Implementation of an Adolescent Social Media Use Screening Tool in Primary Care:

A Quality Improvement Project

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NURS 703B: DNP Project

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Submitted to: Dr. Heather Wiggins - Chair

This paper is submitted in partial fulfillment of the requirements for

the Doctor of Nursing Practice degree.

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Abstract

Adolescent anxiety is a global problem with a prevalence that increased almost 50% during the COVID-19 pandemic and is the most diagnosed mental health condition. Studies have identified a significant association between anxiety and maladaptive social media use. This quality improvement project implemented a standardized screening tool to identify maladaptive social media use risk stratification in children and adolescents 11 to 17 while maintaining provider satisfaction with screening methods. A modified Home, Education, Activities, Drugs, Sexuality, Suicide, Safety, Social Media (HEADS4) screening tool including only the social media extension was provided to eligible patients during check-in ensuring completion prior to the patient's appointment. Data collected included social media sites and applications used, average daily time spent on social media, adolescent interpretation of social media use, and online risky behaviors. Staff satisfaction surveys were completed prior to implementation and following the first PDSA cycle to evaluate the perceived need for screening and comfort with implementation. Prior to implementation, 0% of eligible adolescents were being screened for maladaptive use. By the completion of the first PDSA cycle 100% of eligible patients were screened. Individuals who were seen via telemedicine or who had prior screening within the last three months were excluded. This resulted in an overall implementation rate of 79%. The positivity rate of screening averaged 33.88%. Provider screening satisfaction increased by 42.93% following the intervention, while staff-identified work burden decreased by 42.85%. Screening improved social media risk stratification, however, there was not a direct correlation between identified risk and early intervention.

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Problem Description

Adolescent anxiety is an internalizing disorder that presents as exaggerated, persistent, and intrusive fear or worry (Walter et al., 2020). Irritability, sleep disturbances, aggression, and physical ailments are common symptoms of an anxiety disorder (Centers for Disease Control, 2023). The Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-IV), diagnostic criteria establish that worry and fear, which impact home, social, and academic endeavors for most days during six months, meet the criteria for anxiety (Church et al., 2013).

Anxiety is prevalent globally, impacting families and communities. A meta-analysis of 29 studies reported an average anxiety prevalence increase of almost 50%, from 11.6% to 20.5% globally, during the COVID-19 pandemic (Racine et al., 2021). Anxiety disorders are ranked as the most common mental disorders (Racine et al., 2021). There is a correlation between increased anxiety and depression with maladaptive adolescent social media activity, particularly in the absence of parental involvement (Mir et al., 2021). Passive social media use correlates to emotional distress, depression, and anxiety, particularly among adolescent girls (Thorisdottir et al., 2019).

The American Academy of Pediatrics recommends utilizing the home, education/employment, peer group activities, drugs, sexuality, safety, and suicide/depression (HEADSSS) screening tool to assess mental health risk factors (Clark et al., 2018). Recent tool updates include social media screen habits yet need to capture social media and networking involvement. Providers can utilize the more comprehensive HEADS4 screening tool to capture data critical for social media use risk stratification. Early identification of maladaptive social media use and associated interventions are essential for promoting healthy behaviors (Clark et al., 2018).

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This project occurred at a small primary care clinic in rural Oregon, which will hereafter be referred to as the Clinic. While appropriate screening to identify anxiety and depression is a standard of care for adolescent patients, implementation of social media-specific screening helps providers identify those adolescents at the most significant risk of developing anxiety related to maladaptive social media use. This preventative screening tool has not previously been utilized at the Clinic.

During check-in, the front desk staff initiated this screening tool for patients aged 11 to 17 years at each eligible visit. This method ensured the tool was completed before their appointment time, utilizing the appointment to its full potential. The time constraints and the intensive nature of the HEADSSS screening tool hinder its utilization despite its availability in the electronic health record (EHR) (See Appendix A). Prior to implementation, the Clinic utilized the Patient Health Questionnaire (PHQ-9) and General Anxiety Disorder-7 (GAD7) screening tools in place of the HEADSSS screening tool to facilitate visit workflow. Implementing a social media-specific extension helps providers thoroughly assess risk factors for mental health concerns, including anxiety. This screening has the potential to positively impact adolescent patient care and promote healthier social media use behaviors in this population.

Available Knowledge

The impact of anxiety during adolescence inversely correlates with adulthood competency in educational success, social interactions, and improved mental health; consequently, implementing tools that identify anxiety risk factors has the potential to impact quality of life across the lifespan (Narmandaka et al., 2020; Woodward & Fergusson, 2001). Following the COVID-19 pandemic, many children and adolescents are isolated and lack direct peer connection and societal structures, so social media sites often provide this missing connection (Orben et al., 2020).

Studies by Keles et al., (2019) and Sharma et al., (2019) demonstrate that active online interactions with peers can strengthen bonds, allow adolescents to share thoughts and feelings, receive

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social support, and engage in mental support groups from anywhere. These positive attributes can reduce anxiety, loneliness, and depressive symptoms. However, maladaptive use, including over 2 hours a day or more on online platforms, correlates with increased anxiety and depressive symptoms (Keles et al., 2019). In addition, forming connections with the platform through passive use and not direct connection with individuals through chat can lead adolescents to compare themselves to higher performers (Keles et al., 2019; Sharma et al., 2020). Additionally, excessive nighttime use leads to poor sleep, fear of missing essential connections, and not meeting peer expectations, increasing anxiety and depression (Mir et al., 2021). These findings suggest that the quality of social media interaction, not quantity, is the highest indicator of the impact on anxiety.

Two systematic reviews evaluating 28 studies of adolescents' interactions with online platforms concluded that online activity is an excessively broad term. Many factors influence how adolescent interactions impact mental health (Craig et al., 2021; Keles et al., 2019). Providers must consider the platform used, time spent, and method of interaction. Understanding that some platforms encourage social interaction and connection while others encourage scroll-based, absentminded, repetitive use (Craig et al., 2021; Keles et al., 2019).

The lifelong impact of anxiety and increased social media use support the need for comprehensive screenings focused on risk factor identification. Social media screening can identify increased use, lack of parental involvement, risky online behaviors, and adolescents' interpretation of the impact of social media use (Clark et al., 2018). Identifying these risk factors increases parental awareness and family action plan implementation, supporting parental boundaries that safeguard against excessive and passive social media use (Clark et al., 2018; Mir et al., 2021).

Context and delivery impact intervention effectiveness; interventions that support behavior change techniques, goal setting, self-monitoring, positive reinforcement, and family social support are most effective (Jones et al., 2021). Clark et al. (2018) and Lakasin & Mirza (2020) support the HEADS4

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social media extension as a well-validated brief intervention that provides information regarding an

adolescent's psychosocial history. Psychosocial history identifies at-risk patients for a more in-depth

evaluation and possible treatment options (Clark et al., 2018; Lakasing & Mirza, 2020).

Current evidence supports performing the HEADS4 social media extension at each adolescent

visit and suggests that implementation leads to identifying risk factors. Screening and risk identification

help facilitate open communication, joint decision-making, and further evaluation by the provider to

determine the need for a follow-up appointment or referral.

Rationale

Completing a root cause analysis and creating a cause-and-effect diagram determined that the

lack of a screening tool, designated screening personnel, and heavy workload expectations for clinic staff

prevented social media screening. The administration of the HEADS4 social media extension screening

tool allows providers to identify maladaptive use and initiate conversations that facilitate open family

communication which can reduce risks and promote adolescent connections (Clark et al., 2018; Lakasing

& Mirza, 2020).

This quality improvement project utilized the Institute for Healthcare Improvement (IHI) Model

for Improvement (MFI). The MFI framework includes the following steps: defining an aim, identifying

how to measure change and improvement, and determining what change will be tested (Institute for

Healthcare Improvement [IHI], n.d.). The MFI then initiates the improvement with the Plan, Do, Study,

Act (PDSA) cycle. The PDSA cycle allows the clinic to test changes quickly, observe outcomes, and

provide the flexibility to adjust implementation strategies based on the results of previous PDSA cycles.

This cycle can be repeated as adjustments are made, allowing continuous improvement (IHI, n.d.). This

model promotes consistent and sustainable changes to adolescent social media screening, allowing the

Clinic to implement a policy on standardized screening of adolescents while maintaining its vision of

holistic person-focused care.

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IMPLEMENTATION OF SOCIAL MEDIA USE SCREENING

Specific Aims

The Clinic began screening adolescent patients for anxiety risk factors using the adapted HEADS4 social media extension (See Appendix B) administered at check-in. Adolescent visits were defined by the Clinic for individuals between the ages of 11-17 years. The specific goal of this project was to increase screening by 60% during the first PDSA cycle. Providers and staff were to report workflow satisfaction with the screening protocol and the Clinic's ability to identify adolescents at risk for anxiety, which will prompt further provider evaluation.

<div align="center">

Methods

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Context

This quality improvement project took place in a rural primary care clinic with three primary care providers. Other staff includes one full-time medical assistant (MA), one care team director, one referral coordinator, and one quality assurance director who is involved in the operation of the Clinic both for daily tasks and long-term goals. The care team director is responsible for rooming patients and providing screening paperwork at check-in. The quality assurance director ensures communication between the patient and providers. The MA completes chart review and screening tools.

The local community relies on primary care clinics for pediatric care; the Clinic currently averages 25 patients aged 11 to 17 years monthly. Access to mental health services for adolescents with anxiety in rural Oregon is limited, with significant wait lists. The Clinic's focus on whole-person preventative care created an ideal environment to implement the HEADS4 social media extension.

Interventions

The annual rate of maladaptive social media use screening in adolescents and staff satisfaction was evaluated concurrently with screening implementation; a five-question standardized screening tool (see Appendix B) was provided to eligible patients when they checked in for their appointment. The tool was created with the Clinic staff and adapted from the HEADS4 social media extension tool. The tool

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included social media use data (which site and application are used, and the time spent during a typical day) and the individuals' interpretation of their social media use (too much time spent, self-confidence, and online risky behaviors). A staff satisfaction survey (See Appendix C) was conducted before the screening tool implementation and at the end of the three-month PDSA cycle. The survey used a five-point Likert scale to identify the staff's perceived need for social media screening and comfort in performing and discussing the social media screening tool with parents and patients.

The screening tool was introduced to the entire team at the Clinic during an all-staff meeting. Staff members were educated on the importance of early and frequent social media screening for adolescent patients and the impact screening may have on the early identification of anxiety. Staff were encouraged to initiate social media screening by utilizing the tool provided during the first PDSA model; the improvement project was reviewed monthly. During the screening tool's rollout, an EHR report was run to determine the number of individuals aged 11-17 currently screened for social media use. An EHR report was run each month and post-implementation to determine the success of implementation.

Study of the Interventions

The study of the intervention included monitoring the American Academy of Pediatrics guidelines on social media use for adolescents that may impact the screening tool metrics that trigger the need for further evaluation by providers. Staff were surveyed to determine the screening tool's impact on workflow and perceived risk stratification for anxiety. An analysis of the rate of social media screening was completed with EHR reports of screening rates compared to the same period last year.

Measures

The primary outcome measure for this project was the percentage of patients between the ages of 11 and 17 years screened for social media use risk factors between July 10th and September 10th, 2023. Screening rates for these months in 2022 were also collected and evaluated for comparison. This comparison evaluated the increase in social media use screening for this population, which is this

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project's specific aim. The secondary aim of the Clinic's provider satisfaction with the screening tool and resulting risk stratification were evaluated through pre- and post-intervention staff surveys. These surveys will evaluate the project's sustainability to improve the Clinic's adolescent screening process and the provider's satisfaction with the tool's ability to identify risks that prompt early intervention.

Process measures for this project include pre- and post-intervention staff satisfaction surveys and monthly chart reviews of adolescent patients seen at the clinic to confirm the use of the social media screening tool. This review included screening tool implementation, successful completion of the tool, and provider documentation of findings and plan. Balancing measures for this project included the increased workload and time burden on staff who provide the screening tool and follow-up after a positive screening. A staff survey was conducted during the PDSA cycle review's first month to evaluate these factors. This intervention increased clinic costs by printing the paper screening tool.

Analysis

This improvement project was implemented over three months between July 2023 and September 2023. Data was analyzed before implementation, at the end of month one, and at the end of the implementation period. The rate of screening tool administration was calculated at these checkpoints and analyzed using run charts. The percentage of screening increase was categorized by those individuals with identified risk factors and those without. Patient demographic information was not collected with the reporting tool. The pre-intervention and post-intervention survey data were analyzed to examine the perceived increase in work burden associated with implementing this screening tool.

Ethical Considerations

The ethical considerations for this project include the deidentified collection of patient screening and the anonymity of staff survey respondents. Clinic involvement in this project is voluntary. The screening tool data was collected by an EHR report run by the clinic manager. The author did not

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have access to patient identifiers or the EHR. Providers at the Clinic were informed of the quality

improvement project during their monthly staff meeting and consented to the project by signing a letter

of support. This project was submitted to the Oregon Health & Science University Investigational Review

Board and was deemed not to be research and did not need further review. The authors report no

conflict of interest involved in undertaking this QI project.

Results

Between July 1st, 2022, and September 30th, 2022, the year prior to the initiation of the

intervention, the clinic saw 66 individuals aged 11-17 years. Zero of those patients were screened for

maladaptive social media use for a pre-implementation screening rate of 0%. PDSA cycle 1 began June

10th, 2023, and ended September 15th, 2023. This PDSA cycle aimed to increase the number of

adolescents aged 11 to 17 years screened for maladaptive social media use by implementing a five-

question standardized screening tool adapted from the validated HEADS4 social media extension to be

completed during patient check-in. The exception to screening included telemedicine visits or screening

within the last three months. This implementation achieved a progressive increase in screening, totaling

6 of 11 eligible patients screened between June and July, 14 of 17 eligible patients screened between

July and August, and 4 of 4 eligible patients seen between August and September. This resulted in an

overall average implementation rate of 79% between June 10th, 2023, and September 15th, 2023 (see

Appendix E).

This study significantly increased screening rates and the number of positive screenings for risk

factors. The positivity rate of screening averaged 33.88% over the entirety of the first PDSA cycle (see

Appendix F). The study also identified minimal provider follow-up after a positive screening for risk

factors. The study identified provider non-compliance as the cause of minimal follow-up. Seven staff

members returned a completed pre-implementation survey evaluating their understanding of

adolescent anxiety and how maladaptive social media use impacts adolescents. All the respondents

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(100%) agree that anxiety is prevalent in adolescents; however, only 28.5% believed that screening for maladaptive social media use is essential to identifying risk factors. This increased to a 71.43% belief that maladaptive screening successfully identified early risk factors for anxiety at the end of the implementation period. The pre-and post-staff surveys also identified a decreased staff-identified work burden due to screening tool implementation, decreasing from 57.14% to 14.29%.

Discussion

Summary

This DNP Project sought to increase the rate of maladaptive social media use screening in individuals aged 11-17 between June 10th, 2023, and September 15th, 2023. It aimed to apply a modified version of the HEADS4 social media extension to capture data critical for social media use risk stratification. This screening identifies maladaptive social media use, which correlates maladaptive use, including passive use without parental involvement, to increased anxiety and depression among adolescents, particularly girls (Clark et al., 2018; Mir et al., 2021; Thorisdottir et al., 2019). The desired outcome of this intervention was to increase the rate of maladaptive social media use screening by 60% while maintaining staff satisfaction. Using the MFI, we planned one PDSA cycle that allowed for continuous modification of our system, with three formal evaluations determining the need for change. No changes were needed over the entirety of the first PDSA cycle. Screening rates, risk factor identification, and staff satisfaction increased significantly throughout this project, resulting in improved risk stratification; however, it was challenging to access provider's specific recommendations to patients and families after a positive screening tool due to a lack of documentation in the EHR.

Interpretation

There was a direct correlation between the number of patients screened and the identification of risk factors for adolescent anxiety. There were no other identifiable causes related to this change. The outcomes of this DNP project were in line with other research documenting the correlation between

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maladaptive social media use and increased risk for children and adolescent anxiety. Adaptation of a validated tool like the HEADS4 allowed for implementation that aligned with clinic values and the patient population while progressing toward quality evidence-based care in the emerging and constantly changing evaluation of maladaptive social media use for adolescents. The PDSA cycle process is essential in maintaining a fixed direction of improvement, results to date, and a framework for continued progress during future cycles.

Based on the study of the first PDSA cycle, it was determined that the HEADS4 social media extension could effectively be implemented during all adolescent appointments without a significant burden on staff or providers; additionally, this study supports the use of the HEADS4 social media extension as a stand-alone screening tool for maladaptive social media use which prompts provider intervention prior to an anxiety-related diagnosis. This PDSA cycle also identified that the maladaptive social media use screening and identification of risk factors alone does not guarantee follow-up by providers due to the lack of mainstream knowledge of social media use as a risk factor for anxiety, as well as the lack of understanding surrounding maladaptive use.

Limitations

This study had two primary limitations: one impacted the screening rate and the second impacted provider follow-up after a positive screening identified risk factors. The limitation impacting screening rates was the inability of the clinic to screen adolescents who had a telehealth appointment. This limitation resulted in a 12.5% reduction in screening eligibility. Digitizing this screening tool would allow for completion of the screening even when the adolescent is not seen in the office. Secondly, the limitation impacting provider follow-up is a need for one provider's understanding of this emerging topic. One provider stated in their post-implementation survey that they found minimal correlation between anxiety and social media use. They believe that the types of social media engagement anxious adolescents partake in are passive and not causative of their anxiety. For this reason, they elected not to
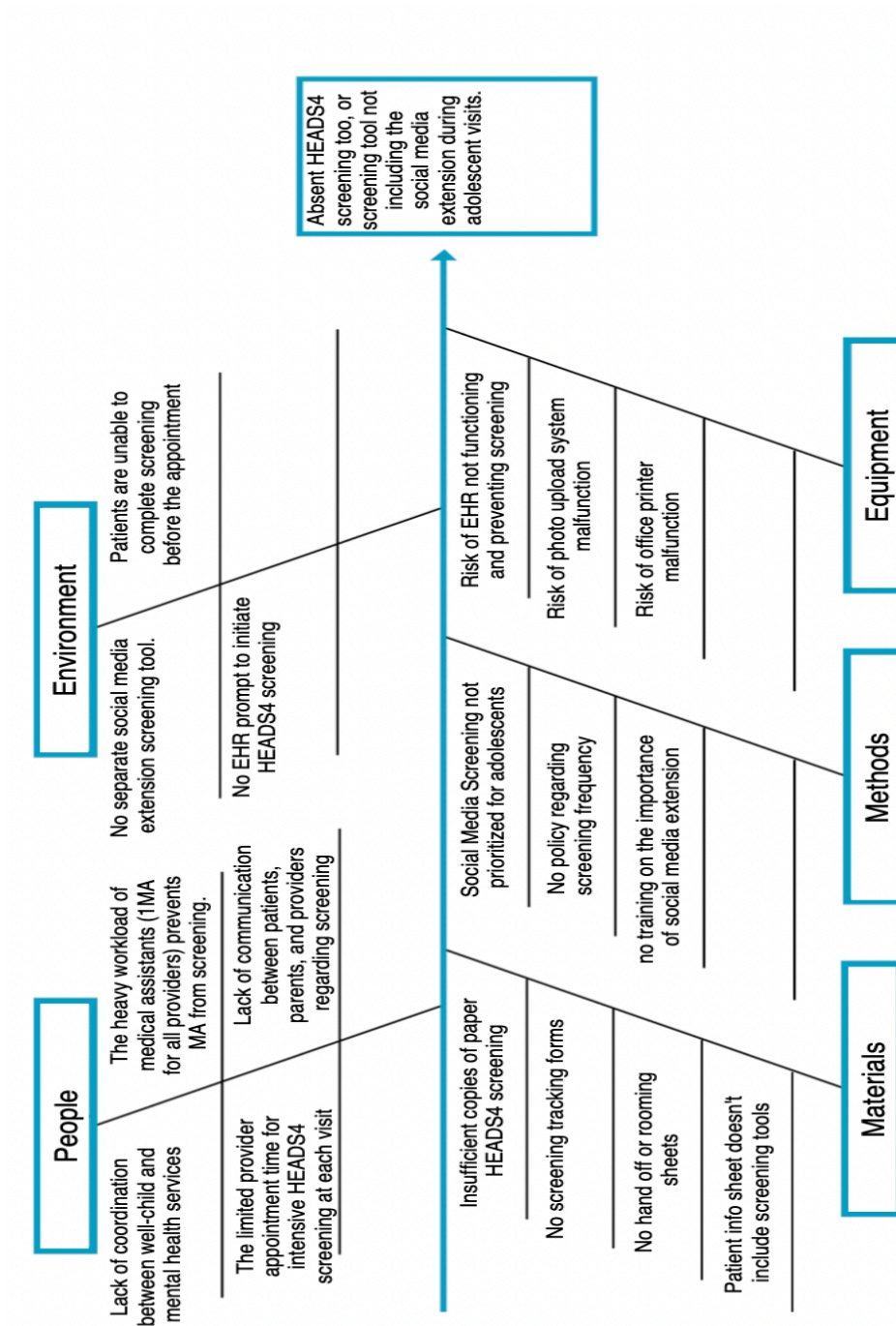
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provide follow-up or conversation based on screening results. This belief that anxiety occurred before the maladaptive social media use prevented provider follow-up for positive screening from this provider. This limitation resulted in only 28.57% of positive screenings receiving follow-up care.

Conclusions

The increased prevalence of social media impacts the mental health of individuals who engage in use. This use can be protective or promote anxiety and fear of missing out (FOMO), depending on the quality of the user's interactions (Roberts & David, 2019). This has prompted the American Academy of Pediatrics to provide guidelines outlining maladaptive social media use and associated evidence-based interventions. This quality improvement project implemented a standardized screening tool to identify social media use risk stratification in adolescents with a specific AIM of increasing screening by 60% while maintaining provider satisfaction with screening methods. The project met both primary and secondary aims and resulted in an overall average implementation rate of 79% and a positive screening rate of 33.88%. Provider screening satisfaction increased from 28.5% to 71.43%, resulting in a staff-identified work burden of 14.29%, a decrease from 57.14% pre-implementation. Further provider education on the validity of the HEADS4 screening tool and the emerging research surrounding the impact of maladaptive social media use on adolescents is necessary to improve screening implementation and associated interventions. Expanding screening delivery methods to include electronic-based EHR forms would allow for screening during telehealth visits. Additionally, patient education surrounding family action plans should be included in post-visit summary sheets to promote implementation across the family unit.

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Appendix A

Cause and Effect Diagram

The fishbone (cause and effect) diagram shows the effect "Absent HEADS4 screening too, or screening tool not including the social media extension during adolescent visits."

People:
- Lack of coordination between well-child and mental health services
- The heavy workload of medical assistants (1MA for all providers) prevents MA from screening.
- The limited provider appointment time for intensive HEADS4 screening at each visit
- Lack of communication between patients, parents, and providers regarding screening

Environment:
- Patients are unable to complete screening before the appointment
- No separate social media extension screening tool.
- No EHR prompt to initiate HEADS4 screening

Materials:
- Insufficient copies of paper HEADS4 screening
- No screening tracking forms
- No hand off or rooming sheets
- Patient info sheet doesn't include screening tools

Methods:
- Social Media Screening not prioritized for adolescents
- No policy regarding screening frequency
- no training on the importance of social media extension

Equipment:
- Risk of EHR not functioning and preventing screening
- Risk of photo upload system malfunction
- Risk of office printer malfunction

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Appendix B

Adolescent Social Media Screening Tool
Adapted from the HEADS-4 Social Media Extension

Adolescent Social Media Screening

All patients 11 to 17 years should be asked the following:

1. *Which social media sites and/or apps do you regularly use?*

/

2. *How long do you spend on social media sites and/or applications in a typical day?*

3. *Do you think you use social media too much?*   YES   NO
   - *If yes, what strategies have you tried to decrease your social media use?*

4. *Does viewing social media increase or decrease your self-confidence?*

5. *Have you personally experienced cyberbullying, sexting, or an online user asking to have sexual relations with you? (Depending on age, parent/clinician may describe what these are)*

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Provider information

- **Question 2:**
  - *Concerning response: >120 minutes per day.*
  - *Practical tip: most smartphones track the total time spent on each application. Ask the patient if they would be willing to follow these instructions to get a more accurate response.*
    - *iOS instructions: Settings →Battery→clock. Time is displayed by application.*
    - *Android instructions: You will need to download an application that tracks usage. Free options in the Google Play Store include QualityTime, BreakFree, and Checky*

- **If screening raises concerns, potential next steps may include:**
  - *Crafting a family media plan*
    - *There are several online tools to help families create a personalized plan. The following link is for a plan through the AAP. American Academy of Pediatrics Family Media Plan*
  - *Scheduling a follow-up to assess changes.*
  - *Behavioral health referral if warranted.*

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IMPLEMENTATION OF SOCIAL MEDIA USE SCREENING

Appendix C

Staff Pre-Implementation Survey

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I feel comfortable explaining the purpose of the Social media screening tool.					
I understand the importance of social media screening for adolescents.					
Social media screening overloads an already full adolescent appointment.					
Anxiety is prevalent in adolescents.					
Maladaptive Social media screening is necessary to identify early risk factors of anxiety					
Social media screening promotes patient education.					
Social media screening promotes open family communication and parental involvement.					

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Appendix D

Staff Post-Implementation Survey

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I felt comfortable explaining the purpose of the Social media screening tool.					
I understand the importance of social media screening for adolescents					
Social media screening is necessary for Adolescents					
Social media screening overloads an already full appointment					
I am open to Social Media Screening					
Maladaptive Social media screening is necessary to identify early risk factors of anxiety					
Social media screening promotes family communication					
Social Media screening supports adolescent health					

Please explain below if you answered disagree or strongly disagree on any of the above questions.

_____
_____
_____
_____
_____

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Appendix E

Percentage of Patients Screened for Maladaptive Social Media Use

Adolescent Social Media Screening

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IMPLEMENTATION OF SOCIAL MEDIA USE SCREENING
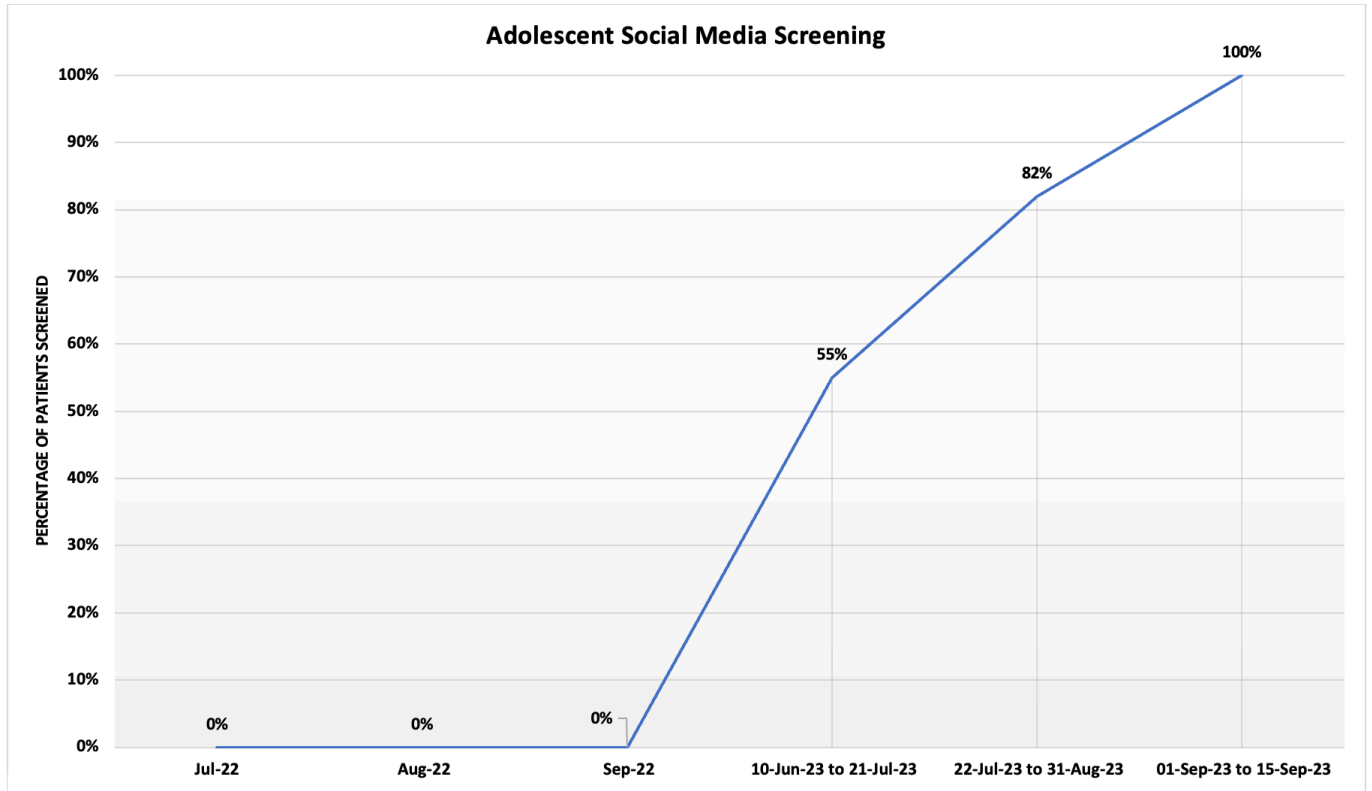
Appendix F

Percentage of Screenings Positive for Maladaptive Use

Percentage of Screenings Positive for Maladaptive Use
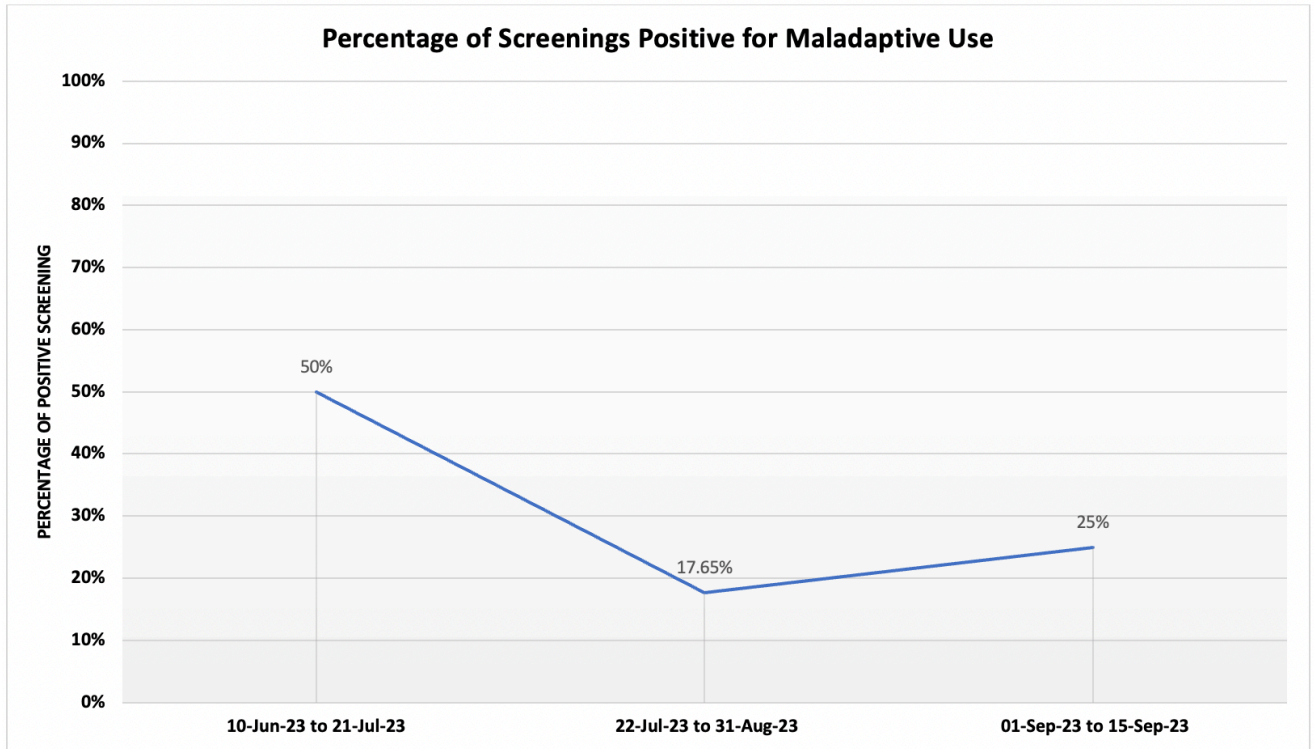
Appendix G

IRB Letter of Determination

![Oregon Health & Science University logo and IRB MEMO header] Research Integrity Office
3181 SW Sam Jackson Park Road - L106RI
Portland, OR 97239-3098
(503)494-7887   irb@ohsu.edu

NOT HUMAN RESEARCH

June 27, 2023

Dear Investigator:

On 6/27/2023, the IRB reviewed the following submission:

Title of Study:	Implementation of an Adolescent Social Media Use Screening Tool in Primary Care: A Quality Improvement Project
Investigator:	Heather Wiggins
IRB ID:	STUDY00025978
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

Version Date: 04/08/2016   Page 1 of 1

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IMPLEMENTATION OF SOCIAL MEDIA USE SCREENING

Appendix H

Clinical Site Letter of Support

Letter of Support from Clinical Agency

Date: 06/10/2023

Dear Amber Tracy,

This letter confirms that I, Kristen Frantzen, allow Amber Tracy (OHSU Doctor of Nursing Practice Student) access to complete her DNP Final Project at our clinical site. The project will take place from approximately June 26, 2023 to September 07, 2023.

This letter summarizes the core elements of the project proposal, already reviewed by the DNP Project Preceptor and clinical liaison:
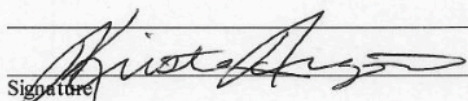
- **Project Site(s)**: Monarque Health and Wellness: 148 E. Hersey St. Ashland, OR 97520
- **Project Plan: Use the following guidance to describe your project in a brief paragraph.**
  - Identified Clinical Problem: Adolescents ages 11 to 17 years old are currently not being screened for social media use, including duration of use and nature of the sites.
  - Rationale: Social media use in this population correlates directly with the development of anxiety. Early and routine screening using the adjusted HEADS4 screening tool allows providers to perform risk stratification and implement interventions such as family action plans which has the potential to decrease the development of anxiety in this population.
  - Specific Aims: By July 2023, the Clinic will begin screening adolescent patients ages 11-17 for anxiety risk factors using the adapted HEADS4 social media extension (See Appendix B) administered in the clinic at check-in. Patients in this population will be screened once a year. The specific goal for this project will be to increase screening by 60% during the first PDSA cycle. Providers and staff will report satisfaction with the screening protocol and the Clinic's ability to identify adolescents at risk for anxiety, which will prompt further provider evaluation.
  - Data Management: Adolescents 11-17 years old will be identified as meeting the criteria to complete the adjusted Heads 4 social media extension. They will be provided with the screening tool and answer the 5-question screening to identify the level of risk associated with the possible development of anxiety. Additionally, staff at the Clinic will complete a Likert scale to identify the perceived burden associated with completing this screening tool. Both provider and patient results will be deidentified, and data will be provided by an EHR provided by the clinic manager. All data will be kept in a password-protected document.
  - Site Support: The clinic will host a staff meeting where the screening tool and project will be introduced. Staff will identify patients who meet the inclusion criteria and provide a copy of the screening tool to each patient. Both the completion of the screening and risk category will be documented. Additionally, staff will complete a pre and post implementation survey to identify perceived increases in workload due to the addition of the screening tool at visits.

During the project implementation and evaluation, Amber Tracy 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 Amber Tracy and Heather Wiggins (student's DNP Project Chairperson).

Regards,

Kristen Frantzen, QA Director   *kristen@monarquehealth.com*

DNP Project Preceptor (Name, Job Title, Email, Phone): _____ 541.201.2024

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[signature]   *15 June 2023*

Signature   Date Signed

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IMPLEMENTATION OF SOCIAL MEDIA USE SCREENING

Appendix I

Project Timeline

	Jun	Jul	Aug	Sep	Oct	Nov	Dec-Mar
Finalize project design and approach (703A)	X						
Complete IRB determination or approval (703A)	X						
PDSA Cycle (703B)		X	X	X			
Final data analysis (703B)					X		
Write sections 13-17 of final paper (703B)						X	
Prepare for project dissemination (703B)							X

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References

Centers for Disease Control and Prevention. (2023, July 25). *Anxiety and depression in children.*

https://www.cdc.gov/childrensmentalhealth/depression.html.

Church, H. A., Corvin, A., & Lucey, J. V. (2012). Anxiety disorders. *Core Psychiatry*, 207–224.

https://doi.org/10.1016/b978-0-7020-3397-1.00016-1

Clark, D. L., Raphael, J. L., & McGuire, A. L. (2018). Heads4: Social media screening in adolescent primary

care. *Pediatrics, 141*(6). https://doi.org/10.1542/peds.2017-3655

Craig, S. L., Eaton, A. D., McInroy, L. B., Leung, V. W., & Krishnan, S. (2021). Can social media

participation enhance LGBTQ+ youth well-being? Development of the social media benefits scale.

Social Media + society, *7*(1). https://doi.org/10.1177/2056305121988931

Jones, A., Armstrong, B., Weaver, R. G., Parker, H., von Klinggraeff, L., & Beets, M. W. (2021). Identifying

effective intervention strategies to reduce children's Screen time: A systematic review and meta-

analysis. *International Journal of Behavioral Nutrition and Physical Activity, 18*(1).

https://doi.org/10.1186/s12966-021-01189-6

Keles, B., McCrae, N., & Grealish, A. (2019). A systematic review: The influence of social media on

depression, anxiety and psychological distress in adolescents. *International Journal of Adolescence

and Youth, 25*(1), 79–93. https://doi.org/10.1080/02673843.2019.1590851

Lakasing, E., & Mirza, Z. (2020). Anxiety and depression in young adults and adolescents. *British Journal

of General Practice*, *70*(691), 56–57. https://doi.org/10.3399/bjgp20x707765

Mir, E., Novas, C., & Seymour, M. (2021). *Social media and adolescents' and young adults' mental health*.

National Center for Health Research. https://www.center4research.org/social-media-affects-

mental-health/

`

Narmandakh, A., Roest, A. M., de Jonge, P., & Oldehinkel, A. J. (2020). Psychosocial and biological risk

    factors of anxiety disorders in adolescents: A trails report. *European Child & Adolescent*

    Psychiatry, *30*(12), 1969–1982. https://doi.org/10.1007/s00787-020-01669-3

Orben, A., Tomova, L., & Blakemore, S.-J. (2020). The effects of social deprivation on adolescent

    development and mental health. *The Lancet Child & Adolescent Health*, 4(8), 634–640.

    https://doi.org/10.1016/s2352-4642(20)30186-3

Racine, N., McArthur, B.A., Cooke, J.E., Eirich, R., Zhu, J., & Madigan, S. (2021). Global prevalence of

    depressive and anxiety symptoms in children and adolescents during COVID-19: A meta-

    analysis. *JAMA Pediatrics*. https://doi.org/10.1001/jamapediatrics.2021.2482

Roberts, J. A., & David, M. E. (2019). The Social Media Party: Fear of missing out (FOMO), social media

    intensity, connection, and well-being. *International Journal of Human–Computer Interaction*,

    36(4), 386–392. https://doi.org/10.1080/10447318.2019.1646517

Sharma, M. K., John, N., & Sahu, M. (2020). Influence of social media on mental health: A systematic

    review. *Current Opinion in Psychiatry*, Publish Ahead of Print.

    https://doi.org/10.1097/yco.0000000000000631

Thorisdottir, I. E., Sigurvinsdottir, R., Asgeirsdottir, B. B., Allegrante, J. P., & Sigfusdottir, I. D. (2019).

    Active and passive social media use and symptoms of anxiety and depressed mood among

    Icelandic adolescents. *Cyberpsychology, Behavior, and Social Networking*, 22(8), 535–542.

    https://doi.org/10.1089/cyber.2019.0079

Walter, H. J., Bukstein, O. G., Abright, A. R., Keable, H., Ramtekkar, U., Ripperger-Suhler, J., & Rockhill, C.

    (2020). Clinical practice guideline for the assessment and treatment of children and adolescents

    with anxiety disorders. *Journal of the American Academy of Child & Adolescent Psychiatry, 59*(10),

    1107–1124. https://doi.org/10.1016/j.jaac.2020.05.005

`

Woodward, J. L., & Fergusson, M. D. (2001). Life course outcomes of young people with anxiety

disorders in adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry,*

40(9), 1086–1093. https://doi.org/10.1097/00004583-200109000-00018

`