

## Best practice model for outpatient psychiatric pharmacy practice, part 2: Confirmation of the attribute statements

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### Abstract

**Introduction:** The American Association of Psychiatric Pharmacists (AAPP) used multiple modalities to develop and refine 28 attribute statements to describe a best practice model for outpatient psychiatric pharmacists. Before addressing implementation, assessment, and field testing, it was necessary to finalize and confirm the statements and their supporting narratives among stakeholders. The objective of this project was to confirm the attribute statements and supporting justifications for a best practice model for outpatient psychiatric pharmacists providing direct patient care.

**Methods:** The 4 phases that resulted in the 28 attribute statements and supporting narratives have been described and published elsewhere. As part of phase 5, the confirmation survey was distributed to pharmacists and resident members of AAPP in November 2021 for 3 weeks.

**Results:** The survey respondents (n=74; 6.1%) were licensed pharmacists for an average of 15.6 years (SD=12.0) and had been practicing as psychiatric pharmacists for an average of 11.3 years (SD=10.4). Slightly more than half (54.2%) of the respondents reported practicing in the outpatient setting and three-fourths (74.3%) were Board Certified Psychiatric Pharmacists. For each of the 28 statements, more than 90% of respondents either agreed or agreed with minimal reservations.

**Discussion:** Given the high degree of agreement on the proposed practice model statements, they will be used as the basis for the outpatient psychiatric pharmacist best practice model. Next steps in developing this model include establishing implementation guidance, determining appropriate metrics for evaluation of these statements in practice, and establishing appropriate field-testing methods.

**Keywords:** outpatient, psychiatric pharmacy, best practice, attributes, consensus

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### Introduction

In 2019, a survey conducted by the Professional Affairs Committee of the American Association of Psychiatric Pharmacists (AAPP) to characterize the current state of psychiatric pharmacy in the United States showed that

pharmacists provide care to persons with mental illness in a multitude of settings using a wide variety of methods.<sup>1</sup> Approximately half of the respondents reported practicing in outpatient settings, with variations in their scope of practice and delivery. Some used prescriptive authority, whereas others only provided care in consultative roles. Tracking of practice outcomes also varied, with small numbers of pharmacists actively tracking the impact of their practice on patient care.<sup>1</sup>

Based on the results of this survey, the Best Practice Model Subcommittee (BPMS) of the AAPP Professional Affairs Committee initiated work on a best practice model for outpatient psychiatric pharmacy practice between June 2, 2020 and November 22, 2021. The goal was to promote a standardized model that allows outpatient psychiatric pharmacists (OPPs) to maximize their impact on the care of patients with mental illness and work collaboratively with the other members of the health care team. The process of developing these statements involved a series of broad surveys and summit meetings of psychiatric pharmacists providing patient care in outpatient settings. The perspective used in developing these statements was to reflect the future of outpatient psychiatric pharmacy practice that pharmacists should endeavor to meet. Although the current status of practice is quite varied, the goal of the best practice model project is to improve the overall quality of care provided to patients by promoting a standardized model that provides consistent, effective care.

## Methods

The first 4 phases of the project resulted in the development of 28 statements with supporting narratives and references that will serve as the basis for the model (Appendix). The methods and results of the first 4 phases (initial membership survey, summit meetings, follow-up membership survey, and summit review meeting) and other project activities have been described and published elsewhere.<sup>2</sup> In the fifth and final phase, the goal was to measure overall agreement and obtain consensus on what core attributes and qualities should be incorporated within the best practice model among AAPP members.

An electronic survey using Qualtrics was administered to pharmacist and resident members of AAPP between November 1 and November 22, 2021. Participants were emailed 2 times and were sent 4 reminders during weekly organization emails during the 3-week period. The survey contained 8 demographic questions regarding licensure, board certifications, region of practice, and practice types. Those who indicated they practiced in outpatient settings received 3 questions for each of the 28 statements. They were asked to indicate their level of agreement to each

statement (*agree, agree with minimal reservations, disagree*), how much each statement characterized their outpatient practice (scale from 0 [*not at all*] to 10 [*completely*]), and how likely they would be able to implement the statement in their practice (scale from 0 [*extremely unlikely*] to 10 [*extremely likely*]). They were also asked whether they were willing to serve as a field tester for the model at their outpatient clinical practice site in the future if resources were available.

Those who indicated that they do not practice in an outpatient setting were also asked to indicate their level of agreement to each of the 28 statements (*agree, agree with minimal reservations, disagree*), but they were not asked about characterization or implementation. All respondents were provided the opportunity to provide comments and feedback on any of the statements or supporting narratives. The survey items were developed by the BPMS to obtain respondents' confirmation for each statement and identify gaps in current practice and likelihood of implementation for future practice. Statements meeting an a priori cutoff score of 25% disagreement among outpatient providers or 50% disagreement among all respondents were to be eliminated.

Descriptive statistics (mean, SD, percentages) were used to describe the characteristics of the respondents as well as the level of agreement for the 28 statements for best practice. Chi-square/Fisher exact tests were used to compare the level of agreement between certain demographic characteristics. Spearman rank correlations were conducted between the number of years of licensure, number of years of practice as a psychiatric pharmacist, their characterization of their outpatient practice to each statement, and the likelihood of implementing each statement in their practice. Data analysis was completed using IBM SPSS version 28.0.

All responses were maintained confidential and de-identified to protect participant anonymity. IRB exemption approval was received from the Massachusetts College of Pharmacy and Health Sciences and University of California, San Diego, IRBs, and approval of the project was received from the AAPP Board of Directors prior to survey distribution.

## Results

Of 1206 pharmacist and resident members who received the survey invitation, 74 individuals (6.1%) consented and responded to the survey. Respondents reported being a licensed pharmacist for an average of 15.6 years (SD, 12.0 years) and practicing as a psychiatric pharmacist (defined as 50% of clinical practice devoted to mental health and/or substance use disorders) for an average of 11.3 years

**TABLE: Demographics of the phase 5 respondents (n = 74)<sup>a</sup>**

Characteristic	Value
Licensed pharmacist, average (SD), y	15.6 (12.0)
Psychiatric pharmacist, average (SD), y	11.3 (10.4)
Region of practice, No. (%)	
Northeast	14 (19.7)
Midwest	17 (23.9)
South	19 (26.8)
West	21 (29.6)
Residencies/fellowships completed, No. (%)	
PGY1	38 (51.4)
PGY2 neurology	1 (1.4)
PGY2 psychiatry	41 (55.4)
Fellowship	6 (8.1)
None	14 (18.9)
Other <sup>b</sup>	3 (4.1)
Board certifications, No. (%)	
BCPP	55 (74.3)
BCACP	2 (2.7)
BCPS	15 (20.3)
BCGP	1 (1.4)
None	13 (17.6)
Other <sup>c</sup>	1 (1.4)
Primary clinical site: federal agency, No. (%)	
Yes	24 (33.8)
No	47 (66.2)
Primary clinical practice setting, No. (%)	
Inpatient	25 (34.7)
Outpatient	39 (54.2)
Administration	1 (1.4)
Other <sup>d</sup>	7 (9.7)
Primary clinical practice locale, No. (%)	
Academic medical center	11 (15.5)
Behavioral health clinic	15 (21.1)
Community hospital	11 (15.5)
Correctional facility	1 (1.4)
Government hospital–state	4 (5.6)
Government hospital–VA	20 (28.2)
Government–other <sup>e</sup>	1 (1.4)
Home health care	0
Hospice	0
Long term care	0
Managed care	0
Pharmaceutical industry	0
Primary care clinic	4 (5.6)

**TABLE: Demographics of the phase 5 respondents (n = 74)<sup>a</sup>**  
(continued)

Characteristic	Value
Nongovernment–other <sup>e</sup>	4 (5.6)
No clinical practice	0

BCACP = Board Certified Ambulatory Care Pharmacist; BCGP = Board Certified Geriatric Pharmacist; BCPP = Board Certified Psychiatric Pharmacist; BCPS = Board Certified Pharmacotherapy Specialist; PGY = postgraduate year; VA = Veterans Affairs.

<sup>a</sup>Three respondents declined to answer region of practice, 2 declined to answer primary clinical practice setting, and 4 declined to answer primary clinical practice locale. Respondents could have selected more than 1 option for residencies/fellowships completed and board certifications.

<sup>b</sup>Other residencies/fellowships: clinical pharmacy practice at psychiatric hospital, psychopharmacology research, emergency medicine, ambulatory care.

<sup>c</sup>Other board certifications: CSP (specialty pharmacy).

<sup>d</sup>Other clinical practice setting: inpatient and outpatient setting, consultant practice, correctional psychiatry.

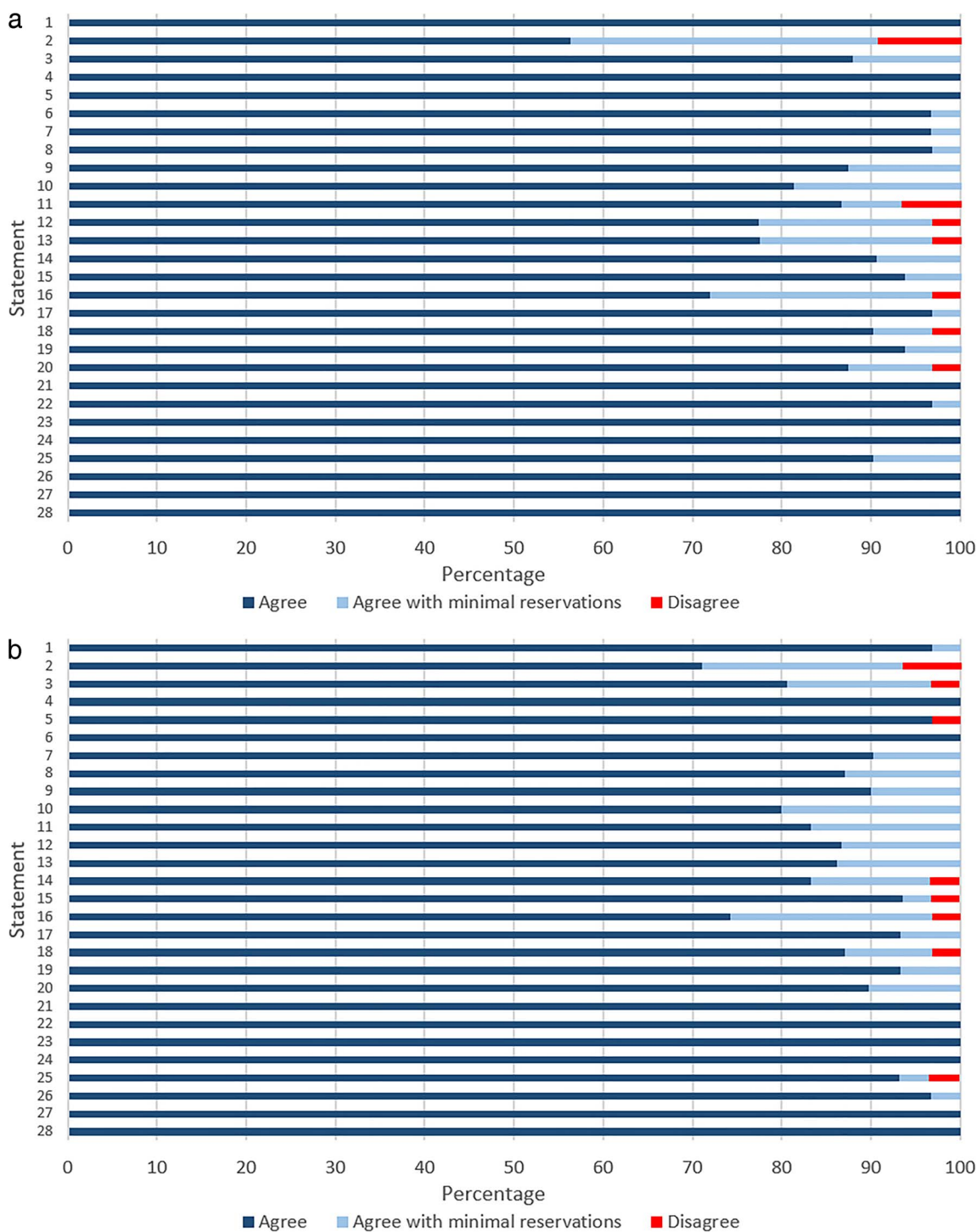
<sup>e</sup>Other clinical practice locale: county public health department, community care, hospital affiliated outpatient pain management clinic.

(SD, 10.4 years; Table). Approximately three-fourths of the respondents reported being a Board Certified Psychiatric Pharmacist (BCPP), and 54% of pharmacists reported practicing in an outpatient setting.

Of the 28 statements, those practicing in the outpatient setting had 100% agreement to 9 statements (1, 4, 5, 21, 23-24, 26-28; Figure 1a). There were no significant differences for any of the statements when compared between those who held BCPP versus those who did not. Those who indicated that the statement characterizes their outpatient practice were also significantly correlated with the likelihood of being able to implement the statement in their practice. Despite the high level of agreement with the statements, none of the statements received a perfect rating for characterizing the respondents' outpatient practices, with average ratings ranging 5.74 to 9.90 of 10 (Figure 2).

Of the respondents, 66% reported that they would be somewhat likely or extremely likely to serve as a field tester for the model at their outpatient clinical practice in the future if resources were available. Among those not practicing in the outpatient setting, respondents reported 100% agreement to 8 statements (4, 6, 21-24, 27-28; Figure 1b).

When the level of agreement was compared between those practicing in the outpatient setting versus those not practicing in the outpatient setting, there was no significant difference for any of the 28 statements. There were 2 statements (2, 11) that had >5% of outpatient or nonoutpatient respondents who disagreed. There were 3 statements among outpatient respondents whose ratings

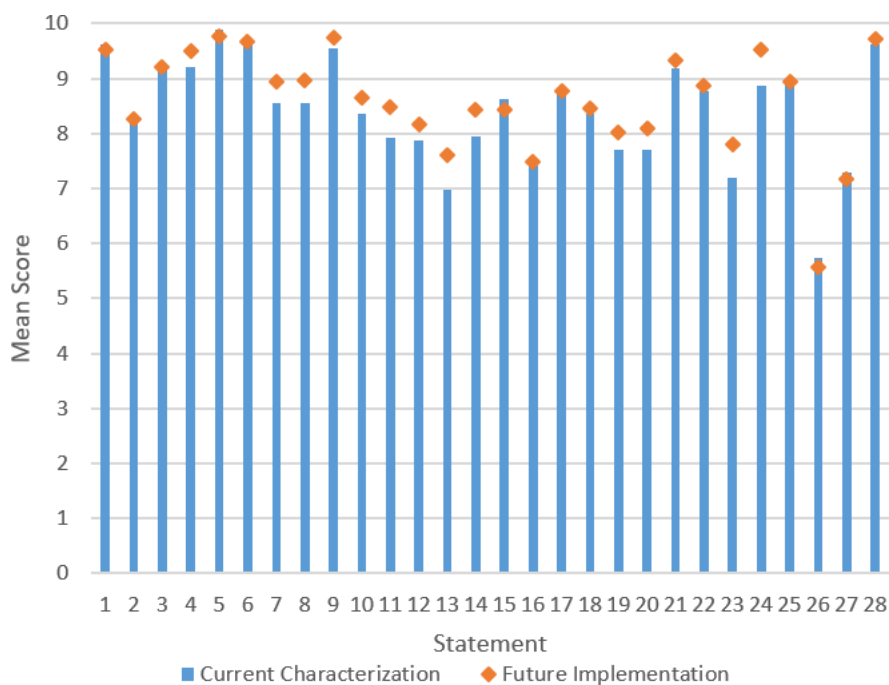


**FIGURE 1:** (a) Percent agreement of outpatient respondents for each statement; (b) percent agreement of nonoutpatient respondents for each statement

of their ability to implement the statement in practice were less than 7.50 (16, 26, 27).

Statement 2 regarding the requirement of a PharmD and BCPP had a 9.4% disagreement rate among outpatient respondents and a 6.5% disagreement rate among nonoutpatient respondents (along with a 56.3%

and 71.0% full agreement rate for each group, respectively; Figure 1a, b). Despite this, both current characterization and future implementation had average scores of 8.25 among outpatient respondents (Figure 2). Some comments regarding this statement mentioned that many current OPPs are not PharmDs or BCPPs and provide high-quality care, that years of



**FIGURE 2:** Characterization of current outpatient practice and likelihood of future implementation of each statement in practice (mean score for current characterization represents average ratings of respondents to the question, “How much does this statement currently characterize your outpatient practice” using the scale from 0 [not at all] to 10 [completely]; mean score for future implementation represents average ratings of respondents to the question, “How likely would you be able to implement this statement in your practice” using the scale from 0 [extremely unlikely] to 10 [extremely likely])

experience should also be considered, or that this could limit the number of OPPs available to provide care to patients.

Statement 11 regarding the administration and interpretation of rating scales had some disagreement among outpatient respondents (6.7%) but no disagreement among nonoutpatient respondents (Figure 1a, b). Both groups, however, did have full agreement above 80%. The outpatient current characterization score was 7.91 and future implementation score was 8.48, indicating a potential for growth in this area among OPPs (Figure 2). Comments for this statement included that rating scales should not replace subjective symptom and illness assessment, that the time required to administer some scales is cumbersome, and that there is need for training on the various rating scales.

There were 2 statements (26 and 27) regarding reimbursement and clinical site support for pharmacist activities, respectively, that had future implementation scores under 7.50 (5.57 and 7.16, respectively) and current characterization scores under 7.50 (5.74 and 7.29, respectively), among outpatient providers (Figure 2). There was 100% agreement among both outpatient and nonoutpatient providers (Figure 1a, b). Respondents did not comment on these statements other than to say that

reimbursement concerns are “currently the largest barrier to care.”

Treatment of other medical illnesses (Statement 16) also had a low outpatient future implementation score of 7.48, with a current characterization score of 7.40 (Figure 2). Although both outpatients and nonoutpatients had low disagreement rates (3.1% and 3.2%, respectively), they also had low full agreement rates (71.9% and 74.2%, respectively; Figure 1a, b). Respondents discussed the need for OPPs to focus on mental health care and concerns about site support and liability. There were also comments that supported OPPs working collaboratively with medical providers to assist in treating medical illnesses in patients with mental illness.

## Discussion

This survey confirmed that a high level of consensus exists around the attributes and qualities that are the basis for the OPP best practice model. The appropriateness of the statements is further confirmed by a cursory examination of similarities to current practice within the Department of Veterans Affairs, where the psychiatric pharmacist is a core team member in the advanced practice provider role.<sup>3</sup> Despite consensus, there is room for improvement with most of the attributes. Some statements can be implemented directly by the pharmacist, such as “Out-



patient psychiatric pharmacists should be able to communicate with empathy, respect, assertiveness, confidence, and cultural awareness (Statement 5).” Other statements can only be implemented with the support of the health system, such as “Outpatient psychiatric pharmacists should have full electronic health record (EHR) access and should document services within the EHR (Statement 28).” Although the feasibility of implementation was generally high, it was notably lower when the statement required action by the health system or payer, such as “Outpatient psychiatric pharmacists should be able to receive reimbursement for clinical services (Statement 26).” Additional implementation concerns were raised through respondents’ comments where additional training was needed for the statements, such as those regarding measurement-based care (Statements 11-13), suicide assessment and prevention (Statement 3), and comprehensive medication management (Statements 9 and 10). Future development of the model will need to address these implementation concerns through training and advocacy efforts. The model could also be used by OPPs to gain support from practice administration because it provides guidance regarding ideal practice conditions.

One item of particular interest was Statement 2 regarding the PharmD degree and BCPP certification as the credentials for OPPs to maintain. This statement had higher rates of disagreement and lower rates of full agreement among both outpatient and non-outpatient respondents. The concerns raised about potentially losing existing OPPs not meeting these credentials or decreasing future expansion of OPPs are worth considering. However, this model is not intended to exclude any existing OPPs or prevent future OPPs from entering the workforce. It is intended to help standardize the quality of care provided by OPPs that is achievable in all outpatient settings.

One limitation of the survey was the low response rate, but current findings aligned with results of previous phases of this project.<sup>2</sup> Throughout phases 1 through 5, there was a wide representation of AAPP members who contributed to the development and confirmation of the statements. Although earlier project phases allowed participants to suggest additional attributes, the design of this survey did not validate whether the attributes represented a complete description of the ideal model. Therefore, it is possible that some attributes for the model may be missing. This concern was mitigated somewhat because respondents could have commented on the survey about any missing attributes. In fact, there were some comments recommending minor word revisions to the statements’ supporting narratives that will be considered by the BPMS. The consensus-building process was important for developing a durable best practice model, but it is noteworthy that previous informal efforts

yielded many of the same attributes as described here.<sup>4,5</sup> These statements also align with the vision of the psychiatric pharmacy specialty in order to best position psychiatric pharmacists to positively impact patient care.<sup>6</sup>

There was a high degree of agreement on the proposed practice model statements that will serve as the basis for the OPP best practice model. Psychiatric pharmacists are uniquely poised to serve as medication experts and provide comprehensive medication management to patients. Current assessment of practice by psychiatric pharmacists in the outpatient setting reveals a high degree of variability, in both attributes of the practitioner and the practice model. Reports of practice models share some similarities, but there is no standardized best practice model. The next steps in developing the OPP best practice model include establishing implementation guidance, determining any needed training, and developing appropriate metrics for the assessment of these statements.

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## References

1. Silvia RJ, Lee KC, Bostwick JR, Cobb CD, Goldstone LW, Moore TD, et al. Assessment of the current practice of psychiatric pharmacists in the United States. *Ment Health Clin* [Internet]. 2020;10(6):346-53. DOI: [10.9740/mhc.2020.11.346](https://doi.org/10.9740/mhc.2020.11.346). PubMed PMID: [33224692](https://pubmed.ncbi.nlm.nih.gov/33224692/); PubMed Central PMCID: [PMC7653732](https://pubmed.ncbi.nlm.nih.gov/PMC7653732/).
2. Silvia RJ, Lee KC, Payne GH, Ho J, Cobb C, Ansara ED, et al. Best practice model for outpatient psychiatric pharmacy practice, part 1: development of initial attribute statements. *Ment Health Clin* [Internet]. 2022;12(2):57-64. DOI: [10.9740/mhc.2022.04.057](https://doi.org/10.9740/mhc.2022.04.057).
3. US Department of Veterans Affairs, Pharmacy Benefits Management, Clinical Pharmacy Practice Office [Internet]. Fact sheet—clinical pharmacist practitioner role in mental health; 2021 [cited 2022 Mar 30]. Available from: [https://www.pbm.va.gov/PBM/CPPO/Documents/ExternalFactSheet\\_CPPRoleinMentalHealth\\_508.pdf](https://www.pbm.va.gov/PBM/CPPO/Documents/ExternalFactSheet_CPPRoleinMentalHealth_508.pdf)

4. Stimmel GL. Psychiatric pharmacy manifesto; 2015 [cited 2022 Mar 30]. Available from: [https://cpnp.org/\\_docs/about/manifesto/manifesto-2015.pdf](https://cpnp.org/_docs/about/manifesto/manifesto-2015.pdf)
5. Stimmel GL. Psychiatric pharmacy manifesto. *Ment Health Clin*. [Internet] 2011;1(4):61-2. DOI: [10.9740/mhc.n84077](https://doi.org/10.9740/mhc.n84077).
6. Cobb C, Little AE, Rey JA. Our vision for the future. *Ment Health Clin* [Internet]. 2011;1(4):72-3. DOI: [10.9740/mhc.n83635](https://doi.org/10.9740/mhc.n83635).
7. National Association of Boards of Pharmacy [Internet]. NAPLEX competency statements [cited 2022 Mar 30]. Available from: <https://nabp.pharmacy/programs/examinations/naplex/competency-statements-2021/>.
8. National Association of Boards of Pharmacy [Internet]. MPJE competency statements [cited 2022 Mar 30]. Available from: <https://nabp.pharmacy/programs/examinations/mpje/competency-statements/>.
9. Board of Pharmacy Specialties [Internet]. Psychiatric pharmacy [cited 2022 Mar 30]. Available from: <https://www.bpsweb.org/bps-specialties/psychiatric-pharmacy/#1517747602846-f1cc6832-2470151778001577715178540776891517858333825151786345368015178643167331517865456116>
10. Goldstone LW, DiPaula BA, Caballero J, Park SH, Price C, Zasadzki Slater M. Improving medication-related outcomes for patients with psychiatric and neurologic disorders: value of psychiatric pharmacists as part of the health care team. *Ment Health Clin* [Internet] 2015;5(1):1-28. DOI: [10.9740/mhc.2015.01.001](https://doi.org/10.9740/mhc.2015.01.001).
11. Goldstone LW, Dipaula BA, Werremeyer A, Botts S, Hepburn B, Liu HY, et al. The role of board-certified psychiatric pharmacists in expanding access to care and improving patient outcomes. *Psychiatr Serv*. 2021;72(7):794-801. DOI: [10.1176/appi.ps.202000066](https://doi.org/10.1176/appi.ps.202000066). PubMed PMID: [33940946](https://pubmed.ncbi.nlm.nih.gov/33940946/).
12. American Society of Health-System Pharmacists and College of Psychiatric and Neurologic Pharmacists [Internet]. Required competency areas, goals, and objectives for postgraduate year two (PGY2) psychiatric pharmacy residencies [cited 2022 Mar 30]. Available from: <https://www.ashp.org/-/media/assets/professional-development/residencies/docs/pgy2-newly-approved-psychiatric-pharmacy-2016.ashx>
13. National Center for Injury Prevention and Control. Division of Violence Prevention [Internet]. Preventing suicide: a technical package of policy, programs, and practices [cited 2022 Mar 30]. Available from: <https://www.cdc.gov/violenceprevention/pdf/suicidetechnicalpackage.pdf>
14. Denson BH, Kim RE. Evaluation of provider response to positive depression screenings and physician attitudes on integrating psychiatric pharmacist services in primary care settings. *Ment Health Clin* [Internet]. 2018;8(1):28-32. DOI: [10.9740/mhc.2018.01.028](https://doi.org/10.9740/mhc.2018.01.028). PubMed PMID: [29955542](https://pubmed.ncbi.nlm.nih.gov/29955542/); PubMed Central PMCID: [PMC6007519](https://pubmed.ncbi.nlm.nih.gov/PMC6007519/).
15. Gillette C, Mospan CM, Benfield M. North Carolina community pharmacists' attitudes about suicide and willingness to conduct suicidal ideation assessment: a cross-sectional survey study. *Res Social Adm Pharm*. 2020;16(5):727-31. DOI: [10.1016/j.sapharm.2019.08.023](https://doi.org/10.1016/j.sapharm.2019.08.023). PubMed PMID: [31416756](https://pubmed.ncbi.nlm.nih.gov/31416756/).
16. Murphy AL, Hillier K, Ataya R, Thabet P, Whelan AM, O'Reilly C, et al. A scoping review of community pharmacists and patients at risk of suicide. *Can Pharm J*. 2017;150(6):366-79. DOI: [10.1177/1715163517733482](https://doi.org/10.1177/1715163517733482). PubMed PMID: [29123596](https://pubmed.ncbi.nlm.nih.gov/29123596/); PubMed Central PMCID: [PMC5661676](https://pubmed.ncbi.nlm.nih.gov/PMC5661676/).
17. Painter NA, Kuo GM, Collins SP, Palomino YL, Lee KC. Pharmacist training in suicide prevention. *J Am Pharm Assoc*. 2018;58(2):199-204.e2. DOI: [10.1016/j.japh.2017.12.007](https://doi.org/10.1016/j.japh.2017.12.007). PubMed PMID: [29366695](https://pubmed.ncbi.nlm.nih.gov/29366695/).
18. US Centers for Disease Control and Prevention [Internet]. Advancing team-based care through collaborative practice agreements [cited 2022 Mar 30]. Available from: <https://www.cdc.gov/dhdsppubs/docs/CPA-Team-Based-Care.pdf>
19. US Centers for Disease Control and Prevention [Internet]. Collaborative practice agreements and pharmacists' patient care services: a resource for pharmacists [cited 2022 Mar 30]. Available from: [https://www.cdc.gov/dhdsppubs/docs/translational\\_tools\\_pharmacists.pdf](https://www.cdc.gov/dhdsppubs/docs/translational_tools_pharmacists.pdf)
20. Alsharif NZ, Brennan L, Abrons JP, Chahine EB. An introduction to cultural sensitivity and global pharmacy engagement. *Am J Pharm Educ*. 2019;83(4):7221. DOI: [10.5688/ajpe7221](https://doi.org/10.5688/ajpe7221). PubMed PMID: [31223166](https://pubmed.ncbi.nlm.nih.gov/31223166/).
21. O'Connell MB, Korner EJ, Rickles NM, Sias JJ. Cultural competence in health care and its implications for pharmacy, part 1: overview of key concepts in multicultural health care. *Pharmacotherapy*. 2007;27(7):1062-79. DOI: [10.1592/phco.27.7.1062](https://doi.org/10.1592/phco.27.7.1062). PubMed PMID: [17594213](https://pubmed.ncbi.nlm.nih.gov/17594213/).
22. Priebe S, Conneely M, McCabe R, Bird V. What can clinicians do to improve outcomes across psychiatric treatments: a conceptual review of non-specific components. *Epidemiol Psychiatr Sci*. 2020;29:e48. DOI: [10.1017/S2045796019000428](https://doi.org/10.1017/S2045796019000428). PubMed PMID: [31412975](https://pubmed.ncbi.nlm.nih.gov/31412975/); PubMed Central PMCID: [PMC8061300](https://pubmed.ncbi.nlm.nih.gov/PMC8061300/).
23. Woit C, Yuksel N, Charrois TL. Competence and confidence with prescribing in pharmacy and medicine: a scoping review. *Int J Pharm Pract*. 2019;28(4):312-25. DOI: [10.1111/ijpp.12595](https://doi.org/10.1111/ijpp.12595). PubMed PMID: [31876027](https://pubmed.ncbi.nlm.nih.gov/31876027/).
24. American College of Clinical Pharmacy [Internet]. Comprehensive medication management in team-based care. 2016 [cited 2022 Mar 30]. Available from: <https://www.pcpc.org/sites/default/files/event-attachments/CMM%20Brief.pdf>
25. CMM in Primary Care Research Team. The patient care process for delivering comprehensive medication management (CMM): optimizing medication use in patient-centered, team-based care settings [updated Jul 2018; cited 2022 Mar 30]. Available from: [http://www.accp.com/cmm\\_care\\_process](http://www.accp.com/cmm_care_process)
26. Chavez B, Kosirog E. Impact on an integrated psychiatric pharmacy service in a primary care clinic. *Ment Health Clin* [Internet]. 2019;9(4):269-74. DOI: [10.9740/mhc.2019.07.269](https://doi.org/10.9740/mhc.2019.07.269). PubMed PMID: [31293846](https://pubmed.ncbi.nlm.nih.gov/31293846/); PubMed Central PMCID: [PMC6607947](https://pubmed.ncbi.nlm.nih.gov/PMC6607947/).
27. Gotlib D, Bostwick JR, Calip S, Perelstein E, Kurlander JE, Fluent T. Collaborative care in ambulatory psychiatry: content analysis of consultations to a psychiatric pharmacist. *Psychopharmacol Bull*. 2017;47(4):41-6. PubMed PMID: [28936009](https://pubmed.ncbi.nlm.nih.gov/28936009/).
28. Wang I, Dopheide JA, Gregerson P. Role of a psychiatric pharmacist in a Los Angeles "Skid-Row" safety-net clinic. *J Urban Health*. 2011;88(4):718-23. DOI: [10.1007/s11524-011-9573-6](https://doi.org/10.1007/s11524-011-9573-6). PubMed PMID: [21512832](https://pubmed.ncbi.nlm.nih.gov/21512832/); PubMed Central PMCID: [PMC3157501](https://pubmed.ncbi.nlm.nih.gov/PMC3157501/).
29. The American Psychiatric Association practice guideline for the treatment of patients with schizophrenia, third edition; 2020 [cited 2022 Mar 30]. Available from: <https://psychiatryonline.org/doi/book/10.1176/appi.books.9780890424841>
30. Anxiety & Depression Association of America [Internet]. Clinical practice review for generalized anxiety disorder [cited 2022 Mar 30]. Available from: <https://adaa.org/resources-professionals/practice-guidelines-gad>
31. National Institute for Health and Care Excellence (NICE) [Internet]. Generalized anxiety disorder and panic disorder in adults: management clinical guideline; 2019 [cited 2022 Mar 30]. Available from: <https://www.nice.org.uk/guidance/cg113/resources/generalised-anxiety-disorder-and-panic-disorder-in-adults-management-pdf-35109387756997>
32. Bhidayasiri R, Fahn S, Weiner WJ, Gronseth GS, Sullivan KL, Zesiewicz TA. Evidence-based guideline: treatment of tardive syndromes: report of the Guideline Development Subcommittee of the American Academy of Neurology. *Neurology*. 2013;81(5):463-9. DOI: [10.1212/WNL.0b013e31829d86b6](https://doi.org/10.1212/WNL.0b013e31829d86b6). PubMed PMID: [23897874](https://pubmed.ncbi.nlm.nih.gov/23897874/).

33. El-Den S, McMillan SS, Wheeler AJ, Ng R, Roennfeldt H, O'Reilly CL. Pharmacists' roles in supporting people living with severe and persistent mental illness: a systematic review protocol. *BMJ Open* 2020;10(7):e038270. DOI: [10.1136/bmjopen-2020-038270](https://doi.org/10.1136/bmjopen-2020-038270). PubMed PMID: [32665350](https://pubmed.ncbi.nlm.nih.gov/32665350/).
34. Nederlof M, Cath DC, Stoker LJ, Egberts TCG, Heerdink ER. Guidance by physicians and pharmacists during antidepressant therapy: patients' needs and suggestions for improvement. *BMC Psychiatry*. 2017;17(1):388. DOI: [10.1186/s12888-017-1522-9](https://doi.org/10.1186/s12888-017-1522-9). PubMed PMID: [29202819](https://pubmed.ncbi.nlm.nih.gov/29202819/).
35. Yatham LN, Kennedy SH, Parikh SV, Schaffer A, Bond DJ, Frey BN, et al. Canadian Network for Mood and Anxiety Treatments (CANMAT) and International Society for Bipolar Disorders (ISBD) 2018 guidelines for the management of patients with bipolar disorder. *Bipolar Disord*. 2018;20(2):97-170. DOI: [10.1111/bdi.12609](https://doi.org/10.1111/bdi.12609). PubMed PMID: [29536616](https://pubmed.ncbi.nlm.nih.gov/29536616/); PubMed Central PMCID: [PMC5947163](https://pubmed.ncbi.nlm.nih.gov/PMC5947163/).
36. American Psychological Association [Internet]. Clinical practice guideline for the treatment of depression across three age cohorts; 2019 [cited 2022 Mar 30]. Available from: <https://www.apa.org/depression-guideline>
37. Berger BA, Bertram CT. Motivational interviewing and specialty pharmacy. *J Manag Care Spec Pharm*. 2015;21(1):13-7. DOI: [10.18553/jmcp.2015.21.1.13](https://doi.org/10.18553/jmcp.2015.21.1.13). PubMed PMID: [25562769](https://pubmed.ncbi.nlm.nih.gov/25562769/).
38. Ng YK, Shah NM, Loong LS, Pee LT, Hidir SAM, Chong WW. Attitudes toward concordance and self-efficacy in decision making: a cross-sectional study on pharmacist-patient consultations. *Patient Prefer Adherence*. 2018;12:615-24. DOI: [10.2147/PPA.S159113](https://doi.org/10.2147/PPA.S159113). PubMed PMID: [29731609](https://pubmed.ncbi.nlm.nih.gov/29731609/).
39. Salvo MC, Cannon-Breland ML. Motivational interviewing for medication adherence. *J Am Pharm Assoc*. 2015;55(4):e354-61; quiz e62-3. DOI: [10.1331/JAPhA.2015.15532](https://doi.org/10.1331/JAPhA.2015.15532). PubMed PMID: [26161493](https://pubmed.ncbi.nlm.nih.gov/26161493/).
40. Vermeulen LC, Swarthout MD, Alexander GC, Ginsburg DB, Pritchett KO, White SJ, et al. ASHP Foundation pharmacy forecast 2020: strategic planning advice for pharmacy departments in hospitals and health systems. *Am J Health Syst Pharm*. 2019;77(2):84-112. DOI: [10.1093/ajhp/zxz283](https://doi.org/10.1093/ajhp/zxz283). PubMed PMID: [31803902](https://pubmed.ncbi.nlm.nih.gov/31803902/).
41. Warshaw C, Sullivan CM, Rivera EA. A systematic review of trauma-focused interventions for domestic violence survivors; 2013 [cited 2022 Mar 30]. Available from: [http://www.nationalcenterdvtraumamh.org/wp-content/uploads/2013/03/NCDVTMH\\_EBPLitReview2013.pdf](http://www.nationalcenterdvtraumamh.org/wp-content/uploads/2013/03/NCDVTMH_EBPLitReview2013.pdf)
42. Warshaw C, Tinnon E. Coercion related to mental health and substance use in the context of intimate partner violence; 2018 [cited 2022 Mar 30]. Available from: [http://www.nationalcenterdvtraumamh.org/wp-content/uploads/2018/03/NCDVTMH\\_MHSUCoercionToolkit2018.pdf](http://www.nationalcenterdvtraumamh.org/wp-content/uploads/2018/03/NCDVTMH_MHSUCoercionToolkit2018.pdf)
43. Cobb CD. Optimizing medication use with a pharmacist-provided comprehensive medication management service for patients with psychiatric disorders. *Pharmacotherapy*. 2014;34(12):1336-40. DOI: [10.1002/phar.1503](https://doi.org/10.1002/phar.1503). PubMed PMID: [25329409](https://pubmed.ncbi.nlm.nih.gov/25329409/).
44. Finley PR, Crismon ML, Rush AJ. Evaluating the impact of pharmacists in mental health: a systematic review. *Pharmacotherapy*. 2003;23(12):1634-44. PubMed PMID: [14695043](https://pubmed.ncbi.nlm.nih.gov/14695043/).
45. Keely JL. Pharmacist scope of practice. *Ann Intern Med*. 2002;136(1):79-85. PubMed PMID: [11777367](https://pubmed.ncbi.nlm.nih.gov/11777367/).
46. Moore T, Groppi J, Ourth H, Morreale A, Torrise V. Increasing access to care using clinical pharmacy specialist providers in outpatient mental health: successful practice integration within the Department of Veterans Affairs. *J Am Pharm Assoc*. 2020;60(5):S107-12. DOI: [10.1016/j.japh.2020.03.011](https://doi.org/10.1016/j.japh.2020.03.011). PubMed PMID: [32280020](https://pubmed.ncbi.nlm.nih.gov/32280020/).
47. Pestka DL, Frail CK, Sorge LA, Funk KA, Janke KK, Roth McClurg MT, et al. Development of the comprehensive medication management practice management assessment tool: a resource to assess and prioritize areas for practice improvement. *J Am Coll Clin Pharm*. 2019;3(2):448-54. DOI: [10.1002/jac5.1182](https://doi.org/10.1002/jac5.1182).
48. Williams AM, Dopheide JA. Nonpsychiatric medication interventions initiated by a postgraduate year 2 psychiatric pharmacy resident in a patient-centered medical home. *Prim Care Companion CNS Disord*. 2014;16(6):10.4088/PCC.14mo1680. DOI: [10.4088/PCC.14mo1680](https://doi.org/10.4088/PCC.14mo1680). PubMed PMID: [25834765](https://pubmed.ncbi.nlm.nih.gov/25834765/); PubMed Central PMCID: [PMC4374824](https://pubmed.ncbi.nlm.nih.gov/PMC4374824/).
49. Harms M, Haas M, Larew J, DeJongh B. Impact of a mental health clinical pharmacist on a primary care mental health integration team. *Ment Health Clin [Internet]*. 2017;7(3):101-5. DOI: [10.9740/mhc.2017.05.101](https://doi.org/10.9740/mhc.2017.05.101). PubMed PMID: [29955506](https://pubmed.ncbi.nlm.nih.gov/29955506/); PubMed Central PMCID: [PMC6007568](https://pubmed.ncbi.nlm.nih.gov/PMC6007568/).
50. Silvia R, Plum M, Dufresne R. Efficiencies and outcomes of depression treatment by a psychiatric pharmacist in a primary care clinic compared with treatment within a behavioral health clinic. *J Am Pharm Assoc*. 2020;60(5):S98-106. DOI: [10.1016/j.japh.2020.05.015](https://doi.org/10.1016/j.japh.2020.05.015). PubMed PMID: [32665098](https://pubmed.ncbi.nlm.nih.gov/32665098/).
51. Watkins VA, Michaels NM, Jackson DL, Rhodes LA, Marciniak MW. The effect of community pharmacist-led health coaching on clinical outcomes. *J Am Pharm Assoc*. 2020;60(3):S65-9. DOI: [10.1016/j.japh.2020.03.021](https://doi.org/10.1016/j.japh.2020.03.021). PubMed PMID: [32439280](https://pubmed.ncbi.nlm.nih.gov/32439280/).
52. Aboraya A, Nasrallah HA, Elswick DE, Ahmed E, Estephan N, Aboraya D, et al. Measurement-based care in psychiatry—past, present, and future. *Innov Clin Neurosci*. 2018;15(11-12):13-26. PubMed PMID: [30834167](https://pubmed.ncbi.nlm.nih.gov/30834167/).
53. Black WE, Esposito-Smythers C, Liu FF, Leichtweis R, Peterson AP, Fagan C. Leveraging health information technology to meet The Joint Commission's standard for measurement-based care: a case study. *Jt Comm J Qual Patient Saf*. 2020;46(6):353-8. DOI: [10.1016/j.jcjq.2020.03.006](https://doi.org/10.1016/j.jcjq.2020.03.006). PubMed PMID: [32371060](https://pubmed.ncbi.nlm.nih.gov/32371060/).
54. Karst A, Colvard M, Bean J, Patel E, Pate R, Lister J. Impact of a mental health trainee interdisciplinary program on a veteran population. *J Am Coll Clin Pharm*. 2020;7(3):757-63. DOI: [10.1002/jac5.1220](https://doi.org/10.1002/jac5.1220).
55. Scott K, Lewis CC. Using measurement-based care to enhance any treatment. *Cogn Behav Pract*. 2015;22(1):49-59. DOI: [10.1016/j.cbpra.2014.01.010](https://doi.org/10.1016/j.cbpra.2014.01.010). PubMed PMID: [27330267](https://pubmed.ncbi.nlm.nih.gov/27330267/).
56. Lee KC, Silvia RJ, Cobb CD, Moore TD, Payne GH. Survey of prescriptive authority among psychiatric pharmacists in the United States. *Ment Health Clin [Internet]*. 2021;11(2):64-9. DOI: [10.9740/mhc.2021.03.064](https://doi.org/10.9740/mhc.2021.03.064). PubMed PMID: [33850685](https://pubmed.ncbi.nlm.nih.gov/33850685/).
57. Eaves S, Gonzalvo J, Hamm JA, Williams G, Ott C. The evolving role of the pharmacist for individuals with serious mental illness. *J Am Pharm Assoc*. 2020;60(5):S11-4. DOI: [10.1016/j.japh.2020.04.017](https://doi.org/10.1016/j.japh.2020.04.017). PubMed PMID: [32522521](https://pubmed.ncbi.nlm.nih.gov/32522521/).
58. McKee JR, Lee KC, Cobb CD. Psychiatric pharmacist integration into the medical home. *Prim Care Companion CNS Disord*. 2013;15(4):PCC.13com01517. DOI: [10.4088/PCC.13com01517](https://doi.org/10.4088/PCC.13com01517). PubMed PMID: [24392254](https://pubmed.ncbi.nlm.nih.gov/24392254/); PubMed Central PMCID: [PMC3869606](https://pubmed.ncbi.nlm.nih.gov/PMC3869606/).
59. California Pharmacists Association [Internet]. Guidelines for pharmacists ordering and managing tests to ensure safe and appropriate medication therapy [updated 2014 May 19; cited 2022 Mar 30]. Available from: <https://cpaha.com/wp-content/uploads/2017/09/Guidelines-for-pharmacists-ordering-tests-in-California-5-o.pdf>
60. Hammond RW, Schwartz AH, Campbell MJ, Remington TL, Chuck S, Blair MM, et al. Collaborative drug therapy management by pharmacists—2003. *Pharmacotherapy*. 2003;23(9):1210-25. DOI: [10.1592/phco.23.10.1210.32752](https://doi.org/10.1592/phco.23.10.1210.32752). PubMed PMID: [14524655](https://pubmed.ncbi.nlm.nih.gov/14524655/).
61. Hill JD, Hill JM, Gentile NJ. A review of state pharmacist collaborative practice laws. *Am J Health Syst Pharm*. 2016;73(18):1467-72. DOI: [10.2146/ajhp160269](https://doi.org/10.2146/ajhp160269). PubMed PMID: [27605327](https://pubmed.ncbi.nlm.nih.gov/27605327/).



62. Tallian KB, Hirsch JD, Kuo GM, Chang CA, Gilmer T, Messinger M, et al. Development of a pharmacist-psychiatrist collaborative medication therapy management clinic. *J Am Pharm Assoc.* 2012;52(6):e252-8. DOI: [10.1033/JAPhA.2012.11215](https://doi.org/10.1033/JAPhA.2012.11215). PubMed PMID: [23229987](https://pubmed.ncbi.nlm.nih.gov/23229987/).
63. Department of Veterans Affairs [Internet]. VHA Handbook 1108.11(1) [updated 2017 Jun 29; cited 2022 Mar 30]. Available from: [https://www.va.gov/vhapublications/ViewPublication.asp?pub\\_ID=3120](https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=3120)
64. Engle JP, Dick TB, Bryant G, Ciolek A, Crismon ML, Fisher JD, et al. Credentialing and privileging for clinical pharmacists. *J Am Coll Clin Pharm.* 2020;3(1):133-44. DOI: [10.1002/jac5.1201](https://doi.org/10.1002/jac5.1201).
65. Galt KA. Credentialing and privileging for pharmacists. *Am J Health Syst Pharm.* 2004;61(7):661-70. DOI: [10.1093/ajhp/61.7.661](https://doi.org/10.1093/ajhp/61.7.661). PubMed PMID: [15119572](https://pubmed.ncbi.nlm.nih.gov/15119572/).
66. Khalil V, deClifford JM, Lam S, Subramaniam A. Implementation and evaluation of a collaborative clinical pharmacist's medications reconciliation and charting service for admitted medical inpatients in a metropolitan hospital. *J Clin Pharm Ther.* 2016;41(6):662-6. DOI: [10.1111/jcpt.12442](https://doi.org/10.1111/jcpt.12442). PubMed PMID: [27578624](https://pubmed.ncbi.nlm.nih.gov/27578624/).
67. Barrett M, Ward S, Colvard M. Pharmacist-led telemental health transitions of care clinic improves antidepressant medication continuity posthospitalization. *Ment Health Clin* [Internet]. 2020;10(6):381-4. DOI: [10.9740/mhc.2020.11.381](https://doi.org/10.9740/mhc.2020.11.381). PubMed PMID: [33224695](https://pubmed.ncbi.nlm.nih.gov/33224695/); PubMed Central PMCID: [PMC7653734](https://pubmed.ncbi.nlm.nih.gov/PMC7653734/).
68. Silvia RJ. Utilization of a psychiatric clinical pharmacist in an integrated behavioral health program of a community health center. *Ment Health Clin* [Internet]. 2014;4(6):287-91. DOI: [10.9740/mhc.n207386](https://doi.org/10.9740/mhc.n207386).
69. Pharmacist Quality Alliance [Internet]. Strategies to expand value-based pharmacist-provided care action guide [cited 2022 Mar 30]. Available from: <https://pqa.memberclicks.net/assets/S2S/Pharmacist-Provided%20Care%20Action%20Guide.pdf>
70. National Committee for Quality Assurance [Internet]. Behavioral health quality framework: a roadmap for using measurement to promote joint accountability and whole-person care: a white paper [updated 2021 May; cited 2022 Mar 30]. Available from: [https://www.ncqa.org/wp-content/uploads/2021/07/20210701\\_Behavioral\\_Health\\_Quality\\_Framework\\_NCQA\\_White\\_Paper.pdf](https://www.ncqa.org/wp-content/uploads/2021/07/20210701_Behavioral_Health_Quality_Framework_NCQA_White_Paper.pdf)
71. National Quality Forum [Internet]. Endorsement summary: behavioral health measures; 2012 [cited 2022 Mar 30]. Available from: <https://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=72211>
72. Davis B, Qian J, Ngorsuraches S, Jeminiwa R, Garza KB. The clinical impact of pharmacist services on mental health collaborative teams: a systematic review. *J Am Pharm Assoc.* 2020;60(5):S44-53. DOI: [10.1016/j.japh.2020.05.006](https://doi.org/10.1016/j.japh.2020.05.006). PubMed PMID: [32600986](https://pubmed.ncbi.nlm.nih.gov/32600986/); PubMed Central PMCID: [PMC7529835](https://pubmed.ncbi.nlm.nih.gov/PMC7529835/).
73. ASHP [Internet]. Accreditation standard for postgraduate year two (PGY2) pharmacy residency programs [cited 2022 Mar 30]. Available from: <https://www.ashp.org/-/media/assets/professional-development/residencies/docs/pgy2-residency-accreditation-standard-June2017.ashx>
74. Greer D, Pasquale J, Wahrenberger JT. Objective and subjective benefits of a psychiatric pharmacist-led long-acting injectable medication training at a large, multisite organization. *Ment Health Clin* [Internet]. 2020;10(5):264-69. DOI: [10.9740/mhc.2020.09.264](https://doi.org/10.9740/mhc.2020.09.264). PubMed PMID: [33062551](https://pubmed.ncbi.nlm.nih.gov/33062551/); PubMed Central PMCID: [PMC7534819](https://pubmed.ncbi.nlm.nih.gov/PMC7534819/).
75. Jorgenson D, Muller A, Whelan AM, Buxton K. Pharmacists teaching in family medicine residency programs: national survey. *Can Fam Physician.* 2011;57(9):e341-6. PubMed PMID: [21918131](https://pubmed.ncbi.nlm.nih.gov/21918131/).
76. Wilkening GL, Gannon JM, Ross C, Brennan JL, Fabian TJ, Marcisin MJ, et al. Evaluation of branched-narrative virtual patients for interprofessional education of psychiatry residents. *Acad Psychiatry.* 2017;41(1):71-5. DOI: [10.1007/s40596-016-0531-1](https://doi.org/10.1007/s40596-016-0531-1). PubMed PMID: [26976401](https://pubmed.ncbi.nlm.nih.gov/26976401/).
77. Stoner SC, Ott CA, Dipaula BA. Psychiatric pharmacy residency training. *Am J Pharm Educ.* 2010;74(9):163. PubMed PMID: [21301597](https://pubmed.ncbi.nlm.nih.gov/21301597/).
78. Lee KC, Kim E, Kim J, Malcolm B, Kuo GM, Bird A, et al. Development of an innovative adult attention-deficit hyperactivity disorder clinic. *Ment Health Clin* [Internet]. 2020;10(5):296-300. DOI: [10.9740/mhc.2020.09.296](https://doi.org/10.9740/mhc.2020.09.296). PubMed PMID: [33062556](https://pubmed.ncbi.nlm.nih.gov/33062556/); PubMed Central PMCID: [PMC7534811](https://pubmed.ncbi.nlm.nih.gov/PMC7534811/).
79. Huang R, Ridout SJ, Harris B, Ridout KK, Raja K. Pharmacist medication management of adults with attention deficit: an alternative clinical structure. *Perm J.* 2020;24:19.122. DOI: [10.7812/TPP/19.122](https://doi.org/10.7812/TPP/19.122). PubMed PMID: [32240081](https://pubmed.ncbi.nlm.nih.gov/32240081/).
80. Leach M, Garcia G, Ganzer N. Implementation and evaluation of a pharmacist-run mental health treatment clinic via clinical video telehealth. *Ment Health Clin* [Internet]. 2016;6(3):159-64. DOI: [10.9740/mhc.2016.05.159](https://doi.org/10.9740/mhc.2016.05.159). PubMed PMID: [29955464](https://pubmed.ncbi.nlm.nih.gov/29955464/); PubMed Central PMCID: [PMC6007644](https://pubmed.ncbi.nlm.nih.gov/PMC6007644/).
81. National Committee for Quality Assurance [Internet]. Guidelines for medical record documentation [cited 2022 Mar 30]. Available from: [https://www.ncqa.org/wp-content/uploads/2018/07/20180110\\_Guidelines\\_Medical\\_Record\\_Documentation.pdf](https://www.ncqa.org/wp-content/uploads/2018/07/20180110_Guidelines_Medical_Record_Documentation.pdf)
82. Nelson SD, Poikonen J, Reese T, El Halta D, Weir C. The pharmacist and the EHR. *J Am Med Informatics Assoc.* 2016;24(1):193-7. DOI: [10.1093/jamia/ocw044](https://doi.org/10.1093/jamia/ocw044). PubMed PMID: [27107439](https://pubmed.ncbi.nlm.nih.gov/27107439/); PubMed Central PMCID: [PMC7654075](https://pubmed.ncbi.nlm.nih.gov/PMC7654075/).

## APPENDIX: Outpatient psychiatric pharmacy best practice attribute statements<sup>a</sup>

### 1. Outpatient psychiatric pharmacists have an active pharmacist license.<sup>7,8</sup>

Supports the requirement that all outpatient psychiatric pharmacists have an active pharmacist license from at least one state or jurisdiction. This is a minimum requirement for pharmacist qualification. This is similar to other medical professions that list the “minimum licensure requirement” within their best practice standards.

### 2. Outpatient psychiatric pharmacists should have a Doctor of Pharmacy degree (PharmD), and obtain and maintain the Board Certified Psychiatric Pharmacist (BCPP) credential.<sup>9-11</sup>

Endorses the proposal from AAPP that all outpatient psychiatric pharmacists obtain and maintain the BCPP credential. This ensures that pharmacists have the training and up-to-date knowledge required for management of psychiatric conditions. It also ensures continuous professional development and education within the specialty so that psychiatric pharmacists stay up-to-date on current treatments. As this credential is supervised by the national Board of Pharmacy Specialties, it has required minimum training and professional experience standards in order to be eligible to take the BCPP exam. This exam is comprehensive across all domains of psychiatric disorders and their treatments and some neurologic disorders, as well as appropriate utilization of psychiatric medications, biostatistics, and regulatory affairs related to psychiatric pharmacy. It is recommended that psychiatric pharmacists obtain this credential as soon as they are eligible. The BCPP credential is in addition to the Doctor of Pharmacy degree, which is the minimum practicing degree for pharmacists in the United States, except for pharmacists who have extensive practice experience prior to the implementation of the Doctor of Pharmacy requirement.

### 3. Outpatient psychiatric pharmacists should have training in suicide prevention and be able to complete suicide risk assessments.<sup>3,12-17</sup>

Supports the need for psychiatric pharmacists to be trained and incorporate evidence-based suicide risk screening and risk assessments as a component of care consistent with other mental health professionals. Suicide risk assessment is a critical component of behavioral health as there are increased rates among individuals with psychiatric disorders.

### 4. Outpatient psychiatric pharmacists should be prepared to initiate, modify, discontinue, or recommend evidence-based pharmacologic treatment for mental health disorders as defined by their scope of practice.<sup>3,18,19</sup>

Supports psychiatric pharmacists to provide Comprehensive Medication Management (CMM) through their scope of practice as a pharmacist practitioner. The component to initiate, modify or discontinue evidence-based pharmacologic treatment is essential to providing CMM. Scope of practice or collaborative practice agreement (CPA) refers to the local agreement between the pharmacist and the physician(s) or executive committee of the medical staff to perform the functions of CMM as designated under state/federal law. This delineates the activities the pharmacist can perform with patients.

### 5. Outpatient psychiatric pharmacists should be able to communicate with empathy, respect, assertiveness, confidence, and cultural awareness.<sup>20-23</sup>

Psychiatric pharmacists are capable of effectively communicating with patients, families, and other team members. They must display tolerance, patience, understanding, and empathy for patients who are different from themselves and for those with whom it may be difficult to communicate because of symptoms of their illness. They must respect patients' preferences and decisions even when they may not agree with them, utilizing appropriate health literacy to ensure patient understanding. They must communicate with confidence and assertiveness, especially when advocating for what is in the best interest of a patient with other members of the healthcare team.

### 6. Outpatient psychiatric pharmacists should be equipped to recognize medication-related adverse drug events, monitoring parameters, and pharmacokinetic/pharmacodynamic interactions, with an advanced focus on psychiatric pharmacy-related treatment concerns.<sup>3,24-28</sup>

Outpatient psychiatric pharmacists should have the training and skills to recognize medication-related adverse drug events and other medication-related monitoring issues including pharmacogenomic-related concerns relevant to psychiatric care of patients. These skills are standard education and training of all pharmacists, regardless of the type of patients.

### 7. Outpatient psychiatric pharmacists should have an understanding of non-pharmacologic treatments for psychiatric conditions, and when to refer patients for such treatments.<sup>3,29-36</sup>

Psychiatric pharmacists should be familiar with non-pharmacologic treatments for psychiatric conditions including various types of psychotherapy (CBT, DBT, etc.), nutrition counseling, sleep education and behavioral interventions for insomnia, stress management, exercise, self-help support, substance use counseling, and pastoral care. Psychiatric pharmacists may or may not be trained or skilled in providing therapy or behavior change counseling themselves but they should be aware of the resources in their community and be able to refer patients to these providers as needed. Psychiatric pharmacists should also be familiar with somatic treatments, such as electroconvulsive therapy (ECT), transcranial magnetic stimulation (TMS), deep brain stimulation (DBS), and vagus nerve stimulation (VNS) and refer patients to these resources when appropriate. They should also be aware of sub-specialty practices in their community and refer appropriate patients to these practices.

### 8. Outpatient psychiatric pharmacists should be trained in and incorporate evidence-based communication styles such as motivational interviewing, shared decision-making, and trauma-informed care.<sup>3,37-42</sup>

Psychiatric pharmacists utilize evidence-based forms of patient-centered communication and counseling styles that provide safe and trustworthy care environments, support patient-centered behavior change, and empower patients to actively participate in their care. These types of communication improve patient engagement in care and improve outcomes.

### 9. Outpatient psychiatric pharmacists should be able to evaluate drug therapy for appropriateness, effectiveness, safety, adherence, and access using the Comprehensive Medication Management process.<sup>3,10,24-25,43-46</sup>

Psychiatric pharmacists provide CMM as they have the training and expertise as the medication expert on the team.

The evaluation of a patient's drug therapy for appropriateness, effectiveness, safety, adherence, and affordability is an essential activity to help patients meet treatment goals, achieve improved outcomes, and avoid harm. CMM is a specific process by which a pharmacist provides patient care, considering all of the patient's psychiatric and other medical diagnoses and treatments.

**10. Outpatient psychiatric pharmacists should utilize Comprehensive Medication Management as the preferred practice model.**<sup>3,25,43,47,48</sup>

Psychiatric pharmacists should use CMM, an evidence-based process of care that has been shown to improve patient outcomes and decrease overall healthcare costs. CMM is the process of identifying and resolving medication-related problems to ensure that a patient's medications are appropriate, effective, safe, and can be taken as intended. CMM adds unique value to patient care as it focuses on optimizing medications to help patients meet treatment goals. Using a consistent process of care like CMM allows providers, patients, and payers to know what to expect from a pharmacist on an interdisciplinary team.

**11. Outpatient psychiatric pharmacists should have training and be proficient in administering and interpreting key rating scales and mental status assessments.**<sup>3,49-51</sup>

Psychiatric pharmacists should have training and be proficient in administering validated rating scales for major psychiatric disease states (e.g., PHQ-9, GAD-7, AUDIT-C, PCL-5, AIMS) to assess and monitor for overall treatment efficacy and safety as a component of medication management. Inclusion of rating scales provides a systematic and evidence-based approach to assess treatment response.

**12. Outpatient psychiatric pharmacists should incorporate key rating scales and mental status assessments into direct patient care to monitor for efficacy and safety.**<sup>3,49-51</sup>

Psychiatric pharmacists should routinely administer and interpret psychiatric rating scales and mental status assessments as a component of medication management. Inclusion of psychiatric rating scales and mental status assessment provides a systematic and evidence-based approach to assess treatment response and clinical outcomes. This also increases pharmacists' scope of practice and provides needed overlap with other mental health professionals in performing these assessments.

**13. Outpatient psychiatric pharmacists should routinely incorporate measurement-based care into their clinical practice.**<sup>3,52-55</sup>

Psychiatric pharmacists utilize systematic measurements of patient outcomes in clinical practice, such as progress monitoring, outcome monitoring, measurement-based care (MBC as described in Statements 11 and 12 above), and patient satisfaction monitoring or the use of feedback systems. Incorporating MBC can improve clinical outcomes, inform collaborative care efforts, enhance treatment decision-making processes, and increase patient care engagement. With a potential shift from fee-for-service to value-based care, tracking and measuring outcomes is important. This importance is heightened with the emphasis on population-based care and the need to demonstrate value with population metrics.

**14. Outpatient psychiatric pharmacists should have prescriptive authority or a collaborative practice agreement.**<sup>3,18,46,56</sup>

Outpatient psychiatric pharmacists should have prescriptive authority as a part of their scope of practice or CPA as allowed by state pharmacy regulations. This allows outpatient psychiatric pharmacists to implement medication changes at the point of care to optimize efficiency.

**15. Outpatient psychiatric pharmacists should be able to provide mental health treatment for any level of outpatient complexity as defined by their scope of practice.**<sup>1,3,57</sup>

Psychiatric pharmacists should be allowed to practice at their peak level of expertise. They should not be restricted in their range of activity as long as the activity is within their scope of practice or CPA authority, such as medication management and psychoeducational treatment. This is important so that psychiatric pharmacists can provide care for patients with any psychiatric condition within their expertise. This includes not limiting certain activities such as initiating medication regimens rather than only making dose adjustments, as the scope of practice allows.

**16. Outpatient psychiatric pharmacists should be able to treat other medical conditions as defined by their scope of practice or collaborative practice agreement.**<sup>11,58</sup>

Outpatient psychiatric pharmacists should be allowed to manage other medical (non-psychiatric) conditions as defined by their local scope of practice regulations or CPAs. This may allow integration of psychiatric pharmacists into primary care settings for continuity of care and seamless integration. Not all psychiatric pharmacists should be expected to manage other medical conditions since this practice may not be within the local practice setting's needs or individual pharmacist's expertise.

**17. Outpatient psychiatric pharmacists should be able to routinely order, monitor, and interpret or act upon clinical laboratory results and other diagnostic assessments as defined by their scope of practice.**<sup>3,59-62</sup>

Psychiatric pharmacists should be able to order and interpret vital signs, laboratory data, drug concentrations, and medical diagnostics. This type of clinical data is essential for choosing appropriate medications and for evaluating adverse effects, drug-drug interactions, drug-disease state interactions, effectiveness, and overall patient health status. This must be done as part of a team approach to care, with careful review of the patient's medical record for existing test results prior to ordering any tests. Pharmacist-initiated orders, results, and interpretation must be documented in the patient's medical record to ensure appropriate action, communication with other healthcare providers and to avoid unnecessary duplication of tests.

**18. Outpatient psychiatric pharmacists should receive a reason for referral for psychiatric medication management and be able to refer for diagnostic clarification as clinically indicated.**<sup>3</sup>

Psychiatric pharmacists should receive referrals that clinically indicate the need for psychiatric medication management, ideally as a formal diagnosis or problem. Psychiatric pharmacists should also have the ability to refer patients to other providers to obtain a clear diagnosis when needed. This is important so that psychiatric pharmacists are performing activities that are under their scope and not those of other providers (such as diagnosing, which is prohibited in many states' pharmacy practice regulations). This also ensures quality of care so that patients are not receiving medications for inappropriate indications.

**19. Outpatient psychiatric pharmacists should be able to refer to other healthcare providers and services.**<sup>3,19</sup>

Outpatient psychiatric pharmacists, as specialists in their field, should have the same resources for referrals available to them as other specialists on the healthcare team. This allows pharmacists to provide broad-based, patient-centered care using as many resources as needed to optimize care coordination, continuity of care, and patient outcomes.

**20. Outpatient psychiatric pharmacists should have privileging and/or credentialing through the medical staff office or clinical site to ensure their proficiency/competency is maintained/upheld.**<sup>63-66</sup>

Pharmacists should keep up with changes involving best practices and providing the best evidence-based care. Psychiatric pharmacists should be credentialed and/or privileged, and have a process for peer review, similar to all other providers at their practice site. This ensures that pharmacists are qualified to provide care and authorized to perform a specific scope of services. This may also help protect health systems against malpractice claims. Payers also use a credentialing process to identify qualified providers for payment where applicable. Indirectly, this statement encourages healthcare systems to credential or privilege pharmacists in order to bill for their services when applicable.

**21. Outpatient psychiatric pharmacists should be able to recognize when to refer to a medical team/specialist and be aware of relevant referral sources for management of other medical disorders.**<sup>1,3,67,68</sup>

Psychiatric pharmacists should have the knowledge, skills, and ability to refer patients to the medical team for management of the patient's other medical (non-psychiatric) illnesses. This is similar to statement 12 when the psychiatric pharmacists may refer patients to non-pharmacist psychiatric providers for clarification of diagnosis. Psychiatric pharmacists should know the scope of their knowledge and skills and recognize situations in which additional evaluation is needed for other medical disorders.

**22. Outpatient psychiatric pharmacists are included as part of the clinical site's interprofessional treatment team for best practice, patient-centered care.**<sup>3,10,11,58</sup>

Having a pharmacist as part of an interprofessional treatment team provides the best care possible and brings unique knowledge and skills to the team to enhance patient care.

**23. Outpatient psychiatric pharmacists should have the same support as other mental healthcare team members to track outcomes that demonstrate best practice patient care models, as well as advancements in mental healthcare.**<sup>3,26,49,50,69-72</sup>

Psychiatric pharmacists are recognized as a valuable contributor to the patient care team and should be able to track the impact of having a psychiatric pharmacist on the patient care team. They should have the same level of support as other members of the team such as access to population health reports, the ability to request reports from computer support teams, and have access to computer support and quality improvement staff to help design processes for documenting, capturing, and automating relevant data reports. Psychiatric pharmacists should use nationally recognized measures when possible, such as those developed by the Pharmacy Quality Alliance (PQA), National Quality Forum

(NQF), or the Healthcare Effectiveness Data and Information Set (HEDIS), to be consistent with common health system measures.

**24. Outpatient psychiatric pharmacists should provide ongoing education and training to other healthcare team members on psychopharmacology and best practice treatment of psychiatric disorders.**<sup>73-76</sup>

Psychiatric pharmacists have specialized training and experience that allows them to effectively provide CMM to patients with psychiatric and/or neurologic disorders as part of the healthcare team. As such, they have the responsibility to provide education and training on best practices, drug therapy, evaluation of medication regimens, drug monitoring, and prevention and mitigation of potential adverse effects to members of the healthcare team as it relates to psychiatric disorders and related conditions.

**25. Outpatient psychiatric pharmacists should advance clinical pharmacy through professional stewardship, training of future clinical pharmacists, and/or active engagement in professional organizations.**<sup>73,77</sup>

Psychiatric pharmacists strive to advance and promote clinical pharmacy to highlight the impact on the healthcare team. Psychiatric pharmacists should be professional stewards actively participating in professional organizations; maintaining professional development and self-directed learning; attending and participating in local, state, and national meetings; participating in activities that promote psychiatric pharmacy; and proactively improving clinical pharmacy through legislative and regulatory processes.

**26. Outpatient psychiatric pharmacists should be able to receive reimbursement for clinical services.**<sup>62,78</sup>

Outpatient psychiatric pharmacists should be able to bill third-party payers and receive reimbursement for clinical services like other healthcare professionals, to allow more patients to access pharmacist services.

**27. Outpatient psychiatric pharmacists should receive support from their clinical site that is similar to other members of the multidisciplinary healthcare team (space, scheduling, nursing and staff support) and include the ability to provide care via multiple modalities (face-to-face, telephone, telehealth) and encounter types (individual, group, scheduled, same day access).**<sup>3,43,79,80</sup>

All providers on the team need equity in regards to having the resources and support they need to contribute their expertise and skills to the care of each patient. Healthcare systems should provide multiple ways for patients to access healthcare in order to ensure healthcare is easily accessible when needed, including care by a psychiatric pharmacist.

**28. Outpatient psychiatric pharmacists should have full electronic health record (EHR) access and should document services within the EHR.**<sup>3,58,81,82</sup>

All healthcare professionals are required to document patient care activities in a health record for other healthcare professionals and patients to access later if needed. Documentation of patient care activities allows better coordination of care and highlights the contribution of the psychiatric pharmacist regarding patient care. This also meets federal medical documentation requirements for medical professionals providing patient care.

<sup>a</sup>Original formatting preserved. Text has not been altered.