CLINICAL SCHOLARS

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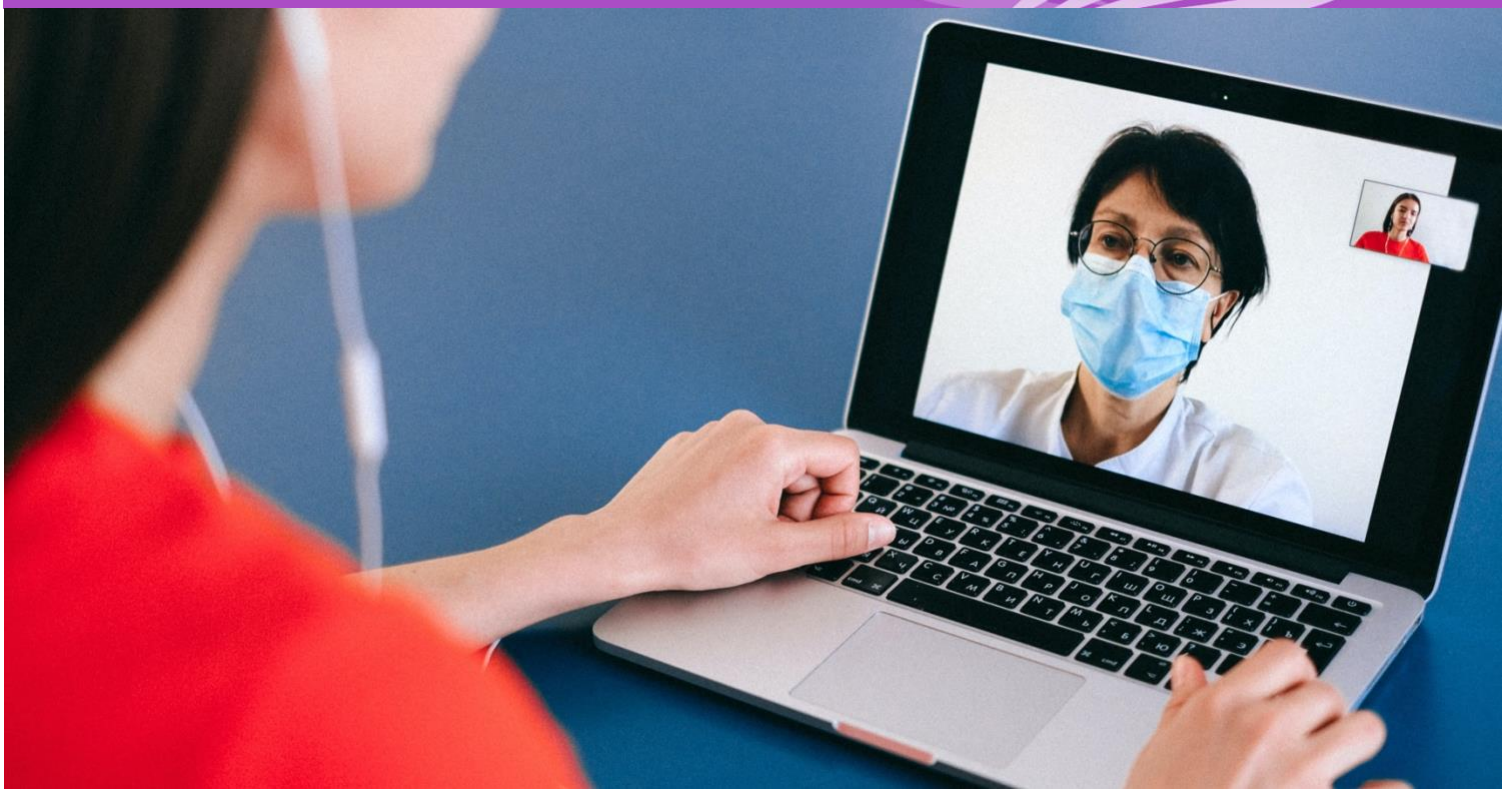

Toolkit for Developing a Digital Web to Address Behavioral Disparities in Rural Communities

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ABOUT THE PROGRAM

Clinical Scholars is a national leadership program of the Robert Wood Johnson Foundation led by the University of North Carolina at Chapel Hill. Learn more about RWJF's Leadership for Better Health programs by visiting: rwjf.org/leadershipforbetterhealth

ABOUT THE TOOLKIT

This toolkit serves as a road map to create a sustainable network of digital approaches to expand education, support and access to behavioral health services in rural communities.

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Toolkit for Developing a Digital Web to Address Behavioral Disparities in Rural Communities

There is a behavioral health care crisis in rural America. Although one might find a psychiatric specialist on almost every street corner in New York City, many New Yorkers living outside of large metropolitan cities can find themselves traveling hundreds of miles for behavioral health care. A dearth of trained psychiatric specialists in rural New York State (NYS) means that frontline clinicians (emergency department, acute care, and primary care) are largely responsible for psychiatric care in rural communities. However, these clinicians are not trained or adequately supported to address the increasingly complex array of serious, persistent symptoms and behavioral health concerns among their patients and families. As a result, patients and families suffer because critical health needs are under-recognized and unaddressed. Access to quality behavioral health care in rural communities has been a longstanding, national problem, resulting in long wait times, repeated visits to the emergency department and even early mortality due to suicide.

In upstate New York, our rural counties are among the hardest hit in these regards. Over the last decade, the number of suicides in NYS increased by 32% (to over 1,700 per year). At the same time, rural cultural mores – including values on independence, caring for oneself and one's own, and stigma around behavioral health – can create obstacles to seeking care. Rural Allegany County, in upstate New York, is no exception to this distinct wicked problem. At the onset of this project, this county found itself at the nexus of spiraling mental health need/suffering and a deep lack of access to resources including behavioral health care.

Increase access to rural behavioral health services

The Digital Web project sought to engage members of the Allegany community, reduce health disparities, and improve the quality of behavioral health care and support received by individuals, families and caregivers. Leveraging the expertise of our team members and technology, Digital Web created linkages between our community partners and the region's academic medical center, University of Rochester (URMC). Our strategies and initiatives were to: equip community providers with the knowledge, skills, and comfort level to treat patients with complex behavioral health within their community, and, to increase access to behavioral health care through digital interventions. Specific objectives of this project were to provide Clarity Wellness Community (a local mental health clinic), Jones Memorial Hospital (a local community hospital), and Allegany County primary care providers with capacity, knowledge and decision support and the patients, families, and caregivers served by these providers with increased access to specialty behavioral health consultation services through a technology driven integrated care delivery system.

The Substance Abuse & Mental Health Services Administration reports that 1 out of 5 residents of nonmetropolitan U.S. counties had some sort of mental illness.

More than 60% of rural Americans live in mental health professional shortage areas.

Tragically, the economic decline that fuels despair and need for behavioral health care in many remote settings also reduces its availability.

Planning

To identify specific geographies of most need within Allegany County, our team used a geographic information system (GIS) framework using geocoded address data of patients seen within the academic medical center, URMC. All patients receiving care at URMC are screened for emotional distress using the PHQ9 or PROMIS Mood Instrument at least once per year. Using GIS, the emotional distress data was layered on the corresponding patient's geocoded address producing the visualization found in Figure 1. When looking at Allegany County (area within the yellow circle), higher prevalence of emotional distress represented by darker shades of purple was attributed to the village of Wellsville.

Figure 1: Emotional Distress Prevalence

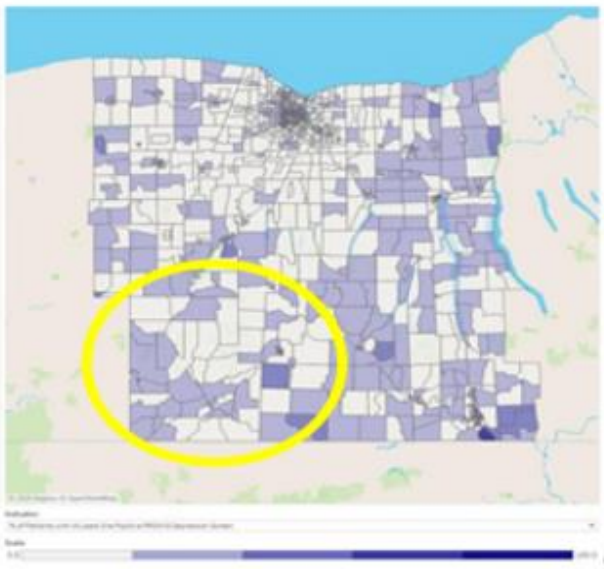


Figure 2: Area Deprivation Index

To better understand the different social, economic and environmental factors that impact the ability to receive the appropriate level of behavioral health care, our team layered on the area deprivation index at the neighborhood level within our GIS framework to provide a proximal measure of the social determinants of health within the community (see Figure 2). This analysis found that the majority of Allegany County had neighborhoods at greater socioeconomic disadvantage represented by darker shades of orange when compared to the rest of the Finger Lakes Region of NYS.

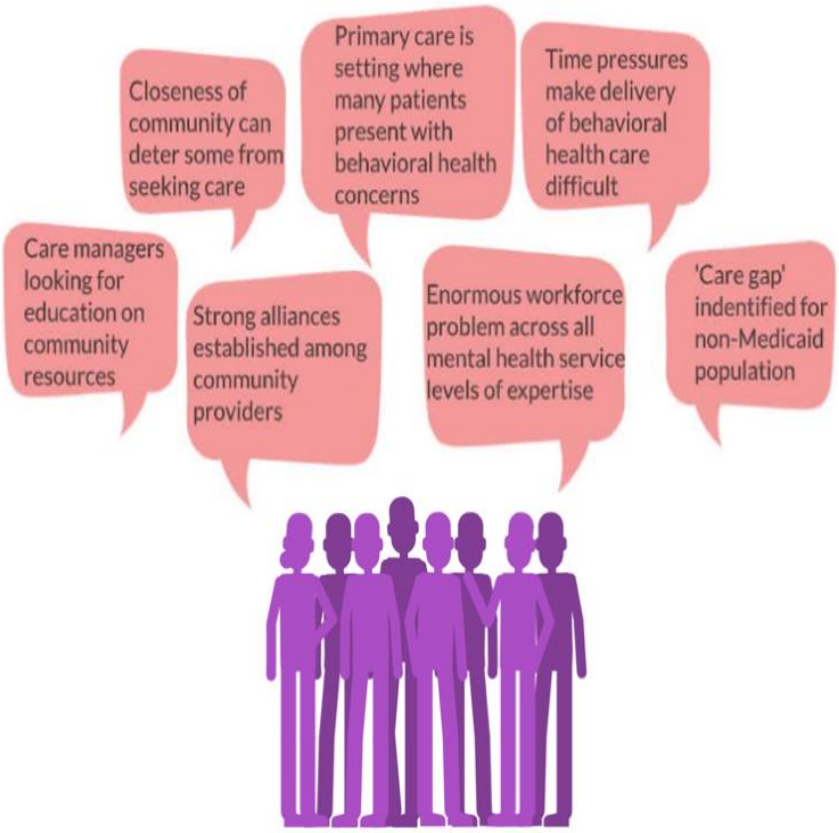
COMMUNITY PARTNERSHIPS

Addressing the behavioral health needs of a rural community requires a collaborative effort across many stakeholders. Listening to the voices of representatives living and working within Allegany County provided key insights on potential community barriers and facilitators that might impact the project's success (Appendix A). The project's strategic plan was revised in response to stakeholder input, with a goal to specifically target the community's "care gaps". The onset of the COVID-19 pandemic halted formal development of interventions tailored specific to this cohort, yet, created a new and more private platform for community members to access mental health treatment through expanded telepsychiatry.

INTERDISCIPLINARY TEAM

Our team is comprised of a psychiatrist, psychologist, psychiatric nurse practitioner and a clinical social worker. The complexities of developing a digital web required the formation of an interdisciplinary team with expertise in the following areas: treating behavioral health disorders, research and application of telehealth best practices, familiarity, roots and trust with the local community, community engagement and leveraging the use of technology across a health system.

With the scope of this project being centered around resources from a large academic center 90 miles away, it was important that the voice of the community was represented on the team to build trust amongst community stakeholders.



CLINICAL SCHOLARS TEAM

- Michael Hasselberg, PhD, RN, PMHNP-BC, University of Rochester
- Jennifer Richman, MD, University of Rochester
- Wendi Cross, PhD, University of Rochester
- Kathryn Lewis, LCSW, Clarity Wellness Community

FUNDING

Funding has been a longstanding barrier to high quality behavioral health care in underserved and rural communities. One of the major drivers of behavioral health provider shortages is poor reimbursement. In all 50 states, the average behavioral healthcare reimbursement is below the Medicare reimbursement threshold, while payment for medical care is well above the threshold. This lack of reimbursement parity is even further evident for behavioral health care provided at a distance through telehealth or other digital health modalities. While all 50 states provide reimbursement for synchronous telebehavioral health care in Medicaid-fee-for-service, only 43 states have laws that governs private pay reimbursement of such services. This has resulted in more patients being forced to travel long distances and seek out-of-network behavioral health care.

The Digital Web was initially funded through a $420,000 grant from Clinical Scholars, a program of the Robert Wood Johnson Foundation. There was need for additional funding to support the reimbursement of virtual behavioral health care across the region. The Affordable Care Act (ACA) accelerated efforts to reimbursed high value behavioral health care through the Delivery System Reform Incentive Payment (DSRIP) Program. Launched via a Medicaid waiver, DSRIP was a transformational model that allowed NYS to promote community-level collaborations and focus of delivery system reform to improve patient care. The overall goal of DSRIP was to reduce avoidable hospital use by 25% over five years with a significant focus on the integration of behavioral health services into the community setting. Regional collaborations of major public hospitals and safety net providers, designated as Performing Provider Systems (PPS), were created to choose and implement DSRIP transformation projects. Additional funding secured through DSRIP allowed for the expansion of our project's telepsychiatry services across the PPS.

Project work

Our three-pronged approach to addressing behavioral health disparities in Allegany County included:

1. **Launching of Project ECHO® PSYCH**
2. **Establishment of telepsychiatry into the community mental health clinic**
3. **Development of psychiatric assessment officer (PAO)/telepsychiatry model**

PROJECT ECHO® PSYCH

The Extension for Community Healthcare Outcomes in General Psychiatry (ECHO PSYCH) is telementoring program systematically connects interdisciplinary behavioral health specialists at URMC with rural community primary care providers and care managers. During these sessions, community clinicians use video-conferencing technology to participate in guided case-based and didactic learning sessions with specialists. Through regular participation in Project ECHO PSYCH, these community clinicians acquire new behavioral health skills to treat patients that they would have otherwise referred out, often many miles from home. Patients with complex and chronic behavioral health conditions get high quality care where they live, with the clinicians they know and trust.

COMMUNITY-BASED TELEPSYCHIATRY

Telepsychiatry defined as the use of two-way real-time interactive audio and video equipment to provide and support behavioral health services at a distance was established at Clarity Wellness Community, Allegany County's outpatient behavioral health clinic. The first step of implementation was completion of policy and procedures for telepsychiatry which needed to be approved by the NYS Office of Mental Health. Next, the technology infrastructure at Clarity Wellness Community was evaluated and it was determined that a HIPPA compliant video-conferencing software, new computers and video cameras would need to be purchased. Once installed, OMH arrived onsite to complete connection testing. The final step in the implementation process was training the distant providers. Unlike many rural community mental health communities, Clarity was already using an electronic medical record and eliminated the use of paper charts. The electronic infrastructure provided the foundation for a smooth training and communication process for increased telepsychiatry.

Due to the onset of the COVID-19 pandemic, rapid expansion of telepsychiatry included the provision of psychotherapy services. Due to prior investment in infrastructure and equipment, Clarity Wellness Community was well positioned to make this transition in a matter of days (Figure 3). Emergency regulations at the state level allowed flexibility around the location of the provider and the patient, with many patients now receiving services via telephone or videoconferencing. An additional benefit of the videoconferencing software was the seamless continuation of treatment team meetings, clinical supervision and high-risk case reviews.

FIGURE 3: CLARITY WELLNESS COVID-19 RESPONSE TIMELINE

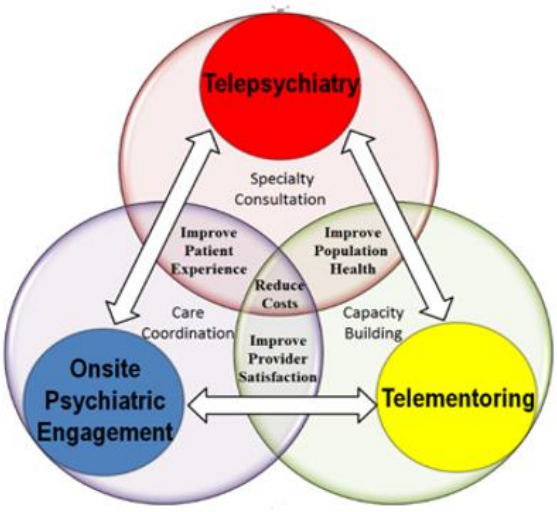
MAR 13	Telemental Health Planning Session
MAR 16	Restriction of In-Person Visits Self-Attestation Submitted to OMH Staff Training on Videoconference Software Telemental Health Planning Session
MAR 17	Agency-Wide Telemental Health Services Begin
MAR 23	IT Deploys Integrated Phone System on Laptops Telemental Health Planning Session
MAR 30	Telemental Health Planning Session Virtual Group Services Commence
APR 13	Documentation and Billing Relief Waivers Implemented

PSYCHIATRIC ASSESSMENT OFFICER (PAO) TELEPSYCHIATRY MODEL

The PAO Telepsychiatry Model (Figure 4) was implemented in Jones Memorial Hospital, the community acute service provider, to help facilitate a smooth transition of care across the community's primary care network, social service organizations, and regional inpatient psychiatric hospitals. The primary goals of the model are to reduce emergency department (ED) revisits and unnecessary and costly out of county transfer of patients presenting with behavioral health conditions. Prior to this model's implementation, this rural ED had no mental health workers. This led to long wait times in the ED to only be met with the additional challenge of being transferred to out of county hospitals for a psychiatric evaluation, often hours away. Patients were then faced with a care team who was unfamiliar with their home community and not equipped to make appropriate referrals if inpatient care was not deemed medically necessary.

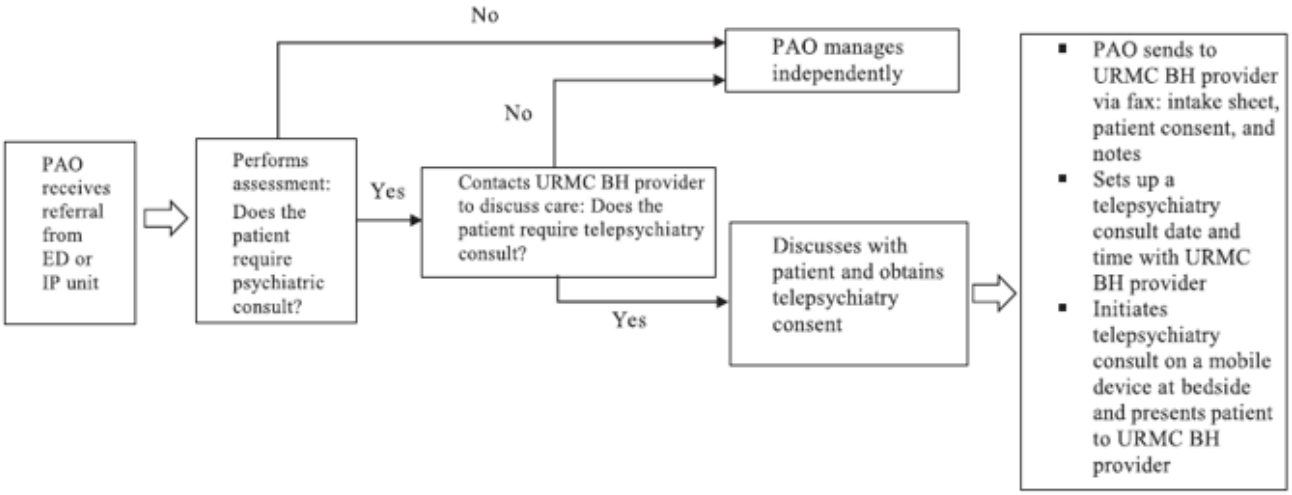
The model calls for the integration of an onsite PAO, often a licensed social worker or mental health counselor, who is charged with performing psychiatric and behavioral health evaluations, crisis intervention and coordination of care. The unique aspect of this approach includes the availability of tele-mentoring between URMC psychiatric providers and the PAO for ongoing support when managing complex cases. In the event of acute and challenging presentations, direct psychiatric consultation is available through video-conferencing software. These consultations can result in diagnostic clarification, pharmacological recommendations and evaluation for higher levels of care (Figure 5).

Figure 4: PAO Telepsychiatry Model



Hasselberg, 2020

Figure 5: PAO Telepsychiatry Model Workflow



Maeng, Richman, Hasselberg, in press

Evaluation and dissemination

ECHO PSYCH

Ten (10) ECHO PSYCH clinics were held from 2/2019-3/2020. These ECHO clinics reached 120 primary care participants, primarily care managers and providers. An evaluation was initiated, in collaboration with ECHO PSYCH departmental leadership, in November 2019 to assess satisfaction and confidence for responding to behavioral health needs in patients. Self-report data on four items was collected from participants after each ECHO clinic. Respondents used a 5-point Likert scale from "strongly disagree" (1) to "strongly agree" (5) to the following items:

- Overall, I am satisfied with this ECHO session
- I am confident I can use what I learned in this ECHO session in my practice
- I believe this training will help me do my current job better
- My colleagues will appreciate my using the new skills I have learned in this training

The plan was to continue the evaluation process for one year. However, due to the pandemic, sessions were discontinued in March 2020 and data is available for only 4 sessions (Appendix B). Satisfaction was very high (76% to 94% agreed or strongly agreed they were satisfied with the session) for all sessions that followed the traditional ECHO format of didactics followed by case discussion. The final session did not include a didactic portion and self-reported satisfaction was lower (59% agreed or strongly agreed). In addition, the pandemic crisis was emerging which likely impacted engagement. Participants also reported confidence they could use what they learned in their practice and the training would help them with their jobs. Example comments from participants include "I feel more confident", "insightful", and "I learned a lot". Although evaluation was truncated, the ECHO model was feasible to implement, well-received by participants and perceived to be helpful particularly when didactics are provided along with case discussion.

PAO TELEPSYCHIATRY MODEL

During the time period of 2018-2019, the Jones Memorial PAO program served 731 patients, while providing 167 tele-mentoring/phone consults. Furthermore, only 7 videoconferencing visits directly with patients were conducted during this time period. The lower utilization of this modality suggests that the needs of community mental health in the ED can be adequately met by experienced mental health counselors and social workers with appropriate support. The PAO model reduced the need to access more costly psychiatric providers only when medically necessary. Mental health workers familiar with patients' home communities are well equipped to facilitate referrals and linkages to services in the community, while creating less reliance in the future on ED services to meet patient needs.

TELEPSYCHIATRY

During this project's implementation billable telepsychiatry sessions out of Clarity Wellness Community, including those allowed by COVID-19 regulations, totaled 12,740 (timeframe: 1/2020 - 9/30/2020). This is an enormous increase in patient care volumes and a 33% increase in services compared to previous year timeframe. There was also rapid expansion of telepsychiatry across the URMC during the COVID-19 pandemic outbreak resulted in a reduction of patient appointment No Show rate from 9% to 2% and the cancellation rate from 20% to .37%.

KEY MESSAGES

- Technological solutions to reduce rural behavioral health disparities are feasible, acceptable and effective.
- Regulatory barriers to providing care (e.g., telehealth) disappeared in the face of unprecedented crisis. Our project was in progress and poised to rapidly respond.
- Including diverse community stakeholders in project planning and implementation is the key to success.
- It is vital not to go into a community project with a preconceived notion about what would benefit the community. Be open minded to the concerns of the community and use the knowledge you have to develop solutions together.

DISSEMINATION

Dissemination of the Digital Web has included academic presentations, media presentations, publications, and a congressional report. (Appendix C)

Challenges, successes, and lessons learned

CHALLENGES

There were several institutional and organizational challenges primarily related to the contingencies associated with a large healthcare system. One critical solution included frank conversations about the multiple roles within the team. Another solution was to seek consultation from experts who were helpful in terms of understanding the organization factors and maintaining the project's scope.

Due to COVID-19, we encountered a system-wide hiring freeze which prevented hiring additional evaluation staff as planned. This occurred at the same time that team members were overwhelmed with pandemic demands. One solution was to seek out individuals who were employed part-time (URMC) and could join the team. We were not successful in engaging a suitable person.

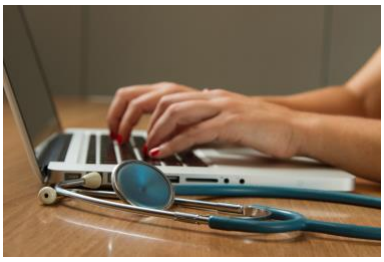
SUCCESSES

The Digital Web established a model for other rural communities that were not already engaged in technology solutions to access and service delivery during COVID-19. The model has the potential to help address the enormous rural health disparities, including behavioral health needs, even after the pandemic. Our greatest success has been the installation of telemedicine into a rural community behavioral health clinic which allowed a rapid response to COVID- 19 and non- interruption of services. Specifically, expansion of telepsychiatry in Clarity Wellness Community initially reduced wait time from three months down to two weeks. The recent surge in request for behavioral health services via telehealth due to Covid-19 has increased wait time for psychiatric evaluation to approximately 4 weeks (excluding psychotherapy services). The agency is currently recruiting for more psychiatry time. Moreover, tele-behavioral health services, including psychotherapy, grew exponentially and are likely to be maintained.

The success of the PAO model has had extended reach. Specifically, the POA model was foundational to a large, federally funded grant focused on meeting the mental health and substance use (particularly synthetic opioid) needs in rural Appalachian communities including Allegany County, our community partner. The UR Medicine Recovery Center of Excellence was established by the Health Resources and Services Administration's Rural Communities Opioid Response Program and the grant activities extend to rural counties in West Virginia, Ohio, and Kentucky for greatest impact.

SHIFTS IN THINKING

The Digital Web team became aware that system level obstacles would thwart additional collaborative efforts, beyond our three primary foci. The political and associated fiscal realities of a large healthcare system in relation to a smaller community-based agency were not to be resolved by our teamwork and individual efforts. We were grateful for Clinical Scholars' curriculum of Drs Emery and Crump on "Understanding Political Systems". They met with our team and helped clarify the roadblocks in our path as insurmountable. We turned our efforts to dissemination products. Then, within months we were extremely busy meeting the demands for digital healthcare across our communities during COVID-19.



RACHEL'S TESTIMONIAL

"Prior to telepsychiatry, we found ourselves at a crossroads with service delivery and the ability to canvas for prescribers with a wider net. Having the ability to engage in telehealth services has not only helped us to be able to spread a larger net for prescribers without needing to have them relocate, it has also provided us with the opportunity to secure a child prescriber, which is a hard role to fill in this rural community.

Since March 2020, we have been able to continue providing telehealth services seamlessly.

We are using telehealth sessions in order to be able to engage individuals that may otherwise had dropped out of treatment due to not being able to receive services in the office or for fear of being exposed to COVID. As a therapist, I have had several really beneficial sessions with individuals over the phone and even had one of my clients tell me that he recognized that he has been more open over the phone than in person."

– Rachel Trudell, Clarity Wellness Center Clinical Social Worker

Recommendations

When addressing any wicked problem, it is important to involve various members of the community from the beginning. Historically, community mental health clinics struggle with continuous funding streams and consistent staffing patterns. Before embarking on a project such as this, it is recommended that the clinic be well-organized in regard to in-person visits and already have structures in place to address access and engagement issues, staff retention and use of evidence-based practices. Telehealth services require an extra effort by all parties to ensure strong and consistent communication. When adding distant providers, policy and procedure gaps become more evident, shaping the client's care experience. This ultimately impacts how willing staff and clients are to embrace the technology.

BEST PRACTICES

Working on wicked problems requires nimbleness and agility. Although an initial project plan might have been well thought through be prepared for it to change many times over the course of implementation. Draw upon on your team's strengths, perspectives and talents as they emerge over time. Our team included leadership from the academic medical center and its large health care system and leadership from the rural community mental health center. Each was accustomed their political reality. It became clear that candid conversations at the outset of the project would have clarified roles, responsibilities and loyalties for team members. Having this understanding ahead of time may have changed some of the scope of the project as well as limitations particularly in terms of evaluation.

Every project and team are different. Our best advice is about the team because good work is not likely to emerge from weak ties among the members.

- Team success requires open communication and transparency. Encourage all members of the team to feel comfortable to speak up, debate, and provide honest feedback throughout the course of the project.
- Progress depends on the strength of the team. Recognize and reinforce what each team member brings to the project, especially as challenges arise. Flexibility is critical.
- It is important to understand the political interests and motivations of other organizations involved in a large-scale project. Gaining this understanding may help one take a non-judgmental approach to resolving the conflict or shed insight on potential pivot points for the project.

Appendix

APPENDIX A: STAKEHOLDER'S MEETING AND TOURS

March 27, 2019 Wellsville Stakeholder's Meeting

Attendees	Affiliations
Vicky Grant	Commission of Social Services
Mike Damiano	ARA Exec Dir
Kelly Dickerson	Managed Care Liaison, DSRIP Initiatives
Lindy White	Assistant Dir of Community Services
Bill Penman	ACASA Exec Dir
Doreen Chaffee	Regional Care Manager Coordinator Jones Memorial
Wendi Cross	URMC
Michael Hasselberg	URMC
Kate Lewis	Associate Executive Director, ARA
Jennifer Richman	URMC

Tour/Visit Sites

Jones Hospital

Clarity Mental Health Center

APPENDIX B: PSYCH ECHO EVALUATION OF SESSIONS: % AGREE OR STRONGLY AGREE

Item	Grief in Primary Care	Psychiatric Drugs	Intellectual / Developmental Disabilities (IDD)	Case Presentation (No Didactic)#
1. Overall, I am satisfied with this ECHO session	94.3%	86.8%	91.4%	59.1%
2. I am confident I can use what I learned in this ECHO session in my practice	91.4%	81.6%	85.7%	45.5%
3. I believe this training will help me do my current job better	85.7%	76.3%	74.3%	50%
4. My colleagues will appreciate my using the new skills I have learned in this training	74.3%	63.1%	71.4%	31.8%

 # Note: Occurred 3/2020, pandemic emerging

APPENDIX C: DISSEMINATION

Academic presentations include:

- 4th Annual North Country Telehealth Conference, Glen Falls, New York
- Consultation-Liaison Psychiatry Conference, Orlando, Florida
- Healthcare Association of New York State, Albany, New York
- New York State Department of Health, Albany, New York
- Pandion Optimization Alliance 2019 Healthcare Innovations Conference, Rochester, New York
- Del Monte Neuroscience Symposium, New York, New York
- 3rd Annual Rochester Behavioral Health Integration Symposium, Rochester, New York
- The John A. Hartford Foundation and The Harry and Jeanette Weinberg Foundation, Setting the Stage for Action in Rural Health and Aging Meeting, Scranton, Pennsylvania
- URAC Telemed Leadership Forum, Washington, D.C
- American Psychiatric Nurses Association Policy Summit, Washington, D.C
- Center for Healthcare Strategies Health Policy Meeting, Washington D.C.

Media presentations include:

- Public radio - WXXI Connections, Rochester, New York, "Discussing telepsychiatry virtual mental health support during the pandemic" https://www.wxxinews.org/post/connections-discussing-telepsychiatry-and-virtual-mental-health-support-during-pandemic
- Public radio - WXXI Indie Lens Pop-Up, Rochester, New York; "The providers"
- National podcast - Podcast presentation for CMIO Podcast: Advancing the Knowledge of Today's CMIO. "URMC digital health" https://www.cmiopodcast.com/post/interview-with-michael-hasselberg-m-s-ph-d
- HealthcareIT News, "University of Rochester serves rural patients, reduces ED burden with telebehavioral health" https://www.healthcareitnews.com/news/university-rochester-serves-rural-patients-reduces-ed-burden-telebehavioral-health

Publications include:

- Hager, B., Hasselberg, M.J., Raney, L., Arzubi, E., Betlinski, J., Duncan, M., & Richman, J. (2018). Leveraging behavioral health expertise: Practices, potentials, and policy implications of the Project ECHO® approach to primary care and behavioral health integration in rural and underserved areas. Psychiatric Services, 69(4), 366-369. doi: 10.1176/appi.ps.201700211.
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- Hasselberg, M.J. (2020). Fast following Amazon to the patient-centered healthcare system. HealthTech Magazines, https://www.healthtechmagazines.com/fast-following-amazon-to-the-patient-centered-healthcare-system/
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- Maeng, D., Richman, J., & Hasselberg, M.J. (in press). Impact of integrating psychiatric assessment officers via telepsychiatry on rural hospitals' emergency visit rates. Journal of Psychosomatic Research, doi: 10.1016/j.jpsychores.2020.109997. AAMC, "An increasing number of teaching hospitals offer online counseling visits. That's more important now than ever" https://www.aamc.org/news-insights/increasing-number-teaching-hospitals-offer-online-counseling-visits-thats-more-important-now-ever

Congressional report:

- Office of the Assistant Secretary for Planning and Evaluation. (February 2019). Report to congress: Current state of technology-enabled collaborative learning and capacity building models. U.S. Department of Health and Human Services, https://aspe.hhs.gov/system/files/pdf/260691/ECHOAct-ConsolidatedReportToCongress.pdf