

AHRQ National Webinar on Leveraging Digital Health Technologies to Address

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[From Emergency to Community: Implementing a Social Needs Assessment and Referral Infrastructure Using Health Information Technology](#)

QUESTION: Are there opportunities to use area-level data to identify patients with high likelihood of needs and offer them referrals pro-actively instead of using the screening tool?

ANSWER: There is a lot of conversation related to this topic. The challenge is finding accurate data with which to direct interventions, and to ensure they are not reinforcing bias. Patients do have concerns about being individually offered solutions based on their demographics - where they live, their insurance etc. However, bringing services to populations and communities that need them is certainly a strategy widely explored to bring services to those with needs.

QUESTION: In first presentation, the presenter mentioned soft referrals. What are warm referrals?

ANSWER: Generally, warm line handoffs are "person to person" when someone is still on the phone, for instance. This is in contrast to a referral requiring the patient/the person referred to follow-up.

QUESTION: Did you find high needs in areas where there were not many community resources, and if so, how did you mitigate that? Thinking of an issue like needing long-term low-income housing, or other areas where resources may be low.

ANSWER: We have been working on this very issue. In terms of the food analysis I mentioned, we did not find evidence that "help seeking" was higher/lower in areas with more food resources. Rather, it was driven at an individual level where patients with other needs were those who also needed food resources. That said, we are continuing to explore this, and whether we can use screening data/calls asking for resources (especially for food) to identify community level service gaps.

QUESTION: What is meant by "ethical" screening?

ANSWER: There are many concerns around privacy, profiling, and stigma by patients. Conversely, providers are very concerned about asking the screening questions if they can't respond with resources.

QUESTION: What specific patient-centered or patient-reported outcomes are you currently collecting in your study?

ANSWER: Some examples are Patient-Reported Outcomes Measurement Information System (PROMIS) depression/anxiety, health system trust, whether the patients feels that their needs have been met, versus us just noting they received "something". We also have a family functioning scale for those screened in pediatric settings.

QUESTION: How might individuals reluctant to share information on their needs or situation due to privacy concerns be helped, especially if information not collected for referrals or getting help?

ANSWER: We message patients about how the questions will not be tied to their electronic health record (EHR). However, that won't be the case as we move to Epic. A colleague of mine is working on a study to develop what may be "pre-screening" questions, particularly for those who don't speak English, and she is very invested in understanding barriers to disclose needs.

QUESTION: You mentioned staff reluctance to screening. Can you talk more about strategies that health systems might use to help with this?

ANSWER: There are a lot of more traditional implementation approaches such as giving feedback about what they've done. Patient stories have been effective in showing that this screening that staff took time to do actually resulted in this specific outcome for the patient. We're finding that is well received in general. There is something to creating connections between the staff and those who are doing the outreach work on a collective team. A lot of health systems are really wrestling with this because these are new roles being created, and they are trying to create an esprit de corps, as it were; a group that's really in it together. We're trying to do more of that, in addition to the usual run charts and report back to their managers; we're also trying to engage staff directly.

QUESTION: Given that staff are pressed for time, have you thought about paring down the four top screening questions to determine the desire for follow up?

ANSWER: This is a common question health systems are trying to deal with because we have such limited time. It's like "how few questions can we ask before we can move on with this?" What we are finding is that you have to ask a certain number of questions before patients even understand what we're talking about. When we talk about social needs, it's not just about money. It's also about social support; we ask about child care and elder care as part of our screening, which can affect anyone. Transportation barriers can affect anyone, for any number of reasons. We really should expand the conversation beyond "do you have money to pay for medication or food?" It is more expansive than that. We find that the sweet spot is ten questions, and the screening only takes a minute.

QUESTION: Do you work with community health workers to help out with communication?

ANSWER: Community health workers have been really at the forefront of a lot of the social needs outreach. There are any number of models about how to integrate them into clinical care, as well as outreach efforts. We have not done as much of that, but 211, our partner in this work, has worked with our community health worker organization at the state level. I don't know if that is a solid answer, but there are a lot of different models being explored about how to do this. The reimbursement question is always the elephant in the room and one of the biggest hurdles we need to work on.

QUESTION: If you could wave a magic wand and conduct your favorite piece of research to help the underserved, what would that be?

ANSWER: Between 7% and 10% of our patients don't have access to reliable telephone technology, and we're trying to explore what to do with those patients and understand their outcomes. In addition to that, continuing to push the conversation back to the consumer and patient needs, that is what this is about. There are so many options for technology at the consumer level, but oftentimes we continue designing interventions around what we can do in our EHRs. I think that it's going to be a dance over the next 10 years, and definitely over the next three to five years, that is really going to push our regulatory barriers and data exchange barriers to try to make it patient-centered.

QUESTION: What role can policymakers play in promoting the adoption and effective use of digital health technologies among underserved populations?

ANSWER: I think that there are reasons that we're continuing to deliver care the way we are. Our payment models aren't necessarily keeping up with the technology, so I think there are opportunities here to make sure that we keep pace. There are certainly the provider-level barriers, but then also, the real underpinning is our ability to make it sustainable.

Brian Jack, M.D.
Boston University and Boston Medical Center
Implementation and Dissemination of 'Gabby,' a Health Information Technology System for Young Women, into Community-Based Clinical Sites

QUESTION: Do you think large language models, like ChatGPT, have a role for conversational agents?

ANSWER: The short answer is yes. Things are moving so quickly in all these areas and the sky is the limit. The opportunity to use all these systems, within the structures of clinical medicine, is really profound. Integration into electronic medical records (EMRs) and patient portals, and also in terms of directly assisting clinicians in delivering clinical content. In the situation of Gabby, it could be that Gabby could do the risk assessment and begin the conversation at home. Or maybe the clinician could prescribe Gabby for a patient and not take all the time necessary to do the risk assessment while in the office visit. The patient could go home, meet Gabby, and do the risk assessment. They could print out the “My Health To-Do List,” which is the list of risks that they have and begin to have conversations with Gabby about each of those risks. They can then come back and talk with the clinician. “This is what Gabby has told me, what do you think about these sorts of things?” It can be in conjunction with clinical care.

These technologies could also be incorporated into patient portals or some other population health tools that big health systems are using increasingly. We believe that our data actually shows that if a large health system identified the target user group, women between 18 and 35, and delivered Gabby as a tool to everyone in their health system, that over time, health risks will be identified and addressed, and the population as a whole will get healthier. Another possibility is embedding conversational agents or chatbot technologies into patient portals where, for example, to talk about the shared decision making around preventive health services such as colonoscopies, prostate cancer screenings, and mammograms. A sort of cancer screening tool to save the clinicians time, which is also becoming a very important outcome variable for all these systems, as health workforce challenges are becoming more profound. The answer is yes to the question, and there are lots of exciting ways in the future about how exactly that's going to happen.

QUESTION: Have you explored post-birth interventions? My understanding is that two-thirds of the deaths are preventable and related to hemorrhage and blood loss.

ANSWER: These kinds of applications can be used in a variety of clinical situations. Many people have asked about antenatal care and about postpartum care. Our way of starting is with a primary prevention approach relative to preconception care, just because it was an interest of mine. I do think that for health IT-type systems, there are a couple of criteria for where we start. One is that it ought to be a really important problem. And certainly maternal mortality among African-American women and low birth weight and infant mortality are really big problems. The second is it ought to be something that's evidence-based and where that evidence is not currently being applied in clinical practice. Preconception care does fit that criteria in the sense that it's not really clinical care because it's too big. Who is going to screen for 100 different things and talk about social determinants and about health promotion activities to the extent that Gabby does in clinical practice? It just doesn't happen, and it's not really public health either.

It's something in between; that information technology really can be applied in those areas to improve health, but not be clinical medicine or public health. It should also be something that people like and will want to use. Because the world is full of randomized clinical trials (RCTs) that show efficacy, but for a variety of reasons people don't use that intervention in terms of effectiveness. So that's where the action is now in terms of efficiency and effectiveness of systems, in terms of getting people to use things that are evidence-based at this point. We would love to do a postpartum trial, but it takes years. And so I think, as we develop how to do these things better, it can be more quickly applied to other clinical circumstances.

QUESTION: Do you work with community health workers to help out with communication?

ANSWER: Our work in Lesotho in southern Africa – it is a poor, rural, and mountainous country where community health workers are really a fundamental part of the health system. Each village has a community health worker that's connected to the

Ministry of Health. In our trial, despite the ruralness and the poverty of the country, young people between the ages of 18 and 35 have a high penetrance of mobile phones and it's growing. And not only mobile phones, but smartphones. So it just tells you what's happening in terms of the opportunities that mobile technologies and mobile health education provide for people around the world. The community health workers connected with the women who enrolled in the Gabby trial, which is called Nthabi in Lesotho and the Sesotho language. We had recruited 135 women to use it for four to six weeks and the women would show the community health workers in the village. So the community health workers would tell us that they're learning a lot by listening to what Nthabi has to say about various clinical topics and suggestions about what to do for various clinical problems, which are pretty profound in their country in terms of HIV rates, and TB, and a variety of other morbidities that face the country. Involvement of village health workers in health education systems is something we can learn a lot from in other places as well.

QUESTION: If you could wave a magic wand and conduct your favorite piece of research to help the underserved, what would that be?

ANSWER: There were comments in the chat about the lack of difference among socioeconomic groups relative to birth outcomes for African American and black women, which is absolutely true. It's been known for some time now. Our approach to health literacy and systems like Gabby is to apply an intervention that is appropriate for all health literacy levels and all socioeconomic levels. Gabby is appropriate for both low health literacy, as well as those with higher levels of health literacy, and so appropriate for all African American women as best as we can do at the moment. In terms of identifying, the primary prevention approach is a matter of, "Are we focusing on African American women because there are more risk factors among African-American women?" And that is not true, necessarily. There are some risk factors like weight, obesity, and hypertension, which are greater in the African American community, but across the board are generally less. So, it's really a matter of access to care and availability of care in terms of getting information that we think will make a difference to everybody.

In terms of the question about what study would I do around health-IT and disparities, is to continue this research and to connect the dots from a process measure, which is really the trans-theoretical model that changes moving to action and maintenance for each individual risk factor across the board. To do a large study to show that birth outcomes, like low birth weight or infant mortality, could really be impacted if we could do a study that is large enough to show that difference. That would be a really big deal and that needs to be done. So there needs to be more funding in disparity interventions across the board.

QUESTION: What role can policymakers play in promoting the adoption and effective use of digital health technologies among underserved populations?

ANSWER: I think going back again to the population health approach. To not put the burden on individuals to go after various technologies that will improve their health, but to put the burden on health systems to both decrease disparities and improve health across the population. Also, to have financial incentives for health systems to make evidence-based interventions that impact disparities available to everyone within their health system would go a long way towards making these things available for people. And to think about how that could be done would be really interesting to do. A population health approach for something like Gabby and other things that will be developed over time, and to make it available for all women and men and families to be able to use it would be good.

**Peter Yellowlees M.D., M.B.B.S.
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[A Clinical Trial to Validate an Automated Online Language Interpreting Tool with Hispanic Patients Who Have Limited English Proficiency](#)

QUESTION: I was interested in your idea that video may be the gold standard as opposed to in-person interviews. Can you talk a bit about what it would take to get there? What's the glide path to get video to be the gold standard?

ANSWER: That is something that really hit us during this study. What we noticed anecdotally was that there was much better eye contact on video, than there was sitting in a semicircle where you had the patient, the interpreter and the psychiatrist as a threesome and everybody looking sort of left and right as they were talking and listening to each other. On video you get to see everybody if you have a gallery view, and so I think that the interpreters actually got a better look at what the patient was saying. And perhaps the patients were also maybe a little bit less anxious. The distance involved in video makes discussing difficult subjects easier.

Many of these patients were highly traumatized and had really horrendous backgrounds with abuses. And so the patients themselves may have spoken more easily on video than they did in person. But then the interpreters were actually getting better eye contact with them, as was the psychiatrist when we were using Zoom for those interviews. So it is something that needs to be explored, quite honestly. Should we in fact be using the Zoom equivalents of the world as the gold standard in the future for these interviews? I think for many people that is the case. It may not be the case for short, more screening style medical interviews, but certainly for longer, more in-depth interviews like we were doing.

QUESTION: In general, what recommendations might you have for researchers attending this presentation conducting cross-language studies?

ANSWER: There's also another really good question in the Q&A that I'll also address about using promotoras (community health workers). First of all, it's difficult. It really is, and AHRQ knows this very well. You have to have a lot more money because you've got to translate everything. Materials must be available in at least two languages, sometimes more. There's a much smaller pool of potential people to employ to work on these sorts of projects. And it's often harder to recruit the patients, as I mentioned. The other big problem we obviously have is that the patients who are undocumented and who frequent many of the clinics we were going to, are much less likely to agree to A) be in a sort of "government study," and, B) to be video recorded. And you can understand that. Whenever anybody is doing work in this area, you really have to make sure that you have thought through carefully how you're going to do your recruiting.

And also you need 20% plus budget compared with a normal non-cross-language study. I think that is something that AHRQ has to think about because that certainly wasn't the case in our study. We had to fund a fair amount of this through extra time ourselves. We wouldn't have been able to see the number of patients with the funding we had. And we actually added on extra patients at the end (beyond what we originally planned) because of the fascination of the Zoom findings that we had.

The second thing, from a research point of view, the obvious people to be doing these interviews across language are promotoras. In other words, support people from within the individual's communities. We actually put in a grant to NIH to do exactly that as a follow-up from this particular grant. We negotiated with groups of promotoras in the Central Valley. They were really fascinated because this was an interesting way of expanding their role and having them help their communities more effectively by becoming trained mental health interviewers. We weren't asking them to try and diagnose anybody, but we did want them to interview patients and then send the interviews to us. Unfortunately, that wasn't funded. So, there's a study there waiting to be done by anybody listening that I think would be a significant improvement on what we did.

QUESTION: Can you please discuss the regulatory barriers to implementation of telepsychology or telepsychiatry?

ANSWER: One of the good things about the pandemic has been that the regulatory barriers have been dramatically reduced. And that's why there has been a huge expansion of telepsychiatry, and telepsychology. The good news is that quite a few of these barriers are staying down once the public health emergency finishes. We'll still be able to see and do mental health consultations within states, and potentially across state lines, in a way that just wasn't possible before.

The DEA, Drug Enforcement Agency, actually just put out some guidelines three days ago making it easier to prescribe controlled substances on a continuing basis for people with addictions and children with ADHD. Regulations are there for a reason and over time, things change. It is no doubt much easier now than it used to be. The key issue that you have to always be very careful of is HIPAA and making sure that you maintain appropriate security and privacy. You need to have what's called a business associates agreement with the manufacturer for any system that you're using. That is essentially saying that you can use their video system and you can see the patients on that, but that they can't look in and see what you're doing. So, it's essentially looking through a pipe and you can see the face at the other end, but the people can't look from outside the pipe. And that's not going away and it shouldn't go away. So, I think that there are very good regulations and then there are regulations that are set up for historical reasons that really need to be cut down occasionally.

QUESTION: If you could wave a magic wand and conduct your favorite piece of research to help the underserved, what would that be?

ANSWER: For me, it's very simple. I would make sure all of the underserved had both smartphones and access to bandwidth. Many people who are underserved do actually have smartphones, but they have to go and literally sit outside Starbucks to use them. And so, bandwidth is a huge issue. I think we can deliver enormous amounts of care through mobile technologies, and that the underserved from many different areas and many different groups are clearly the neediest group. This is an enormous opportunity that we could easily work on.

The pandemic essentially demonstrated that there was yet another digital divide here where, in fact, people who were homeless or living in difficult circumstances, particularly in metropolitan areas, were actually the most difficult people to reach for care. Whereas, in the past, it always used to be people living in rural areas. Suddenly it's become actually a metropolitan type issue. I think there are solutions for that, but we've got to look at how best we deliver care using phones. I think phones and mobile care are clearly the way healthcare is going. We have to focus strongly on all sorts of mobile care, both synchronous and asynchronous across many different disciplines, because if nothing else, A, it's there, and B, the younger generation is expecting it.

QUESTION: What role can policymakers play in promoting the adoption and effective use of digital health technologies among underserved populations?

ANSWER: My suggestion is that policymakers need to listen to young people much more than they currently do. Most policymakers are from my generation, and in reality we are not the best people to be making policy. We may have the experience, but we don't necessarily have the attitudes. And so if you look at telemedicine as an example, a major reason why telemedicine has not developed much prior to the pandemic is because providers were not very keen on it and didn't want to change the way they worked. Whereas we know that patients have wanted to use these systems for years and years and years. I think we've got to talk to patients and talk to younger people because this is how they live, and we are still providing a lot of very old-fashioned healthcare.