Implementing Virtual Abnormal Involuntary Movement Scale (AIMS) Assessments in a

Rural Behavioral Clinic

Aletta J. Mannix

School of Nursing, Oregon Health & Science University

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Dr. Ginny Elder

Abstract

The Abnormal Involuntary Movement Scale (AIMS) is considered the gold standard for the initial screening for and assessment of tardive dyskinesia (TD), a chronic and largely irreversible movement disorder caused by the dopamine blockade resulting from long-term administration of first and second-generation antipsychotic medications. During the COVID-19 pandemic, many behavioral health clinics turned to telehealth to meet client needs. One rural behavioral health clinic in Oregon utilized telephone visits to mitigate some of the difficulties clients were having with access to virtual technology, and this practice is still active at said clinic. While telephone visits offered much ease and convenience especially to low-functioning clients, the ability for providers to assess for TD and subsequently treat became limited. This quality improvement (QI) project sought to provide a foundation for establishing a method of assessing patients who present in person to the clinic for AIMS assessments by developing a rooming protocol and providing education on how to conduct AIMS assessments to the providers and support staff. An evidence-based training module developed by the American Association of Psychiatric Pharmacists (AAPP) was selected and a collaborative rooming protocol was developed by the QI and clinic team. Results revealed that short staffing and time management remained concerns for the team, but that education was helpful. The author concludes that future QI projects should focus on employee retention while also moving forward with testing the rooming protocol using PDSA cycles.

Problem Description

Tardive dyskinesia (TD) is an unfortunate and stigmatizing involuntary movement disorder caused by antipsychotic medications prescribed for conditions such as schizophrenia spectrum, bipolar and psychotic disorders (Ward & Citrome, 2018). Symptoms of TD include spastic facial movements such as repeated tongue protrusion, lip smacking and tremors. The Abnormal Involuntary Movement Scale (AIMS) has long been considered a valid screening tool to measure both the severity of TD and comparative effects of treatment (Kane et al., 2018). The available literature suggests that these assessments can be successfully completed virtually and ideally are combined with regularly scheduled in-person visits (El-Mallakh et al., 2022). Because providers at this clinic remain operating remotely but their support staff operate live at the clinic, the clinic has expressed a need to implement virtual AIMS assessments. This author aims to conduct a quality improvement (QI) project to assist in a successful implementation of AIMS testing by virtual providers on patients arriving in-person to the clinic using support staff to assist with rooming and directing patients via AIMS training and rooming protocol development and explored the scope of practice required to administer such an examination,

Available Knowledge

Epidemiologic studies estimate prevalence of one or both movement disorders in this population at approximately 20 to 35% of antipsychotic users in the United States (Ward & Citrone, 2018) while some international studies have indicated the prevalence could be around 54% for TD, 35% for DIP, and around 18% of patients presenting with both in a primarily African-Caribbean population in The Netherlands (Mentzel et al, 2017). Antipsychotic medications cause a dopamine (D2) blockade, leading to the release of acetylcholine, causing spastic muscular activity (Stahl, 2021). In TD, a permanent condition, it's possible that after

long-term treatment with antipsychotic treatment the D2 receptors cannot "reset back to normal," leading to irreversible symptomology (Stahl, 2021).

In an original research project, Amarendran et al. (2011) concluded that AIMS testing could be performed reliably and feasibly via teleconferencing. However, their study group of 50 was relatively small. The limitations of this study were lack of racial and ethnic diversity. When variability in rater scores was analyzed, there was a generalized agreement between raters in making AIMS assessments virtually. This further supports the generalizability and feasibility of conducting AIMS exams via teleconferencing (Amarendran et al., 2011). A systematic review comparing the psychometric quality of available scales used to assess antipsychotic-related movement disorders concluded that the AIMS tool does not allow for a clear delineation between chorea, dystonia or other Parkinsonian-like symptoms. (Martino et al., 2023).

A double-blind, quantitative, physician-based observational survey found that despite certain limitations, psychiatrists and neurologists felt positively about the future of movement disorder assessments via teleconferencing. Physician-perceived limitations included: socioeconomic and technological limitations could impact clinician's ability to diagnose drug-induced movement disorders (DIMDs). In this study, providers did not receive any specialized education on how to perform an AIMS assessment virtually, so this project would aim to close this gap in the literature by providing an educational module (Bera et al., 2022). A brief report aimed at making clinical and research recommendations regarding the assessment of DIMDs deemed teleconferencing a valid means of acquiring accurate assessment, but states that future goals should include the development of protocols that include assessments for the full spectrum of antipsychotic-induced movement disorders, not just for TD, as is the limitation of the AIMS test. (Shore et al., 2015).

Regarding the question of who is qualified to administer the AIMS examination, a 2018 Consensus Statement from the Tardive Dyskinesia Assessment Workshop states: "The AIMS test can be administered by any trained healthcare provider to any patient regardless of psychiatric diagnosis (Kane et al, 2018, p. 19)." According to the American Association of Medical Assistants, it is not permissible to delegate triage duties to a medical assistant. "Triage" in this context is defined as "a communication process with a patient (or patient representative) during which a healthcare professional is required to exercise independent clinical judgment and/or to make clinical assessments or evaluation (American Association of Medical Assistants)." For the role of the LPN, the Nurse Practice Act for the State of Oregon states that the LPN can conduct a focused assessment under the supervision of a registered nurse (RN) or licensed independent practitioner (LIP) (Nurse Practice Act, 2021).

Rationale

This project will be guided by Kotter's Model for Change. Kotter's model is a well-known process model for change management that has gained recognition from healthcare leaders as a useful guide for implementation practice (Baloh et al., 2018). The model consists of eight steps: Creating a sense of urgency, building a guiding coalition, forming a strategic vision, enlisting a volunteer army, enabling action by removing barriers, generating short-term wins, sustaining acceleration, and instituting change (see Appendix E).

A root cause analysis found that there is not a consistent process for regularly assessing for movement disorders via teleconferencing or in person. Primary barriers identified by stakeholders were delayed or slowed responses from electronic health record technologists, quality improvement committees and stakeholders feeling inundated with other projects, the validity of performing AIMS assessments via teleconferencing, billing, fear of resistance from

providers, and uncertainty about who on the treatment team is qualified to perform AIMS assessments. If standardized teleconferencing with reliable technology is a valid means of performing an AIMS assessment, then this clinic may benefit from both provider and staff education and a consistent means of providing teleconferencing for our patients in clinic to our remote providers. In one QI project that aimed to increase compliance with AIMS documentation from psychiatry attending physicians and residents, the most highly ranked solution was the implementation of a one-hour AIMS training session. After this educational intervention, compliance rates increased from 3% to 87% in a sample size of sixty patients in an outpatient psychiatry clinic (Chakrabarty et al., 2023).

Specific Aims

Our clinic will establish a vetted and specific protocol for how providers can screen live patients in the clinic using a designated space, available technologies, and assistance from medical assistants by February 28, 2024. Providers and staff will receive an educational module by February 1, 2024, and complete a series of surveys regarding comfort levels and knowledge before and after said module by February 15, 2024.

Context

S.K. Behavioral Health is a certified community behavioral health clinic (CCBHC) serving rural Oregon with a population of approximately 23,000. It serves as the county seat for mental health services. The department consists of four psychiatric mental health nurse practitioners (PMHNP), two licensed practical nurses (LPN), and two certified medical assistants (CMA). During the COVID-19 pandemic, PMHNPs at this clinic began using telephone calls for medication management encounters. After the pandemic, telephone visits remained the

mainstay due to provider preference and convenience, as well as an increase in appointment adherence by patients, particularly those who are clients of the assertive community action (ACT) team. However, while the providers at this clinic operate remotely, their medical assistants operate live at the clinic.

Interventions

This quality improvement (QI) project was conducted by a PMHNP student as a requirement of a Doctor of Nursing (DNP) program. The intervention consisted of two major facets: education on how to administer the AIMS screening tool/assessment and the development of a patient rooming protocol/procedure. The AAPP training module was approved for use by faculty at Oregon Health & Science University (OHSU) and by a clinic psychiatric provider per the request of the Director of Clinical Services (Nelson, 2022). A five-question survey was designed to capture qualitative and quantitative data via Lickert scale and text box and was sent to the team before and after the education module was completed.

The PMHNP student worked with providers and office staff to establish a procedure that delineates all the necessary steps required to perform the assessment in the clinic with a virtual provider. Using Kotter's Model for Change, the PMHNP student worked in person at the clinic to develop a rooming protocol. Using an existing clinic policy entitled Remote Employee Support & Expectations as a model, a draft of a rooming procedure was written by the PMHNP student. A primary initial piece of feedback from the team was that the procedure should address scope of practice of the MA and LPN in administering the AIMS assessment, so this was included in the procedure in addition to the MA scope of practice. The protocol outlined the assigned duties of support staff in rooming the patient, connecting the provider virtually to the patient, and uses the "cheat sheet" made available as a companion document to the video learning module from the

AAPP to guide support staff in directing the patient. This policy draft also includes a reference page of evidence supporting telehealth practices, scope of practice, and assessing for tardive dyskinesia (Appendix C).

The survey questions were designed to remain the same for surveying the team post-intervention to accurately measure whether the intervention was effective. The PMHNP student used Kotter's Model of Change to guide the iterative process of developing the protocol and training module via weekly visits to the clinic site by the PMHNP student. A post-intervention meeting with the providers was held to gather any final insights as qualitative data.

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Study of the Interventions

According to Baloh et al, 2018, it's important to consider how the change process unfolds in practice using Kotter's model to better understand implementation successes and failures. Therefore, a study of the intervention partially involved examining if ample time was spent on each step and in the correct order. The study of our intervention included an analysis of the data collected from the surveys to providers and staff, both before and after education is given and protocol is developed. If comfort and knowledge levels increase from baseline, then we will know our intervention was successful (Kotter & Cohen, 2012).

Measures

Qualtrics, the approved data management platform for OHSU, was utilized to collect and create visual representations of the data using bar graphs. The primary outcome measures for this project were twofold: The first measure was to quantify comfort and knowledge levels providers and support staff feel completing AIMS assessment virtually on patients who present for in-person visits to the clinic. The second measure was buy-in and comfort level of clinic staff of a

vetted protocol for rooming live patients. Process measures for this project included the number of available support staff.

There were several balancing measures to consider for this project. These measures include increased workload on clinic staff and providers of collaboratively building a protocoland provider concerns about the limitations their current workloads impose. To evaluate these variables, survey questions allowing free text for addressing additional concerns were added to the pre and post intervention surveys for both groups.

Analysis

For the Lickert Scale questions, a bar graph was utilized with contrasting colors to compare answers from before and after the intervention (see Appendix A and B). For the free-text responses, a manual analysis of common themes was used due to the small number of team members and served as qualitative data (see Appendix A and B). The primary factor contributing to data variability was loss of support staff during the intervention and the before and after-effects of the intervention.

Ethical Considerations (Present and Future)

The Institutional Review Board (IRB) at OHSU determined that the plan for this QI project did not include the use of human subjects and was approved before implementation. Other ethical considerations for the long-term goals of the project are the social determinants of health (SDOH) that could create barriers to the care of patients. For example, it could be difficult for some patients, particularly ones who live in remote communities with insufficient access to transportation or other functional SDOH-related functional impairments to arrive at the

clinic for in-person assessments. A future QI project could address these barriers for some patients taking antipsychotic medications.

Thoughtfulness in helping mitigate provider burnout was a primary ethical consideration. A continuation of this project could address existing or potential provider burnout given the shortage of providers at this clinic. Flexibility with scheduling time with providers and staff was integral to the project and to nursing practice as stated in the Nursing Code of Ethics, 1.5: Relationships with Colleagues and Others: "Nurses maintain professional, respectful, and caring relationships with colleagues. . . Nurses value the distinctive contributions of individuals or groups as they seek to achieve safe, quality patient outcomes in all settings. Additionally, they collaborate to meet shared goals of providing compassionate, transparent, and effective health services (American Nurses Association [ANA], 2015)."

Results

The Lickert portion of the survey (Questions 1-4) revealed several results. The result of the post-intervention support staff survey showed with Question 1 that there was an increase in familiarity with AIMS examinations. Question 2 elucidated that there was no change in the perception of importance of conducting AIMS assessments. Question 3 showed that there was an increase in confidence levels in helping providers conduct AIMS assessments on live patients presenting to the clinic. Question 4 showed that confidence levels with feasibility improved (see Appendix B). Provider responses indicated with Question 1 that there was an improvement in satisfaction with the current process of administering live AIMS assessments in the clinic. Question 2 responses indicated no change in perception of the importance of implementing the intervention. Question 3 indicated no global change in comfort levels in providing such an assessment given that there is a standardized environment. Question 4 revealed an increase in

concern about the feasibility of conducting such assessments after the intervention (see Appendix A).

Extracted themes from support staff in the pre-intervention phase were confidence in the ability to help providers with AIMS assessments, concerns about unfamiliarity with the exam leading to a missed diagnosis by the provider, concerns about equipment and technology, thoughts about anticipating working with technology support staff at the clinic. Interview themes from support staff revealed concerns about staff shortage and time management. There were no qualitative data from support staff in the post-intervention survey (see Appendix B).

Qualitative data themes collected from providers in the pre-intervention survey were as follows: having reliable support staff, excitement/optimism about implementation, concerns about existing time shortages, and inexperience with conducting AIMS assessments. Data themes collected in the post-intervention survey were lack of feedback from support staff on their ability/availability, impact on daily workflow, desire to help make the intervention successful, doubts about the willingness/ability of patients to travel to the clinic, ability to fully view the patient, and staff shortages. Themes extracted in the post-intervention provider meeting included scheduling concerns, camera positioning, available space to view entire body of client, concerns about insurance approval of medications without an AIMS assessment in the chart.

Interpretation

One of the most informative findings of the results of the intervention was that providers expressed a higher level of concern about the feasibility of the Lickert scale portion of the post-intervention survey. One possible reason for this was the loss of two support staff members during the course of the intervention (see Appendix D). Since persistent pre- and post-

intervention themes in the data were concerns with staff shortages and availability of time, this factor may have been an exacerbator of these concerns. Another reason may have been related to an initial and expected (and ideally temporary) resistance to change once the intervention was underway and once the prospect of working through such a change was fully grasped. Using Kotter's model to identify possible causes from a change model standpoint, it's possible that the intervention may have not had the scope to achieve enough small wins to generate a feeling of stability for the team (Kotter & Cohen, 2012). However, the scope of the project was not intended to carry the intervention to the long-term goal of successfully scheduling and completing virtual AIMS assessments; this project was intended to lay a foundation for future PDSA cycles using live patients in the clinic. With this in mind, trepidation amongst team members could very well be part of an organic change process at this stage of the intervention.

Results reflect that there was no change in attitudes about the importance of conducting AIMS assessments in the clinic with providers and support staff, suggesting that buy-in was not an obstacle to implementation. An increase in provider satisfaction levels with the current process of administering AIMS assessments suggests that "satisfaction" could be synonymous with "confidence," given that there is still no current process in place, but that initiation of the project may have instilled a sense of confidence in a process gaining momentum. Additionally, since providers reported that they felt they had limited experience in conducting AIMS assessments, the education module may have bolstered feelings of efficacy in assisting with moving the project forward.

Limitations

Several limitations were identified during the implementation and data interpretation phases of the project. As stated, two members of the support staff team were lost during the course of the intervention, making it difficult to ascertain the true validity of the data, as the number of respondents decreased by 33% (see Appendix D).

Due to the anonymity of responses, it was impossible to know in Question 2 of the provider survey if any individual provider's perception changed regarding the importance of conducting AIMS assessments. In reflecting upon the Lickert portion of the survey in general, it is questionable whether these questions did well at capturing specific concerns and measurements or performing as pre- and post-intervention questions.

Additional barriers were limited access to clinical leads. Due to loss of staff, the clinical leads were largely unavailable and difficult to get timely responses from as their job duties expanded beyond the clinic to other sites to compensate for loss of staff there as well as covering for the loss of staff at the current clinic site.

Summary

This quality improvement project sought to establish a foundation for a rural behavioral health clinic to achieve a long-term and long-standing goal of implementing virtual AIMS assessments on patients taking antipsychotic medications by virtual providers for patients presenting in person to the clinic. It represents an important consideration to patient safety as well as accommodating the unique context of the clinic's workflow. The scope of the project was to assess provider and support staff comfort and knowledge levels regarding AIMS assessment, and more specifically, the prospect of completing such assessments virtually.

Another aspect of the project was developing a rooming protocol that would eventually become approved by clinic administrators. The protocol has been submitted for review and an evidence-based video education module has been selected and viewed. This module will be assigned to all incoming and future team members.

Conclusions

The prominent qualitative and quantitative themes of optimism mixed with concerns about time management and staff shortages provides valuable insight into the next steps of the project, which may benefit from implementing strategies to address these concerns directly as the project moves forward. While future directions and ultimate success of the project will rely heavily on employee retention, the next phase of the project should nevertheless focus on small-scale successes with regard to testing rooming protocols, implementing technology, and establishing charting protocols.

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Appendix A

1 - I am satisfied with the current process of administering AIMS assessments on virtual patients at the clinic
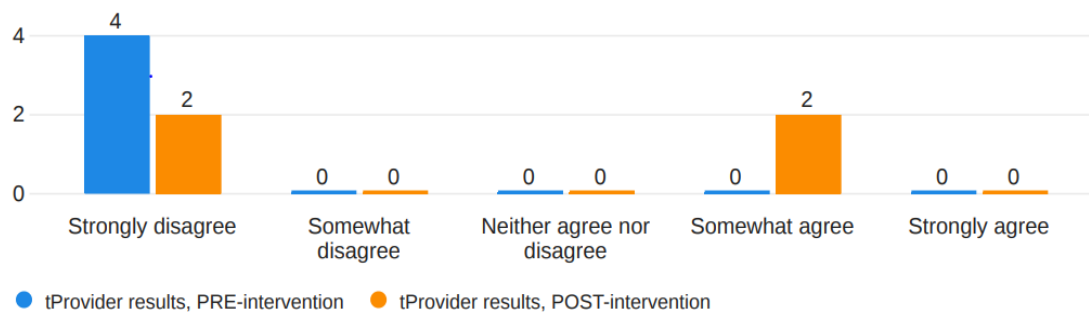
- tProvider results, PRE-intervention
- tProvider results, POST-intervention

2 - I think it's important to conduct regular AIMS assessments on patients taking antipsychotic medications

- lProvider results, PRE-intervention
- tProvider results, POST-interventio
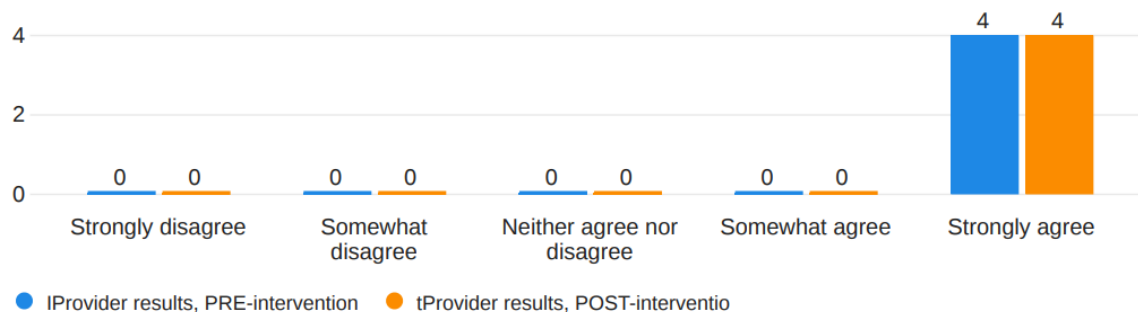
3 - If I was provided with a standardized environment in the clinic, I would feel comfortable performing AIMS assessments virtually on patients who arrive in person at the clinic

- lProvider results, PRE-intervention
- lProvider results, POST-intervention
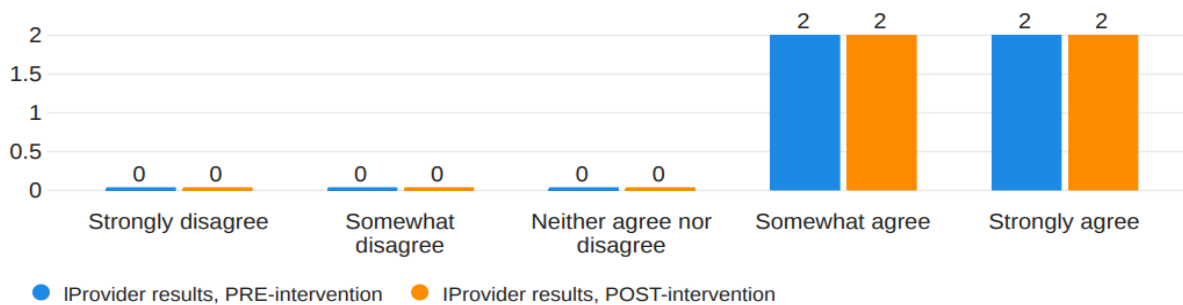
Appendix A (continued)

4 - I am concerned about the feasibility of conducting regular virtual AIMS assessments on patients

● IProvider results, PRE-intervention   ● eProvider results, POST-interventio
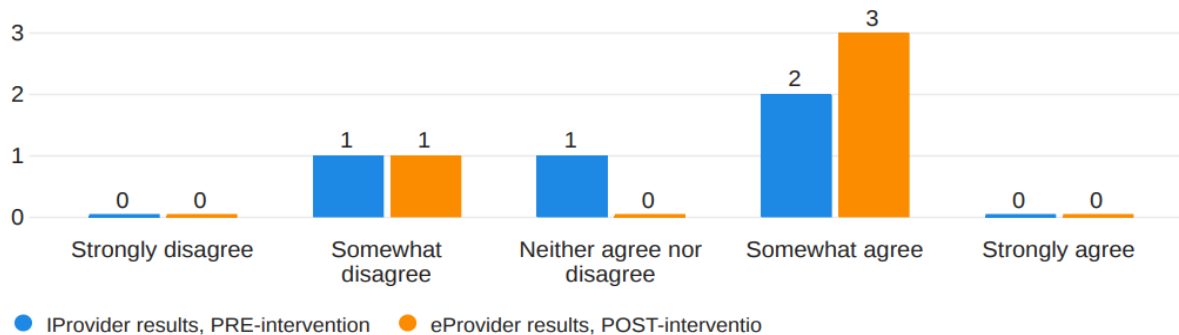
Question 5: Providers

Pre-Intervention Survey: If the answer to number 4 (previous question) is anything but "strongly agree," please share your concerns about feasibility in providing AIMS assessments, or anything else you would like to share.

Having reliable support staff.

I worry that this could possibly be a bit difficult to do. I've also heard of other researchers/clinicians make comments about how this is difficult to perform virtually. I am very excited to see what you have planned! :)

The time that it would take to do the assessment. We already have a shortage of time.

I have no practical experience with conducting an AIMS assessment and so do not know what to expect. I'm hopeful, though!

No more results to show

Appendix A (continued)

Question 5: Providers

Post-Intervention Survey: If the answer to number 4 (previous question) is anything but "strongly agree," please share your concerns about feasibility in providing AIMS assessments, or anything else you would like to share.

Don't have any feedback yet on how support staff will be handling this and their reliability.   •••

My main concern would be related to how it might impact the flow of my schedule during the day. I do strongly believe this to be important so am willing to work at it in such a way that I can more easily include it in my routine when working with such clients.   •••

Being able to fully view the patient, as the current setup unfortunately does not allow for this.   •••

I have some doubts that the clients that need an AIMS assessment will make themselves available for such. Additionally, we currently have insufficient numbers of support staff, which could pose an additional problem.   •••

No more results to show

Appendix B

1 - I am familiar with AIMS assessments for patients taking antipsychotic medications and why they are important.

Support Staff PRE-intervention.   ISupport Staff POST-intervention

2 - I think it's important to conduct regular AIMS assessments on patients taking antipsychotic medications

ISupport Staff PRE-intervention   ISupport Staff POST-intervention

3 - If there was a designated space in the clinic to room patients for AIMS assessments with a camera and proper lighting, I would feel comfortable assisting providers in conducting virtual assessments on patients who arrive in person.

ISupport Staff PRE-intervention   eSupport Staff POST-intervention
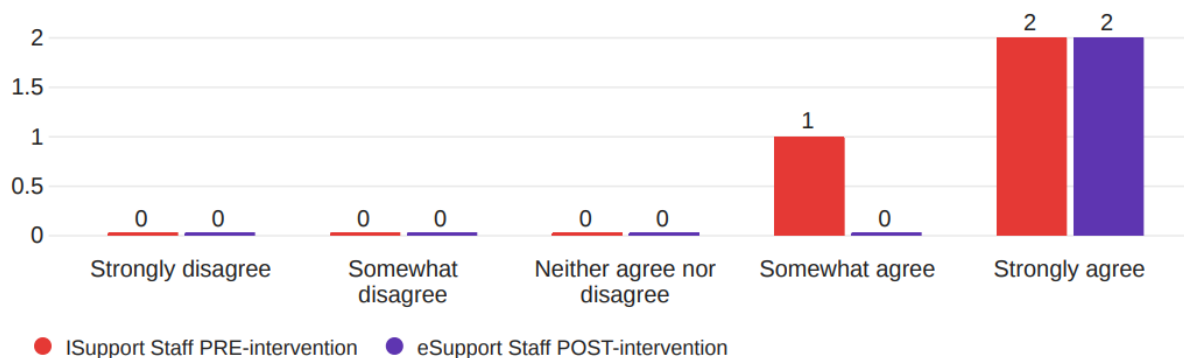
Appendix B (continued)

4 - I am concerned about the feasibility of helping providers conduct regular virtual AIMS assessments on patients.

● ISupport Staff PRE-intervention ● ISupport Staff POST-intervention
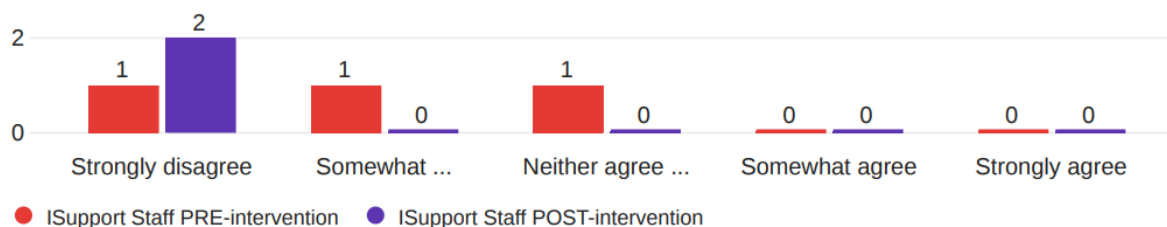
Question 5: Support Staff

Pre-Intervention Survey: If the answer to number 4 (previous question) is anything but "strongly agree," please share your concerns about feasibility in providing AIMS assessments, or anything else you would like to share.

I feel confident in helping providers with AIMs testing

Showing records 1 - 1 of 1

Page: 1 Of 1

Strongly agree

If the answer to number 4 (previous question) is anything but "strongly dis...

If a provider is remote and the individual that is assisting the provider with the assessment is not familiar with the assessment and guidelines a missed diagnosis could be a potential risk. Training the individual that will be assisting is very important as well as making sure the individual has proper certification and clearance to be a part of guiding this assessment. Also making sure the equipment that will be helping the provider and assistant perform the assessment is up to date and has all the proper guidance to complete the assessment. Communicating with the facilities IT team would be highly recommended.

Showing records 1 - 1 of 1

Appendix C

Klamath Basin Behavioral Health

POLICY: Rooming Protocol for Conducting Virtual Abnormal Involuntary Movement Scale (AIMS) Assessment for In-Person Clients at Klamath Basin Behavioral Health (KBBH)

DEPARTMENT: Behavioral Health, Personnel

POLICY STATEMENT:

Behavioral Health (BH) patients who use antipsychotic medications require at least one annual movement disorder assessment from a trained provider. Movement disorders such as drug-induced Parkinsonian symptoms (DIPS) and tardive dyskinesia (TD) can be disruptive to quality of life and in some cases, irreversible. For this reason, it is essential for these patients to receive regular movement disorder assessments (Chakrabarty et al., 2023). The abnormal involuntary movement scale (AIMS) assessment is the gold standard for screening for TD (Chakrabarty et al, 2023). Clients who regularly receive telehealth services from behavioral health providers at KBBH will need to present in person to the clinic at least once annually to be assessed virtually or in person by a KBBH psychiatric provider. **The scope of practice of the medical assistant (MA), certified medical assistant (CMA), or certified nursing assistant (CNA) does not currently include the ability to perform the AIMS assessment**. **The scope of practice of the LPN/LVN allows for performing such a focused assessment under the clinical direction and supervision of a Registered Nurse (RN) or a licensed independent provider (LIP) (*Nurse Practice Act, Oregon*, 2024).** Providers and licensed medical support staff are required to complete assigned annual training from the American Association of Psychiatric Pharmacists (AAPP) entitled "Tips to Conducting the AIMS" located on the S-drive or at on conducting AIMS assessments and reviewing the Rooming Procedure as follows.

PROCEDURE:

- When a patient presents to the clinic for a behavioral health appointment, the provider shall be notified of arrival.
- The provider shall send a link for an approved teleconferencing platform to the support staff person.
- The appointed support staff for the provider will retrieve and room patient in appointed room designed and utilized for AIMS assessments.
- Support staff shall take vitals and input them into the electronic health record (EHR).
- Support staff shall log onto appointed device with a camera and connect with the provider via assigned teleconferencing link.

Appendix C (continued)

- Support staff shall be responsible for positioning the client properly and adjusting camera, lighting, or other environmental factors so that the entire body and gait of the patient can be viewed clearly by the provider.
- Either support staff or provider shall explain the assessment to the patient, including how long the assessment will take and what will be required of the patient during the assessment.

AIMS Examination Procedure

This should be completed before entering the ratings on the AIMS form. Either before or after completing the examination procedure, observe the patient/client unobtrusively at rest (e.g., the waiting room).

The chair used for this procedure should be a hard, firm one without arms.

1. Ask the patient if there is anything in his/her/their mouth (i.e. gum, candy, etc) and if there is, to remove it.
2. Ask the patient about the current condition of their teeth. As if they wear dentures. Do teeth or dentures bother the patient now?
3. Ask the patient whether they notice any movements in mouth, face, hands and feet. If yes, ask them to describe to what extent they currently bother the patient or interfere with their activities.
4. Have the patient sit in the chair with hands on knees, legs slightly apart, and feet flat on the floor. (Look at entire body for movements while in this position).
5. As patient to sit with hands hanging unsupported. If wearing pants, between legs. If wearing a dress or skirt, hanging over knees. (Observe hands and other body areas).
6. Ask patient to open mouth. (Observe tongue at rest within mouth). Do this twice.
7. Ask patient to protrude tongue (observe abnormalities of tongue movement).
8. Ask the patient to tap thumb on their thigh with each finger, as rapidly as possible for 10-15 seconds: separately with right hand, then with left hand (observe facial and leg movements).
9. Flex and extend patient's left and right arms, one at a time (note any rigidity and rate it).
10. Ask the patient to stand up (observe in profile and observe all body areas again, hips included).
11. Ask the patient to extend both arms outstretched in front with palms down (observe trunk, legs and mouth).
12. Have the patient walk a few paces, turn, and walk back to the chair (observe hands and gait). Do this twice (Nelson, 2022)

Equipment: Sturdy, firm chair <u>without</u> roller wheels or excess padding

Appendix C (continued)

- Device/laptop with camera capabilities with an approved, secure platform for telehealth practices
- Adjustable lighting
- Private exam room that is large enough for provider to view entire body habitus AND at least 10 feet of viewable walking space
- Printed copy of AIMS exam guide sheet from the American Association of Psychiatric Pharmacists to assist support staff member in guiding patient through necessary movements.

Telehealth-Specific Requirements:

1. Therapists must adhere to all HIPAA policies and ensure their worksite is HIPAA compliant, secure, and private. Please refer to the KBBH policy "Remote Employee Support and Education" for full explanation of these expectations.
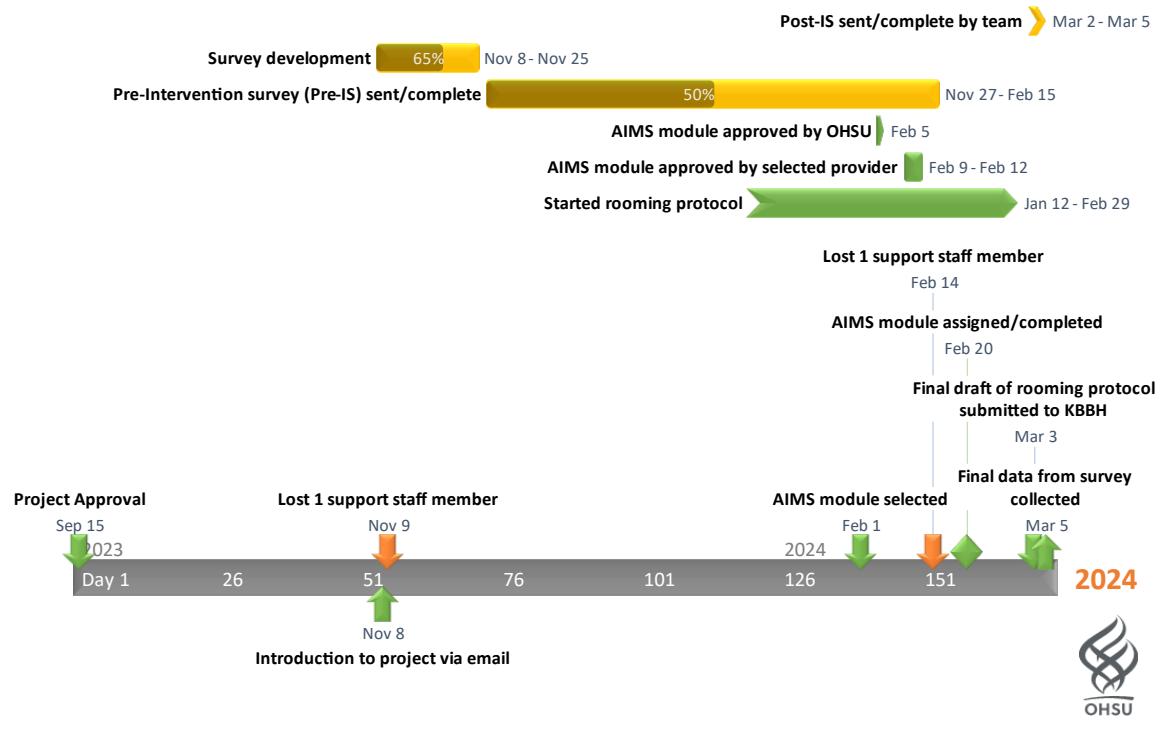
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Appendix D

Timeline for Implementation of Virtual AIMS QI Project

Post-IS sent/complete by team — Mar 2 - Mar 5

Survey development — 65% — Nov 8 - Nov 25

Pre-Intervention survey (Pre-IS) sent/complete — 50% — Nov 27 - Feb 15

AIMS module approved by OHSU — Feb 5

AIMS module approved by selected provider — Feb 9 - Feb 12

Started rooming protocol — Jan 12 - Feb 29

Lost 1 support staff member — Feb 14

AIMS module assigned/completed — Feb 20

Final draft of rooming protocol submitted to KBBH — Mar 3

Final data from survey collected — Mar 5

Project Approval — Sep 15 — 2023

Lost 1 support staff member — Nov 9

AIMS module selected — Feb 1 — 2024

| Day 1 | 26 | 51 | 76 | 101 | 126 | 151 | 2024 |

Nov 8 — Introduction to project via email

OHSU

Appendix E

Applying Kotter's Model of Change at Rural Clinic

Steps	Execution/Implementation
1. Create a sense of urgency	Introductory and informational email sent to the team. Rationale for patient safety discussed. Team had a pre-existing desire to implement AIMS assessments, implementation started but stalled by clinic due to resources
2. Build a guiding coalition	Met weekly in person with support staff to generate input for policy/procedure development.
3. Form a strategic vision	Communicated the scope of the current project in relation to the long-term goal of the clinic. Based on root cause analysis determined that building a foundation for the goal with education and collaborative policy-building would be an appropriate place to start
4. Enlist a volunteer army	Enlisted staff to complete surveys and education module. Unable to enlist assistance in any other regard due to staffing shortage
5. Enable action by removing barriers	Selected an evidence-based video learning module on how to perform the AIMS assessment to increase knowledge and comfort levels Not able to address the primary barrier of staff retention
6. Generate short-term wins	Generated some enthusiasm about moving the project forward. Completed a final draft of a policy/procedure.
7. Sustain acceleration	Not applicable for the scope of this project
8. Institute change	Laid a foundation to move forward with developing a system to bring in patients to the clinic for AIMS assessments

Appendix F

IRB MEMO

Research Integrity Office

3181 SW Sam Jackson Park Road - L106RI
Portland, OR 97239-3098
(503)494-7887   irb@ohsu.edu

OREGON
HEALTH
& SCIENCE
UNIVERSITY

NOT HUMAN RESEARCH

August 31, 2023

Dear Investigator:

On 8/31/2023, the IRB reviewed the following submission:

Title of Study:	Re-Instating the Abnormal Involuntary Movement Scale (AIMS) Assessment in a Rural Behavioral Health Clinic: A Quality Improvement Project
Investigator:	Virginia Elder
IRB ID:	STUDY00026257
Funding:	None

The IRB determined that the proposed activity is not research involving human subjects. IRB review and approval is not required.

Certain changes to the research plan may affect this determination. Contact the IRB Office if your project changes and you have questions regarding the need for IRB oversight.

If this project involves the collection, use, or disclosure of Protected Health Information (PHI), you must comply with all applicable requirements under HIPAA. See the HIPAA and Research website and the Information Privacy and Security website for more information.

Sincerely,

The OHSU IRB Office

<u>Letter of Support from Clinical Agency</u>

Date: September 7, 2024

Dear Aletta Mannix,

This letter confirms that I, Amy Boivin, Director of Clinical Services at Klamath Basin Behavioral Health (KBBH), allow Aletta Mannix (OHSU Doctor of Nursing Practice Student) access to complete his/her DNP Final Project at our clinical site. The project will take place from September 1, 2023 to February 28, 2024.

This letter summarizes the core elements of the project proposal, already reviewed by the DNP Project Preceptor and clinical liaison (if applicable):

- **Project Site(s)**: *Klamath Basin Behavioral Health headquarters, 2210 N El Dorado Ave, Klamath Falls, OR 97601*
- **Project Plan: Use the following guidance to describe your project in a <u>brief</u> paragraph.**
    - Identified Clinical Problem: *The clinic needs to re-implement annual AIMS (abnormal involuntary movement scale) assessments on all patients taking 1st and/or 2nd generation antipsychotic medications. This practice fell away during the COVID pandemic when prescribers began to hold patient visits strictly by telephone. Providers are still conducting visits remotely via telephone, so the clinic needs a process to facilitate remote teleconferencing for the assessment of these patients in a standardized environment.*
    - Rationale: *Patients can develop tardive dyskinesia from antipsychotic medication without regular monitoring and screening. This condition is permanent and debilitating to a patient's quality of life. Patient safety is the main impetus for this intervention.*
    - Specific Aims: *Develop a policy/protocol approved for the clinic that addresses the rooming procedure for patients arriving to the clinic for such an assessment, how to connect the provider virtually to the visit, and how to direct the patient through the AIMS assessment. Develop/assign an evidence-based, approved training module for how to conduct an AIMS assessment for both providers and support staff.*
    - Methods/Interventions/Measures: *Surveys measuring comfort and knowledge levels of providers and support staff will be administered before and after the education module. Kotter's Model of Change will be used to develop the rooming policy and will focus on a collaboration between the PMHNP student and providers/staff.*
    - Data Management: Qualtrics will be used to manage and present data. Bar graphs will be used to illustrate changes in knowledge and comfort levels.
    - Site(s) Support: *Tara Hunter and Amy Boivin will be clinical contact persons for this project. A designated room for such assessments has been selected to room patients.*

During the project implementation and evaluation Aletta Mannix will provide regular updates and communicate any necessary changes to the DNP Project Preceptor.

Our organization looks forward to working with this student to complete their DNP project. If we have any concerns related to this project, we will contact Aletta Mannix and Virginia Elder (student's DNP Project Chairperson).

Regards,

_____
_____

DNP Project Preceptor (Name, Job Title, Email, Phone):_____

_____
_____

_____
_____

Signature   Date Signed