Best practice model for outpatient psychiatric pharmacy practice, part 1: Development of initial attribute statements

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Abstract

Introduction: A 2019 survey identified significant variability of practice characteristics among outpatient psychiatric pharmacists (OPPs). No published model establishes which attributes constitute best practice for OPPs. By developing a consensus for best practice model attributes, OPPs can work toward consistent, effective patient care. This project aimed to develop attribute statements for a best practice model for OPPs providing direct patient care.

Methods: Board Certified Psychiatric Pharmacists and American Association of Psychiatric Pharmacists (AAPP) members were questioned using a 5-phase (P1-P5) survey and summit approach. The phases were: P1, broad ideation survey; P2, 10-person summit to develop draft statements; P3, survey of the draft statements for acceptance; P4, summit to resolve review feedback; and P5, survey of AAPP membership to confirm the finalized statements.

Results: P1 survey results generated a list of 143 possible attributes that informed the P2 summit, which were refined to 28 statements. P3 survey results confirmed at least 70% agreement with each statement. The P4 summit evaluated all P3 survey results and made significant modifications to 4 statements. Informal feedback was sought with other stakeholders, and supporting narratives and references were developed to provide clarity regarding the intent of each statement. Finalized statements and supporting narratives were confirmed in the P5 survey.

Discussion: The 28 attribute statements were developed over 18 months by gathering input and consensus through multiple modalities, including 3 surveys, 2 summit meetings, and numerous informal feedback requests. The agreement on the attribute statements was consistently high across all phases. The final attribute statements are presented elsewhere in this issue.

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

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Introduction

As part of the interdisciplinary team, pharmacists are uniquely positioned to provide specialized medication management services for patients. Psychiatric pharmacists have advanced knowledge of psychiatric disorders, including mental health and substance use disorders, and play pivotal roles in providing care to this vulnerable population. Psychiatric pharmacy became a recognized specialty in 1992 by the Board of Pharmaceutical Specialties (now the Board of Pharmacy Specialties), although mental health pharmacists and associated training programs date back to the early 1970s.\(^1\,\,^2\) Over time, psychiatric pharmacy has evolved, and psychiatric pharmacists are providing care for patients in a wide variety of practice settings across the globe.

A 2019 survey administered to more than 1000 psychiatric pharmacists sought to categorize the different types of practice by psychiatric pharmacists. Responses from this survey indicated that about 50% of the psychiatric pharmacists practice in outpatient settings. Of those respondents practicing in the outpatient setting, there was significant variability in the practice type, disease states managed, prescriptive authority authorized, and other clinical activities.\(^3\) Werremeyer and colleagues\(^4\) also found a diverse array of outpatient psychiatric pharmacy practices reported in the literature. Clinical roles ranged from patient education for improving medication adherence, to comprehensive medication review, to medication therapy management. Regardless of the role, pharmacist involvement was associated with improvements in patient care, demonstrating the benefit of a psychiatric pharmacist on the treatment team.

Due to the variability found in the literature, we sought to develop a consensus of the attributes for a best practice model for psychiatric pharmacists providing direct patient care in an outpatient setting. Data collected during this inquiry will be utilized to develop a best practice model that provides consistent, effective care through a standardized model that will be disseminated for widespread use and implementation.

Objectives and Methods

The objective of this project is to develop a best practice model for psychiatric pharmacists providing direct patient care in outpatient settings. The focus of this stage of the project was to develop and obtain consensus on core attribute statements that would be incorporated into the best practice model.

The American Association of Psychiatric Pharmacists (AAPP) conducted this project through a series of broad member surveys and summit meetings to develop and refine a list of core attribute statements. The phases and other procedures used throughout the entire project can be found in Figure 1.

The first phase was an online survey of AAPP active members who were Board Certified Psychiatric Pharmacists (BCPPs) and served on an AAPP work group (committee, editorial board, task force, board of directors, etc) within the previous 5 years. The survey consisted of 14 Likert scale and open text questions regarding the characteristics and attributes that should be incorporated into the best practice model, how psychiatric pharmacists can be differentiated from other mental health providers, providing treatment for nonmental illnesses, and other practice attributes. The questions from this survey can be found in Figure 2. The online survey link was emailed to potential participants and the survey was conducted from June 2 to 19, 2020, with several reminder email invitations being sent during this time.

The second phase involved a focus group called the Outpatient Psychiatric Pharmacy Practice Summit (OPPPS) that reviewed and utilized the data from the initial survey to develop the first draft of potential attribute statements for inclusion. AAPP members were solicited for participation in the OPPPS, and participants were then selected by the Best Practice Model Subcommittee (BPMS) of the AAPP Professional Affairs Committee. The criteria for being selected as an OPPPS member included having a direct patient care outpatient psychiatric pharmacy practice, being able to track the outcomes of their practice, and being an active member of AAPP during the previous 5 years. Being a BCPP was not a requirement as the BPMS recognized that not all practicing outpatient psychiatric pharmacists were BCPPs. In addition, it was decided a priori to have OPPPS representation from specific settings (eg, a Veterans Affairs Medical Center, primary care), representation of certain experiences (eg, supervising multiple psychiatric pharmacist providers, providing care for both mental and other medical illnesses), representation of certain patient diagnoses (eg, severe mental illness, substance use disorders), representation from all US geographic locations (Northeast, South, Midwest, and West), and representation across sexes. One OPPPS member could represent multiple roles, with a target composition between 8 and 10 total members.

Once the BPMS compiled the survey data from the first phase, they were sent to the OPPPS members for review. They were asked to utilize the data and their personal expertise to develop their own specific statements regarding the attributes and characteristics for inclusion in the model within 7 specified categories: pharmacist qualifications, pharmacist attributes, treatment of mental and non-mental illnesses, practice model type, clinical site
attributes, outcomes measurement, and other activities/attributes. The OPPPS members submitted their proposed statements to the BPMS for review and collation. Prior to the initial OPPPS virtual meeting on October 23, 2020, the collated proposed statements were distributed back for review.

During the meetings, each of the 7 categories listed above was reviewed. OPPPS members were asked to select a specific statement, their own or someone else’s, from the provided list for consideration by the members. The OPPPS members could propose combining or dividing statements as they felt appropriate. The summit facilitators utilized a real-time 5-point Likert scale (with an extra not ready to vote option) via virtual poll to determine if consensus had been reached by members, or if more discussion was needed to reach consensus. Participant polling efficiently indicated if a statement should be tabled for later discussion due to a lack of consensus. A simple majority (6 or more) of the OPPPS members was needed to determine consensus (for either accepting or rejecting a proposed statement), and the consensus threshold was maintained at 6 members even if some OPPPS members were unable to attend a portion of a virtual meeting in order to maintain the rigor of the statement reviews. Due to time constraints, the OPPPS adjourned the initial meeting and completed its work via a second virtual meeting on November 20, 2020. Although statement generation and collation happened in advance of the meeting, the OPPPS process in this phase was effectively the nominal group technique.5

The third phase was the distribution of a confirmatory survey emailed to AAPP members from December 7 to 31, 2020, detailing the results of the OPPPS meetings. Several reminder email invitations were sent during this time requesting participation. The statements developed and approved by the OPPPS were surveyed for level of agreement, any recommended word adjustments, and general feedback on the statements as a whole. This online survey link was sent to all AAPP active members, without any additional requirements as with the initial survey, in order to obtain as wide a scope of consensus as possible. Participants were asked to accept, revise (agree in principle, but wording needed revision), or reject the statement as written and provide an explanation why if they desired. The level of acceptance and any provided comments were then sent to the OPPPS members for consideration.

The fourth phase of the project was a review of the AAPP membership confirmation survey data by the OPPPS members. The BPMS performed nonsubstantive copy editing of the statements for clarity based on survey data. Data from the survey were sent to OPPPS members and were discussed during a Zoom meeting on February 5.
2021. The members reviewed the survey data and proposed additional modifications to the statements, which were then accepted or rejected using the same methodology as previous summit meetings. No substantive changes were made to the statements after this phase.

Subsequent to the project procedures above, the BPMS solicited informal feedback from other stakeholders, including nonpsychiatric pharmacists, psychiatrists, primary care providers, social workers, nurses, and administrators, to determine how the statements might be perceived by outside audiences. Each BPMS member requested feedback from 2 external colleagues from across these various professions. The statements were also considered for future model development.

Once the statements were developed and agreed upon after the final OPPPS summit meeting and additional feedback received as described above, the BPMS developed supporting narratives to clarify each statement. These narratives were derived from the commentary collected during the survey and summit meeting components of the project, as well as input from BPMS members and other stakeholders. Additional support and referencing for the statements and narratives were also compiled from literature searches conducted by volunteer AAPP members (please see Acknowledgments).

The fifth and final phase in the development process was a confirmation survey emailed to all pharmacist members of AAPP that ran November 1 to 22, 2021, with several reminder email invitations being sent during this time. This survey asked members to review all statements and supporting narratives, indicate their level of agreement with each statement, and provide any comments on the supporting narratives for potential revision. Responses were analyzed by practice setting (outpatient versus nonoutpatient). Outpatient pharmacists were also asked to use 11-point Likert scales (scored 0-10) to describe how well each statement characterized their level of current practice.

FIGURE 2: Initial survey questions (phase 1)
of the BPMS were excluded from taking part in any survey or summit components of this project as they were supervising the overall development of the best practice model. The BPMS also reviewed all collected data between each phase for appropriateness and compiled the data into a more concise format for progression into the next phase.

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

### Results

**Phase 1: Initial Member Survey**

Of 165 invited participants who met the inclusion criteria for the survey, 21 responded (12.7%). Tables 1 and 2 summarize their responses regarding the clinical factors and qualities that (1) are cited as necessary for psychiatric pharmacists to provide direct patient care for those with mental illness, (2) differentiate the role of the outpatient psychiatric pharmacist from other health care providers,
and (3) qualify a pharmacist to provide direct patient care. Of note, more than 95% of respondents felt that being a BCPP was an extremely important qualification for outpatient psychiatric pharmacists in direct patient care. There were 61.9% of respondents who indicated that psychiatric pharmacists providing outpatient medication management for mental illness should also provide medication management for other medical illnesses. When asked about the minimum level of complexity of patients who should be referred to an outpatient psychiatric pharmacist, 57.1% of respondents stated “any level of complexity,” followed by 33.3% who stated “patients who have failed first-line therapy.” None of the respondents stated “only known treatment-refractory patients.”

Phase 2: Initial OPPPS Statement Development

The 10 members selected for the OPPPS summit meetings reviewed the data discussed above. Independently, they created 246 statements from the survey data within certain subareas, including pharmacist qualifications (n = 21), pharmacist attributes (n = 56), treatment of mental and nonmental illnesses (n = 37), practice model type (n = 29), clinical site attributes (n = 55), outcomes measurement (n = 30), and other activities/attributes (n = 18). These statements were then discussed, modified, and approved by the OPPPS members until they agreed upon the final 28 statements that were advanced forward to the next phase of the project. During this process, 69 statements were either rejected outright or thought to be duplicative with other approved statements and removed. An additional 55 statements were brought up for discussion but did not receive enough votes to be approved and move forward.

Phases 3 to 4: Member Review Survey and OPPPS Review

Participants were asked to rate their level of agreement (accept, revise, reject) for the 28 statements that were approved by the OPPPS members. Of the 643 invitees, 42 (6.5%) volunteered for the survey. Of the 28 statements, 21 had greater than 90% acceptance by respondents, and none had less than 70% agreement. Three statements were rated as reject at a rate greater than 3%: “Outpatient psychiatric pharmacists should obtain and maintain BCPPs” (4.9%); “Outpatient psychiatric pharmacists should be able to treat non-mental health conditions as defined by their scope of practice or collaborative practice agreement” (4.8%).

The OPPPS members reviewed these survey data to determine if any further statement modifications were needed. Based on this review, modifications were made to 13 statements, with substantial modification to 4 of these 13. Notably, of the 3 statements with greater rejections listed above, 2 were modified by the OPPPS, with only the

### TABLE 2: Results of phase 1 initial member survey: qualifications to provide care to persons with mental illness and key measurement factors for an outpatient psychiatric pharmacist (OPP) best practice model

| Qualification (n = 21) | Extremely Important, % | Very Important, % | Moderately Important, % |
|-----------------------|------------------------|-------------------|-------------------------|
| BCPP                  | 95.24                  | 0.00              | 4.76                    |
| PGY2 psych residency trained | 71.43                  | 28.57             | 0.00                    |
| PGY1 general residency trained | 61.90                  | 23.81             | 9.52                    |
| Years of specialty practice | 28.57                  | 42.86             | 23.81                    |
| Years of practice (general) | 23.81                  | 19.05             | 42.86                    |

| Key measurement factor (n = 20) | Extremely Important, % | Very Important, % | Moderately Important, % |
|-------------------------------|------------------------|-------------------|-------------------------|
| Ability to measure and analyze patient-related outcomes data | 45                      | 45                | 10                      |
| Outcomes use measurement-based care (eg, rating scales) rather than subjective assessment | 35                      | 50                | 10                      |
| Ability to compare team outcomes data before and after pharmacist initiation | 30                      | 45                | 25                      |
| Ability to compare outcomes data on team with pharmacist compared to a team without pharmacist | 30                      | 35                | 30                      |
| Ability to compare outcomes data to other types of providers within practice | 25                      | 30                | 25                      |

BCPP = Board Certified Psychiatric Pharmacist; PGY = postgraduate year.
statement on treating nonmental health conditions left intact.

Additional Review and Final Phases

After the OPPPS finalization of the 28 statements, the BPMS distributed them to external stakeholders for comment, and 22 stakeholders provided feedback. The Idea Exchange session in April 2021 was attended by 34 AAPP members and elicited additional comments. These comments were reviewed by the BPMS to determine if any statements required further revision by the OPPPS members. No comments required this level of intervention, but minor nonsubstantive edits were made for clarity to several statements. An additional 16 volunteers performed literature searches to add evidence-based narratives to support each statement. Comments from all phases in the process were also considered in preparing the supporting narratives for each of the statements. Results of the final member confirmation survey (phase 5) are presented in the companion part 2 article within this journal issue.6

Discussion

AAPP undertook a deliberate, rigorous, multiphase, and evidence-based process5,7 to develop a best practice model for psychiatric pharmacists providing direct patient care in outpatient settings, including 3 surveys, the development and refinement of statements by the OPPPS, the solicitation of feedback from external stakeholders, and an Idea Exchange at the AAPP annual meeting. Feedback was obtained from a wide range of outpatient pharmacists with varying years of experience, differing practice sites, and geographically diverse locations to obtain consensus on the core attributes and qualities to be incorporated into the model. During phase 2, the 10 OPPPS members developed, considered, and refined the statements they prepared based on the initial survey results, and used a consensus process to arrive at a final 28 statements across 7 key practice domains. Statements were further clarified and refined using stakeholder feedback from outside of psychiatric pharmacy and a random, self-selected group of attendees at an AAPP Annual Meeting Idea Exchange. Each phase in the rigorous development process further confirmed and strengthened the validity and appropriateness of the final 28 statements.

The main project limitation was the small number of respondents to the surveys. The use of email to send the invitations to participate was also likely a contributing factor to this as email invitations historically can be lost or ignored. However, for each survey, multiple email invitations were sent to help reduce this effect. A total of 21 members of 165 invited participants (12.7%) responded to the initial survey. The estimated time to complete the initial survey along with its complexity of open-ended questions may have limited participation. The review survey was completed by 63 of 643 eligible participants (9.8%). This is in comparison with a previous AAPP survey completed by a total of 334 of 1015 pharmacists (32.9%).3 However, since the original statements went through several revisions by multiple participants in the various phases of the project, the expectation is that the overall feedback would have been similar if there had been higher rates of participation. For instance, in the phase 3 review survey, no statement was rejected by more than 7.1%, and only 3 statements were rejected by more than 3%, demonstrating a high degree of agreement with the proposed statements. OPPPS members reviewed these 3 statements, and substantial changes were made to 2 of them with 1 kept intact (the statement on treating nonmental health conditions). Additional edits were made to 2 statements where there were not any rejections but where comments from respondents indicated the need for edits for clarity. This demonstrates the responsiveness of the project to feedback from stakeholders where disagreement or concern was noted.

Psychiatric pharmacists are uniquely positioned to provide specialized medication management. A consensus of the qualities for a best practice model for psychiatric pharmacists providing direct patient care in an outpatient setting was concisely developed using data collected through various modalities, including surveys and summit meetings. The data collected and feedback generated were utilized to develop a best practice model to provide consistent, effective care through a standardized model that can be disseminated for implementation and studied for effectiveness and value. The 28 statements developed through a rigorous process allow outpatient psychiatric pharmacists to optimize their effect on the care of patients with mental illnesses and work collaboratively on an interdisciplinary health care team in a standardized way. The next step was to confirm the statements and their narratives, which is discussed elsewhere in this issue.5

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