Responses to Unanswered Questions During the NIH Pathways to Prevention Workshop: Improving Rural Health Through Telehealth-Guided Provider-to-Provider Communication

October 12–14, 2021

Day 1—October 12, 2021

1. **What was name of the article and author mentioned during Dr. Rutter's presentation?**

   Dr. Rutter referred to Anzalone A, Horswell R, Hendricks B, et al. Higher hospitalization and mortality rates among SARS-CoV-2 infected Persons in Rural America. MedRxiv. 2021 Oct 7. doi: 10.1101/2021.10.05.21264543. [eprint ahead of publication], and Bardach SH, Gibson A, Parsons K, et al. Rural Caregivers: Identification of Informational Needs Through Telemedicine Questions. Journal of Rural Health. 2021;37(2):406-411. doi:10.1111/jrh.12431.

2. **Can Dr. Morris address the issue of availability of lab diagnosis of diseases? Access to a lab is a major challenge for diagnosis of bleeding and clotting disorders.**

   Response from Dr. Morris: The issue of access to laboratory services in rural areas has not gotten much attention in the literature. Certainly, commercial laboratory services (i.e., Quest and Labcorp) may be less accessible in rural areas and anecdotally we have heard that labs in rural hospitals and larger rural clinics often act as a reference lab in those situations. This is an area in which we could support more research through the Rural Health Research Center grant program and we will raise this issue with our awardees in the coming year.

3. **What are the suggested evaluation metrics to assess return on investment on provider-to-provider communication? As part of a CDC (Centers for Disease Control and Prevention) grant we are embarking on provider-to-provider communication in relation to COVID-related care and would appreciate some pointers.**

   Response from Dr. Mehrotra: I believe we should use the same metrics we use to evaluate the impact of any technological innovation (drug, device, surgery)—how much health is gained at what cost. Given telehealth's impact, it is important to include patient time costs when we measure societal costs.

4. **Isn't our weak Medicaid infrastructure spread across 50 states a weak link in the system?**

   Response from Dr. Slabach: The structure of Medicaid, with its deference to states and ability to request waivers, would seem to offer a path forward to support provider-to-provider telehealth and to do so within the appropriate state-specific context.

5. **One question to consider would be if the specialists/subspecialists are willing to accept the potential costs? For every eConsult, they aren't seeing someone in person. How do we make this attractive for the specialist providers?**

   Response from Dr. Mehrotra: There are several "sells" to a specialist.

- There is no shortage of patient demand for your care. This allows you to triage and use your time on the patients where you can add the greatest value.
- For surgical specialties, eConsults can translate into higher yield of OR (operating room) cases and fewer visits where you add little value.
- Also, your time can be reimbursed. This is the sort of activity that can be easily done in "off hours" and therefore increasing clinical revenue.

6. **Could the telestroke platform be expanded to support obstetric readiness in rural emergency departments (EDs)? Many rural L&D units have closed without enhancing ED readiness for pregnant people. ED clinicians are in urgent need of timely emergency support to stabilize, transport, and sometimes deliver these patients.**

   Response from Dr. Mehrotra: The telestroke platforms have been expanded to many other clinical areas already including psychiatric services and ICU (intensive care unit) care. Certainly, they could be extended to obstetrics.

7. **When it comes to sustainability and adoption, $15-75 for a subspecialist doesn't seem to be adequate compensation when they could make >$200 for an in-person consult. How can we make this sustainable for both PCPs (primary care providers) and specialists? Any thoughts from the panelists?**

   Response from Dr. Withy: The funding is a start, but it doesn't go far enough. In order to make a real change, the behavior has to be built into workflow and made easy. $15 will do nothing. $75 might inspire the creation of a new model, or a blended model (some direct care and some consults) but I doubt it's enough.

   Traditionally, Medicare has overpaid new procedures that they want doctors to do. While I don't think this is a good idea, and it's gotten us into this lopsided payment schedule, it does work. So, I would pay consultants at least $100 for the provider-to-provider consult. Then we will see a change in attitude toward what used to be a freebie (curbside consult).

   The other thing to consider is malpractice insurance. Will it cover the activity? It must, or this won't happen. Plus, there has to be a regular system for feedback and specialist involvement in ongoing care (unlike the curbside consult).

   Another barrier is the electronic medical record. If we were all on one system, this would be much easier.

   So, in summary, we need to have a systematic, accepted, and compensated way to do this. Then it will take off. Of course, we need enough physicians so that they have time to do it.

   Response from Dr. Totten: Yes, money matters. There might be an argument that you can do more telehealth consults than in person in the same amount of time. But I imagine that is

variable. How much is paid for what is a major issue in our system. Particularly when you consider fee for service versus any type of bundled payment.

Day 2—October 13, 2021

1. **Question for Dr. Szefler—with your rural outreach plans, do you recommend appointing a local champion for asthma (i.e., one gen peds provider in the community who adopts special interest/focus in asthma), or do you plan to support all community providers?**

   Response from Dr. Szefler: Thank you for that question. Yes, identifying an asthma champion in the community is key to success as well as choosing someone who can support all providers and build bridges to integrate the various components of care for the child including parents, school nurses, primary care clinicians, and the specialist who may be involved with the child's care.

2. **The success of these programs do rely on an ability to communicate seamlessly across divergent EHR (electronic health record) systems. Is there any movement on a national level to make this more feasible?**

   Response from Dr. Szefler: This is a major challenge, especially from school to providers. We often rely on FAX machines to facilitate communication since telephone calls are very difficult with offices and schools being very busy. The high-tech people go into shock when I mention the use of the FAX. They think that they are all in the Smithsonian by now next to the dial telephone. Our hospital has promoted read-only access to providers and schools that are in our care network and have the same EHR.

   Response from Dr. McGrath: I think that the variable platforms is driven by the proprietary nature of some of the services that require we use a specific platform (i.e., tele-stroke and acute tele-psych). Some of the consultants demand specific platforms.

3. **Dr. McGrath, have you done an analysis for pediatric and neonatal inpatients remaining at rural hospitals, the role of pediatric telehospitalist medicine, and the role of pediatric transport telemedicine?**

   Response from Dr. McGrath: We have not done any analysis on this question but I think you bring forward a really important issue. In our area of the inland Northwest, we have seen a progression to transfer even more routine pediatric hospitalizations to the region's only tertiary pediatric hospital which is a 3-hour drive away. Often, those patients have stays that are quite short and sometimes even under 24 hours. It is a great opportunity to impact the experience of care and care costs. Local pediatric nursing skills are key. It probably would require a combination of ECHO (Extension for Community Healthcare Outcomes) programs for the whole rural pediatric care team as well as case support for the whole team, not just the peds hospitalist.

4. **Provider-to-provider seems specific to needs in rural areas—thoughts on other future innovations such as health center hubs, cvs pods, medical homes? To move the care to locations of patients vs institutional centers.**

   Response from Dr. McGrath: I think "hospital at home" models could be a new model.

5. **In a private setting, what would be the best model of reimbursement of specialists in a provider-to-provider telehealth consultation?**

   Response from Dr. McGrath: I think in a private setting it is supported through alternative payment models with value-based payment.

6. **I was wondering if you could expand a bit more about the technology your hospital requires for the provider-to-provider services your hospital offers. I think you mentioned that it requires seven different systems. Does this mean you have computers with seven different software programs? What kinds of costs do you incur? Also, do you consider cybersecurity protections at your hospital?**

   Response from Dr. McGrath: It is a reflection of the asynchronous roll out of services over time. Since we do not have one entity providing all of the services, each health system or provider has their preferred/required platform. A lot of this is the proprietary "cart" that they may use (i.e., telestroke, telepsych, acute telepsych, tele-ICU, telecardiology, telederm). While some of it makes sense when a higher fidelity system is truly needed, it mostly seems like preference over true function needs. Does that answer your question? We do consider cybersecurity. It is a dynamic need. My frustration as a provider is that it seems that we should be able to have some unified standards for hardware that allows interchangeable use. It would be easier to manage the cybersecurity on less platforms.

   Response from Dr. Totten: Additional comment on costs. As Dr. McGrath is pointing out, it is not just about costs. It is about who gets the money. So, while tele-ICU might reduce overall costs or travel costs for a payer, they can also increase revenue for the rural hospital if they provide the care and get the payment. Then there are patient costs that may be reduced due to travel. But there are other scenarios to consider. What if the patient ends up staying in the rural hospital longer for some reason and co-insurance is per day? What if the hospitals that used to receive patients start losing revenue and consider not continuing to offer telehealth consultations for patients that say in the rural hospitals?

7. **Can you talk about any telehealth related training resources available for providers in rural areas? How accessible are these trainings for a typical provider?**

   Response from Dr. Garcia-Dia: There are available training resources for telehealth depending on the region. From the Northeast, I came across this website: https://nytelehealth.netrc.org/home.php. The site provides an introduction to key concepts in the telehealth program development and management. The courses were developed by the

Northeast Telehealth Resource Center. Other resources: https://www.relias.com/topic/telehealth.

Response from Dr. Womack: While many of the program evaluations produced narrative reports, we did come across one study that provided a "how-to" toolkit, based on their experiences implementing provider-to-provider telehealth, focused on teleprescribing of buprenorphine. The reference for this study is: Brunet N, Moore DT, Lendvai Wischik D, et al. Increasing buprenorphine access for veterans with opioid use disorder in rural clinics using telemedicine. Substance Abuse. 2020;1-8. doi: 10.1080/08897077.2020.1728466. PMID: 32078492.

Local and regional ECHO programs are another opportunity for training. ECHO is a form of provider-to-provider telehealth that offers rural clinicians opportunities to present challenging cases and receive feedback from remote specialists, and/or to receive continuing education at a distance. Several additional pointers that that go beyond the evidence review include: Health professions training—such as medical residencies are now including how to practice via telehealth in their curriculum; and HSRA (Health Resources & Services Administration) has recently funded new projects through the Telehealth Technology-Enabled Learning Program to build telementoring programs and networks in medically underserved communities.

Response from Dr. Davis: I think the answer/resource would also depend on what type of telehealth the provider is hoping to use (e.g., is this for patient care for an acute need or for cancer treatment? For an econsult? For education such as through ECHO and what capacity their site has? There's a pretty detailed list of resources available at NCQA (National Committee for Quality Assurance) including some getting started guides, see: https://www.ncqa.org/programs/data-and-information-technology/telehealth/taskforce-on-telehealth-policy/educational-resources/.

I'd also encourage folks to reach out to partners in their state who might be doing work/ providing support in this area, for example the state Office of Rural Health, the Primary Care Association, an ECHO hub, and/or within regional universities (PBRNs (practice-based research networks) or CTSAs (Clinical and Translational Science Awards) or connected health centers that emerged in response to COVID-19). Some of these local partners may have "facilitators" or trainings that can help with platform selection, identification, and implementation support.

Day 3—October 14, 2021

1. **EMR (electronic medical record) integration comes up a lot in these discussions. What do we know about advances or "best practices" for improving EMR integration?**

Response from Dr. Cullen: There is little EHR integration across platforms. The best situation is a common EHR within a hospital system. In my community of 4,000 people, we have four non-integrated EHRs.

2. **Comment for response—Strategies that get information to the folks who need it need to be supported within university tenure systems.**

   Response from Dr. Krupinski: Agree! Too often outreach is not a big part of the tenure /promotion review process, but the personal statement can convey these efforts as can listing them in what is typically a section called media and outreach or something along those lines.

   Response from Dr. Ward: I agree, there should be a balance of dissemination efforts that contribute to the scholarly literature and pragmatic learnings that contribute to end-users who need information to make informed decisions. Both are important.

3. **As federal agencies like HRSA (Health Resources and Services Administration), FCC (Federal Communications Commission), USDA (United States Department of Agriculture), and others during a PHE (public health emergency) fund telehealth, carving off staff for research and reporting takes slightly from funds for delivery. Do we have the right match?**

   Response from Dr. Krupinski: Not 100% clear what the question is asking, but the match is right but these agencies are not 100% of the solution. It is true the funds are more often to support the program implementation, technology etc., and less for staff support thus making it necessary to be creative about how to collect data and by whom. However, it is feasible with some cross-training of existing staff who are motivated. Other agencies like NIH (National Institutes of Health) and PCORI (Patient-Centered Outcomes Research Institute) have better support for personnel and PCORI certainly supports telemed research and program implementation, and NIH is starting to support clinical trials with telemedicine so they are increasingly good fits.

   Response from Dr. Ward: Personally, and I am biased as a researcher, research and reporting are very important. It is akin to "teach a person to fish…". A grant providing support to an entity to provide a telehealth service is doing good in terms of meeting the needs of a particular community of users but is missing the boat in terms of generating learnings beyond that grantee that could benefit a much larger community, and hopefully address pressing issues such as which services should CMS (Centers for Medicare & Medicaid Services) reimburse.

4. **In regard to having a group of specialists available 24x7, have you found any groups providing this service for the rural providers?**

   Response from Dr. Cullen: In terms of a telepresence, only for ICU and ER (emergency room) such as in the Avera model. We do have telestroke 24/7. I can talk 24/7 to on-call specialist providers in Anchorage and they have access to my images, labs, and x rays. The quality of the consult is heavily dependent on the specialist involved.

5. **Dr. Cullen, you mentioned about the importance of having EMR for telehealth during your talk. How easy or difficult was it to implement EMR in the rural area?**

Response from Dr. Cullen: We have four EHRs in our community that do not talk with each other. My hospital though is part of the larger network.

6. **As telehealth utilization advances, are "Siri and Alexa" in attendance for examinations, consultations, etc.? Is there consideration for all the mobile AI (artificial intelligence) mined from everyone's pocket or Bluetooth devices whether they are patients, care providers, visitors, staff, etc.?**

   Response from Dr. Arora: At this time, I am not aware of Siri and Alexa being present on telehealth consultations. This has the potential to create a lot of valuable data which can be used to create new knowledge and insight. A challenge is going to be to get appropriate consents and address issues related to patient privacy.