiving an incoming call can establish a date and time most convenient for the provider to be reached. Being conscientious and considerate of work hours and a provider’s limited availability will create a positive impression for the subsequent completion of the Screening Instrument.

E-mail messaging was not particularly effective as an initial means of introducing the project to a prospective participant. It was difficult to secure a correct e-mail address; messages were not routinely answered in a timely manner; and in most instances, a follow-up call to introduce the project was required. Although not a particularly effective tool for initial contact, e-mail messaging is clearly the preferred means for communicating once a commitment to participate in a focus group is made. Use of e-mail is more time efficient for the meeting organizer and provider and less disruptive to the office practice/clinic operation.

2.2.2 Participant Screening Instrument

Main Finding. Participants who state that they have an EHR system in place should be screened to confirm they have a basic familiarity with that system and its potential functionality. The more familiar a provider is with an EHR system, the more substantive comments, observations, and opinions they can offer.

The Draft Focus Group Participant Screening Instrument (dated November, 5 2010) was used to gather information about prospective focus group members and to provide a preliminary overview of the project. The Screening Instrument should include additional information that emphasizes the scope and Medicaid orientation of the study. Since this tool drives the first formal exchange between a project representative and prospective participant, it is critical that a positive tone and perception of the project be created.

Securing as much information about the targeted health care provider in advance of the call may reduce the time required to complete the Screening Instrument. This information may be validated during subsequent contact, and this approach may convey a unique and genuine interest in a provider's possible project participation.

Consideration should be given to deleting certain questions in the Instrument that either duplicate a question in the Moderator's Guide or may not have particular relevance to an individual's participation in a focus group (i.e., Screening Instrument items 10 and 11). Question 11, for example, reviews use of a listing of specific functions and is better suited for the focus group session. The Screening Instrument and the Moderator's Guide should be reviewed and any data element that will not be collected and retained for analytical or reporting purposes should be deleted.

2.2.3 Recruiting Individual Subjects to Participate

For the pilot, we identified a pool of 28 potential participants. During the recruitment process six were not available or did not return our messages. A total of 22 different providers were contacted about their interest in participating in a pilot focus group. This included 12 physicians, 4 nurse practitioners or certified nurse midwives, 3 dentists, and 3 administrators. For the Pilot we ultimately recruited a total of 9 individuals including: 1 administrator, 1 dentist affiliated with a university clinic, 6 physicians and 1 nurse midwife (see table 3-1 below).

Main Findings. Based on the recruitment efforts required in the pilot, it may take identifying four to six candidates to secure a single study participant. Recruiting eligible providers who have not acquired an EHR system will be particularly challenging. Based on feedback received during the pilot project, several providers were not inclined to undergo the screening process, much less participate in the formal interview. Securing commitments from health care providers to participate in a focus group will require a sustained effort from the meeting organizer and will likely require repeated calls to each health care provider. Access to the providers and their availability are two immediate challenges the organizer can anticipate.

Patient care, office responsibilities, and related obligations consume most of a health care provider's available time. Since dates and times for focus group sessions will be prearranged, it will be challenging to secure a pool of prospective participants whose schedules easily align with the focus group meeting dates and times. For the pilot, participants requested 3 to 4 weeks advance notice so they could clear their calendars of potential conflicts for focus group meeting dates and times. Regardless of the effort, inevitably conflicts will arise and some participant attrition will occur.

Although alternates were not necessary for the pilot, it would be prudent to secure at least two potential replacements for each anticipated session. Doing so will enhance the probability that a full panel of focus group members will be available to participate.

Once commitments are secured from individual providers, routine reminders should be sent via e-mail. The messages should be customized so that the provider is reminded or informed about the project, its scope and purpose, and the general information that the process is attempting to acquire. This will help the individual in preparing for the session and will allow the meeting organizer to respond to any unanticipated conflicts or other events that might impact the session. On average, pilot participants were provided at least three notices prior to the scheduled interview.

Given the Medicaid orientation of the study, every opportunity should be taken during the recruiting process to confirm with the provider the primary focus of the study. The Screening Instrument should rearrange the location of several screening questions to better verify eligibility the incentive program.

2.3 Recommendations for Main Study Recruitment Processes

- Secure as much information about the respondent in advance of the call and then validate that information with the provider. This technique may reduce the time required to complete the Screening Instrument.
- A thorough screening of potential participants must be conducted to ensure final participants have a basic understanding of an EHR system, how it functions, and the potential benefit/value that system can offer their practice. At the same time, questions currently included in the Screening Instrument that are best reserved for the focus group sessions should be reserved for the focus group meetings.
- Follow-up messages to providers in advance of the study date are important. These messages should mitigate the chance for scheduling oversight and can reinforce the primary focus, orientation, and subject matter to be addressed in the study.
- “Over subscribe” participants because attrition will occur. Having available/qualified replacements will enhance the probability of having complete panels for the focus group sessions. It would be prudent to secure at least two potential replacements for each interview session that will be conducted.

3. EVALUATION OF FOCUS GROUP FORMAT AND CONTENT

3.1 Pilot Focus Group and Interview Methods

Participants in the pilot project replicated, as much as possible, the mix of eligible professionals who would be represented in the main study. Participants included individuals from various clinical areas and practice domains. The pilot project included both eligible professionals with and without EHR experience. Private practitioners and Federally-qualified health center (FQHC) employees were represented. Finally, the pilot project tested three primary modes for conducting a focus group meeting: an in-person meeting, an informant interview technique, and a virtual session.

3.2 Observations and Lessons Learned

3.2.1 *Composition of Focus Groups*

Main Findings. Clinicians, regardless of type, can be assigned to like groups with three caveats: 1) A session dedicated exclusively to dentists should be arranged so that their unique needs are clarified, 2) health care providers not experienced or familiar with an EHR system should be interviewed separately from those who have experience; and 3) administrators without clinical practice have little to contribute to the discussion about particular EHR functions. The main consideration in convening focus groups is ensuring that they are homogenous with respect to level of experience with EHRs. With only one administrator in a group of clinicians, the administrator did not have much clinical experiences with an EHR to provide.

The main study sets forth an explicit set of characteristics that will dictate the qualifications, background, and experience of eligible providers recruited to participate in the interview sessions. These characteristics include

- Private practice clinicians and clinicians employed in an FQHC or rural health center (RHC) setting
- Clinical types/specialties, including family practitioners and/or internists with an adult medicine orientation, physician assistants, nurse practitioners, certified nurse midwives, pediatricians, and dentists.
- Practice managers and/or clinic administrators
- Providers experienced and inexperienced with the use of an EHR system
- Providers who serve a significant number of Medicaid beneficiaries (i.e., 20%–30% of the patient panel is made up of Medicaid beneficiaries)
- A representative mix of providers practicing in urban, suburban, and rural settings.

Using these selection criteria as a guide, the pilot project recruited nine eligible providers to be interviewed. Table 3-1 provides a summary of the provider types and the type of interview session to which each was assigned.

Table 3-1. Composition of Pilot Focus Group Sessions

Group 1 – Informant Interview (Individual)	Group 2 – Focus Group Meeting	Group 3 – Virtual Focus Group
<ul style="list-style-type: none"> ▪ One private practice family physician with no EHR ▪ One private practice pediatrician with no EHR 	<ul style="list-style-type: none"> ▪ One FQHC CEO (with EHR) ▪ One certified nurse midwife from an FQHC (with EHR) ▪ One private practice family practice physician (with EHR) ▪ One university-based dentist (with EHR) 	<ul style="list-style-type: none"> ▪ One FQHC family practitioner (with EHR) ▪ One FQHC medical director (with EHR) ▪ One private practice medical director (with EHR)

NOTE: The pilot test group was limited to nine participants to comply with the Paperwork Reduction Act.

3.2.2 Focus Group Mode, Setting, and Materials

Main Finding. In-person focus groups, in-person informant interview, and virtual focus group techniques all yielded substantive results. If the virtual focus group technique can be well managed by the meeting facilitator, it could enhance the opportunity to schedule more events and should significantly ease scheduling conflicts. Rather than having participants travel to a central meeting location, providers can participate in virtual sessions from their offices.

In-person Focus Group. The in-person focus group was convened on Wednesday, January 12, 2011 at 3:10 p.m. EST and was concluded at approximately 4:45 p.m. Four participants attended, including a certified nurse practitioner, clinic administrator, dentist, and adult medicine family practitioner. The interview was conducted in a conference room located at West Virginia Medical Institute’s (WVMI’s) Charleston, WV, office. The room was separated from other office areas and helped to minimize any extraneous noise or related disruptions. All participants arrived on site at the prescribed start time.

The conference room was well equipped for the interview. Paper and pens as well as copies of all relevant resource materials were provided (Show Cards 1, 2, and 3). Flip charts and a dry erase board were available to record presenter comments as applicable (Moderator’s Guide, Questions I-A-3, and I-A-4). Light and room temperature were monitored to ensure a comfortable work environment. No problems were noted. The room was equipped with a recording device and microphone to capture all proceedings. Participants were advised in advance of the interview that the session would be recorded and how the recording would

be used (Moderator's Guide, Ground Rules Section). A conference phone was also engaged in advance of the interview to allow RTI project personnel to listen to the proceedings. Neither recording the session nor having observers listening to the proceedings seemed to interfere with or intimidate any of the participants.

In addition to the four participants, there were two project personnel on site, an interview facilitator and resource person. Roles for both project personnel were explained in advance of the interview.

One-on-one Informant Interviews. In addition to the in-person group session, two individual interviews were conducted. These interviews took place with a pediatrician and an adult medicine family practitioner. Neither of these physicians currently has an EHR system and are only generally considering whether they will acquire a system for their respective practices.

Given their limited experience with EHRs and the Medicaid Meaningful Use requirements, neither provider was inclined to participate in a larger group session. Each, however, agreed to be interviewed to test the Moderator's Guide. Since the design of the study sought to include the opinions and observations of eligible providers who do not have EHR experience, the decision was made to proceed with individual interviews. Comments from these providers were enlightening and will be used to assess any changes that may need to be made in the Moderator's Guide. These health care providers were in the midst of deciding whether to adopt EHR systems in their practices. These individuals may have anticipated that the process of participating in a focus group session may help clarify their own considerations about what is important in an EHR system.

Based on this experience and the challenges encountered in the pilot study, either a virtual session or one-on-one interviews with providers without EHR experience would be the preferred interview technique. Providers of this type should be segregated from providers with EHR experience.

Virtual Focus Group. The virtual (conference call) interview session was convened on Wednesday, January 26, 2011 at 2:30 p.m. EST and was concluded at approximately 4:30 p.m. The call originated from WVMI's Charleston, WV, office and included a pediatrician and a family practitioner from Pennsylvania and a family practitioner from Delaware.

In advance of the call, all participants were provided specific written instruction via e-mail on how to access the conference line. All participants were able to join the call at the prescribed start time. In advance of the interview, participants were provided copies of all relevant resource materials that would be referenced during the conference call. (Show Cards 1, 2, and 3). Show cards 1 and 2 had been initially submitted. A third show card was created to facilitate discussion related to Question II-A-11.

The session commenced with introductory comments made by the session facilitator and roles for project personnel (WVMI and RTI) were explained. Participants were advised that the proceedings would be recorded and how the recording would be used. No objections or reservations were noted.

Based on the outcomes of the session, no discernable differences were noted between the virtual interview technique and the informant interview session previously conducted. The meeting facilitator was able to track and differentiate speakers. The exchange among and between providers flowed well. Individuals did not interrupt one another when speaking and all were given fair and ample opportunity to respond. The meeting facilitator was very conscientious about identifying each participant by name before directing a question or soliciting a response. Participants sounded as if they were fully and actively engaged during the interview. There were no indications that any participant was either distracted or bored during the session. The exchange was very spontaneous. It should be noted that there were only three providers participating in the virtual pilot interview. For the main study, it is recommended that as many as nine, but preferably five, individuals could be included in any one virtual group session. To manage the process with a group of nine participants, the meeting facilitator would need to be extremely focused and alert to any dynamics that might impede the participation/input from any group member.

This technique proved to be as effective as the informant (in-person) interview in generating substantive and thoughtful responses from participants.

3.2.3 Moderator's Guide

Ease of Use

For purposes of the pilot study, the Moderator's Guide was designed as a "question bank," in which certain questions were more appropriate for nonadopters, some for clinicians with EHR experience, and some for in-person focus groups, while other language was more appropriate for virtual focus groups. We found that having the facilitator use the entire question bank was somewhat cumbersome. Thus, to enhance the facilitator's use of the Moderator's Guide, the document will be customized for the specific type of technique used to conduct the interview and for the specific focus group composition. The Moderator's Guide will be organized so that a version is tailored for use in an in-person focus group meeting and a second Guide for use in a virtual group session. A third version will be prepared that can be used to focus the questioning directed at a group of providers that does not have an EHR system in place.

Customizing the Moderator’s Guide to meet the needs and conditions of the various focus groups should streamline its use by the meeting facilitator and mitigate the chance for posing an unintended or inappropriate question while conducting the interview.

Items That Generated Productive Discussion

A provider’s familiarity and experience with an EHR system appeared to be the more significant factor impacting whether a productive and engaged dialogue occurred during the focus group session. For example, the virtual group participants were more experienced with an EHR system and its functionality than the in-person group. Consequently, the virtual group was able to engage in a much more substantive and thorough discussion. Knowledge of the Meaningful Use standards and conditions that would confirm compliance with the standards also seemed to influence the substance of a provider’s response.

In the virtual pilot interview, all participants had at least 2 years experience with an EHR system. Two of the three participants were responsible for the selection and deployment of the EHR system in their respective practices. The third participant had used an EHR system exclusively in his practice. In light of this experience, each participant was able to offer detailed observations, opinions, and comments. Responses reflected both a clinical and administrative perspective on the challenges, barriers and benefits that could be achieved through the use of an EHR system. This group was also able to address how the functionality of their respective EHR systems could support the practices’ abilities to meet the Meaningful Use requirements and affect the quality of service rendered to their Medicaid patients.

The characteristics of the providers who participated in the virtual pilot test interview differed significantly from the providers who participated in the in-person group interview.

The in-person focus group included an FQHC-based certified nurse practitioner, an FQHC executive director, a family practitioner, and a dentist. Each provider represented a practice that had an EHR system. However, their experience with their respective systems was somewhat less than the experience reflected by the virtual group, and the functionality and/or applications used by their respective systems was also not as extensive as suggested by members of the virtual group. These distinguishing characteristics were also influenced by the fact that the dentist participating in the in-person interview used a very unique “dental-oriented record,” and the agency executive director was only able to generally address some of the clinical application-oriented questions posed during the interview.

Overall, it appears that a participant’s experience and use of an EHR system as well as his/her familiarity with the Meaningful Use standards influenced the substance of the

exchange between group participants. This was particularly evident in how participants responded to the questions posed in Section II of the Moderator's Guide. This background and experience was also reflected in how elaborate the responses were to questions posed in Section III, particularly those questions related to a State Medicaid incentive program (Questions III-AB-4, a, b, c; III-AB-6; and III-AB-7 in the Moderator's Guide).

Items That Did Not Generate Discussion

Even more than the construct and/or content of a Moderator's Guide question, the characteristics of the participants seemed to influence the amount of discussion that occurred during an interview. The in-person group, which was not as familiar with EHRs or the Meaningful Use guidelines as our virtual group, generated less discussion around specific Meaningful Use topics. It was also clear that clinicians (physicians and the nurse midwife) were more capable of answering questions about their systems than the administrator or dentist who were interviewed. It should be noted that the dentist interviewed for the pilot was very knowledgeable about the electronic record that was in place in his specific practice, but uninformed about an electronic health record applicable for a medical practice. Questions I-A-3; I-A-4; and I-A-5 all generated more substantive discussion among the experienced provider group than the group with less experience with an EHR system.

Among the less experienced practitioners, questions about factors considered prior to acquiring an EHR system (questions I-A-5 regarding transition to EHR use and I-A-6, use by other clinicians in the office) did not generate much discussion. This was probably because several of the providers interviewed arrived at the practice after the acquisition decision was made. The questions did not seem germane to the overall purpose of the study.

Items That Needed Further Clarification

Based on responses received during the pilot study, some provider participants did not appear familiar with the Meaningful Use requirements, their State's Medicaid incentive program, resources available to assist in the selection and use of an EHR system (i.e., REC), or the capabilities that other health care providers had related to the exchange of health information. Several of the clinical respondents were not sure of the percentage of Medicaid beneficiaries reflected in their particular practice or clinic.

Given the need to keep providers focused on the Medicaid orientation of the study, whenever applicable, the moderator's questions should be referenced with the term "Medicaid." This cue should help maintain responses that are focused toward a Medicaid application rather than allowing the provider to speak more generally.

Overall Effectiveness of Moderator's Guide to Answer Research Questions

The Moderator's Guide, as drafted, represents an effective tool for facilitating a focused, meaningful, and efficient exploration of barriers that eligible health care providers may encounter in meeting criteria to receive Medicaid incentive payments. Information acquired from the series of focus groups sessions will provide a rich reservoir of data from which actionable recommendations can be submitted to Federal policy makers as they consider changes and/or modifications in how providers might qualify for Medicaid incentive payments.

Proposed changes are more process oriented than content oriented. These relate to matters such as identifying and selecting eligible provider participants and the organization and composition of individual focus groups. As mentioned previously, the "output" of the study will be most dependent upon the comments, observations, and experiences of those being interviewed. For this reason, every effort will be made to secure an informed and diverse group of provider participants.

3.3 Recommendations for Main Study Focus Group Format and Content

- There did not appear to be a specific reason to differentiate or segregate urban, suburban, or rural providers. Based on the observations from the focus group, location of practice is not as differentiating a factor as one's experience with an EHR system. These characteristics may be important for practical reasons in forming in-person focus groups.
- There did not appear to be a particular reason to differentiate groups by practice setting (i.e. FQHC affiliation) from private practitioners. Experience or familiarity with an EHR system was more of a distinguishing factor for clinicians.
- The meeting facilitator will need to be focused and assertive in order to manage the dynamics of groups composed of six or more participants. In the pilot study, groups included four or three participants. The virtual group, made up of 3 providers, required the full 2 hours to complete the study. Reformatting/tailoring the Moderator's Guide to align with the interview technique to be used will help focus the questions posed during the session.
- To have a robust conversation within a focus group, it will be important for the focus groups to be homogenous with regard to the participants' level of experience with EHRs. Providers with EHR experience should not be included with providers who do not have an EHR system or are not inclined to acquire a system. As a result of this recommendation, the selection of focus group participants would change from the current sampling plan, which is outlined in Table 3-2, to a revised configuration, which is outlined in Table 3-3.
 - This configuration retains the number of approximate completed interviews, with the same number of provider types, with the notable exception of administrators. It allows for nonadopters to be interviewed in more convenient "virtual" environment. To maintain some geographic diversity among EHR adopters, the

in-person focus group interviews would be supplemented with smaller virtual groups emphasizing rural clinicians. The virtual groups would have fewer participants per session as they are more easily administered with a relatively smaller number of voices on the line.

- This also would result in 13 sessions as opposed to the current plan of nine.

Table 3-2. Original Focus Group Configuration*

Practitioner Type	Private Practice					FQHC/RHC				Total
	#1 (w/ EHR)	#2 (w/ EHR)	#3 (no EHR)	#4 (rural, w/EHR)	#5	#6 (w/ EHR)	#7 (w/ EHR)	#8 (no EHR)	#9 (rural, w/EHR)	
Pediatrician	2-3	2-3	2-3	2-3	0	2	2	2	2	16-20
Adult MDs	2-3	2-3	2-3	2-3	0	2	2	2	2	16-20
DDS	0	0	0	0	7-9	2	2	2	2	15-17
Mid-level providers (NPs, CNMs) (PA-FQHC only)	2-3	2-3	2-3	2-3	0	2-3	2-3	2-3	2-3	16-24
Admin. Staff	0	0	0	0	0	2	2	2	2	8
Totals	6-9	6-9	6-9	6-9	7-9	10-11	10-11	10-11	10-11	71-89

*Groups 3, 4, 5, 8 and 9 were to have been virtual focus groups.

Table 3-3. Revised Focus Group Configuration

Practitioner Type	Adopters			Non-adopters	Total
	#1-4 In Person (4 separate groups)	#5 Virtual (1 group of dentists only)	#6-9 Virtual (4 separate groups, focus on rural providers)	#10-13 Virtual (4 separate groups)	
Pediatricians	8-12	0	3-5	3-5	14-22
Adult MDs	8-12	0	3-5	3-5	14-22
DDS	2-4 (FQHC)	7-9	3-5	3-5	15-23
Mid-level providers (NPs, CNMs) (PA-FQHC only)	8-12		4-5	4-5	16-22
Admin. Staff	0	0	0	0	0
Total	7-10 in each group	7-9 in one group	3-5 in each group	3-5 in each group	59-89

Appendix A
Barriers to Meaningful Use in Medicaid
Draft focus group participant screener—November 5, 2010

DATE: ____/____/____

Hello, my name is _____ calling from (FG AGENCY). May I speak with (FILL IN THE BLANK)?

IF NOT AVAILABLE: LEAVE A MESSAGE TO RETURN YOUR CALL.

IF ASKED TO EXPLAIN YOUR CALL, OR IF YOU CONTACT SELECTED PROVIDER:
Hello, my name is _____ calling from (FG AGENCY). May I speak with (FILL IN THE BLANK).

We have been asked by the U.S. Department of Health and Human Services to conduct a series of focus groups with a variety of health care professionals. The purpose of these focus groups is to understand any barriers you face in meeting criteria to receive Medicaid incentive payments for using electronic health record systems, or EHRs.

We are recruiting health care providers to participate in a single two-hour focus group. The results will help inform Federal policy regarding incentive payments for the adoption and use of EHR systems for providers who treat Medicaid patients. Your name was selected from among a list of health care professionals in your state who treat Medicaid patients. Your participation is entirely voluntary and will not have any effect on your eligibility for Medicaid payments of any kind. Naturally, all your responses will be kept confidential to the extent permitted by law.

The focus group will be held [DATE] in [LOCATION/BY CONFERENCE CALL/BY WEB CONFERENCE]. The focus groups may include physicians, nurse practitioners, certified nurse midwives, and health center administrators in your area; or if you are a dentist, other dentists. We will include only one person per practice in any focus group. You will receive \$200 as a token of our appreciation.

IF SUBJECT SAYS S/HE DOES NOT USE EHR SYSTEMS: It is not essential that you currently use EHR systems in your place of work. We're also interested in hearing from non-users.

Public reporting burden for this collection of information is estimated to average 12 minutes per response, the estimated time required to complete the survey. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: AHRQ Reports Clearance Officer Attention: PRA, Paperwork Reduction Project (0935-XXXX) AHRQ, 540 Gaither Road, Room # 5036, Rockville, MD 20850.

I'd like to ask you a few questions to make sure we have a variety of health care professionals to represent the providers in your area. This should take only about 5–10 minutes.

1. May I ask a few questions to determine if I am speaking with the correct person?

- YES CONTINUE
- NO SET CALL BACK TIME
- REFUSAL THANK THEM FOR THEIR TIME AND NOTE AS A REFUSAL GO TO GOODBYE

2. IF TALKING TO AN ADMINISTRATOR. SKIP TO QUESTION 4.

I need to verify what type of practice license you hold. Are you licensed as a:

- Physician (GO TO 2a)
- Dentist (GO TO 2b)
- Nurse practitioner (GO TO 3)
- Physician assistant (GO TO 3)
- Certified nurse midwife (GO TO 3)
- NO PRACTICE LICENSE-ADMINISTRATOR (GO TO 4)
- OTHER (GO TO END 1)
- DON'T KNOW (GO TO END 1)
- NO ANSWER (GO TO END 1)

2a. What is your medical specialty?

- PEDIATRICS (GO TO 3)
- FAMILY MEDICINE (GO TO 3)
- INTERNAL MEDICINE (GO TO 3)
- OBSTETRICS/GYNECOLOGY (GO TO 3)
- OTHER SPECIALTY (GO TO END 1)
- DON'T KNOW (GO TO END 1)
- NO ANSWER (GO TO END 1)

2b. What is your dental specialty?

- GENERAL DENTISTRY (GO TO 3)
- PEDIATRIC DENTISTRY (GO TO 3)
- OTHER, please specify _____ (GO TO END 1).

3. Are you currently licensed to practice medicine (dentistry, nursing, midwifery) in the state of (FILL IN THE BLANK)?

- YES
- NO
- LICENSE IS TEMPORARILY SUSPENDED

- LICENSURE IS PENDING
- DON'T KNOW
- NO ANSWER

○ **IF NOT YES, GO TO END 1**

4. In order to qualify for Medicaid incentive payments to adopt and use EHR systems, 30% of your patient visits must be with Medicaid patients. Or, if you are a pediatrician at least 20% of your visits must be with Medicaid patients. If you work in a Community Health Center or Rural Health Center those percentages could include Medicaid, or uninsured patients.

Based on your patient mix, do you think you might qualify for this incentive program?

- YES (GO TO QUESTION 5).
- YES-HEALTH CARE PROFESSIONALS IN MY HEALTH CENTER WILL QUALIFY FOR THIS INCENTIVE PROGRAM (GO TO QUESTION 5)
- NO (**GO TO END 1**)
- UNSURE (GO TO 4a.)
- DON'T KNOW (GO TO 4a.)
- NO ANSWER (**GO TO END 1**).

4a. Do you think the percentage of Medicaid patients you serve might increase in the next 1 to 3 years so that you might be eligible for this EHR incentive program in the future?

- YES (GO TO QUESTION 5)
- YES- HEALTH CARE PROFESSIONALS IN MY HEALTH CENTER MIGHT QUALIFY IN THE FUTURE (GO TO QUESTION 5)
- NO (**GO TO END 1**)
- DON'T KNOW (**GO TO END 1**)
- NO ANSWER (**GO TO END 1**)

5. We're interested in talking with health care professionals who are in different phases of adopting and using electronic health records (EHRs) in their out-patient practice. I am not referring to computerized scheduling, billing, claims processing, or other types of practice management systems. Rather, I am referring to electronic record systems used in clinical care, for things like patient demographics, electronic prescriptions, recording patient histories, and recording your care for your patients.

I'd like to read a short list of ways that might describe where your practice is. Please tell me which best describes the use of EHRs in your practice.

- You do not have plans to purchase an EHR system in the next 12 months. (**GO TO INVITE 1 OR END 2**)
- You plan to purchase an EHR system sometime in the next 12 months. (**GO TO INVITE 1 OR INVITE 2 OR END 2**)
- You now have an EHR system. (**GO TO INVITE 1 OR INVITE 2 OR END 2**)

*******End of Participant Screener—determine INVITE 1, INVITE 2 OR END 2 based on responses given and participants already recruited*******

INVITE 1: We would like to invite you to participate in a group discussion via conference call about the barriers you face in meeting criteria to receive Medicaid incentive payments for using EHRs. This research is sponsored by Agency for Healthcare Research and Quality (AHRQ), an agency within the U.S. Department of Health and Human Services. This group discussion is strictly for research purposes. The discussions will be recorded so that we can accurately report the contents of the discussion. No one other than the research staff will see or hear the tapes. It will last about 2 hours. As a token of our appreciation, you will receive a gift of \$200. [GO ON TO QUESTION 6.]

INVITE 2: We would like to invite you to participate in an in-person group discussion about the barriers you face in meeting criteria to receive Medicaid incentive payments for using EHRs. This research is sponsored by Agency for Healthcare Research and Quality (AHRQ), an agency within the U.S. Department of Health and Human Services. This group discussion is strictly for research purposes. The discussions will be recorded (both audio and video) so that we can accurately report the contents of the discussion. No one other than the research staff will see or hear the tapes. It will last about 2 hours, and refreshments will be served. As a token of our appreciation, you will receive a gift of \$200. [GO ON TO QUESTION 6]

6. The discussion will be held on {DAY}, {DATE} at {TIME} in {LOCATION, OR BY TELECONFERENCE/WEB CONFERENCE}. Would you be interested in participating?

- YES (CONTINUE)
- NO (THANK SUBJECT AND GO TO GOODBYE)
- DON'T KNOW / MAYBE (GO TO END 2)
- NO ANSWER (THANK SUBJECT AND GO TO GOODBYE)

IF THIS SUBJECT WILL BE RECRUITED FOR AN INTERVIEW OR FOCUS GROUP, ASK ITEMS 7–17.

7. Great! Now in order for us to analyze the information we collect at the focus group, I'd like to ask you a few more questions. These will help us describe your current familiarity with EHR systems and know a little about your practice situation. This information will be needed in our analysis. This should take 3-5 minutes. Can I get your verbal consent to ask you these questions to help us analyze the information we collect in the focus group?

- YES (CONTINUE)
- NO (THANK THEM FOR THEIR TIME, GO TO GOODBYE)
- CALL LATER (SET A CALL BACK TIME)

SCREENER: IF SPEAKING WITH AN ADMINISTRATOR, SKIP TO QUESTION 13.

8. SCREENER: HOW DID PARTICIPANT RESPOND TO QUESTION 5?

- YOU DO NOT HAVE PLANS TO PURCHASE AN EHR SYSTEM IN THE NEXT 12 MONTHS (GO TO 13)
- YOU PLAN TO PURCHASE AN EHR SYSTEM SOMETIME IN THE NEXT 12 MONTHS (GO TO 13)
- YOU NOW HAVE AN EHR SYSTEM (GO TO 9)

9. I'm now going to read a short list to describe the extent to which the staffs at dental and medical out-patient clinics are using EHR systems. Please tell me which best describes the use of EHRs in your practice.

- You recently purchased an EHR system, but are not yet using it.
- In general, you use your EHR system on a regular basis.
- You use your EHR all of the time and with all of your patient encounters.
- DON'T KNOW
- NO ANSWER
- REFUSE

10. Now, I will list some ways to describe the degree to which your patients' *clinical* records might be kept electronically. Please choose the one which best describes this use in your practice. Remember, this does not refer to electronic systems for billing and reimbursement; only clinical records.

- All of your patient records are kept electronically,
- Most of your patient records are kept electronically, or
- Fewer than half of your patient records are kept electronically
- DON'T KNOW
- REFUSE

11. Next, I will read a list of specific functions EHRs often provide. Some health care providers use these features more than others. Please tell me which ones you use on a regular basis.

- a) Do you record patient demographics?

- YES
- NO
- DON'T KNOW
- REFUSE

b) Do you record active patient medication lists?

- YES
- NO
- DON'T KNOW
- REFUSE

c) Do you transmit prescriptions electronically?

- YES
- NO
- DON'T KNOW
- REFUSE

d) Do you receive or send health information electronically?

- YES
- NO
- DON'T KNOW
- REFUSE

e) Have you enabled automatic warnings for drug interactions?

- YES
- NO
- DON'T KNOW
- REFUSE

f) Have you enabled decision support rules?

- YES
- NO
- DON'T KNOW
- REFUSE

g) Do you generate patient lists for quality improvement?

- YES
- NO
- DON'T KNOW
- REFUSE

h) Do you report clinical quality measures?

- YES
- NO
- DON'T KNOW
- REFUSE

12. Considering all of the locations at which you may have practiced during your career, how long have you personally been using EHRs to keep patient records in your outpatient practice?

Is it:

- Fewer than three months,
- Three to twelve months,
- One to three years, or
- More than three years?
- DON'T KNOW
- REFUSE

13. Let me read some descriptions of the settings in which you have served patients during the last three months. Please tell me which of these best describes the practice setting where you serve most of your patients. There can be more than one.

- A private or solo practice
- A hospital outpatient clinic
- A free standing clinic or surgi-center (not part of a hospital outpatient department).
- A community health center or federally qualified health center
- A rural health center
- Anywhere else? (IF YES, GO TO 13a.)
- NONE OF THESE
- DON'T KNOW
- REFUSE

13a. Have you served patients at...

- A community mental health center?
- A clinic operated by your state or local government?
- A family planning clinic (like a Planned Parenthood Clinic)?
- A health maintenance organization or other pre-paid practice such as Kaiser Permanente?
- A faculty practice?
- Any other locations I haven't mentioned?
- IF ANY OTHER, Please specify _____

14. In total, how many (physicians/dentists) serve patients at your primary office location?

- NONE
- ONE (SOLO PRACTICE)
- 2-3
- 4-9
- 10 OR MORE
- DON'T KNOW

REFUSE

15. Is your location where you serve most of your outpatient visits a single specialty or multi-specialty practice?

- SINGLE SPECIALTY
- MULTI SPECIALTY
- DON'T KNOW
- REFUSE

16. Can you confirm the spelling of your first and last name for future communications?

ENTER NAME HERE:

17. Please give me a mailing address and telephone number where you can be reached so we can send you a confirmation letter and some information regarding the group.

IF IN PERSON: This will include the address and directions to the focus group meeting.

IF VIRTUAL: This will include information that will allow you to dial into a secure telephone conference line for this focus group session.

ADDRESS: _____

CITY: _____

STATE: _____ ZIP: _____

PHONE: (____)_____-_____

EMAIL: _____

Thank you. The discussion group will be held on {DAY}, {DATE}, at {TIME}, (at {LOCATION})/ by teleconference/web-conference. We will send you a reminder notice and directions/a phone number in the mail and by email.

END: Thank you for your time. We look forward to your participation in the focus group. If you have any questions in the interim, please contact Sean Hogan at RTI international. He can be reached at 800-334-8571 extension 2-5265.

END 1: I'm sorry but I must have been misinformed about your (SPECIALTY / NUMBER OF MEDICAID PATIENTS). Thank you, but at this time, we are looking for focus group participants with different characteristics than you. Thank you for talking with me. Good bye.

END 2: Right now we have received a positive response from health care professionals who are similar to you in terms of specialty and the type of care they provide. So, we will probably need to ask someone else, so that we have enough variation to inform our research. I would like to keep your name on hand in case it turns out that we need someone with your background. Would it be OK for us to call if it turns out that we have a vacancy down the road?

- YES. (SAY: Thank you. We will call only if we find a vacancy for someone with your background.)
- NO
- MAYBE

GOODBYE: Thank you. Good bye.

Appendix B

Barriers to Meaningful Use of Electronic Health Records in Medicaid

Focus Group Moderator's Guide

November 5, 2010

Directions sent to participants in advance of virtual focus groups:

- Please locate a quiet place where you will not be interrupted, where you will have access to a telephone and a computer with Internet access.
- Please sign into the web-portion of the meeting at least 10 minutes before our scheduled start time.
- You will receive a packet of materials for use during the focus group session. Please have them in front of you during the session.

Materials to be distributed to virtual focus group participants prior to the session:

- Consent form (to be returned in advance of the session)
- List of EHR functionalities required to demonstrate meaningful use for the Medicaid EHR incentive program (Show cards 1 and 2)

Welcome, Team Introduction and Informed Consent (5-10 Minutes)

Welcome. Thank you very much for coming to this group discussion (agreeing to this interview if personal interview). We'll be talking about the use of electronic health records and the Medicaid EHR Incentive Program. Your ideas and opinions are very important to us.

Public reporting burden for this collection of information is estimated to average 120 minutes per response, the estimated time required to complete the survey. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: AHRQ Reports Clearance Officer Attention: PRA, Paperwork Reduction Project (0935-XXXX) AHRQ, 540 Gaither Road, Room # 5036, Rockville, MD 20850.

I'm **Linda Dimitropoulos** and I'll be facilitating our discussion today. I'm from RTI International, a private, non-profit research organization that conducts research related to health care and health care delivery. I am being assisted this evening by **Patricia MacTaggart** (Trish) of the George Washington University School of Public Health. She is a lead research scientist there, and is a former Medicaid director. I am also being assisted by my colleague (**NAME**) from the West Virginia Medical Institute. She/he is (**FILL IN THE BLANK**). Trish and (**NAME from WVMI**) may ask follow up questions during our discussion, provide answers to technical questions you have, or offer insights.

We are holding several of these groups with health care professionals around the country. We're doing this for the Agency for Healthcare Research and Quality, which is part of the U.S. Department of Health and Human Services. They are working in collaboration with the Centers for Medicare and Medicaid Services to address how best to understand any barriers you face in meeting criteria to receive Medicaid incentive payments for using EHRs.

FOR IN-PERSON GROUPS: I will be passing out consent forms. Let's take a minute to read them and fill them out so I can collect them before we start. You will get two copies to sign. One copy is for you to keep; it has phone numbers to call in case you have questions afterwards. Once you have signed the one for me, please pass it down to me.

FOR VIRTUAL GROUPS: I have a copy of your signed consent form here. If you need to please refer to the copy of the consent forms that you signed and were asked to keep. If you need a new one, let me know.

FOR BOTH VIRTUAL AND IN-PERSON GROUPS: These inform you that your participation is voluntary and that we will protect your privacy. This says you don't have to answer a question if you don't want to. You can refuse to participate even after we get started. It says that this group discussion will last about 2 hours and that at the end of the session I will give you \$200 as a token of our appreciation for your participation.

Any questions before we move on?

Group Objectives (5 Minutes)

Our goal today is to understand, from your perspective, any barriers you may face in meeting criteria to receive Medicaid incentive payments for using electronic health records (EHRs) under the new Medicaid EHR incentive program. This includes finding out about the challenges—if any—in establishing yourself as eligible for Medicaid incentive payments for adopting, implementing or upgrading an EHR. If you have an EHR, we'll be asking about barriers you're facing in using your EHR in a way that satisfies the criteria for "meaningful use." We'll define

these terms for you as we go along. Your experiences and opinions will inform both research and future Federal policy.

Here's how I'd like to proceed: First I'll layout a few ground rules that help make focus groups work.

Next, I would like everyone in the focus group to introduce themselves by giving their first names only. Then we'll get into the heart of the discussion. I have a set of questions and discussion topics that I will be guiding us through.

Here are some ground rules that will help us work together:

1. First of all, everyone should know there is no right or wrong answer. We want to know *your* honest experiences, ideas and opinions. During this group some of you may bring very different experiences and opinions to the table. That is exactly what we're looking for. We are here to learn from you, and we want to hear from everyone and learn what each of you thinks.
 - 1a. FOR VIRTUAL GROUPS: I hope you are already in a quiet place where you will be undisturbed for the duration of this call. If not, please take this time to find a quiet place now. Also, if you have not already done so, please take out the material sent to you. We will use the visual aide in the course of the discussion. (If using a web-based meeting format, confirm that everyone is logged in.)
2. As a courtesy to everyone, please put phones or pagers on vibrate. I know in your line of work, emergencies sometimes crop up. You may excuse yourself if you need to respond to an emergency.
 - a. FOR VIRTUAL GROUPS: When it's not your turn to speak, please put your phone on mute if you are able to. This will reduce background noise for everyone who is listening.
3. Also, please respect each other's privacy. To do this, I'm asking you to not repeat anything you will hear from your colleagues here today.
4. When we write our report, we will report *what* was said, but not *who* said it.
5. Only RTI (and WVMi during pre-testing) will be able to link your identity with any of your answers. Your identity and anything you say here will remain private. This means that your names, addresses, and phone numbers will not be used in any of our reporting. We will not mention your practice by name.

6. You may have noticed the recording devices in the room. (FOR VIRTUAL GROUPS: “We are recording this conference call.”) We want to give you our full attention and not have to take a lot of notes. We will refer to the recordings when writing our report to help ensure accuracy. We will not share these tapes with AHRQ, but we will provide AHRQ with *transcripts* of our tapes. So please use *only* your first names during our discussions. We’ll redact information that would specifically identify you as a participant from our transcripts.
7. Because we are recording, it is important that you try to speak one at a time. I may occasionally interrupt when two or more people are talking at once. This is to be sure everyone gets a chance to talk and that responses are accurately recorded. Sometimes I may need to move the discussion along to make sure we cover everything, and I may ask those people who have contributed a lot to the discussion to give others a chance to speak.
8. FOR IN-PERSON GROUPS: Should you need to go to the restroom during the discussion, please feel free to leave. However, we’d appreciate it if only one person would be out of the room at any one time.
 - a. FOR VIRTUAL GROUPS: If you are temporarily called away from the phone, please go ahead and take care of the situation. While you’re gone, please do not put us on hold. Phone systems with music or recorded messages for waiting phone calls will interrupt the conversation. If you need to leave for a moment, it would be better to hang up and dial in again. However, we’d appreciate it if only one person would be off the call at any one time, if possible.
9. FOR IN PERSON FOCUS GROUPS: Please feel free to get a snack or a drink.
10. If you do not understand a question that I ask, please let me know. I’ll try to re-phrase it, or explain what we are trying to get at with the question.
11. Please don’t hold back from giving us your honest answers. If you have something negative to say, that’s all right. Sometimes the negative things are the most helpful. Remember, there is no right or wrong answers. We just want to hear what you have to say.

Introductions (10 minutes)

FOR IN-PERSON GROUPS: To start things off, let's go around the room and introduce ourselves, so we can get to know each other a little better. Please tell us your first name, and little about the type of health care you provide.

FOR VIRTUAL FOCUS GROUPS: To start things off, let's introduce ourselves, so we can get to know each other a little better. Please tell us your first name, and little about the type of health care you provide. I'll start with (MODERATOR: CHOOSE SOMEONE and THEN CALL ON EACH PERSON TO IDENTIFY HIM/HER SELF).

Section I—YOUR GENERAL EXPERIENCE WITH USING OR ADOPTING ELECTRONIC HEALTH RECORDS (20–25 Minutes)

When we speak of Electronic Health Records, or EHRs, I am not referring to computerized scheduling, billing, claims processing, or other types of practice management. Rather, I am referring to electronic record systems that take the place of paper patient records. The EHR systems we're talking about are for clinical care, for things like patient demographics, electronic prescriptions, recording patient histories, and recording your care for your patients.

I-AB-1. How many of you have access to an electronic health record at the location where you practice outpatient care most often?

For those who do not have an EHR:

I-B-1. Do you know anyone using an EHR now?

- a. What have you heard about them?*
- b. Do you have any concerns, or worries about using them?*
 - 1. What are they?*

Moderator: Especially on the virtual interviews, you may find it easier to call on participants by name.

Moderator: For those who say yes (Group A), follow questions A-X. For those who say no (Group B), follow questions B-X. Questions that refer to both groups will be labeled as AB-X.

We'll get into more of those in a little while.

I-B-2. Do you have any plans for buying an EHR system?

a. IF YES: What are the biggest reasons for you to acquire an EHR?

b. IF NO: What are the biggest reasons for not getting an EHR?

PROMPT: Are they too expensive? Would they cause disruptions? Are you worried that it would take a long time for your staff to get up to speed in using an EHR?

a. What, if anything, might make you want to get an EHR?

Moderator: For **Question I-A-2 and I-B-3**, you may list the following functions on a dry erase board flip chart, or show card to facilitate discussion, or in virtual focus groups, refer to slide on screen (if web-based) or item in material sent to participants in advance.

- Patient demographics
- Medication lists
- Medication orders
- Problem lists
- Medication allergy list
- Sending prescriptions to pharmacy
- Checking for drug interactions
- Clinical decision support
- Public health reporting

Moderator: After hearing responses to **Question I-A-2**, put a box around the items that participants use frequently.

For those of you who do have access to an EHR:

I-A-1. Some of you may practice in more than one location. If so, do you use more than one EHR system?

a. Has switching between systems posed any particular challenges to you? Please explain.

b. Are you able to use of all of the functions available in all of the EHR systems you use?

I-A-2. FOR IN-PERSON GROUPS: Now, Trish MacTaggart will put up a list of functions that EHR systems often have. For those of you who have an EHR system, which of these functions are you using on a regular basis? Are there others that you're using that we didn't list?

FOR VIRTUAL GROUPS: Please pull out the visual aid from the material we sent you called "Show card 1." For those of you who have an EHR system, which of these functions are you using on a regular basis? Are there others that you're using that we didn't list? As we go through the list, we'll ask you to put a box around those that we hear people using most frequently.

I-B-3. Now, I'd like to talk about some specific EHR functions that are available.

(Assuming these will all be virtual focus groups): Please pull out the visual aid from the material we sent you called "Show card 1." Which of the functions would be most helpful to you, if you were to use an EHR? Which are the most intimidating?

I-A-3. Now, please look at those functions that do *not* have a box around them—the functions you say aren't being used very frequently. Why is it that you don't use this so much?

a. Would you like to use any of these functions more often?

b. IF YES: Why aren't you using (NAME SOME SPECIFIC FUNCTIONS) more often?

I-A-4. Now, for the functions that you are using, the ones that are in the box - would you say you use these functions for all patient records, most patient records, or fewer than half of your patient records?

a. Why is it that you aren't using these functions for all of your patients?

PROMPT: Are they not relevant? Are they difficult to use, or find in your system?

Now I'm going to step back and ask you to think about how you:

- FOR GROUP A: ...selected an EHR and made your transition to using EHRs in your primary practice
- FOR GROUP B:might select an EHR in the future

I-AB-2. What were (are) the characteristics of an EHR that affect(ed) your selection of a particular EHR system?

Moderator: For **Question I-AB-2**, probe for concerns about having an EHR that meets the needs of special populations (e.g. children, patients with special needs.) Listen for differences between provider types (e.g., dentists, midwives, pediatricians.)

Moderator: For **Question I-AB-3**, you may prompt to see if there are other provider types, like behavioral health providers, that participants would like to share electronic health information with for better care coordination of Medicaid patients.

I-A-5. Once you installed the EHR system you use in the location where you see the most patients (we'll call this your primary practice), how long did it take for you to feel comfortable using the system?

a. What was the transition period like?

PROMPT: Did you feel like you were wasting a lot of time looking for ways to record something?

b. Did you feel uncertain that the system would capture the information you needed recorded?

c. Did your patient interactions change during this period?

I-AB-3. Do you know whether other types of providers in your area—like nursing homes, community mental health centers, or emergency departments—are able to transmit or accept electronic information?

a. In what ways does that affect your interest in using an EHR?

b. How did that influence the timing of your adoption?

c. IF THE OTHER PROVIDERS HAVE NOT ADOPTED: Do you think you would use your EHR more (or choose to adopt sooner) if other providers in your area were using EHR systems.

I-A-6. Are the other clinicians in your office (health center) using the system more than you, less than you or about the same as you?

I-A-7. Is there a management team at your practice (health center) encouraging you to make use of the EHR system you have? If so, in what ways?

I-A-8. Do you know whether your practice (health center) is using an EHR that is certified, or is seeking certification in order to participate in the incentive program?

a. How important is having a certified EHR to the selection decision at your practice?

Moderator: For Question I-A-8, be prepared with a brief description of certification and the certification process.

- Any difficulties in upgrading to a certified EHR product?

Moderator: Question II-A-9 is about the use of structured data. It is intended to help understand how much difficulty is experienced by clinicians in using some structured data—since Stage 2 MU will require greater use of structured data.

Stage 1 measures that require structured data include:

- a) demographic data
- b) height
- c) weight
- d) blood pressure
- e) diagnoses
- f) medications and medication allergies
- g) lab test results

The standards for these data items are SNOMED-CT (Systematized Nomenclature of Medicine Clinical Terms), and LOINC (Logical Observation Identifiers Names and Codes).

Moderator: For Question II-A-11 you may write the items **a-g** on a dry erase board or use show card 2 if it helps participants.

When asking about challenges in using these functions, probes to use:

- Differences between provider types (if any).
- Why certain functions are challenging to use.

Section II (applies to Group A only)—Specific Uses (10-20 minutes)

Let's talk a little bit more about how you use the EHR system.

II-A-9. Most of the EHR systems want you to record some information using structured data. This means data that is standardized, and could be entered in drop-down boxes, buttons, and check boxes. This may also mean that entering non-standard data would result in an error message. You cannot easily change the formatting, but this makes it easy to retrieve and compile information.

- a. How do you feel about using this structured data?
- b. PROMPT: What do you like and dislike about structured data?
- c. PROMPT: Are there specific instances when having to use structured data frustrates you? Does it make things easier for you? Please explain.

II-A-10. Does using structured data make it easier or more difficult for you to enter orders, to code diagnoses, or to enter prescriptions?

- a. Do you find the word choices or units of measurement (i.e. for a drug dosage, volume, weight) are appropriate for your use?
- b. Does anything about the use of structured data conflict with what you learned in your medical or dental training?

II-A-11. Now I'm going to list some functions that a provider will need to use frequently in order to qualify for the Medicaid EHR incentive payment. For each one of them, please tell me if you currently use this function in your EHR. I'm then going to ask you about the challenges you face in using these functions.

Functions related to patient engagement:

- a. Provide a clinical summary to patients after their visits.
- b. Provide an electronic copy of patients' health information upon request.
- c. Provide patients with access to their own health information online.
- d. Identify patient-specific education resources to provide to patients.
- e. Send reminders to patients for preventive and follow-up care.

Functions related to maintaining patient records:

- f. Record race, ethnicity, and preferred language of your patients in their medical record.
- g. Record smoking status for patients 13 years of age or older.

Functions related to clinical decision support

- h. Implement a drug formulary check system, with access to at least one drug formulary.
- i. Create growth charts for children.

Functions related to electronic information exchange

- j. Share information electronically in your area with specialists, labs, pharmacies, nursing homes, or hospitals.
- k. Electronic prescribing.

Other

- l. Report clinical quality measures.
- m. Generate list of patients by specific conditions for quality improvement or other activities.
- n. Perform medication reconciliation at times of transitions between care settings.
- o. Provide a summary care record for patients who transition from your practice or are referred elsewhere.

Moderator: For **subparts a-e**, which reference patient access to information, probe or listen for any characteristics of the Medicaid population that might impede their participation in patient/family engagement activities.

Moderator: For **subpart k** you may prompt with “Transmitting prescriptions electronically requires pharmacies to be able to accept them. Patients also need to be able to identify the pharmacy they want to go to.” Listen for barriers that might be related to Medicaid patient population characteristics. For example, they may be mobile and not have the same pharmacy to fill chronic disease medications. If participants identify Medicaid-specific barriers, ask why they think those barriers exist?

Moderator: For **subpart l**, listen for any concerns about the relevance of clinical quality measures for meaningful use to the Medicaid provider population.

Moderator: *After* getting responses to question III-AB-4, take questions about the general features of the Medicaid incentive program.

If some information is necessary, post a list of facts about the Medicaid EHR incentive program. For virtual focus groups, have slides prepared or refer to materials distributed in advance.

Moderator: For Question III-AB-5, follow up with prompts about whether participants had any difficulty determining the percentage of Medicaid patient encounters or patients.

- For private practice providers, any concerns about tracking patients by payer?
- For CHCs and RHCs, any concerns about calculating their proportion of “needy individuals” vs. Medicaid/CHIP?
- For both—is Medicaid insurance status stable enough over a 90 day period to get a snapshot of percentage patient encounters attributable to Medicaid?

Moderator: Before leaving Section III, ask if there are any providers that serve Medicaid patients from more than one State. If so, ask if they have issues with selecting the State from which to apply for the incentive program, if not already mentioned.

Section III—Effect of the incentive programs on EHR selection/adoption/use (20 minutes)

Now, let’s talk about the Medicaid EHR Incentive Program more specifically. Right now the state Medicaid program is or will be offering monetary incentives for health care providers to adopt and make use of certified EHR systems.

III-AB-4. Would you say that you are familiar with the Medicaid EHR Incentive Program?

- a. If so, where have you gotten information about the program?
- b. What is your understanding of how the program works?
- c. On what aspects of the program would you like clarification?

III-AB-5. One of the requirements for receiving Federal incentives is having a certain proportion of your patient encounters with Medicaid patients. About what percent of your patient encounters in the last three-month period were Medicaid recipients?

- a. Out of curiosity, how did you arrive at that number?

III-AB-6. How much does this program influence whether you would adopt a certified EHR, upgrade to another EHR, or use your EHR according to the meaningful use criteria?

- a. Are there any of you who are affected other providers in your practice, who might qualify for the Medicare EHR Incentive Program but not the Medicaid EHR Incentive Program? How so?

III-AB-7. Are these incentives enough to cause you to make more use of EHR systems?

Section IV—Factors that may facilitate meaningful use (15 minutes)

I'd like to ask you about any help that you may have received (or will receive) in adopting and using an EHR.

IV-AB-8. What organizations or entities, if any, have you turned to for help in selecting your EHR (or will help you select) an EHR?

IV-AB-9. Were there any that helped train you in using it? (For non-adopters, do you anticipate anyone might be assisting you in using an EHR you have adopted?) This may include vendors, health center networks, hospital administrators, or others.

IV-AB-10. Regional Extension Centers—or RECs—are located throughout the country to assist practices with fewer than nine health care providers adopt and use EHRs.

- a. Are you familiar with the REC in your area?
- b. What sort of support has your practice received from the REC?

IV-AB-11. Are commercial payers offering incentives for adoption or use of EHRs, or penalizing you for non-use of EHRs?

- a. What are some of those incentives?
- b. How much did policies of private insurers help you make up your mind about adopting an EHR system?
- c. Did private insurers not only influence whether you'd buy, but did they influence which type of EHR to buy? How?

Moderator: On questions IV-AB-8 and IV-AB-9, when discussing these questions with Community Health Centers or Rural Health Centers, probe for comments about the degree to which **Health Centered Controlled Networks** are operating in their areas, and if so, how useful they are in this regard.

Moderator: On Question IV-AB-10, if time allows, ask “What is the REC not doing that you think it should be doing?”

Moderator: On Question IV-AB-11, follow up with a probe, “Are there any quality initiatives that play a role in your decision whether to adopt/use EHRs?” Listen specifically for any mention of “medical home” or “patient-centered medical home.”

Moderator: On Question IV-AB-13, ask about benefits of using EHRs beyond EHR Incentive payments.

Consider probing for these factors (from AHRQ's *Will it Work Here?* Guide.):

- Awareness of peers who have had success with EHRs
- Belief there is evidence that EHRs improve quality.
- Benefits to organization (e.g., better working conditions, enhanced satisfaction)

IV-AB-12. Do you know if your State or local public health department has the ability to accept electronic health data for your patients, for example, immunizations, or syndromic surveillance information?

IV-AB-13. Is there anything I didn't ask about that may influence your decisions about the adoption and use of EHRs?

Section V—Technical assistance (10 minutes)

V-AB-14. Have you been offered any assistance to help ensure that you satisfy the meaningful use requirements and eligibility requirements for the EHR incentive program? What type of assistance do you most need?

I can see we have time for one more question.

V-A-12. Are there any barriers to using specific functions within an EHR system, which we may not have mentioned yet?

V-B-4. Are there any barriers to adopting, implementing, upgrading an EHR system which we may not have mentioned yet?

Moderator: For **Question V-A-12 and V-B-4**, probe for:

- Barriers specific to Medicaid providers, and if so, why
- Broadband connectivity
- Appropriateness of clinical quality measures required for demonstrating meaningful use
- Any laws or regulations that are in place that you think conflict with the goal of using an EHR systems
- Factors from AHRQ's *Will it Work Here?* Guide, such as:
 - o Concern about scope of change
 - o Costs (financial and otherwise)
 - o Lack of leadership
 - o Risks
 - o Organizational culture
 - o Past failures

Moderator: Check with Trish MacTaggart and WVMi for any final questions and clarifications they think necessary.

Closing (5 minutes)

FOR BOTH VIRTUAL AND IN-PERSON GROUPS: Thank you very much for your time. Your comments and insights will be very helpful.

FOR VIRTUAL GROUPS: You should receive a check in the mail in about 10 days. If you do not, please contact me and I will look into any delays. Thank you again for your cooperation.

Barriers to Meaningful Use in Medicaid Show Cards

Information to be displayed during focus groups. For in-person focus groups, this information will be distributed in hard copy and posted on signs displayed on easels. For virtual focus groups, the information will be distributed electronically or displayed on the web conferencing interface.

Show Card 1

- Patient demographics
- Medication lists
- Medication orders
- Medication allergy list
- Problem lists
- E-prescribing
- Drug-drug interaction checks
- Clinical decision support
- Public health reporting

Show Card 2

Stage 1 measures that require structured data include:

- demographic data
- height
- weight
- blood pressure
- diagnoses
- medications and medication allergies
- lab test results

Show card 3

Functions related to patient engagement	Functions related to maintain patient records	Functions related to clinical decision support	Functions related to electronic information exchange	Other
<ul style="list-style-type: none"> ■ Provide a clinical summary to patients after their visits ■ Provide an electronic copy of patients' health information upon request ■ Provide patients with access to their own health information on line ■ Identify patient-specific education resources to provide to patients ■ Send reminders to patients for preventive and follow-up care 	<ul style="list-style-type: none"> ■ Record race, ethnicity and preferred language of your patients in their medical record ■ Record smoking status for patients 13 yrs of age or older 	<ul style="list-style-type: none"> ■ Implement a drug formulary check system, with access to at least one drug formulary ■ Create growth charts for children 	<ul style="list-style-type: none"> ■ Share information electronically in our area with specialists, labs, pharmacies, nursing homes or hospitals ■ Electronic prescribing 	<ul style="list-style-type: none"> ■ Report clinical quality measures ■ Generate list of patients by specific conditions for quality improvement or other activities ■ Perform medication reconciliation at times of transitions between care settings ■ Provide a summary care record for patients who transition from your practice or are referred elsewhere