

Practice change: Social Media Screening Questionnaire to identify high-risk adult psychiatric patients

Cara A. Lutzow DNP, PMHNP-BC, FNP-BC¹  | Grace Hubbard DNP, PMHCNS-BC² | Cheryl Giscombe PhD, PMHNP-BC² | Lawrence Greenberg MD³

¹School of Nursing, Primary Investigator, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

²School of Nursing, University of North Carolina, Chapel Hill, North Carolina, USA

³MindPath Care Centers, Cary, North Carolina, USA

Correspondence

Cara A. Lutzow DNP, PMHNP-BC, FNP-BC, Primary Investigator, The University of North Carolina Chapel Hill, 115 Kildaire Park Dr. Ste 402, Cary, NC 27519, USA.
Email: Cara.Lutzow@gmail.com

Abstract

Purpose: Include social media screening during initial psychiatric examination with new adult patients to increase psychiatric providers' awareness of the rate and impact of social media use in their patients.

Design and Methods: Plan-Do-Study-Act cycles were implemented to evaluate the effectiveness of psychiatric provider 5-question social media screening during the initial evaluation.

Findings: Screening for social media usage ($N = 136$) improved providers' awareness of the rate and impact of social media use on patients' distress levels. The process of screening influenced a conversation between provider and patient about healthy social media use.

Practice Implications: The inclusion of social media screening during initial psychiatric evaluation may aid in the assessment of risk factors for psychological distress.

KEYWORDS

depression, PDSA, psychiatric illness, quality improvement, social media

1 | INTRODUCTION

High utilization of social media applications has been linked to higher levels of psychiatric distress. As of 2018, 68% of adults in the United States have a Facebook (FB) account, 78% of young adults (age, 18–24) use Snapchat, and 71% of young adults use Instagram.¹ As social media use has risen over the last decade, psychiatric providers have had increasing concern about the impact on psychiatric distress.

2 | BACKGROUND

Current popular social media platforms include FB, Twitter, Snapchat, and Instagram. Social media allows consumers to connect with a larger geographic network of friends and strangers who they may not interact with in person.² The heightened popularity of social

media has resulted in research that assesses the impact of usage on people's wellbeing.

Evidence supports an association between increased time on social media use and worsening psychiatric symptoms. High social media use, defined as over 3-h daily, was associated with higher body dissatisfaction,³ increased sleep disturbance,⁴ and depressive symptoms.^{2,5} Negative experiences on social media (i.e., cyberbullying, rude comments) have been associated with negative mood in young adults. In a sample of 264 young adults, all negative FB experiences were associated with depressive symptoms ($p < 0.05$, confidence interval: 95%).⁵ Evidence also suggests passive social media use (scrolling without commenting) has a higher risk of psychiatric distress.¹

Specific results of three randomized control trials ($N = 1501$) with adults ages 18–35 indicated positive mood was negatively correlated with time spent on FB ($p = 0.007$),⁶ social media use versus “general internet use” caused higher levels of negative

emotions.⁷ Limiting social media use to 30 min daily for 3 weeks was associated with a reduction of depressive symptoms, from moderate-high depression to no depression using the Beck's depression scale for self-reporting symptoms.¹ Limitations of these studies included small sample sizes and brief data collection periods which may limit generalizability to broader populations.

The literature mostly focused on negative impact of social media use; however, the relationship between social media and psychiatric health is complex and some social media use could potentially have a positive impact on psychiatric wellbeing. The use of social media to emotionally connect with those a person cannot meet with physically can create stronger emotional bonds between friends and family. One study found that routine use and emotional connection made with social media use improved mental health and social wellbeing.⁸ Limitations of this study were the participants were not diagnosed with a psychiatric disorder and small sample size.

Social media use is an influential component of many patients' lives. Therefore, psychiatric providers may benefit from understanding the potential influence of social media on their patients' psychiatric symptoms. The current evidence suggests that social media usage may have positive or negative impact on mental health dependent on the individual user and intention of usage. More research may allow clinicians to provide evidence-based recommendations to patients for safe and beneficial practice of social media use.

The goal of this practice change initiative was to include a Five-item Social Media Screening Questionnaire (SMSQ; Figure 1) in the existing initial psychiatric evaluation tool to increase psychiatric providers' awareness of the rate of social media usage by their adult patients. This information could be used to facilitate treatment planning related to the impact of social media on the patient's psychological state.

3 | QUALITY IMPROVEMENT INITIATIVE

Psychiatric mental health providers from a suburban outpatient psychiatric clinic located in the southeastern region of the United States expressed an interest in gaining information about rates and impact of social media usage among their patients. Providers in the practice were invited to participate in the quality improvement initiative during a routine staff meeting. Six providers agreed to participate (four nurse practitioners, one psychiatrist, and one physician assistant) and include the SMSQ in their initial evaluation.

No existing social media screening tools, questionnaires, or scales relevant for the clinical environment were discussed in the literature. Therefore, from the available evidence, five questions were developed to guide screening of rates and impact of social media use and to promote consistency among the providers. For ease of discussion among the providers the screening questions were referred to as the SMSQ and were included in the initial psychiatric interview for new patients age 18 and older. Given the high demands of clinical practice for efficiency and productivity, the SMSQ was designed to include large, quick-read font with multiple-choice answers to be circled by the providers. An open text box was optional for feedback by the patient or provider during the interview. Administration time for the five questions was 1–3 min depending on the responses. The goal of the SMSQ was to provide providers with information that could influence treatment planning; therefore, the SMSQ focused only on the negative impact of social media use to facilitate discussion about adjusting rates of usage, if warranted. If a patient experienced no distress from their usage, no treatment changes would be indicated.

Daily, the Project Lead distributed each participating provider the correct number of SMSQ's based on the number of initial evaluations scheduled for that business day. After completion of the screening, the providers returned completed SMSQ to front office

Five-item Social Media Screening Questionnaire

1. Do you use social media?

YES	NO
-----	----
2. How many hours daily do you spend using social media?

0-1	1-2	2-3	3+
-----	-----	-----	----
3. How many different types of social media do you regularly use?

0-1	1-2	2-3	3+
-----	-----	-----	----

Circle: Instagram Facebook Twitter Snapchat

Other _____
4. Do you feel using social media causes you to experience emotional distress?

Yes	No	Neutral
-----	----	---------
5. Can you identify the type of emotional distress you experience?

Increased anxiety	Increased depression
Lower self- esteem	Increased anger

Other _____

Comments: _____

FIGURE 1 Five-item Social Media Screening Questionnaire

staff who scanned the document into the patient's chart and then put the completed survey in a designated folder for the Project Lead for data collection. If a patient did not show for the appointment, the provider wrote "NO-SHOW" on the questionnaire and put the unused questionnaire in the designated folder for the Project Lead.

Each SMSQ was numbered to identify the provider who completed the questionnaire. Each provider's code started with their designated number and the number of surveys they had completed. For example, provider-participant #1 had numbers 100–199; provider-participant #2 had numbers 200–299, and so forth through 600–699 for provider-participant #6. This facilitated tracking of each questionnaire while providing anonymity for the patient associated with it. The post-implementation evaluation was included a 30-min postimplementation lunch and an emailed Qualtrics^{XM} link.

To evaluate sustainability and effectiveness of the SMSQ, four Plan-Do-Study-Act (PDSA) cycles were implemented over a 7-week period. PDSA is a cyclical quality improvement framework used to produce rapid and effective change. The end of one PDSA cycle is the beginning of another on a slightly larger scale.⁹ The PDSA cycle begins with a plan to test the desired change (Plan), provides a process to carry out the test (Do), allows for observation and learning from the consequences (Study), and determines what modifications should be made to the test (Act). This process promotes deliberate learning based on what is achieved by the plan, how the plan was conducted, and identifies areas for improvement.¹⁰ Each cycle ends with an evaluation to determine what is working and what aspects of the new process need to be improved. This completes the rapid, effective change aspect of the PDSA cycles. For this project, the PDSA started with one provider and increased to all six providers over the four PDSA cycles (Table 1).

Debriefing between each of the four PDSA cycles promoted real-time discussion about challenges experienced by the providers related to the implementing of the SMSQ and allowed identification of solutions to improve the process, before adding additional providers to the next cycle. A final debriefing was conducted with all six providers after the fourth and final cycle to gain feedback about providers' perceptions regarding feasibility of adopting the practice change to include the SMSQ in the initial evaluation for all adult patients.

This quality improvement initiative was reviewed by an Institutional Review Board and considered non-human subject research, and as a quality improvement initiative for a single psychiatric clinic is not generalizable to other populations.

Sustainability of inclusion of the SMSQ in the initial evaluation for all adult patients was contingent on the providers' ability and willingness to incorporate into their daily practice. Two major areas were assessed: (1) effectiveness of the SMSQ to inform the providers about rate and impact of their patients' social media usage, and (2) providers' perceptions about the process for inclusion of the SMSQ in their current practice. A postimplementation discussion was used to assess the first area and a Qualtrics^{XM} (2019)¹¹ survey (Likert scale, strongly disagree–strongly agree) was used to assess the second area. The survey assessed ease of use, effectiveness for identification of high utilizers (3+ h/day) of social media, the value for customizing treatment plans, and the likelihood of continued use of the social media screening (Figure 2).

4 | RESULTS

The six providers administered 136 screenings during the four PDSA cycles; of the 136 screenings, 113 were completed correctly (83%), 17 (12.5%) were discarded due to "no-show" patient, and six (4%) new patients were not screened during the initial psychiatric interview. Of the six providers who participated, screening adherence rates were: three providers completed the social media screenings on 100% (81) of initial evaluations, one provider completed screenings on 86% (18/21) of initial evaluations, one provider completed screenings on 85% (11/13) of initial evaluations, and one provider completed screenings on 75% (3/4) of initial evaluations.

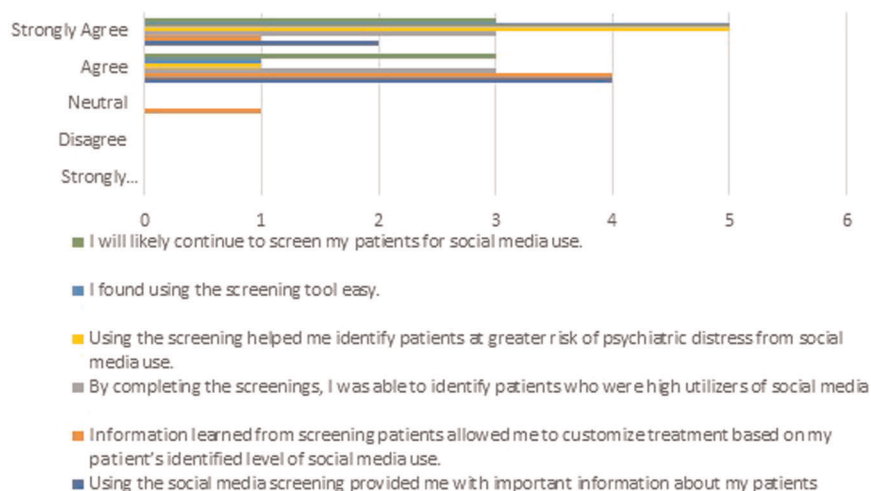
Although all social media screenings appeared correctly filled out, one provider reported the screening protocol was followed only 25%–50% of the time. This provider incorporated the questions in a more organic conversation, as opposed to exactly following the screening questionnaire. For example, this provider may have asked "Tell me about your social media use" and used answers to fill out the screening questionnaire. The other five providers reported following the questionnaire as written. All screenings were reported to take less than 3 min to complete.

Between each PDSA cycles, no barriers were identified allowing each cycle to occur as originally planned. Unanimously, the providers believed the screening was easy to complete and effective for identification of patients who were high utilizers of social media. Four providers (67%) believed the screening assisted with customizing treatment plans, and five (83%) believed they will likely continue to screen for social media use with future patients. Three of

Cycle	Week	Provider-participants	No. of intakes
Cycle 1	Week 1–June 3rd–7th	1	3
Cycle 2	Week 2–June 10–14th	1, 2, 3	16
Cycle 3	Weeks 3 and 4–June 17th–28th	1, 2, 3, 4, 5, 6	46
Cycle 4	Weeks 5, 6, and 7–July 1–19th	1, 2, 3, 4, 5, 6	49
Total	7 Weeks	6 Providers	114

TABLE 1 Table of cycling

FIGURE 2 Effectiveness of five-item screening [Color figure can be viewed at wileyonlinelibrary.com]



the six providers (50%) stated information learned from the screening changed their treatment interventions.

The postimplementation discussion revealed providers experienced no barriers to inclusion of the SMSQ during the initial psychiatric evaluation. All providers reported no change in productivity rates with the addition of the five screening questions, emphasizing the helpfulness and efficiency of the easy-to-use format. Another purpose of the debriefing was to explore the providers' reactions to the screening process and to discuss possible themes among patient responses. Information regarding patient responses was provided second-hand by providers during this debrief. Providers stated many patients recognized they experienced negative impacts from their social media use and had begun to regulate their own use accordingly. The limits patients imposed on their use ranged from total removal of social media interaction to restriction of time frame for use. Providers shared patient's responses to the screening questions. For example: "that [social media use] makes me sad" or "there is too much negativity on social media." Many of the patients who were not current users of social media mentioned they had already discontinued use because of its influence on their mood and quality of life. Providers stated as the screening process unfolded, they begin to realize the discussion that occurred during the actual screening raised the patients' awareness of the overall impact of social media use on their emotional state. For example, one provider commented a patient stated, "I have never reflected on how it [social media] affects my mood, but it definitely bums me out." Additionally, providers stated they had not considered age-related social media use patterns; however, patients under the age of 40 frequently reported using numerous social media platforms.

5 | DISCUSSION

The results of this practice change revealed providers valued the knowledge gained by social media screening during the initial psychiatric evaluation. The providers indicated a high likelihood of adopting a social media screening tool as standard practice on all

initial evaluations, with the additional consideration for ongoing evaluations with multi-platform users. The process of screening for social media use promoted important conversations about the patients' social support and well-being. This awareness promoted healthier use of social media for these patients.

Data obtained from the screening supported evidence that 3 or more hours of social media (3+ h) seemed to suggest increased psychiatric distress.^{5,7} The frequency of multiple platforms among young adults suggested the importance of ongoing screening and discussion related to this aspect of social media use for this demographic.

A large focus of the evidence in the literature about social media usage was on mood and anxiety-specific symptoms suggesting mood spectrum and anxiety-related disorders are the most impacted psychiatric disorders from high social media utilization.¹ This evidence guided the development and focus of the five screening questions.

Providers stated patients identified restricting time or abstaining altogether from social media use positively impacted their mental health. This behavior is supported by the evidence which revealed less than 30 min usage or abstinence was associated with a reduction of depressive symptoms.¹ Set time limits or a decrease in frequency of social media use may be an effective recommendation for some patients. The largest group of patients positively impacted by reduction of time spent on social media were those with the highest use pattern, which was consistent with the evidence reviewed.¹

College students and young adults are the largest population represented in the research conducted to date.^{3,5,6} During this social media screening project, providers stated this demographic reported the highest rates of usage and negative psychiatric impact; therefore, screening this population may be the priority.

Based on the evidence supported in the literature and feedback from the providers, online social networking as a component of a person's social support deserves more consideration during an initial psychiatric evaluation. Psychiatric providers need to evaluate social media use; and when warranted, develop treatment plans that incorporate a realistic plan for safe social media use. Provisional recommendations include limiting usage to under 3h daily and

encouraging patients to use social media to actively engage with others instead of passively scrolling through their social media feeds.^{4,6}

6 | STRENGTHS AND LIMITATIONS

The use of the quality improvement methodology of PDSA cycles allowed prompt feedback and promoted provider engagement with the process. Evidence available in the literature regarding the rate and impact of social media use was discussed with providers before the practice change was initiated. Ease-of-use of the screening tool was important in a fast-paced, productivity-focused setting. The five, evidence-based questions demonstrated an efficient and effective approach to screening and encouraged participation from the psychiatric providers. The screening questions promoted open discussion between the provider and patient about the impact of social media use. Responses indicated some patients had been reflecting about their social media use and this reflection improved quality of patient care and potentially increased patient safety.

A limitation was the lack of a validated screening tool to assess risks associated with social media use. It is also important to note that patient perspectives and outcomes were not measured in this project; therefore, the value of screening was inferred by the providers rather than obtained directly from patients. Another potential limitation in the SMSQ was that it did not specifically include items that assess positive emotions associated from social media use.

7 | IMPLICATIONS FOR NURSING PRACTICE

Expansion of this practice change to other psychiatric practices can facilitate data collection and opportunities for dissemination through publication. Future practice change projects might focus on a smaller demographic of patients whose ages range from 18 to 40 years of age, as the evidence suggests this is the most impacted group. Also, a practice change project that assesses social media use among children and adolescents might yield clinically significant data to influence treatment planning in these populations.

Social media use has been a trending topic among the psychiatric community, and there is still room for further research to develop specific clinical guidelines and recommendations for psychiatric disorders. Future randomized control trials comparing specific time limits and abstinence from social media and evaluation of the impact on psychiatric distress will provide clinicians the ability to create specific treatment recommendations for patients.

The focus of this quality improvement project was to highlight the important role social media plays in many patients' lives and how that may impact their psychiatric wellbeing. Over two thirds of US adults have one or more forms of social media and as new technologies are developed this number will likely continue to rise.¹

Screening patients during their initial visit is a low-risk and effective way for clinicians to increase their awareness of the impact of social media use for an individual patient. In a world where we are always connected, psychiatric providers need to consider how those connections affect their patients' social needs.

CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

ORCID

Cara A. Lutzow  <https://orcid.org/0000-0003-3665-9467>

REFERENCES

1. Hunt M, Marx R, Lipson C, Young J. No more FOMO: limiting social media decreases loneliness and depression. *J Soc Clin Psychol*. 2018; 37(10):751-768. <https://doi.org/10.1521/jscp.2018.37.10.751>
2. Vannucci A, Flannery K, Ohannessian C. Social media use and anxiety in emerging adults. *J Affect Disord*. 2017;207(1):163-166. <https://doi.org/10.1016/j.jad.2016.08.04>
3. Carter A, Forrest JL, Kaida A. Association between internet use and body among young females: cross-sectional analysis of the Canadian Community Health. *J Med Internet Res*. 2017;19(2):e39. <https://doi.org/10.2196/jmir.5636>
4. Levenson JC, Shensa A, Sidani JE, Colditz JB, Primack BA. Social media use before bed and sleep disturbance among young adults in the United States: a nationally representative study. *Sleep*. 2017; 40(9):36-41. <https://doi.org/10.1093/sleep/zsx113>
5. Rosenthal SR, Buka SL, Marshall BD, Carey KB, Clark MA. Negative experiences on Facebook and depressive symptoms among young adults. *J Adolesc Health*. 2016;59(5):510-516. <https://doi.org/10.1016/j.jadohealth.2016.06.023>
6. Tromholt M. The Facebook experiment: quitting Facebook leads to higher levels of well-being. *Cyberpsychol Behav Soc Netw*. 2016; 19(11):661-666. <https://doi.org/10.1089/cyber.2016.0259>
7. Sagioglou C, Greitemeyer T. Facebook causes a decrease in mood and why people still use it. *Comput Human Behav*. 2014;35:359-363. <https://doi.org/10.1016/j.chb.2014.03.003>
8. Bekalu M, McCloud R, Viswanath K. Association of social media use with social well-being, positive mental health, and self-rated health: disentangling routine use from emotional connection to use. *Health Educ Behav*. 2019;46:69-80. <https://doi.org/10.1177/109019811986376>
9. Moen R, Norman C. *Circling Back: clearing up the myths about the Deming cycle and seeing how it keeps evolving*. 2017. <http://www.apiweb.org/circling-back.pdf>
10. Institute for Healthcare improvement. *Model for improvement: Plan-Do-Study-Act (PDSA) Cycles*. 2020. <http://www.ihl.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx>
11. QualtricsSM. 2019. Version 06-08, 2019. Provo, UT, USA. <http://www.qualtrics.com>

How to cite this article: Lutzow CA, Hubbard G, Giscombe C, Greenberg L. Practice change: Social Media Screening Questionnaire to identify high-risk adult psychiatric patients. *Perspect Psychiatr Care*. 2021;57:1145-1149. <https://doi.org/10.1111/ppc.12669>