Arizona Medical Information Exchange (AMIE)
Behavioral Health Pilot Evaluation

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0. **Executive Summary**

Focus group results

- Most often, users cited <u>increased patient-specific clinical information</u> as the biggest benefit of AMIE. Specifically, medication history was most frequently mentioned as the most useful record type, followed by laboratory values.
- Half the user groups indicated that **AMIE met their expectations** while the remainder indicated they <u>would like more information</u> (more record types, more patients, and access to the drug treatment medication lists).
- Respondents indicated that the **biggest barriers to AMIE use** were: 1) time; 2) technical difficulties (remembering password, finding the AMIE site, and timing out too quick); and 4) not finding enough of their patients in the database.
- Over half of the user groups said that AMIE **had made an impact on their clinical decisions.**
- Respondent consensus was that **AMIE will decrease health care costs**.
- Sites reported varying methods of incorporating AMIE into their workflow. These included having: 1) providers look up all his/her scheduled patients at the beginning of each shift; or 2) administrative personnel query AMIE for all Medicaid patients and communicate with to the provider when information was found (via printing and placing the information in the patient chart).
- Some sites reported less than optimal AMIE use due, in part, to the lack of a systemic method for incorporating AMIE into the site workflow.
- The vast majority of respondents agreed that it was too soon to tell if AMIE had improved their **efficiency** but they agreed that it does have that potential.
- The vast majority of respondents indicated they **would recommend AMIE to other providers.**
- Respondents **requested that more information be added to AMIE**. Specific recommendations included: 1) information from nearby hospitals; 2) substance abuse medications; 3) laboratory values from other providers; 4) children's hospital discharge information; and 5) specialty notes.
- One user group recommended including the patient social security number as a search option. They noted that it was difficult to find patients who had had a name change in the AMIE database.
- Overwhelmingly, respondents indicated that the **best thing about having access to AMIE was the additional patient information** that it provides.
- Most user groups did not mention **the worst thing about using AMIE**. However, a few mentioned the need for additional record types and additional patients to be added to AMIE to increase its' value. Others mentioned technical difficulties such as remembering passwords.

<u>Conclusions</u>
- Respondents:
    - Believe AMIE has the potential to help increase the quality and safety of health care while decreasing costs.
    - Would like more information (record types, patients, and substance abuse medications) to be included.
    - Need assistance with incorporating AMIE into their workflow to optimize use.

<u>Selected Respondent Quotes</u>

- Potential benefits of AMIE
    - AMIE will "decrease duplication" and "allow us to cut down on medical errors."
    - "I found it very useful because we actually have to request a lot of records form other agencies and that makes it better for us because we don't have to make any calls, we can just look it up in the system and everything can just be pulled off of AMIE."

- o "We're hoping is to increase patient safety so that we all know what everybody is prescribing a and have that coordination of patient care for safety and for the best care for the patient."

- Expectations of AMIE
  - o "I like the way that the information is exchanged."
  - o "It has absolutely fulfilled my expectations for medications. It's really exceeded it as long as the patient is on AHCCCS."

- Impact of AMIE on costs
  - o "… we have an opportunity to have a discussion with them about the side effects and the importance of medication compliance and also patient safety because that's an opportunity to work with the collaborative relationship with some of the PCP's and reducing the amount of medications that some of these patients are on."
  - o "This is going to be a costs savings for the state."
  - o "We can identify options that have been fruitless/not tolerated in the past – so I will not prescribe that."
  - o "[There will be] less medication and class duplication. Can talk to patient about safety and quality and reduce the amount of medications the patient is on."

- Impact of AMIE on clinical decisions
  - o "I think that it will definitely help to guide how we prescribe as well as it may help in terms of how we direct treatment…"
  - o "[We] found medications we had no idea people were on …"
  - o "[We] used AMIE to make sure patient was getting their medication filled."
  - o "Well I can think of at least one patient that is on controlled substances and has a borderline personality disorder and has been in and out or urgent care […] and been released and somebody at some clinic did put her on a controlled substance, and it's been more difficult to manage her because she has a tendency to overdose and come in with a petition because she's suicidal, so it's nice to know that data when we have her come in and out. Also, she's on insulin and she tends to overdose on the insulin and it's a lot of attention getting things, but it's nice to see who's prescribing what, when and where so we can track her clinically. In addition to her attention-getting threats."

- Integration of AMIE into the workflow
  - o "…so for us, it's more of a tool that we have to learn to integrate into our flow."

- Impact of AMIE on efficiency
  - o "It's saving time for us and our clients and also providing a lot more information that a clients will not always disclose to the psychiatrist."
  - o "AMIE is available 24/7, so I find it very efficient. I think I'm saving a lot of time."
  - o "We don't have to be contacting any staff it's just very efficient"

- Would you recommend AMIE?
  - o "Yes, because the more they use it, the more likely it's going to contain something that is useful for me.
  - o "Yes, it provides a lot of useful information for the doctors …"

 What other information should AMIE include?
  - o "One of the issues that I have is that some of the confidentiality medicines are left off and those are exactly the meds that I am looking for."

- What is the best thing about AMIE?
  - o "[The] potential [to] exchange of information and to collaborate with other providers to give the patient the best overall care."

- What is the worst thing about AMIE?
  - "Not enough information."
  - "Just trying to figure out how to login and everything and the passwords"

Abstract

**Background**: Funded through the Federal Medicaid Transformation Grant Program, the Arizona Health Care Cost Containment System (AHCCCS), Arizona's single Medicaid Agency, developed the Arizona Medical Information Exchange (AMIE - also referred to in this report as the Viewer), a prototype system for the secure exchange and display of medical information. Authorized behavioral health (BH) clinician users were granted access to AMIE's secure web-based application on in March 2009. This pilot included 26 AHCCCS BH providers affiliated with four regional behavioral health authority (RBHAs) who practiced in outpatient clinics and private offices. Through AMIE, the BH cohort was equipped with web-based access to medication history, recent laboratory test results, and hospital discharge summaries across the systems for a small number of their patients.

**Methods**: The AMIE user outcomes assessment consisted of pre and post: 1) print-based questionnaires; and 2) focus groups or personal interviews.

**Results**: Eight-eight percent (23 out of 26) of AMIE BH users participated in the baseline focus groups and 46% (12 out of 26) of users participated in the post focus group. Therefore, the response rate will change.) As can be seen in Table 1, the questionnaire response rate was very low and therefore the data are unusable. Therefore, this report will focus on information gathered during focus groups.

Most respondents mentioned that AMIE would improve patient health outcomes by increasing efficiency and information access while decreasing duplication and medical errors. Findings from the focus groups indicate that when the physicians found patient information in the AMIE it positively impacted their clinical decisions by allowing them to clarify treatment plans, check on compliance. Medication history was perceived as the most useful record type but many focus group interviewees indicated the need to include medications that are now screened from AMIE inclusion. Overall, participants would recommend AMIE to other providers because it fulfilled their expectations and demonstrated to be a support tool that improves health care.

**Conclusions**: AMIE proved to be usable and functional. It was viewed positively and some benefits were identified. However, the impact of AMIE on health care quality and costs may become more evident when more practitioners and data providers are included. Overall, participants agreed that the AMIE was successful.

1. Background

Funded through the Federal Medicaid Transformation Grant Program, the Arizona Health Care Cost Containment System (AHCCCS), Arizona's single Medicaid Agency, developed the Arizona Medical Information Exchange (AMIE - also referred to in this report as the Viewer), a prototype system for the secure exchange and display of medical information. Authorized behavioral health (BH) clinician users were granted access to AMIE's secure web-based application on in March 2009. This pilot included 26 AHCCCS BH providers affiliated with four regional behavioral health authorities (RBHAs) who practiced in outpatient clinics and private offices. Through AMIE, the BH cohort was equipped with web-based access to medication history, recent laboratory test results, and hospital discharge summaries across the systems for a small number of their patients.

2. Methodology

The AIME POC users were recruited by AHCCCS personnel over the past 12 months. Inclusion criteria included RBHA clinicians with AHCCCS affiliation, who are licensed in Arizona, and were endorsed or recommended by executive leaders from their places of employment. In addition, AIME BH pilot users were required to commit time to participate in training and feedback meetings. Institutional Review Board (IRB) approval to conduct AMIE evaluation was granted by corresponding authorities at the University of Arizona. Participants were informed of all evaluation activities during the first focus group discussion and an informed consent form signed by each AMIE participant was collected (See Appendix A).

For this study both focus groups and survey research methods were used. Mixed methods are important when determining validity and reliability because they involve the use of more than one method to develop and confirm data.

Print-based questionnaires

The questionnaire was adapted from the AMIE POC evaluation. That is, in an effort to streamline the evaluation process, the researchers analyzed each question contained in the AMIE POC evaluation questionnaires based on the POC responses. This led to a recommendation to limit the questionnaire items to only those that produced the most beneficial results in the POC. The final survey consisted of 15 Likert scale items with the response options: "Strongly Disagree," "Disagree," "Agree," and "Strongly Agree." In addition, it included 1 frequency scale question with responses "Never," "Rarely," "Often," and "Always." Both types of questions included a "Not Applicable" option. This questionnaire also included 11 open-ended items designed to quantify the impact AMIE had on care (see appendix A). The pre questionnaires were distributed in March 2009 and final measurement questionnaires were distributed in May 2009.

Focus groups and personal interviews

The focus group discussion guide was also adapted pursuant to responses received in the POC. Participants were asked to participate in 2 group sessions (a pre and post

AMIE use focus group) (See Appendix D). Each focus group lasted 20-45 minutes. To increase participation, personal or phone interviews were scheduled for clinicians unable to attend focus group sessions. During discussions, clinician responses were recorded on an audio-cassette while an author typed the participants' answers and comments verbatim into a word processing computer program. Written transcripts were checked with the audio-cassette for accuracy.

3. Response Rate

Table 1 presents a list of response rates for the evaluation activities. Eight-eight percent (23 out of 26) of AMIE BH users participated in the baseline focus groups and 46% (12 out of 26) of users participated in the post focus group. Therefore, the response rate will change.) As can be seen in Table 1, the questionnaire response rate was very low and therefore the data are unusable. Therefore, this report will focus on information gathered during focus groups.

Table 1: AMIE User Participation in Evaluation Activities

Viewer User's Last Name	Organization	Pre Q.	Post Q.	Pre Focus Group	Post Focus Group
Ainsworth	NARBHA	0	0	1	1
Ehrgott	NARBHA	0	0	1	1
Evans	NARBHA	0	0	1	1
Ford	NARBHA	0	0	0	1
Gagliardi	NARBHA	0	0	1	1
Kennedy	NARBHA	0	0	0	1
Sims	NARBHA	0	0	1	1
Taylor	NARBHA	0	0	0	1
Rodriguez	CENPATICO	1	0	1	1
Torres	CENPATICO	1	0	1	1
Villegas	CENPATICO	0	0	1	1
Barnes	MAGELLAN	0	0	1	0
Cline	MAGELLAN	0	0	1	0
Diaz	CPSA/LC	0	0	1	0
Whiting	CPSA/LC	0	0	1	0
Zurita	CPSA/LC	0	0	1	0
Bernard	CPSA/P	0	0	1	0
Dupper-Knopper	CPSA/P	0	0	1	1
Masterson	CPSA/P	0	0	1	0
Rodriguez	CPSA/P	0	0	1	0
Sellars	CPSA/P	0	0	1	0
Cherukuri	UPC	0	0	1	0
Horning	UPC	0	0	1	0
Jain	UPC	0	0	1	0
Rauscher	UPC	0	0	1	0
Williamson	UPC	0	0	1	0
N=26					
Overall Response Rate				**23/26**	**12/26**

Q.= Outcome Questionnaire; 1= Completed; 0= Not Completed

4. Results

4.1.1 Potential Benefits of AMIE

Participants reported positive expectations regarding the clinical utility of AMIE. Most respondents mentioned that AMIE would improve patient health outcomes by increasing efficiency and information access while decreasing duplication and medical errors. Likewise, participants expressed positive attitudes towards the potential benefit of AMIE on efficiency and workflow. Representative quotes are included below.

> AMIE will "decrease duplication" and "allow us to cut down on medical errors."

> "I found it very useful because we actually have to request a lot of records form other agencies and that makes it better for us because we don't have to make any calls, we can just look it up in the system and everything can just be pulled off of AMIE."

> "We're hoping is to increase patient safety so that we all know what everybody is prescribing a and have that coordination of patient care for safety and for the best care for the patient."

> "We don't have to make any calls, we can just look it up in the system and everything can just be pulled off of AMIE."

4.1.1 What are the barriers to using AMIE?

As in the AMIE POC evaluation, the focus groups served as a time for discussing AMIE's functionality. Respondents indicated that the biggest barriers to AMIE use were: 1) time; 2) technical difficulties (remembering password, finding the AMIE site, and timing out too quick); and 4) not finding enough of their patients in the database. However, as educational theory suggests, even with the best training, learners can integrate only a limited amount of information at any given time. Therefore, many opportunities were seized by the investigators and by AHCCCS staff to retrain, provide additional information, and to clarify misconceptions at the time of the focus group session. A representative quote is included below.

> " I didn't know it was accessible to people without AHCCCS."

4.1.2 Other Information that Should be Included in AMIE

During focus group sessions, some attributed not experiencing AMIE benefits to using AMIE periodically. In general, AMIE users would like AMIE to include more data types and to engage additional data providers, especially hospitals in areas closer to the BH facilities (i.e., outside Phoenix).

> "I have found the information that I've gotten from Amie has been helpful and well worth the time, but it would be even more helpful to have more data providers so that we could have increased access to information."

Many focus group interviewees indicated the need to include medications that are now screened from AMIE inclusion. A representative quotes is included below.

"One of the issues that I have is that some of the confidentiality medicines are left off and those are exactly the meds that I am looking for."

4.1.3   AMIE Impact on Health Care Costs

Most respondents agreed that the information obtained from AMIE has the potential to decrease health care costs. Focus group sessions identified that AMIE avoided redundant testing. Representative quotes are included below.

"… we have an opportunity to have a discussion with them about the side effects and the importance of medication compliance and also patient safety because that's an opportunity to work with the collaborative relationship with some of the PCP's and reducing the amount of medications that some of these patients are on."

"This is going to be a costs savings for the state."

"We can identify options that have been fruitless/not tolerated in the past – so I will not prescribe that."

"[There will be] less medication and class duplication. Can talk to patient about safety and quality and reduce the amount of medications the patient is on."

"…that's an opportunity to work with the collaborative relationship with some of the PCP's and reducing the amount of medications that some of these patients are on."

"We don't have to be contacting any staff it's just very efficient."

4.1.4   AMIE Impact on Clinical Decisions

Findings from the focus groups indicate that when the physicians found patient information in the AMIE it impacted their clinical decisions. Focus group participants revealed that AMIE helped:

- to make better decisions

"[We] found medications we had no idea people were on …"

"I think that it will definitely help to guide how we prescribe as well as it may help in terms of how we direct treatment…"

"AMIE affects my decision when I come across a medication that I don't know that they're on and that they haven't told me they are on."

- clarified treatment plans

"Well I can think of at least one patient that is on controlled substances and has a borderline personality disorder and has been in and out or urgent care […] and been released and somebody at some clinic did put her on a controlled substance, and it's been more difficult to manage her because she has a tendency to overdose and come in with a petition because she's suicidal, so it's nice to know that data when we have her come in and out. Also, she's on insulin and she tends to overdose on the insulin and it's a lot of attention getting things, but it's nice to see who's

prescribing what, when and where so we can track her clinically. In addition to her attention-getting threats."

- check on patient compliance

"[We] used AMIE to make sure patient was getting their medication filled."

4.1.5   AMIE Impact on Efficiency

Participants incorporated AMIE into their workflow in different ways. Some expressed they checked AMIE before seeing the patient while others preferred to do it during or after the patient visit. Focus group sessions revealed that the impact on workflow varies depending on the type of practice and workflow. Many participants agreed that it is faster to get records from AMIE than to request them from other practitioners or to obtain them directly from the patient.

- Integration of AMIE into the workflow

"…so for us, it's more of a tool that we have to learn to integrate into our flow."

"We are really using it to validate that they are not on something we don't know."

- Impact of AMIE on efficiency

"It's saving time for us and our clients and also providing a lot more information that a clients will not always disclose to the psychiatrist."

"AMIE is available 24/7, so I find it very efficient. I think I'm saving a lot of time."

"We don't have to be contacting any staff it's just very efficient"

"I think timing is everything, especially with AMIE one of the advantages is you can check it right there and then."

"[AMIE is] more of a tool that we have to learn to integrate into our flow. And I'm not sure that, to me anyway, that I've been able to really evaluate that."

"AMIE is available 24/7, so I find it very efficient. I think I'm saving a lot of time. I've struggled in the past with other agencies; sometimes it would take about a week or two weeks to get clients information or sometimes they would even send it at all, or send it by mail. So it's very fast and efficient. I find it a useful tool."

4.2   Other Findings from Focus Group Sessions

Overall, participants would recommend AMIE to other providers because it fulfilled their expectations and demonstrated to be a support tool that improves health care. Most users agreed that AMIE should be available for all health care practitioners. The majority also acknowledged that it is important to increase the number of practitioners in order to observe a bigger impact in health care quality. Representative quotes are included below.

So far, has the Viewer fulfilled your expectations? Why/why not?

> "It has absolutely fulfilled my expectations for medications. It's really exceeded it as long as the patient is on AHCCCS."

> "I like the way that the information is exchanged."

> "It has absolutely fulfilled my expectations for medications. It's really exceeded it as long as the patient is on AHCCCS."

> "One of the issues that I have is that some of the confidentiality medicines are left off and those are exactly the meds that I am looking for."

Would you recommend AMIE to other providers? Why/why not?

> "Yes, because the more they use it, the more likely it's going to contain something that is useful for me.

> "Yes, it provides a lot of useful information for the doctors …"

> "Yes because of continuity of care and patient safety with controlled substances and if you have lab values recently you could check to start a mood stabilizer on the observation unit and rule out medical etiologies. It's helpful for patient safety, too."

When asked what the best part of AMIE was, participants mentioned the technical aspects of the project and having additional clinical information to provide better care. Most of participants also identified the limitation in data available as the worst part of AMIE as well as the major barrier to its use. Participants expressed the need to continue operating AMIE after the HB evaluation Representative quotes are included below.

What is the best thing about AMIE?

> "[The] potential [to] exchange of information and to collaborate with other providers to give the patient the best overall care."

What is the worst thing about AMIE?

> "Not enough information."

> "Just trying to figure out how to login and everything and the passwords"

> "Just trying to figure out how to login and everything and the passwords. … get a universal login somewhere someday, that would be nice."

> "The timing out and having to log back in after I've already put in the patient information sometimes it will then […] log me out and I've lost that information so that's kind of annoying."

> "Is there any way that the social security number can be added to that?"

5. Limitations

Findings of this study should be considered in view of some limitations. Given the voluntary nature of participation, (i.e. no random selection) selection bias may have been influenced results. The results of this study are limited by the response rate and to the clinical domain of the AMIE participants; there is a small number of participants in the AMIE BH evaluation.

We have provided an overview of clinician attitudes of AMIE therefore recall bias may be present thus underestimating results. To be able to obtain more accurate measures (i.e. economic outcomes) we recommend pursuing a retrospective analysis using medical and pharmacy claims data where findings do not rely upon the physician recall process. Results from this study indicate that participants believe that having AMIE information, especially medication history, has a positive effect on health care services. Therefore future studies should examine these aspects closely. An additional consideration is that the evaluation process took place during the AMIE learning phase; some users may overcome learning barriers faster than others thus providing more positive feedback or results may differ after the learning curve.

6. Recommendations

- Increase the number of AMIE adopters with the end goal of have access to AMIE by all members of the health care team.
- Increase the number of patient records and data providers, eventually expanding such that AMIE can be utilized as a statewide information sharing system for Arizona.
- Future studies should investigate the economic impact of AMIE through a controlled designed study (i.e. retrospective data base analysis with control group).
- A targeted educational effort that includes success stories from the AMIE BH evaluation may be useful to improve clinicians' adoption that present low AMIE use.
- Include the screened Behavioral and Mental health data in AMIE.
- Provide AMIE users with additional assistance concerning how to incorporate AMIE into their workflow to optimize use.

7. Conclusion

AMIE proved to be usable and functional. It was viewed positively and some benefits were identified. However, the impact of AMIE on health care quality and costs may become more evident when more practitioners and data providers are included. Overall participants agreed that the AMIE was successful.

APPENDIX A: OUTCOMES QUESTIONNAIRE

Arizona Medical Information Exchange (AMIE) Behavioral Health Pilot Questionnaire

ID #_____

Directions: Using the scale provided, please rate each statement by circling the response that best describes your response. **The goal of this portion of the questionnaire is to evaluate the operability and usability of AMIE.** NA= Not applicable

1. The data in AMIE are easy to use.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
2. The data in AMIE are timely	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
3. As displayed, the information in AMIE are easy to understand.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
4. AMIE helps me get better patient information	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
5. AMIE helps me get patient information faster.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
6. Getting clinical information with AMIE saves me time when providing care.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
7. Getting clinical information with AMIE decreases health care costs.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
8. Using AMIE decreases duplication of health care services.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
9. Using AMIE reduces the probability of medication errors.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
10. The quality of my decisions has improved because of using AMIE.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
11. The efficiency of my work has improved because of using AMIE.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
12. Getting clinical information with AMIE saves resources for my practice setting (i.e. fax, mail, phone, calls).	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
13. How often does using AMIE have an impact on your decision making process at the point of care?	Never	Rarely	Often	Always	NA
14. **AMIE** decreases duplicate therapy.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
15. The medication reconciliation process is improved by using AMIE because it provides more complete patient information.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA
16. I feel that patient safety has improved because of using AMIE.	Strongly Disagree	Disagree	Agree	Strongly Agree	NA

Directions: Please answer the following questions based on your experience with AMIE.

Because of AMIE, in the last 7 days …

    how many fewer lab tests did you order? _____

    what types of lab tests did you not order? _____

    how many fewer imaging studies did you order? _____

    what types of imaging studies did you not order? _____

    how many fewer prescriptions did you order? _____

    what types of prescriptions did you not order? _____

    how many fewer patients did you admit to the hospital? _____

    how many times did you not order medical records by courier? _____

    how many minutes less did you spend evaluating each patient? _____

    how many minutes more did you spend evaluating each patient? _____

Comments:_____

APPENDIX B: PROVIDER FOCUS GROUP DISCUSSION GUIDE

1. Completion of paper based survey [10-15 minutes]

2. Introductions [5 minutes]

3. Facilitated Discussion [35-40 minutes]

Welcome, and we'd like to thank you for coming today. My name is Dr. Terri Warholak, and I'm accompanied by Ana Hincapie. I am a faculty member at the University Of Arizona College Of Pharmacy and she is a graduate student from the same department. As you know, we would like you to share with us more specific experiences you have had using the Viewer, so that, we will be able to have insightful feedback of this tool…

Because we are very interested in exactly what each of you have to say, this discussion will be recorded on audio tape. I want to make certain that everyone agrees with this. [*Review consent form out loud; address any questions, have participants sign a copy, and collect the signed copies.*] [Moderator will make notes next to each participants name to guide further discussions] Okay, let's get started with our discussion. I'm going to turn on the recorder.

Possible questions:
Expectations
1. What are the potential benefits of the viewer?
2. So far, has the Viewer fulfilled your expectations? Why/why not?
3. What are the barriers to using the viewer?

Outcomes experienced thus far
If you have not already mentioned it…
4. What impact has the viewer had on your clinical decisions so far? Examples?
5. What about efficiency? Please provide examples.
6. Do you think the Viewer decreases or increases health care costs? How?

Work flow
7. How have you integrated the Viewer into your work flow?

Expansion to other providers
8. Would you recommend the Viewer to other providers? Why/why not?

Recommendations for AHCCCS
9. What other information is important to include in the Viewer?

Best and worst
10. So far, what is the best thing about using the Viewer?
11. So far, what is the worst thing about using the Viewer?

Conclusion [5 minutes]

Now I'd like to give our AHCCCS observers the opportunity to ask any additional questions. As we finish, what else would you like to say about this topic that you have not had a chance to say already? Any concerns, challenges, or expectations we have not discussed? Thank you very much for your participation today. Your views and experiences you've shared with us will be a great help as we work to improve the Viewer and we very much appreciate your time. Will see you next month!

APPENDIX C: PROVIDER FOCUS GROUP DISCUSSION TRANSCRIPS

Date: March 20, 2009
What: Baseline Measurement: BH AMIE FIG UPC MAGELLAN
Who: Barnes, Cline

1. What are the potential benefits of the viewer?

A. As the potential benefits, I would expect that I would be able to transfer information between the practicing medical physicians and primary care physicians to receive not only updated medication prescription information as well as basic physical history. I would also expect to exchange updated information in terms of medication changes, use of also any abuse of substances in particular, illegal substances. I would hope to also get some information in terms of updated family history, in terms of physical conditions as well as any other kind of mental health condition that I may not have been able to gather.

B. Well […] that Dr. Barnes mentioned, I think the additional benefit would be all the information that's available through not only AHCCCS but ADH Health and particularly the […] specialty populations like Medicare D, pharmacy information, that sort of thing, […] information, hospitalization information, and if the information on any hospital in PIMA county were available, that would be very beneficial. I like the way that the information is exchanged. It's very similar to the program that we're using here at […].

2. So far, has the Viewer fulfilled your expectations? Why/why not?

So far it hasn't, and I do apologize for not being able to fill the survey out. The intentions for me to use it was to assist Dr. […]. We are extremely spread thin right now as far as medical staff Dr. Barnes has had to wear many hats recently. But I think it would help out a lot of our needs as far as coordination of care with the primary care physician as Dr. Barnes mentioned before. But I think that's it thus far for me.

3. What are the barriers to using the viewer?

- Actually, I had trouble logging in this morning. I would like to see how it works, I'm just not sure if it would be okay for me to look up a specific client just as an example. I know that we are going to be trying to watch who we look up and what the reasons are, so that discouraged me a little bit today just for precautionary reasons. If we have an example subject that we could just pull up to just see how the system works, how the information is uploaded, what the log looks like.

You haven't had an opportunity to see anything yet?

No I haven't been able to look up a natural client because I haven't been in a situation where I am assisting Dr. Barnes. Rosemary Cline is actually his medical staff liaison but she doesn't have access to the system.

Rosemary how come you don't have access? Where you not on the original contribution list that Maria put together?

No I couldn't come that very first time you had the conference so I don't have anything…I mean I wouldn't know where to go or how to find it.

4. What impact has the viewer had on your clinical decisions so far? Examples?

Well I think that it will definitely help to guide how we prescribe as well as it may help in terms of how we direct treatment in terms of various […] in options. For instance, if we know that people have been tried on 10 different of 5 different medications and that they've had certain symptoms that we may not have, that perhaps the primary care physician has, then that will definitely help to guide us in terms of, for instance, antidepressant selection. I think, for me, the most important information will be in terms of really knowing a medical history, in terms of knowing also, if at all possible, a substance abuse history and how patients have actually utilized or over-utilized the use of pain medications. That's one of the most challenging feats that we do have today in psychiatry; trying to better understand if and when there's substance abuse history or if substance use is actually an issue. I think that the medical physicians (primary care physicians) can really be a key link in closing link in terms of people abusing substances. They hold so much information in regards to that. They're the prescribers of most of the pain medication and it would be really good to link in a communicate more directly with them.

5. Do you think the Viewer decreases or increases health care costs?

I think in terms of health care costs, obviously we are in a fiscal crunch right now, the state as a whole, as all of the states in the US are really crunching down in terms of numbers. The way I can envision saving from a containment strategy would be to not perhaps try options that have been fruitless in the past. If you know that, for instance, someone has not tolerated Cymbalta, an anti-depressant, it will help me not to prescribe something […] the rate of $120 a month. Just […] they really can't tolerate that medication. I think the duplication of services is something else that we can utilize with this system to cut down on the costs and provide some […] measures. For instance, if someone has had several bouts at a rehabilitation program and have not been successful, then perhaps we're not going to opt for that particular rehab. And I can see […] but I think the duplication of services, the streamlining of services, using more bulleted types of treatment based on history is going to just be really helpful.

6. How have you integrated the Viewer into your workflow?

I think it will probably be most helpful after a person's psychiatric assessment, when you are at that point in gathering information. I think also at the point of contact when people are first coming into the system to get a better, more rounded view, of what may be happening from a physical standpoint. Patients don't always know what to explain to their psychiatrists in terms of what sort of treatment they've had in the past or what kind of physical elements they are still being looked up for, or what is being considered at the time. So I think this system will have a huge impact in terms of getting a more rounded picture of how patients are actually being treated and what conditions they may have and that, I think, will just go a long way in terms of streamlining and really being exact with the kinds of treatments we can deliver.

Terri: So, if I understand you correctly, what I think you are saying is that you would have them, when the patient has their first contact with the office, at that point perhaps the medical assistants would assists you by looking up that patient on AMIE and perhaps…viewing the information at that time, would they then print it out for you and put it in a paper to give you or send you some type of notification that there's information on this patient that you may want to look at?

What I would say I would like to see is that, at that point, we could perhaps download or print out that information and it could be an add-in to the patient's job. I think that it's something that should actually follow patient's around as their permanent medical records because it will probably be very valuable information. For instance, if a patient has been treated for pancreatic cancer, you would want to know that because if they are going to present with a depressive episode is more than likely due to the pancreatic cancer or it can still be a likely source of the ongoing mood component. So that being part of a medical record would be valuable to know and again, it would cut down on the wastefulness or the unnecessary duplication of services within the entire system. If you already know, for instance, if someone has a thyroid condition then chances are you are probably not going to need to have them go to an endocrinologist's and have them worked up again and again. So very valuable in terms of, I believe, cost containment and more specific treatments.

7. What impact has the viewer had on your efficiency? Please provide examples.

In terms of efficiency, I think it's kind of hard to really say. I think, again, it probably will have a […] on what we include in terms of […] and not include and what we would have to consider in terms of possible reasons for certain conditions to be present. It probably has an impact on your efficiency, but I think, unlike in general medicine, you have more specific diagnostic testing that you can do. I think psychiatry still has a fair amount of just clinical reasoning that has to go making that […] as well as targeting treatment protocols. So I'm not so sure if […] won't just be utilized mostly just for gathering more of our history and being more complete. But of course the ongoing exchange with the primary care physician is, to me, very vital. So, I'm hoping this will provide that vehicle to do that.

Alba: Even just knowing that medication history […] because it often times […] don't have a full list or their not sure how to […] the medication so that alone saves a lot of time; or if they have any allergies, any reactions.

8. Would you recommend the Viewer to other providers? Why/why not?

I think that's difficult for me to say right now. I happen to have an opportunity to really utilize the system but theoretically, I think it would be something that I think every provider should be able to use in every

specialty because it will just provide for a much more complete picture of that individual or that patient that they are treating. For instance, if a woman comes into an OBGYN clinic and states that she has had several miscarriages, several pregnancies, and it does not seem likely that that would be the case, to know that she had a specific delusional disorder would really help that GYN physician not to do multiple diagnostic studies and various testing that just getting a more complete psychiatric history would alleviate that exploration. So I can see it being used in just about every field, really.

9. What other information is important to include in the Viewer?

I would love to see any updated progress notes from physician visits.

10. So far, what is the best thing about using the Viewer?

I think the best thing will be just the exchange of information to collaborate with a particular health specialty physician so that the patient will get the best overall care. The exchange of information is number one.

11. So far, what is the worst thing about using the Viewer?

The worst thing could be getting antiquated information or the incorrect information that doesn't specifically apply to an individual.

Date: March 20, 2009
What: Baseline Measurement: BH AMIE FIG CPSA
Who: Dupper-Knopper

1. What are the potential benefits of the viewer?

An example would be I have a patient currently that's in the hospital that was admitted for […]. When she was in the hospital, they found out that she was on (lists medications) and so she had disclosed any of these things to each one of her three providers and one thing that I can do now, which I was not able to do in the past, was to really go in and take a look at the medications some of these clients are on. I think the thing that I have found with this particular group of patients is that they overuse their medications or they don't take their medications but often times what we've found is that they are on multiple medications from different providers and they […]. So I think what we're hoping is to increase patient safety so that we all know what everybody is prescribing and have that coordination of patient care for safety and for the best care for the patient.

2. So far, has the Viewer fulfilled your expectations? Why/why not?

Yes. It has been easy to use. I have used it probably two or three times myself. I've used it in totality probably a lot more than that because I have Angel use it for me. For me, we are on electronic medical record […] the one thing that I've tried to do is I'd have Angel try and minimize it because if I minimize then I am able to do it better myself to bring it back up and Angel told me it wouldn't do me any good because it would just lock me out anyway. So I haven't played with it enough to see if I bring it back up if it's just a matter of re-keying in or not or re-entering in my log because I think it does lock you out for protection over a period of time.

-I think for me it's just getting it to be user friendly for me: minimizing it, bringing it up, looking into my password and login and getting more used to that just like you do with any computer login; once you do it several times it become second nature. This one isn't quite second nature yet it takes me a little longer to get into it.

3. What are the barriers to using the viewer?

I haven't found any. Like I said, it's minimizing and bringing it up […] that I will have to do. I don't' use it as often as I probably should because of time factor. In other words if I have my patient in front of me, we're going through everything with them, and I'm, on the computer screen because of their medications and we're doing blood pressures and so it's not AMIE's fault, it's more a time factor and that's why oftentimes I just go to Angel and say hey can you look this up for me really quick?

4. What impact has the viewer had on your clinical decisions so far? Examples?

So far what we have found is our patients are doing what they are supposed to be doing, so I haven't had to adjust anything. We also get a written report that comes often times sent to us by…I'm not sure where it comes from…it says other prescriber's referred to and other. It's a list of one particular patient and it shows all the medications that they are on. So it's a handwritten copy. I think the benefit is it's a typewritten copy of particular patient and al the medications on them and I think it's an alert that we get probably from the insurance company. The thing with this, though, is that it comes in the mail and it comes late so at least with AMIE as I have the patient sitting in front of me, that would something that I can slip out of the office and ask Angel to bring up for me. Whereas the ones that I get in the mail are, I do look at them, but I think timing is everything, especially with AMIE one of the advantages is you can check it right there and then.

5. Do you think the Viewer decreases or increases health care costs? Please provide specific examples of tests not ordered or admissions avoided, etc.

I think that if I know that I'm giving my patients (drug name) and their on (drug name) by their primary care physician, definitely one of them goes, if not, both. If people are abusing medication, we have an opportunity to have a discussion with them about the side effects and the importance of medication compliance and also patient safety because that's an opportunity to work with the collaborative relationship with some of the PCP's and reducing the amount of medications that some of these patients are on.

6. How have you integrated the Viewer into your workflow?

Either I bring it up or Angel brings it up for me. So in the work flow, it can ether be at the time the patient is in my office. Often times though, if we're actually looking at it, I haven't really used it yet when the patient says they can't remember what medication they're on because most of our patients come with lists. We are really using it to validate that they are not on something we don't know. So often times, right now in our work flow, it's an after thought and so it's like, I've seen that patient, something doesn't seem right. And then it's like let's go look. So it's almost us being investigative, but it would also certainly be helpful if patients can't remember what they are on then we could look it up. So far I haven't done that but that would certainly be something that would be helpful.

7. What impact has the viewer had on your efficiency? Please provide examples.

I can't evaluate that yet because we're so pushed right now, we see many clients in between the clients for crisis reasons, so for us, it's more of a tool that we have to learn to integrate into our flow. And I'm not sure that, to me anyway, that I've been able to really evaluate that.

8. Would you recommend the Viewer to other providers? Why/why not?

Yes, it's wonderful.

9. What other information is important to include in the Viewer?

I don't know because for us, medications, discharge summaries and labs are important. If it were a perfect world, it would be wonderful to see integrated notes between all providers for a particular patient. So if I have a patient that has [various specialty doctors], and me, it would be wonderful to receive their notes so that I can see where they have been and what their problems have been. It would be great to collaborate the tier.

10. So far, what is the best thing about using the Viewer?

Validating medications.

11. So far, what is the worst thing about using the Viewer?

Nothing bad. It has just been an amazing tool

Date: March 19, 2009
What: Baseline Measurement: BH AMIE FIG CPSA
Who: Bernard

1. What are the potential benefits of the viewer?

Well it's really nice to be able to view the medication history. I did look up a couple of what we call "frequent fliers" and when they are being prescribed controlled substances, to see who is prescribing it, what site/clinic and to be able to be able to file through that. We actually don't end up prescribing controlled substances in the lobby which is good because otherwise we'd […] people I think and having a difficult time following them, but it is really good to look through medication history. With the […] population, so many people don't know what they are on for medications and dosages so that's very helpful. I've been working in mental health in Arizona since 1992 and have always wanted to have access to medical records, mostly the medication history for the […] population. It's really beneficial.

2. So far, has the Viewer fulfilled your expectations? Why/why not?

Yeah, I think it's great to be able to access the records like that. We so often can't find a hard copy, we have electronic records and in the lobby mostly it's a hard copy. We don't dictate our psych evaluation in to the voluntary folks that come in through the lobby, It's a hard copy and a written psych evaluation. And then the […] do sort of a progress note about the […] the discharge, because they don't usually write down medications exactly that people are on. We do a hard copy of the medication reconciliation sheet, but that isn't entered into a computer in the lobby. So it's nice to be able to have access to that through the clinics that actually are prescribing meds and other things. In the back they do enter everything into the computer, the observation unit with the patient system, so the lobby is just a little bit different so it's nice to be able to have the electronic record. I used to work at county with the universal chart which is […] to be able to see what actually happened at either GYN or a neuro visit and then you just have to pop up through the emergency rooms or consultant notes, its really nice. […] I really like working with the universal chart.

3. What are the barriers to using the viewer?

I didn't know it was accessible to people without AHCCCS so that's helpful to know that. I do have a computer out there that's available to me and I just didn't realize that you could look up people without AHCCCS, so I will pursue that.

4. What impact has the viewer had on your clinical decisions so far? Examples?

Well I can think of at least one patient that is on controlled substances and has a borderline personality disorder and has been in and out or urgent care […] and been released and somebody at some clinic did put her on a controlled substance, and it's been more difficult to manage her because she has a tendency to overdose and come in with a petition because she's suicidal, so it's nice to know that data when we have her come in and out. Also, she's on insulin and she tends to overdose on the insulin and it's a lot of attention getting things, but it's nice to see who's prescribing what, when and where so we can track her clinically. In addition to her attention-getting threats.

5. Do you think the Viewer decreases or increases health care costs? Please provide specific examples of tests not ordered or admissions avoided, etc.

I think it decreases because you can see the continuity of care. When I was speaking about the lady with the controlled substances, I can see what clinics she's going to, who's prescribing what, and also the medical who's prescribing the insulin so we are able to track it better than asking her while she's threatening to overdose. You are just not able to follow up with things. And it's not like I would call her medical doctor immediately but at least I know where she's going and who's prescribing insulin when she's threatening to overdose on it.

6. How have you integrated the Viewer into your workflow?

The one or two particular people that I know that have complicated health histories. When she's on […] and threatening to kill herself, then she would go through the back in the observation unit so I really haven't had the full complement of having to figure out whether to […] if she's not going to overdose, and that type of thing. So I haven't really accessed it that much.

7. What impact has the viewer had on your efficiency? Please provide examples.

It probably hasn't done much with my efficiency so far because I haven't accessed it that much because I don't get into the hospital medical clearances and back and forth with petitions that get hospitalized so I haven't used it as much in the lobby. If I were working in the observation unit, we have to always send somebody for med clearance if they are going to go to Desert Vista on a court ordered evaluation so […].

8. Would you recommend the Viewer to other providers? Why/why not?

Yes because of continuity of care and patient safety with controlled substances and if you have lab values recently you could check to start a mood stabilizer on the observation unit and rule out medical etiologies. It's helpful for patient safety, too.

9. What other information is important to include in the Viewer?

I don't know if our evaluations […] I know that might be a confidentiality issue […] and that would be nice because we would certainly utilize it on […] visits and trying to evaluation whether someone really does need to be sent to Desert Vista on a court-ordered evaluation.

10. So far, what is the best thing about using the Viewer?

The medication history and lab values are very helpful. The ideal situation, and I know people have issues with probably the same, confidentiality but the universal chart really is a nice thing to work. So, so far the medication histories, the clinics, and who's prescribing what has been helpful.

11. So far, what is the worst thing about using the Viewer?

Just trying to figure out how to login and everything and the passwords. I know how to do it now, but I have the Microsoft outlook Magellan that you have to have a password with, then we have my Magellan.com, like our own benefits where you have to have your own password with. Then we have this e-learning one through Magellan which is a different ID and password, and then there's one other thing with Magellan: the benefits where I have to have an ID and password. And then with AMIE I have an ID and a password so If you guys could get a universal login somewhere someday, that would be nice. Because I have to have like clipboards with all my different passwords which I don't want to leave written anywhere so I have to carry it around everyday under the top page.

1. What are the potential benefits of the viewer?

I can check to see if a patient is on meds from other prescribers that I don't know about, or that they are not telling me about. […] I can look at those labs.

2. So far, has the Viewer fulfilled your expectations? Why/why not?

One of the issues that I have is that some of the confidentiality medicines are left off and those are exactly the meds that I am looking for. Those are the meds that patients aren't going to tell me about and those are the […] that can get that patient into trouble. I would like access to having those particular medications. I know that's not up to you, that's the law but that is a problem for me.

3. What are the barriers to using the viewer?

It times out and then I have to go back […] quickly, too quickly for me, I'm not the worlds best system keyboarder so I would like to see me to be able to get in more quickly once it times out, or to time out less-quickly.

4. What impact has the viewer had on your clinical decisions so far? Examples?

[I don't have any examples because] the patients that I have looked up so far, the medications that they've been on, I've known that they tell me that they are on them and then I have a list of their […] affects my decision when I come across a medication that I don't know that they're on and that they haven't told me they are on. But again, getting back to that point, patients that I'm looking for they're not going to tell me about, and the confidentiality prevents me from knowing about those and those are exactly the medicines that I should be knowing about.

5. Do you think the Viewer decreases or increases health care costs? Please provide specific examples of tests not ordered or admissions avoided, etc.

I can't answer that yet, I don't know.

6. How have you integrated the Viewer into your workflow?

If I have a patient on AHCCCS, before I see that patient, I will click on it to review any medications that they are on and I will click on it to see if thee are any labs there that I don't have. I'm hoping that it will be available to the nurses as soon as possible because I would like them to be able to look at that also because they see patients and they're interested in looking for the same thing and helping the prescribers out in that fashion.

7. What impact has the viewer had on your efficiency? Please provide examples.

8. Would you recommend the Viewer to other providers? Why/why not?

Yes

9. What other information is important to include in the Viewer?

It would be helpful if there were more data providers especially with children and use of other facilities outside of our area because we don't have a children's inpatient hospital here so discharge summaries from other facilities we use would be helpful. I have found the information that I've gotten from Amie has been helpful and well worth the time, but it would be even more helpful to have more data providers so that we could have increased access to information. If there was an easy and efficient way to integrate the information from AMIE into our electronic medical records, it would help save us some time and also help facilitate clinical care.

Lindsey: Can you tell me some providers that would be helpful for your particular clinic?

St Luke's Hospital, Sonora Desert Hospital in Tucson, […] Medical Center, […] Medical Center, […] behavior health. There's multiple, but that's to give you an idea.   All that data that comes up for medications, there's two columns for "days early" and "days late". I think it would be helpful know whether they're attempting or have refilled the medication at that time. But it doesn't seem to be consistent with the days […] that I'm hearing from the patients I have. It will shows on days earlier or late "30 days early" and maybe I'm just not understanding how to read it or interpret it but the days early and days late

don't seem to be consistent with when my patients are actually picking up the medications and when I order them.

10. So far, what is the best thing about using the Viewer?
   For checking for medications that aren't prescribed by me, as well as the labs that have not been ordered by me quickly.

11. So far, what is the worst thing about using the Viewer?
   I can't figure out how to close one chart and open another one. And then the timing out and having to log back in after I've already put in the patient information sometimes it will then […] log me out and I've lost that information so that's kind of annoying.

Date: March 16, 2009
What: Baseline Measurement: BH AMIE FIG CENPATICO
Who: Torres, Rodriguez

1. What are the potential benefits of the viewer?
>A. Its good, but I've tried it before and I couldn't find the person I was looking for.
>So that particular patient you looked at this morning, was it an AHCCCS patient?
>B. Yes
>A. Ok, and you didn't find a medication history on that patient?
>B. I think I was looking more for lab results and I did find medication
>A. Ok so the lab results are only going to be populated form Sonora Quest. You do work with Sonora, right?
>B. Right
>A. Okay So remember we talked a little bit too about how sometimes the lab can be […] so they might not be posted immediately? The medication history will be updated every 2 weeks so you found a medication history on a patient, which is good. Were you able to find certain medication that he had been recently prescribed?
>B. Yes
>A. Okay so that's perfect right there […]. Give it a couple days for the labs, don't rely on the systems that you are utilizing within your work environment now. […] As we start to pick up a little bit, you should see more movement at the charting perspective.

2. So far, has the Viewer fulfilled your expectations? Why/why not?
>B. I think we had very good expectations, I think it's going to help a lot with the medications […inaudible due to phone ringing in background]
>C. […] so just to refresh that, we have for discharge summaries, you'll have Banner Health Systems, […] you have Maricopa Integrated Health and then your have St. Josephs Hospital and Medical Center. And then for labs you'll have Sonora Quest, and then for medication history that will come form Managed Care Pharmacy Consultants. Over the next several weeks and months to come as we work through the original health pilot we'll identify additional data partners to work with. So if you […] either particular laboratories or data partners that you work with today […] for what you do within your work flow then we need to know about that.
>B. Yeah I would say like […] medical hospital and also […] Urgent Care […]
>C. Ok perfect. Would you be able to send me an email with the names of those facilities?
>B. Sure, I can do that for you.
>C. We are probably not going to be able to bring them on right away but it is good to understand what the demographics look like. So if you can get that over to me, we can get that on the list of potentials.

3. What are the barriers to using the viewer?
>B. I've only used it once and I really don't see any barriers. I think it's very easy to navigate and to understand.

4. What impact has the viewer had on your clinical decisions so far? Examples?
>B. Well actually […]

5. Do you think the Viewer decreases or increases health care costs? Please provide specific examples of tests not ordered or admissions avoided, etc.
>This is going to be a costs savings for the state. With the information that we're able to view as far as the labs and the duplication of services that we are going to do with the lab component alone I can see the substantial costs savings for the state. I believe that at pharmacy, we have a different set of medications […] we may not see a […] as far as the pharmacy because of the […] population of medications that we work with but it will allow for us to view the information and have potential […] as a result of being able to view what they are receiving from PCP's and other providers.

6. How have you integrated the Viewer into your workflow?

B.[…] Claudia has used it whenever she gets the doctor's schedule she actually […] any information that is there so that we can have the information for the doctors the next day.

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That's the work flow process that we are going to do the physician extenders as soon as they get the client loads they will be going […] and looking for any information. Whenever they find the information that I'm looking for it gets printed out. We are 100% EHR. What's happening right now is each county is printing that information out so that we can have that available to the doctors. As soon as those doctors are on board, trained, and have their information available, the extender will do the preliminary screening noted by the doctor that there is information, if any, that will be beneficial to them, and then the doctor will be able to pull that up prior to seeing the consumer. We've moved to 100% EHR so the work flow issue works better for the extender to check and then give the doctor a heads up to pull that up to the system.

7. What impact has the viewer had on your efficiency? Please provide examples.

B. That's going to allow us to identify any labs and medication; that's going to save us time as far as the coordination of care. It's going to save us dollars as far as duplication of services and it will allow the doctor to already know, assuming the consumer has received labs in the last 1 to 2 weeks, it will allow the doctor to already know and review the levels that they are looking for prior to prescribing which will get our consumers […] with less chance of an error or […].

8. Would you recommend the Viewer to other providers? Why/why not?

Yes, […] it provides a lot of useful information for the doctors and…yes I would

9. What other information is important to include in the Viewer?

10. So far, what is the best thing about using the Viewer?

The results and having the information right in front of you as opposed to having to request information and send off for information.

11. So far, what is the worst thing about using the Viewer?

I can't think if anything.

From what I'm hearing from staff, we can't identify any drawbacks at this time.

Date: April 10, 2009
What: Baseline Measurement: BH AMIE FIG NARBHA
Who: Sims

1. What are the potential benefits of the viewer?
> What I've seen of it, what I've been able to use, is mainly the medication; what is prescribed by other prescribers and us so I can compare what they are telling me with what is in the system. I have not found anyone yet that I have been able to get labs on, so I don't know if I'm just not going to the right place, or what? [conversation with Lindsey about this issue]

2. So far, has the Viewer fulfilled your expectations? Why/why not?
> It has absolutely fulfilled my expectations for medications. It's really exceeded it as long as the patient is on AHCCCS. The labs are still something that we need to get access to.

3. What are the barriers to using the viewer?
> Just getting familiar with the logon, the site, finding the site and getting it loaded onto my desktop. If we make a change here at work, it seems to disappear from my desktop and then I have to figure out how to access it. So, there was a temporary difficulty, but I think we are just learning the system.

4. What impact has the viewer had on your clinical decisions so far? Examples?
> I don't know that I've sued it enough to say that. It's just that I'm able to really verify the primary care doctor meds, the pain management meds, all of that, along with our meds. That really improves the level of care. It would be really excellent to have access to labs because we probably do more labs than we need to because we can't access them any other way. When we get those, that's going to be very helpful

5. Do you think the Viewer decreases or increases health care costs?
> Please provide specific examples of tests not ordered or admissions avoided, etc.
> I would think it will definitely decrease health care costs because of what I said about the labs and I'll be able to see what's already been drawn, what the levels were and I don't have to repeat labs.

6. How have you integrated the Viewer into your workflow?
> I try and [look at AMIE] before I see the patient. I would like to have it so seamless that I can pull all my patients up and have it ready for me to just click on their name when I'm seeing them. Not having my password for a little while this week, I haven't gotten a routine yet with it.

7. What impact has the viewer had on your efficiency? Please provide examples.

8. Would you recommend the Viewer to other providers? Why/why not?
> Yes because it has given me accurate information that you can't get in other places or it would take a really long time to get it.

9. What other information is important to include in the Viewer?
> I don't know if this is a possibility, but hospital discharges, other mental hospital stays. We have some independent facilities around here like […] Center and sometimes we don't get the right information from them and it would be nice if it were available o AMIE. So, I guess having other systems involved in it.

10. So far, what is the best thing about using the Viewer?
> I would have to say the medication verification.

11. So far, what is the worst thing about using the Viewer?
> I guess my unfamiliarity with the system. It's going to be an easy to use system and it's going to be something that I can integrate very easily once I get really proficient with it.

Date: May 15, 2009
What: Final Measurement: BH AMIE FIG CENPATICO
Who: Torres, Rodriguez, Villegas

1. What are the potential benefits of the viewer?
     Claudia: [inaudible-fading in and out]
     I find it a very useful tool. Like Claudia had mentioned before, there are a lot of things that the clients do not discuss or sometimes they don't remember their medications. So they would have to request a lab report for the fact that it shows in our records the most recent one that we completed. So what we do is just print them out, provide them to the doctor, and he verifies whether not other tests need to be done at that time.

2. So far, has the Viewer fulfilled your expectations? Why/why not?
     A. yes it did. I find a very useful tool and I like it very much. It's not time consuming, it's very fast and efficient.
     B. I agree

3. What are the barriers to using the viewer?
     A. I don't think there is a barrier. The only time was when it was down for a maintenance kind of thing, but it's regular and not even very often, we think it will be every once in a while, but I find it very efficient. As far as any barriers, none at this point.

4. What impact has the viewer had on your clinical decisions so far? Examples?

5. Do you think the Viewer decreases or increases health care costs?
     A. I think it decreases in the fact that it's not using any staff, we don't have to be contacting any staff it's just very efficient. It doesn't take a lot of time from anybody, it just takes time from us looking up that information and providing it to the doctor. So I thought it would be more in decreasing, and also a little increasing but it's for a good cause for it to be useful for other agencies in having less staff and less money involved for the whole economy. I find it very efficient.

6. How have you integrated the Viewer into your workflow?
     We deal with medications and lab results, so that's how we pretty much have integrated. Right before the appointments, I usually print out whatever is needed and give it to the doctor.

7. What impact has the viewer had on your efficiency? Please provide examples.

8. Would you recommend the Viewer to other providers? Why/why not?

9. What other information is important to include in the Viewer?

     A.I would like hospitals in Yuma (Yuma Regional Medical Center) to become a data provider.
     B. I believe we already did mention that and that it was going to be a hard time for other providers to be involved […] with the confidentiality. I think they mentioned that it was something that was going to be worked on maybe in the near future.
     Another thing that I've noticed is that sometimes clients change last names. I mentioned this to Lindsey last time, but since they changed their last names, we go by what they have recently and what they give us. But maybe their social security number? I know she said that due to fraud and what not, it may be hard, but I think […] eligibility so we still have access to all that information. Yesterday, I was unable to look up one of our clients because she didn't come up under that last name.

10. So far, what is the best thing about using the Viewer?
     A. It's efficient, there's less time used, we don't have to be contacting other providers. Everything that's listed, their labs, medical information and what doctors have prescribed, which not a lot of clients can remember which medications they have had or which doctor prescribed it. So I find that very helpful for me as well as for the doctor.
     B. I agree

11. So far, what is the worst thing about using the Viewer?
     A. I haven't had any negative encounters with it yet.

Date: May 20, 2009
What: Final Measurement: BH AMIE FIG NARBHA
Who: Evans - Lisa - Barbara – Taylor – Ford

1. What are the potential benefits of the viewer?

    A. The benefits are for us to be able to see what other prescriptions may be prescribed to the client, particularly […] with a focus on medication. Also, to pull up labs that there are available. I haven't found too many of those, but I look forward to finding more of those in the future. From my perspective, that's what I have been using it for and it ahs been helpful to pull up the medical history.

    B. It's cost effective for us to see if there is a lab and what has already been ordered so that we are not duplicating information.

2. So far, has the Viewer fulfilled your expectations? Why/why not?

    A. It hasn't been as robust I would like it to as far as the lab results, but I don't know if that's AMIE, the lab results or where you are getting it from. The information that we do have is good, I would like to see more leverage or information.

    B. It's a bit cumbersome to use and it would be helpful to have more providers, more specific facilities that we coordinate with like St. Luke's Hospital, Flagstaff Medical Center. I would agree about the lack of availability of labs, there's a problem. I think they were more available when we first started our program with you guys; I've had more problems obtaining labs recently than when we begun.

    Terri Asks: What did you mean by cumbersome, so that we can provide feedback to AHCCCS?

    A. There's a lot of screens to go through to actually get to the information that you need that switching from one patient to another is hard because the number of screens that you have to go through as well as […] of each patient as the last one that you had up, as opposed to starting new again, so you have to make sure you are all right to get the information. It's a difficult thing to use at times, because it's not integrated with our software program.

    B. I noticed, and this probably has to do with me not being as familiar with it as I'd like to be […]. Then, I get rid of them and I won't pull them up again, or maybe I minimize them, and I get this screen that says "They are already there" and I don't know where they are. I look all over for them; I look in my desk, I look in my closest, I look everywhere but I find that I have to back totally out of it, and then pull the whole thing up again to get the results that I wanted. I know they are hiding somewhere, but I haven't found them yet.

3. What are the barriers to using the viewer?

    I think we already covered it.

4. What impact has the viewer had on your clinical decisions so far? Examples?

    A. I primarily look to see if the patients are being seen for things and getting meds that they are not telling us about, and then coming in and asking for more. So far, when I see that, the patient has admitted to them. So, I don't have any examples that I'd like to give you which is that they are meds and they're not telling me, but that's what I continue to look a for and it's one of the main things, as well as pain medications that they are on. So far, when I've asked, they've said they've been on them and I don't know if it's because I'm looking at the screen that they know I'm looking at or if that's because they will do it anyway, but that's what I want to find out. If the recent labs are there, then we don't have to order new ones, or sometimes we do because the results that we see cause us some concern. But again, this has not yet happened to me, but I'm assuming that as things […], I'm hoping that it will happen in the future.

    B. Today, we had an example of a patient who was a […] she had a box of old and current prescription bottles that she didn't really know what she was taking. She was new to us, so we were able to use AMIE and find out what her current prescriptions were, when they were filled last, etc. so that we would not prescribe something that she is no longer on.

5. Do you think the Viewer decreases or increases health care costs?

We really can't tell you that. Our nurse Barb said that potentially it should decrease the cost of it because we will not have to duplicate labs or meds that have already been ordered and possible save people from going to the ER because they've overdosed on certain meds […] as well.

6. How have you integrated the Viewer into your workflow?

I pull AMIE out every morning. When I pull my other programs up, I leave it minimized. Before I see a patient, I put that patient in to see if they are in there, their current meds and any labs that are in there.

7. What impact has the viewer had on your efficiency? Please provide examples.

-I think it slows us down a little bit at this time because it is another program to open up and maintain during the day.

8. Would you recommend the Viewer to other providers? Why/why not?

A. Yes I potentially would once it has more information in it.

B. I think the more providers, the better. I think there is an issue with there not being enough providers on it and I think that the more there are on it, the more information we are going to have. So, from a selfish standpoint, I would recommend it so that they can then put their information in it.

9. What other information is important to include in the Viewer?

Certainly, discharge information from our local hospitals rather than just the ones that you have now. […] I don't think our labs are in there, it's Sonora, […], so I don't understand why there are so few.

- [inaudible]

Interviewer: Can you tell me some providers that would be helpful for your particular clinic?

10. So far, what is the best thing about using the Viewer?

I think we've already answered that.

11. So far, what is the worst thing about using the Viewer?

Going through different steps to get to where we want to and the fact that I have to remember yet another password.

Date: June 3, 2009
What: Final Measurement: BH AMIE FIG UPC
Who: Williamson, Rousher, Erickson, Jain, Stevenson, Horning, Keith, Schaeffer.

1. What are the potential benefits of the viewer?
      -I use it at least a few times a week
      -I use it a couple times a week at this point. There's only two of us that have been using the product regularly; Dr. Horning and Dr. Williamson. I think that the potential for the product is huge from the standpoint of our community. The more that we have discharge, […], the ER evaluations from medical facilities, the more likely this will meet its potential. Right now, what we primarily find is their medication history; what they've been taking most recently. The program has only been going a few months, but it's only been helpful to me about 25% of the time that I've tried to look up somebody's medication history. So, one in four I'm getting a […] where AMIE's not able to tell me anything about the patients. One of those was about medication history, and one of those is about labs that I didn't realize they'd had. I think [the other ¾] is primarily because I don't know their status when I'm using it; whether or not they have Access, and I think that's why I wasn't getting anything.

2. So far, has the Viewer fulfilled your expectations? Why/why not?
      -again, I just don't think that I'm finding enough data there. I haven't found anyone that's had a discharge summary in AMIE.
      -My grandson has two people where its been useful with hospital records where they've been admitted and there's been discharge summaries.
      -I have to agree with Dr. Williamson and Russel. The times I've looked at it for information it just wasn't there, so I just stopped actually using it.

Follow up Question: Other than the information that's in the viewer right now, what other types of information do you want it to provide to you?
      -I like what you have set up to provide for us, I think that it's great. It's just that so far, there's not enough data in the system yet for our patient population […] and I think we have other resources […] about our patient population, what their histories are and we are so used to going at the collateral data which is calling pharmacies and things like that, and we get that data from a lot of other sources as well. Especially during the daytime, it's a little bit less useful. During the nighttime when no one is available, I think it's a lot more useful, but we'll see how it goes. As the system is around longer and there's more discharge summaries in it, I think it will be much more useful to us because these clients are bouncing into medical ER's, bouncing into hospitals. Once we get more of that there about it, I think it will be much more helpful.
      -I think also that the more hospitals that are involved, more useful it's going to be because […] providing the reports anyway right now.

3. What are the barriers to using the viewer?
      -The application itself is very easy to use; I don't see a problem with using the application.
      -It doesn't have a lot of our patients in it, so when we utilize it, it doesn't have a lot of our patients in it.
      If you have not already mentioned it…

4. What impact has the viewer had on your clinical decisions so far? Examples?
      - For me, it just helps me get them home so that I am comfortable that I […] with the medications.
      - The patients that I found a hospital record helped to clarify […] stories so it shed some light on what he was trying to do.

5. Do you think the Viewer decreases or increases health care costs?
      Please provide specific examples of tests not ordered or admissions avoided, etc.
      -I think it will decrease in the long run.

6. How have you integrated the Viewer into your workflow?
      - I usually log onto it at the beginning of the shift, and then periodically use it to lookup patients.
      -I do the same thing. I come in in the morning, I log on to the computer, I look onto outlook, AMIE and healthline […].

7. What impact has the viewer had on your efficiency? Please provide examples.
　　　　-I don't think it's impacted us at all.

8. Would you recommend the Viewer to other providers? Why/why not?
　　　　-Yes, because the more they use it, the more likely it's going to contain something that is useful for me.
　　　　- I agree.

9. What other information is important to include in the Viewer?

10. So far, what is the best thing about using the Viewer?
　　　　-The […] information I don't have now.

11. So far, what is the worst thing about using the Viewer?
　　　　-Not enough information.

Date: April 10, 2009
What: Final Measurement: BH AMIE FIG CENPATICO
Who: Christina

1. What are the potential benefits of the viewer?
   Christina: I found it very useful because we actually have to request a lot of records form other agencies and that makes it better for us because we don't have to make any calls, we can just look it up in the system and everything can just be pulled off of AMIE. As far as […] it's been a long time since I was having trouble and Lindsey was very helpful to help me today.

2. So far, has the Viewer fulfilled your expectations? Why/why not?
   C: So far, yes it has. Again, I can't say I've been using AMIE it's been like two days since I've had access to client's records, but I find it very useful because it's […] the type of medications the client's been taking or other areas the client has been seen so that's a lot of release of information that we could get for our clients. It's saving time for us and our clients and also providing a lot more information that a clients will not always disclose to the psychiatrist.

3. What are the barriers to using the viewer?
   The only barrier that I find is sometimes when we are having technical difficulties, just with technology, but nothing really big. No barriers whatsoever.

4. What impact has the viewer had on your clinical decisions so far? Examples?

5. Do you think the Viewer decreases or increases health care costs?
   I believe it would decrease health care costs because it's saving people time and there's more work to get done. It's benefiting the client and us as the agency so it's a win-win situation.

6. How have you integrated the Viewer into your workflow?
   The way I use it is due to working with a psychiatrist and dealing with clients taking medications, not all clients disclose that they are being seen by other doctors and the type of medications that they're taking or their history, so sometimes we have to ask the client and sometimes they are denying. When we get some lab work done, that's when we find out al lot the information and then later on they disclose that they were being seen by a neurologist or their primary care physician and they were given some kind of other medication that they didn't inform the doctor of. That's very important because if they're being seen by another doctor and they are not notifying the psychiatrist, we don't want the medication to be interfering with any other meds.

7. What impact has the viewer had on your efficiency? Please provide examples.
   AMIE is available 24/7, so I find it very efficient. I think I'm saving a lot of time. I've struggled in the past with other agencies; sometimes it would take about a week or two weeks to get clients information or sometimes they would even send it at all, or send it by mail. So it's very fast and efficient. I find it a useful tool.

8. Would you recommend the Viewer to other providers? Why/why not?
   Definitely. I would definitely be wanting for other areas to be using AMIE. It's fast, it's very efficient, for the information that I've seen, it's current. Lindsey once said that its going to take some time to get clients' information, but all the clients that I've accessed, I've found it a very useful too. It would be great for other agencies to be using as well instead of having to call back and forth to agencies and waiting for a response.

9. What other information is important to include in the Viewer?
   Well pretty much […]. I mean, it has all the client's records so I find it very useful.

10. So far, what is the best thing about using the Viewer?
    One, it saves time. Two, its available 24/7. We wouldn't have to go having to sign in […] or client or having to wait for another agency to be sending the records, so it's very fast and efficient.

11. So far, what is the worst thing about using the Viewer?
    I can't say I have a worst thing right now.

COMMENTS

I actually have good comments to say. I've only used AMIE once today since I was having problems with it, but I like it. I'm glad that AMIE was created. Another thing that I wanted to mention was that since it's only asking for the first name and last name and the date of birth, is there any way that the social security number can be added to that? The reason I'm saying this is because there have been time where the date of birth is not correct, whether it's from simpatical or vice versa with access. There have been some occasions where the date of birth is input incorrect by either AHCCCS or the client.

Date: August 13, 2009

Who: CPSA, Terri Dupper-Knoper, (other attendees inaudible)

1. What are the potential benefits of the viewer?
  […] When the patient has filled their prescription, if they had filled the prescription, what other medications that they have from other providers, […].

2. So far, has the Viewer fulfilled your expectations? Why/why not?
  Yes

3. What are the barriers to using the viewer?
  The only thing that I had is that you can't tell who the provider is. Sometimes when you are in the medication history there's numbers instead of the prescriber's name. This sometimes takes quite a bit of research to find out who prescribed the medication.

4. What impact has the viewer had on your clinical decisions so far? Examples?
  [Inaudible]

5. Do you think the Viewer decreases or increases health care costs?

6. How have you integrated the Viewer into your workflow?
  [Inaudible]…Track down the information…do that beforehand.

7. What impact has the viewer had on your efficiency? Please provide examples.
  [Inaudible]…

8. Would you recommend the Viewer to other providers? Why/why not?
  […] It's just a different way of facilitating communication between providers.

9. What other information is important to include in the Viewer?
  I think the […] would be wonderful. […]. We had one case where we had a client who was reporting to the emergency room for […] and her primary care physician prescribing […] and didn't know who she was using them. So we were looking up how she was using them […] we called the provider and gave them the heads up. […]
  I would be nice eventually to have pharmacy notes from other providers […].
  Interviewer: Can you tell me some providers that would be helpful for your particular clinic?
  [Inaudible]
10. So far, what is the best thing about using the Viewer?
  -The ability to see medication history […], to see the medications that they are on, […].
11. So far, what is the worst thing about using the Viewer?
  [Inaudible]

COMMENTS

We would like to say that AHCCCS's staff has been very supportive.