Preceptor's Guide

full update May 2025

The toolbox below provides practical tips, strategies, and resources for preceptors. This toolbox can be used for a variety of learners (e.g., pharmacy technicians, pharmacy students or residents, medical students or residents).

Goal	Suggested Strategies or Resources
Develop a **learning experience description**.	• Develop a comprehensive learning experience description.[1] • There is no need to reinvent the wheel. Professional organizations or learning institutions often provide example descriptions that you can use as a starting point. For example: o **Pharmacy resident internal medicine rotation**: http://www.ashpmedia.org/softchalk/softchalkpractitionersurveyortraining2014/LED%20-%20Internal%20Medicine.pdf. o **Pharmacy student emergency medicine description**: https://www.ashp.org/-/media/assets/pharmacy-practice/resource-centers/preceptor-toolkit/sicp-emergency-appe-student-rotation-updated.pdf. o **Medical resident**: https://clerkship.medicine.ufl.edu/syllabus/goals-and-objectives/. o **ASHP has a resource about pharmacy technician education and training** that includes sample experiential activities: https://www.ashp.org/-/media/assets/professional-development/technician-program-accreditation/docs/model-curriculum-for-pharmacy-technician-education-training-programs-final-2018.pdf
Be **prepared.**	• Plan for learning opportunities outside of patient care activities (e.g., journal club, inservice, lecture, medication-use evaluation). • If possible, review the learner's previous learning-experience evaluations. This can shed light on a learner's specific strengths and weaknesses observed during past learning experiences. • On the first day, review and set clear expectations. For example: o A pharmacy or medical resident may be responsible for covering 50% of the internal medicine service on week one, but cover 100% of the service by week four. o A pharmacy student may fill IV orders on week one, but fill IV and unit dose orders by week four. o A pharmacy technician may fill 25% of the pending prescriptions on week one and increase by 25% each week. • Get to know the learner. Ask about things like: o career goals o learning style (e.g., auditory [podcasts], visual [graphics or charts], learning by doing [case studies or simulations]) o personal areas for improvement o previous learning experiences • Come up with ways to integrate learners into your routine tasks. For example, quiz learners on brand and generic names of medications while putting up the order or share clinical pearls while reviewing morning labs for patients on your service.

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Be a good **role model.**	• Demonstrate professionalism in character (personal reliability), connection (interpersonal compatibility), and competence (professional capability).[3] Examples of professionalism for each domain include:[3] o **character**: honesty, integrity, humility, responsibility, service, and moral courage o **connection**: compassion, empathy, self-control, kindness, and influence o **competence**: self-directed learning, knowledge, applied skill, proactivity, and wisdom • Use the appropriate professional code of ethics or conduct to help you demonstrate, model, and encourage ethical practice.[4]
Use **teaching tools**.	• ASHP reviews the four preceptor roles for precepting pharmacy residents. However, these could be applied to any learner. See ASHP's Starring Roles: The Four Preceptor Roles and When to use Them, for information on when and how to use the four preceptor roles (http://www.ashpmedia.org/softchalk/softchalk_preceptorroles/softchalk4preceptorroles_print.html). These roles include:[2] o **instructing**: If learners display a knowledge gap, refer them to an appropriate resource to gain knowledge. For example, assign articles for the learner to read to expand their knowledge. Follow up to check their understanding of the material. o **modeling**: Demonstrate skills or processes while "thinking out loud" so learners can see and hear your problem-solving process. o **coaching**: Provide ongoing feedback while observing the learner perform a skill. o **facilitating**: Allow learners to perform tasks independently. Be available in case they need help or guidance. • SNAPPS is a learner-centered teaching approach involving six steps, often used for medical students or residents. These steps include:[21] o S: **summarize** the history and findings. For example, "The patient is a 5-year-old male with a fever of 101.2°F complaining of right ear pain for two days. Physical exam reveals a red inflamed ear drum." o N: **narrow** the differential to two or three possibilities. For example, "I believe acute otitis media is the most likely diagnosis, but before examining the patient I was also considering otitis externa." o A: **analyze** the differential, comparing and contrasting the possibilities. For example, "Since the patient does not have redness or swelling of the ear canal, I am learning more toward acute otitis media." o P: **probe** the preceptor by asking questions about uncertainties, difficulties, or other approaches. For example, the learner may ask "Is there anything else that you would include in the differential?" o P: **plan** the management of the patient's issue. For example, "I would recommend using oral amoxicillin for five days." o S: **select** a case-related issue for self-directed learning. For example, "I would like to learn more about antibiotics that cover infections caused by *Streptococcus pneumoniae*."
Communicate effectively. Continued…	• Encourage open communication. Request feedback from learners (e.g., on precepting style, teaching methods, rotation activities, feedback).[52] • Demonstrate and teach effective communication with **patients** and **healthcare professionals**. o Some learners may be uncomfortable communicating via telephone.[47] Teach telephone skills using simulations with real-time feedback, repetition, and structured reflection.[46,47] o Discuss what to do when there is a language barrier (e.g., allow more time for consultations, provide visuals, utilize facility interpreter services).[48,49] Advise learners to avoid use of translation apps unless they have been approved by your institution.[49] They should not rely upon colleagues who speak the language or patient family members except in an emergency.[49]

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Communicate effectively, continued	○ Provide tips for talking to older patients: https://www.nia.nih.gov/health/health-care-professionals-information/talking-your-older-patients. ○ Provide tools to navigate cultural differences that might affect patients' perspective of their illness or treatment (e.g., Arthur Kleinman's Eight Questions: https://thinkculturalhealth.hhs.gov/assets/pdfs/resource-library/arthur-kleinmans-eight-questions.pdf).
Have students practice the **SBAR** method of communication.	SBAR is a tool for organizing verbal or written communication that enhances accuracy, clarity, and efficiency of communication, thus reducing the risk of errors.[27,29,30] SBAR stands for:[27,28] • **Situation**: Briefly state the problem and identify yourself (e.g., name, pharmacy, position) and the patient (e.g., name, date of birth).[27,28] Example: "This is Avery, a pharmacy student at Main Pharmacy. I am calling about Hugh Morris, date of birth April 19, 1954. We received a new prescription for *Entresto* for him from a hospitalist, and I am calling to let you know because he has an active prescription for lisinopril. This combination is contraindicated." • **Background**: Provide pertinent clinical information and context (e.g., significant medical history, labs).[28] Example: "He was discharged today after a heart failure exacerbation." • Review pertinent resources (e.g., the medical record, prescribing information, treatment guidelines) before initiating communication to make sure you can provide more background information if requested and respond to any drug-related questions that may arise. • Avoid unnecessary information unrelated to the current situation.[30] • **Assessment**: State your clinical impression or concern.[27] Example: "Taking both meds could increase his risk of hypotension, hyperkalemia, or kidney impairment." • **Recommendation**: Give your advice, and clearly state what you need, including a timeframe for response.[27] Example: **"**I recommend that one of these medications be discontinued. Please ask the prescriber which one of these medications the patient should take. I can hold, or you can call me back today at this number."
Select a **feedback method**	• Use a feedback method that you find helpful and easy to use (if it's not easy, you are less likely to use it). • Some examples of feedback methods include: ○ **Ask-Tell-Ask** (https://paeaonline.org/wp-content/uploads/imported-files/Ask-Tell-Ask-Feedback-Model.pdf) ○ **One-Minute Preceptor** (https://paeaonline.org/wp-content/uploads/2017/02/One-Minute-Preceptor.pdf) ○ **ARCH** (www.mitemmc.org/uploads/Walsh_monthly_tip.pdf) ○ **Start/Stop/Continue** (https://www.smartsheet.com/sites/default/files/2022-09/IC-Start-Stop-Continue-Performance-Review-11582_PDF.pdf)(This method can also be used for students to provide feedback to the preceptor.) ○ **Plus/Delta** (https://mcblogs.montgomerycollege.edu/thehub/fundamentals-of-teaching/instructor_resources/a-means-to-effective-peer-to-peer-feedback-plus-delta-method/) ○ **Pendleton** (https://www.exult.co.nz/articles/giving-feedback/) ○ **What?/So What?/Now What?** (https://www.experientiallearning.org/blog/what-so-what-now-what-reflection-model-and-reflection-questions/)

Goal	Suggested Strategies or Resources

Provide **formative (ongoing, regular) feedback**.	• Provide feedback in a private setting, to facilitate discussions.
	• Start with learner self-assessment; "How do you think that went?" and "What would you do differently next time?"
	• Formative feedback is:[2,5,19]
	  ○ **objective**: supported by specific examples.
	  ○ **actionable**: provides the learner with direction on what to focus on.
	  ○ **balanced**: includes what was good and why, as well as what could be improved and how.
	  ○ **fair**: considers knowledge, performance, abilities, and skill level of the learner with reasonable expectations.
	  ○ **timely**: given in "real-time" or soon after the learning activity. Aim for daily feedback. At a minimum, consider using something like "Feedback Fridays" to ensure ongoing feedback and avoid surprises at the end.
	  ▪ For learners who are struggling, early feedback is especially important to allow time for improvement, and for assignments and tasks to be adjusted to target problem areas.
	• Consider limiting feedback to one or two items at a time, and balance constructive with positive feedback.
	• Have learners summarize the feedback to ensure understanding. Clarify anything that was misunderstood.

Provide **summative feedback**.	• Summative feedback is a **summary of formative feedback** given during the learning experience (i.e., nothing should be a surprise at this point). • Discuss progress toward achieving assigned educational goals and objectives. • Use this as an opportunity to ask about ways to make the learning experience even better for future learners.

Address the needs of **high-performing learners** (i.e.,performing above the curve)
 	
Continued…
	• **Individualize expectations**. There are minimum expectations for all learners. Consider going beyond the minimum for high performers. If learning experiences are not challenging enough, high performers may become bored.[17]
	• **Communicate regularly**. It may seem natural to give high performers more autonomy. But keep in mind that autonomy is not synonymous with a lack of communication. Learners may feel neglected if not meeting with preceptors on a regular basis.[17]
	• **Encourage learners to self-assess**. Self-assessment reveals how learners view their own abilities. Some high performers may be overly critical of themselves, dismiss positive feedback, or constantly strive for perfection.
	  ○ Use discussions about self-assessments as an opportunity to correct any inaccuracies.[17]
	  ○ During their self-assessments, encourage those constantly striving for perfection to reflect on at least one thing that went well.
	• **Provide feedback appropriately**:[16,17]
	  ○ **Set the stage.** Explain that your job as a preceptor is to provide feedback to learners performing at all levels. Remind learners that the purpose of each rotation or learning experience is to grow, learn, and develop personally and professionally.
	  ○ **Give more than just praise**. High performers also need constructive feedback.
	  ▪ Consider a feedback method with both types of feedback already built in (e.g., ask-tell-ask method).[18,19]
	  ▪ Praise high performers when they exceed expectations.
	  ▪ Provide constructive feedback with suggestions and strategies to help them move beyond success toward mastery. High performers often fear failure. They also may not have had much (or any) constructive feedback. Be prepared that they may respond with anger, defensiveness, denial, devastation, or tears.

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High-performing learners, continued	• Work to shift the focus from the learner's actions to the patient experience or outcome.[20] • **Discourage comparing themselves to others** (e.g., other learners, you, other preceptors).[17] Provide perspective:[17] o Share your professional timeline (i.e., how long it took you to get where you are). o Talk about professional mistakes and failures and what you learned from them. Help learners see their own failures as learning opportunities and encourage self-acceptance. o Explain that even though you are a preceptor, you continue to learn, grow, and develop your skills.
Handle **challenging learning situations or challenging learners**.	• Challenges can occur because of many things. Common reasons for challenges involve knowledge and skill deficits, attitude, and poor time management.[10] Be alert for other reasons (e.g., miscommunication, anxiety, burnout, family problems, substance use).[12] • Repeatedly having to handle challenging learners is a predictor of preceptor burnout.[53] Employ strategies to **prevent problems** before they occur.[51] o Set expectations (and consequences) on the first day.[51] Consider incorporating "top 10 rules" into the syllabus.[51] o Ensure that students understand that informal feedback or "sandwiched" feedback ***is*** feedback that should be taken seriously.[52] • As with other feedback, continue to ask learners to self-assess, even during challenging situations.[51] • **Identify problems** and **manage problems** one-on-one and early (i.e., don't wait until a scheduled midpoint or final evaluation if you have concerns.[10] Consider using the SCOPE model when addressing concerns or having a difficult conversation.[7] o S: Use **sensitivity** when phrasing things (e.g., "It may be helpful," "I'd like to suggest," "I wonder if," "My perception is"). o C: Be **constructive** by working together to develop a measurable plan for improvement. o O: Provide an **objective** and specific example of the problem, including documentation, if possible. o P: Focus on **performance**-based behaviors, not personal characteristics. o E: Provide **equalized** feedback by balancing positive and negative. • Rehearse difficult conversations ahead of time to practice and prepare.[11] • Ask learners if this is new feedback or has this type of feedback been provided before. It can be helpful to know if it's not new, as this may indicate the learner doesn't have the knowledge or tools to improve. • Consider the Situation-Behavior-Impact model to get clarity on intent (https://www.uab.edu/humanresources/home/images/LearnDev/PerformanceMgmt/_Tools.Learning.STAFF/Feedback_Model_SBI.pdf). • Ask for help when warranted.[51] Document and follow procedures to communicate with others, if necessary (e.g., residency program director, school administrator).[7] • For ideas on how to handle challenging learning situations and tips for giving difficult feedback see Addressing the Needs of Challenging Learning Situations at https://studylib.net/doc/18531398/pharmacy-practice-experiences---american-pharmacists-asso. • When remediation is needed, follow appropriate remediation policies for:[9] o frequency of feedback o documentation requirements o other customizable interventions (e.g., extended rotation, repeat rotation, probation, counseling [referring residents to your employer's Employee Assistance Program when appropriate]).

Goal	Suggested Strategies or Resources
Help students improve time management skills.	• Suggest time tracking to identify specific problems to target.[35] • Technology distractions can be minimized by checking email only at set times and turning off notifications.[31] Set boundaries with family and friends regarding texting during work hours. • If poor concentration is an issue: o share the Pomodoro technique: set a timer to focus on a task for 25 minutes, followed by a three- to five- minute break, then repeat.[33] This method is also associated with improved mood.[33] o suggest they jot down "to-do" items, questions, or ideas on paper or a notes app so that these thoughts do not affect focus.[37] • Watch for maladaptive perfectionism, a paralyzing fear of imperfection that can lead to long hours and procrastination in starting projects.[35,38] • To improve prioritization, recommend triaging tasks by importance and urgency and clarifying deadlines.[36] (Be aware that perfectionists may see all tasks as equally important.[39]) But if a task takes less than two minutes, recommend completing it right away.[31] • To keep long-term projects on track, suggest an online project management tool such as Microsoft Planner or Trello.[36] These can help create timelines and break longitudinal tasks into bite-sized pieces. • Share tips to improve efficiency. o Encourage setting a block of time for each task.[34] o Focus on one task at a time. Discourage multitasking, which is linked to errors, lower productivity, and mental exhaustion.[32] o Encourage reaching out early for clarification if they are confused about an assignment so they don't waste time going down the wrong path. • Be aware that assignment overload may be the problem. Encourage openness about workload. Stagger project deadlines.
Build **resilience** in longer-term learners (e.g., residents). *Continued…*	• Share the following resources with learners: o ASHP's State Affiliate Toolkit Well-Being and Resilience (https://www.ashp.org/State-Affiliates/Affiliate-Resources/State-Affiliate-Toolkit-Well-being-and-Resilience) o National Academy of Medicine's Clinical Well-Being Knowledge Hub (https://nam.edu/clinicianwellbeing/) • Consider initial and ongoing assessment of resilience with an existing tool (e.g., Connor-Davidson Resilience Scale [http://www.connordavidson-resiliencescale.com/]) • Consider expanding your program's discussions to include resilience topics (e.g., combating impostor syndrome [feeling like a fraud], creating a mantra, finding balance, gratitude, mindfulness).[6,14,15] • Embrace the phrase "It takes a village" by providing a culture of connection and support.[13] Examples of ways to do this might be: o including family or significant others in parts of resident orientation to foster an understanding of what is involved in the residency with a goal of leading to encouragement at home. o providing an informational email or pamphlet for residents to share specifically with family or significant others. • Provide opportunities to build comradery organically (e.g., a snack station), or arrange quarterly social events.[50] Don't overdo it; for some learners, out-of-work social events can just feel like extra work.[50]

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Build **resilience** in longer-term learners (e.g., residents), continued	• Celebrate successes to build confidence (e.g., staff meeting or newsletter recognition, personal note, text, or email).[13] • Tailor resident development plans to incorporate goals and build on existing personality types and individual strengths.[13] Consider having residents complete a personality assessment (e.g., Myers-Briggs [https://www.mbtionline.com/], DiSC profile [https://www.discprofile.com/]) and/or a strength assessment (e.g., StrengthsFinder 2.0 or CliftonStrengths [https://www.gallup.com/cliftonstrengths/en/252137/home.aspx]) and use the results. For example: o if a resident has "arranger" as a strength, helping to organize activities for pharmacy week might be a good fit. o a resident who aligns with the "INTP" Myers-Briggs' personality type is typically curious, enjoys solving problems, and works methodically). Capitalize on this; involve the resident in helping a student understand a complicated concept or patient case. • Keep tabs on resident well-being by asking about stressors and encouraging self-care (e.g., sleep, healthy eating, exercise).[13]
Address Impostor Syndrome	• Impostor syndrome involves chronic feelings of inadequacy plus dread about being exposed as a fraud despite evidence of success.[14] It is common in high achievers.[45] • Impostor syndrome can lead to anxiety, distress, or fear of being evaluated.[42,44] It can even impact physical health.[45] • Symptoms of impostor syndrome may include self-doubt, feeling undeserving of praise, or attribution of accomplishments to external factors or luck, and perfectionism.[40,42] People with impostor syndrome may take on extra work to prove their worth, second-guess themselves frequently, apologize for asking questions, or eschew challenging opportunities or promotions because they feel unqualified.[40,41] • The Clance Impostor Phenomenon Scale can be used to gauge the likelihood and intensity of impostor syndrome.[41] (https://paulineroseclance.com/pdf/IPTestandscoring.pdf). • Bring awareness to impostor syndrome by discussing it openly.[14] Share personal experiences with impostor syndrome, and explain that it can happen even to experienced clinicians.[14] • Combat impostor syndrome encouraging objective self-assessment; learners can make a list of their strengths and reflect on accomplishments each day.[14,40,45] Remind learners that it is ok to not know everything.[43] Encourage students and colleagues to embrace new roles or challenges.[40] Pair residents with a student to mentor to increase self-confidence.[41] • Use positive reinforcement, and encourage acceptance of compliments.[40,41]
Manage burnout.	• Streamline responsibilities by involving learners in projects you are working on as part of their learning activities (e.g., data collection, developing policies or patient education materials, leading topic discussions, participating in journal club, in-services). • If possible, use **layered learning** if you are precepting a student and resident at the same time. This allows the resident to participate in some of the precepting responsibilities of the pharmacy student. For ideas see this preceptor development presentation on layered learning for ideas of how to incorporate this into your practice (https://pharmacy.uconn.edu/wp-content/uploads/sites/2740/2020/03/HO-6-per-page-Layered-Learning-final.pdf). • Incorporate time for learners to work with other professions (interprofessional learning) and support staff (e.g., understand all roles within the practice).

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Growth and professional development.	• Engage in ongoing professionalism, including a personal commitment to advancing the profession, as part of your preceptor requirements. This is met by completing at least three professional activities (e.g., manuscript reviewer, poster presentation, active participation in professional organizations, publications, etc) in the last five years.[8] • Strive for continual growth and development as a preceptor. Review The Habits of Preceptors Rubric (https://www.habitsofpreceptors.org/) for ideas on how to assess and develop your own or your learner's precepting skills. • Encourage participation in professional organizations. US Pharmacist provides a sample list, including links, to national, state, and other pharmacy organizations at https://www.uspharmacist.com/professional-organizations. • Talk about the benefits of and opportunities for board certification (www.bpsweb.org). • Share professional development information for things such as: o board certification resources (e.g., live reviews, recertification courses) o continuing education o professional certificate programs (e.g., emergency medicine, nutrition support) o residency information • Share websites on professional development (e.g., www.acpe-accredit.org/continuing-professional-development/) for additional guidance, including a worksheet to use to keep track of professional development activities. • Encourage participation in professional meetings.
Research projects *Continued…*	• Pharmacy residents often conduct a research project, but other learners may also conduct research projects. • Understand and address research barriers, such as time constraints and limited experience for both learners and preceptors. o Brush up on areas related to research, including IRB submission, study design, statistics, etc. o Ensure dedicated and protected time for research. For example, administrative time for research preceptors and time for learners (e.g., one day per month, short blocks near holidays). • Gather topic ideas to provide to residents to choose from.[22] o Topic ideas can come from a variety of sources (e.g., preceptor suggestions, departmental needs) o Prioritize topics before presenting the list to incoming residents. o Consider sending potential topics before residency starts or during orientation to start the research process early. o Align resident interests with research topics to avoid disinterest as a research barrier. For example, ask residents to rank their interest in potential research topics. • Use a formalized research process.[22] o Consider involving or developing a research committee.[23,24] Research committees:[24] ▪ can provide tools (e.g., data collection forms, protocols). ▪ may offer constructive/actionable feedback; help anticipate and overcome barriers; and improve research quality. o Provide classes and discuss research and related processes at orientation and throughout the year (e.g., IRB process, interpreting results, manuscript writing) o Provide residents with a structured timeline.

Goal	Suggested Strategies or Resources
Research projects, continued	▪ Ensure selected research projects are realistic to complete within the timeline. • Most resident projects will need to be completed within six to eight months. However, larger projects may be an option in some cases (e.g., completing PGY-1 and PGY-2 residency at the same site). • Alternatively, outgoing residents could complete the first half of a research project, including project design, IRB submission, etc) while incoming residents could complete data collection and analysis. ▪ Ensure deadlines allow for mentor/preceptor review prior to submission. • Collaborate and engage expertise.[22] o Collaborate with other residents or residency programs or involve students.[25] For example: ▪ Students can assist with data collection allowing for a larger sample size. ▪ PGY-2 residents may be able to help mentor PGY-1 residents through the research experience. o Engage expertise (e.g., college of pharmacy, research committee, colleagues who have completed a research corticate program). ▪ Consider participating in a research certificate program.[26] For example, The American College of Clinical Pharmacy offers a Research and Scholarship Certificate Program (https://www.accp.com/academy/researchAndScholarship.aspx). • Have residents share their results to highlight their hard work and practice presentation skills. This can be done internally to administration or the Pharmacy & Therapeutics Committee or externally at an appropriate conference (e.g., regional residency conference).

Abbreviations: APhA = American Pharmacists Association; ASHP = American Society of Health-System Pharmacists; IRB = institutional review board; PGY = post-graduate year.

Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.

References

1. Soric MM. Writing your syllabus or learning experience description. The Effective Pharmacy Preceptor. 2017. https://www.ashp.org/-/media/store-files/p5549-sample-chapter-3.ashx. (Accessed May 16, 2025).
2. American Society of Health-System Pharmacists. Starring roles: the four preceptor roles and when to use them. http://www.ashpmedia.org/softchalk/softchalk_preceptorroles/softchalk4preceptorroles_print.html. (Accessed May 16, 2025).
3. Brown D, Ferrill MJ. The taxonomy of professionalism: reframing the academic pursuit of professional development. Am J Pharm Educ. 2009 Jul 10;73(4):68.
4. American Society of Health-System Pharmacists. Code of ethics for pharmacists. https://www.ashp.org/-/media/assets/policy-guidelines/docs/endorsed-documents/code-of-ethics-for-pharmacists.ashx. (Accessed May 16, 2025).
5. Midwestern University, Larson S, Davis LE, et al. The habits of preceptors rubric: providing a framework for pharmacy preceptor development. May 3, 2019. www.habitsofpreceptors.org/rubric. (Accessed May 16, 2025).
6. Swanson S, Schweiss S. Resident perceptions of a resilience curriculum in a postgraduate year 1 (PGY1) pharmacy residency program. Curr Pharm Teach Learn. 2019 Sep;11(9):949-955.
7. Weitzel KW, Haydon-Greatting S. Pharmacy practice experiences: addressing the needs of challenging learning situations. APhA 2016 Annual Meeting. March 4 – 7, 2016. https://studylib.net/doc/18531398/pharmacy-practice-experiences---american-pharmacists-asso. (Accessed May 16, 2025).
8. American Society of Health-System Pharmacists. Guidance document for the ASHP accreditation standard for postgraduate year one (PGY1) pharmacy residency programs. March 2021. https://www.ashp.org/-/media/assets/professional-development/residencies/docs/guidance-document-PGY1-standards.ashx. (Accessed May 16, 2025).
9. Hellwig T, Williams CR, Jen C, et al. Current practices for identifying and managing challenging pharmacy residents: A needs assessment. Am J Health Syst Pharm. 2020 Jan 1;77(1):52-55.
10. Davis LE, Miller ML, Raub JN, Gortney JS. Constructive ways to prevent, identify, and remediate deficiencies of "challenging trainees" in experiential education. Am J Health Syst Pharm. 2016 Jul 1;73(13):996-1009.
11. Priftanji D, Hill JD, Ashby DM. Managing difficult conversations. Am J Health Syst Pharm. 2020 Oct 14;77(21):1723-1726.
12. Williams E, Martin SL, Fabrikant A, et al. Rates of depressive symptoms among pharmacy residents. Am J Health Syst Pharm. 2018 Mar 1;75(5):292-297.
13. Fuller P, McCarthy MW, Patel RJ. ASHP National Pharmacy Preceptors Conference. Building resilience in residency training: it takes a village. 2018. https://www.ashp.org/-/media/preceptors-conference/docs/handouts/854L04-Building-Resilience-in.ashx. (Accessed May 18, 2025).
14. Arizona State University. Best practice: developing resilience and overcoming imposter syndrome. July 21, 2020. https://graduate.asu.edu/sites/default/files/2020_07-16_online2.pdf. (Accessed May 16, 2025).
15. The British Psychological Society. Feeling like a fraud. https://thepsychologist.bps.org.uk/volume-23/edition-5/feeling-fraud. (Accessed May16, 2025).
16. Mindtools. Managing high achievers: harnessing top performers' full potential. https://www.mindtools.com/pages/article/managing-high-achievers.htm. (Accessed May 16, 2025).
17. Guidry CM, Medina MS, Bennett KK, Schwier NC. The other side of "challenging learners": Strategies for teaching and precepting the overachiever and high performer. Am J Health Syst Pharm. 2022 Jan 5;79(2):17-22.
18. The Physician Assistant Education Association. Ask-tell-ask feedback model. February 2017. https://paeaonline.org/wp-content/uploads/imported-files/Ask-Tell-Ask-Feedback-Model.pdf. (Accessed May 16, 2025).
19. A.T. Still University. July 2020 TLC teaching tip: should you sandwich your feedback? July 28, 2020. https://www.atsu.edu/news/july-2020-tlc-teaching-tip-should-you-sandwich-your-feedback. (Accessed March 17, 2025).
20. Roze des Ordons A, Cheng A, Gaudet J, et all. Adapting Feedback to Individual Residents: An Examination of Preceptor Challenges and Approaches. J Grad Med Educ. 2018 Apr;10(2):168-175.
21. PAEA's committee on clinical education. SNAPPS: a six-step learner-centered approach to clinical education. February 2017. https://paeaonline.org/wp-content/uploads/imported-files/SNAPPS.pdf. (Accessed May 17, 2025).
22. Bulkley CF, Miller MJ, Draugalis JR. Developing and improving residency research training. Am J Health Syst Pharm. 2017 Feb 1;74(3):152-161.
23. McLaughlin MM, Short E, Prusi R, et al. Implementation of a pharmacy research committee to

enhance the pharmacy resident research experience. Curr Pharm Teach Learn. 2017 Nov;9(6):1141-1146.
24. Weeda ER, Hayes GL, Gaspar EA, et al. Advice Provided by a Pharmacy Residency Research Committee. Ann Pharmacother. 2021 Dec;55(12):1547-1549.
25. Olson KL, DiDomenico RJ. Residency research training: need to rethink the prescription for success? J Am Coll Clin Pharm. 2021;4(6):664-666. https://doi.org/10.1002/jac5.1464.
26. American College of Clinical Pharmacy. Research and scholarship academy. https://www.accp.com/academy/researchAndScholarship.aspx. (Accessed May 17, 2025).
27. NHS England and NHS Improvement. Online library of quality service improvement and redesign tools. SBAR communication tool-situation, background, assessment, recommendation. https://aqua.nhs.uk/wp-content/uploads/2023/07/qsir-sbar-communication-tool.pdf. (Accessed May 17, 2025).
28. AHRQ. Tool: SBAR. November 2019. https://www.ahrq.gov/teamstepps-program/curriculum/communication/tools/sbar.html. (Accessed May 17, 2025).
29. American Society for Quality. SBAR (situation, background, assessment, recommendation). https://asq.org/quality-resources/sbar. (Accessed May 17, 2025).
30. Anon. To communicate concerns, use the SBAR method. September 3, 2015. Pharmacy Times. https://www.pharmacytimes.com/view/to-communicate-concerns-use-the-sbar-method. (Accessed May 17, 2025).
31. Higgins J, Graziano C, Froerer C, et al. Time management strategies for the new practitioner. Am J Health Syst Pharm. 2023 Apr 8;80(8):483-486.
32. Enz S, Hall ACG, Williams KK. The Myth of Multitasking and What It Means for Future Pharmacists. Am J Pharm Educ. 2021 Nov;85(10):8267.
33. Biwer F, Wiradhany W, Oude Egbrink MGA, de Bruin ABH. Understanding effort regulation: Comparing 'Pomodoro' breaks and self-regulated breaks. Br J Educ Psychol. 2023 Aug;93 Suppl 2:353-367.
34. Murphy B. 4 time-management tips for busy medical residents. June 10, 2020. https://www.ama-assn.org/medical-residents/residency-life/4-time-management-tips-busy-medical-residents. (Accessed May 17, 2025).
35. McGuire R. Time management. February 24, 2001. https://pharmaceutical-journal.com/article/ld/time-management. (Accessed May 17, 2025).
36. Happy Pharm Life.3 time management hacks for pharmacy residents. https://www.youtube.com/watch?v=FYLsFHwM3f4. (Accessed May 17, 2025).
37. Allen D. Getting things done. Book summary. https://www.shortform.com/summary/getting-things-done-summary-david-allen. (Accessed May 17, 2025).
38. Sullivan JB, Ryba NL. Prevalence of impostor phenomenon and assessment of well-being in pharmacy residents. Am J Health Syst Pharm. 2020 Apr 27;77(9):690-696.
39. Boyes A. Don't let perfection be the enemy of productivity. March 3, 2020. https://hbr.org/2020/03/dont-let-perfection-be-the-enemy-of-productivity. (Accessed May 17, 2025).
40. Mass General. A guide to impostor syndrome-and overcoming it. https://www.mcleanhospital.org/essential/impostor-syndrome. Accessed May 17, 2025).
41. Fliehman D. How to help a pharmacy resident overcome imposter syndrome. ASHP PELE SAG Blog November 11, 2022. https://connect.ashp.org/blogs/deanna-fliehman/2022/11/11/ashp?ssopc=1. (Accessed May 17, 2025).
42. Clance IP scale. https://paulineroseclance.com/pdf/IPTestandscoring.pdf. (Accessed May 17, 2025).
43. Ashby B. Navigating imposter syndrome in pharmacy residency: lessons learned. April 24, 2023. https://www.legacyhealth.org/About/news-and-media/story-center/2023/04/navigating-imposter-syndrome-in-pharmacy-residency-lessons-learned-by-bryce-ashby. (Accessed May 17, 2025).
44. Dymala K. How to overcome imposter syndrome in pharmacy. Pharmacy Times. May 9, 2022. https://www.pharmacytimes.com/view/how-to-overcome-imposter-syndrome-in-pharmacy. (Accessed May 17, 2025).
45. Siddiqui ZK, Church HR, Jayasuriya R, et al. Educational interventions for imposter phenomenon in healthcare: a scoping review. BMC Med Educ. 2024 Jan 8;24(1):43.
46. Chao CY, Lin TK, Hung NY, Hsu CL, Kao LT. Advancing Pharmacy Students' Telephone Communication Skills through Real Time Feedback in Innovative Simulations. Am J Pharm Educ. 2025 May 5:101414 [abstract].
47. Rude TA, Kelsch MP, Fingarson M, Eukel HN. Hello Operator? A Pharmacy Practice Simulation to Increase Student Confidence in Telephone Communication Skills. J Pharm Technol. 2023 Feb;39(1):16-22.
48. Álvarez-Cruces D, Mansilla-Sepúlveda J, Nocetti-DE-LA-Barra A. Sentient Intercultural Self-Efficacy: Constructing Intercultural Competence in Health Sciences students. J Adv Med Educ Prof. 2025 Apr 1;13(2):93-104.
49. Squires A. Strategies for overcoming language barriers in healthcare. Nurs Manage. 2018 Apr;49(4):20-27.
50. Kellog Insight. Should we be forced to socialize at work? The Insightful Leader. July 27, 2022. https://insight.kellogg.northwestern.edu/newsletters/should-we-be-forced-to-socialize-at-work. (Accessed May 18, 2025).
51. Ross C. What I wish I knew: managing difficult student/resident situations. American Association of Psychiatric Pharmacists. (Accessed May 18, 2025).

52. Tolleson S, Truong M, Rosario N. Navigating power dynamics between pharmacy preceptors and learners. Explor Res Clin Soc Pharm. 2024 Jan 17;13:100408.
53. Baumgartner L, Roller L, LeVay M, et al. Burnout Among Pharmacy Preceptors in Northern California. Am J Pharm Educ. 2022 Nov;86(8):ajpe8759.

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−This Clinical Resource gives subscribers additional insight related to the Recommendations published in−

trc pharmacist's letter ™ trc prescriber's letter ™ trc pharmacy technician's letter ™ trc nurse's letter ™

December 2019 ~ Resource #351205

Point-of-Care Testing: Technician Checklist

Many pharmacies offer point-of-care (POC) testing as a patient care service. Testing is often to help screen for or monitor chronic medical conditions, such as diabetes (A1C) or high cholesterol (cholesterol levels). Other POC tests can help identify certain infections (e.g., flu, strep throat, hepatitis C, human immunodeficiency virus [HIV]). Pharmacy technicians can use this checklist for ways to get involved in POC testing.

Market POC Testing Services

- ☐ Hang posters or place flyers inside bags at Rx pickup to advertise testing your pharmacy offers.
- ☐ Talk to patients in the waiting area or during Rx pickup about available testing opportunities.
  - o Work with the pharmacist to come up with a "pitch" to be sure to cover the important points.
- ☐ Fax or deliver promotional information about available testing services to local prescribers.

Identify Eligible Patients for POC Testing

- ☐ Help identify patients based on **medication use**. For example, look for prescriptions for statins, such as atorvastatin or simvastatin; these patients may be eligible for cholesterol testing. Or, patients getting diabetes meds, such as metformin or insulin, may be eligible for A1C testing.
- ☐ Help identify patients based on **symptoms**. If your pharmacy offers influenza or strep A testing, stay alert for patients with acute respiratory symptoms. You may identify patients when they ask for help with symptoms (e.g., sore throat/fever [strep throat], sudden onset fever, cough, aches [influenza]).

Scheduling

- ☐ Schedule patients for testing, keeping in mind factors such as the test itself, staffing, etc. Some tests can be done at any time of day, even as a walk-in. Other tests may need to be done first thing in the morning before patients have had anything to eat or drink (e.g., when testing some cholesterol levels).[1]
- ☐ For prescheduled tests, call patients the day before to remind them about their appointment.

Testing

- ☐ Provide patients with consent and screening forms. Enter this information in the computer system or store it with your pharmacy's POC testing documentation.[1,2]
- ☐ Enter the POC test "prescription" into your pharmacy's computer system. Use a basket or other method to place this in line with other prescriptions to help with workflow.
- ☐ Set up testing supplies (e.g., throat or nasal swabs, lancets, bring refrigerated kits to room temperature).[1]
- ☐ Notify the pharmacist when everything is ready for them to perform the test. Or, perform assigned POC testing activities as allowed by regulations and policy (e.g., finger sticks).[1]
- ☐ Set a timer to know when test results will be available. Notify the pharmacist when results are ready so they can interpret the results and counsel patients.[2]

Post-Test Duties

- ☐ Ensure proper disposal of supplies after use, including sharps and hazardous waste (i.e., blood).
- ☐ Be ready to help with new prescriptions that are needed based on test results (e.g., antibiotics, antivirals).
- ☐ Help document test results (e.g., file papers or enter results in the computer, notify prescribers).[2]
- ☐ Connect patients with follow-up services or educational programs offered at your pharmacy or in the community, based on test results and as directed by the pharmacist (e.g., MTM programs).[1]

Administrative and Billing

- ☐ Ensure compliance with necessary training and documentation.
- ☐ Manage inventory and storage of testing supplies (e.g., room temperature, refrigeration, expiration dates).[1]
- ☐ Help perform quality assurance to ensure testing equipment and processes are running effectively (e.g., tracking testing, performing quality control tests on equipment, conducting patient satisfaction surveys).[2]
- ☐ Submit billing information to payers or obtain payment for testing from patients.[1]

More. . .

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References

1. Keller ME, Kelling SE, Bright DR. Pharmacy technicians and point of care testing. *J Pharm Technol* 2015;31:143-8.
2. Borchert JS, Phillips J, Thompson ML, et al. ACCP white paper. Best practices: incorporating pharmacy technicians and other support personnel into the clinical pharmacist's process of care. June 2018. https://accpjournals.onlinelibrary.wiley.com/doi/epdf/10.1002/jac5.1029. (Accessed November 5, 2019).

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Technician Tutorial:
Getting Involved in MTM and Medication Reviews

Medication Therapy Management (MTM) services in the US can involve a broad range of professional activities, including performing Comprehensive Medication Reviews (CMR), identifying and resolving drug-related problems, and providing patient education and training. MTM allows pharmacists to optimize a patient's drug therapy. It also can give pharmacy staff more meaningful patient interactions. In Canada, a similar service is provided and is referred to as a "medication review" or "medication therapy review (MTR)."

These services have traditionally been thought of as a pharmacist-only task. However, pharmacy technicians can get involved in many ways. Your pharmacist will appreciate your proactive involvement in helping efficiently deliver MTM services and medication reviews to patients.

What exactly do MTM or medication review services refer to?

There are several different definitions of MTM in the industry. Simply put, MTM services are focused on the identification, prevention, and resolution of medication-related problems. Medication-related problems can include dosing issues, drug interactions, duplicate therapy, missing therapy, adherence problems, etc. MTM services may be reimbursable by payers or patients can pay out-of-pocket for them.

Experts typically refer to five core elements of MTM:

1. Medication therapy review (e.g., Comprehensive Medication Review or CMR)
2. Personal medication record or list (PMR or PML)
3. Medication action plan (MAP) or Recommended To-Do List (TDL)
4. Intervention and referral
5. Documentation and follow-up

The personal medication list and medication action plan are patient-centered documents intended to be provided directly to a patient after a CMR. The personal medication list is a document that includes all medications (including Rx, over-the-counter [OTC] meds, vitamins, and supplements), indications, directions, and prescriber information. The patient can show this document to their healthcare providers and update it as changes are made. The medication action plan is a simple guide with a list of actions addressing medication and/or health concerns. The medication action plan includes the pharmacist's suggestions for the patient to address these concerns, and a space for the patient to fill in progress made. Many payers (health insurance companies, employer groups, state or federal government, etc) who cover CMRs may require that these documents be provided to a patient within a certain period of time, such as within 14 days of the CMR completion date, in order for the pharmacy to get reimbursed for the service.

Each core element is not required in order for a service to be considered MTM. A CMR will typically include all five core elements. However, there are other shorter interventions, typically referred to as a "Targeted Medication Review" (TMR), or targeted interventions, which may require intervention/referral and documentation/follow-up. For example, let's say you alert the pharmacist to a patient who appears to be nonadherent to their oral diabetes med based on an erratic fill history. The pharmacist may intervene by reaching out to the patient to resolve this issue. This intervention would be documented, and the pharmacist will likely want to follow-up with the patient in a couple of weeks. But this targeted intervention would not necessarily result in the generation of a personal med list or medication action plan. Certain targeted interventions may be reimbursable by some payers.

Although requirements vary among provincial programs, medication reviews in Canada generally involve patient assessment, identification of medication therapy problems, creation and implementation of a care plan, and documentation.

What is the difference between a CMR and TMR?

The terms CMR and TMR come from the Centers of Medicare and Medicaid Services (CMS) Medicare Part D MTM program, but are widely accepted in the industry. CMRs are only one type of MTM service, but it is the service that takes the most time, so it usually gets the most attention. It's also what people typically think of when they hear "MTM."

A CMR is a systematic process used to collect and analyze information about a patient's medications (including OTC meds, vitamins, and supplements) and medical conditions. The pharmacist then uses the information collected to identify medication-related problems. CMRs are usually completed once a year. You can think of these as a "medication check-up." A TMR is a targeted review of a specific medication-related problem. These are problems or potential issues that can come up in between CMRs. Think of these as similar to the visits you make to your physician in between your annual check-ups for problems that come up (e.g., bacterial infection, flu, back pain). Examples of TMRs could be identifying an issue with adherence, noticing that a patient should be on a med they aren't on, or intervening to prevent a drug interaction. While CMRs usually involve communication with both the patient **and** prescriber, TMRs may only require communication with the patient **or** the prescriber (it can include both too). CMRs usually take anywhere from 30 to 60 minutes, while TMRs take just a few minutes. Depending on the payer, CMRs may have to be completed face-to-face with the patient. Other payers allow for CMRs to be completed over the phone. TMRs usually don't have specific requirements on whether they need to involve face-to-face or over-the-phone interactions.

Who needs MTM or medication review services?

In a perfect world, patients would get MTM or medication review services when they experience any of the following:

- start a new medication.
- don't understand why they are taking a medication or how to take a medication.
- are nonadherent.
- get admitted to or discharged from a hospital or other healthcare facility.
- are diagnosed with a new chronic condition (diabetes, asthma, etc).
- have difficulty meeting targets for good control of their conditions (e.g., blood pressure, blood sugar).
- feel they would benefit from additional education, regardless of the number of chronic conditions or number of medications they are taking.

However, realistically, payers usually limit MTM reimbursement to patients they think would benefit most from MTM services. In Canada, provinces determine medication review program eligibility and funding.

Let's take the US Medicare Part D MTM program as an example. CMS sets parameters within which each Part D plan should develop their criteria for MTM program eligibility. These criteria include that the patient should be on multiple drugs, have multiple chronic conditions, and be likely to incur above a certain amount of prescription drug costs per year. The specific details outlined by CMS, such as the number of drugs and chronic conditions and the minimum drug costs, can change from year to year.

Commercial plans that pay for MTM services (not all do) also develop their own criteria for MTM program eligibility. Usually, the common theme is that in order for a patient to be eligible, they need to have multiple chronic conditions and take multiple meds. However, there's no standardized number of either that is used across all payers. Canada is also lacking in standardization of medication review program eligibility.

In the US, there are companies that offer MTM software, or an "MTM platform," which can help participating pharmacies identify patients who are eligible for a payable MTM service. These MTM software companies may work with both the payers and pharmacies to pass information on patient eligibility from the payer to

local pharmacies. Documentation and billing of the MTM services can often be completed within the MTM software itself.

Why is MTM or medication review important?

MTM or medication review is important for a variety of reasons. Let's start with the benefits to the patient. The intended outcome is optimization of a patients' medication regimens, increase in medication adherence, and reduction in the risk for adverse drug events and drug interactions. Here are some actual examples based on published data of benefits observed in different patient populations:

- asthma: MTM services have been found to decrease asthma-related emergency room visits and hospitalizations, decrease direct and indirect healthcare costs, and decrease the number of missed workdays per year.
- diabetes: Patients who have multiple MTM visits annually have been found to have significant improvements in blood sugar levels.
- high cholesterol: Participation in MTM programs has helped patients meet treatment goals and reduce drug costs compared to patients who do not participate in MTM programs.
- human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS): MTM services, such as patient counseling about overuse or underuse of meds, management of side effects, and telephone refill reminders, have been found to increase medication adherence rates, help patients stay on the same HIV regimen for longer periods, and reduce the risk of using contraindicated drugs.

Keep in mind, it is generally accepted that similar benefits can be seen in more conditions than those listed above. In addition to benefits for the patient, the pharmacy also benefits from an additional revenue source. Payment for MTM or medication review services can help some pharmacies offset the increasingly slim margins on drug reimbursement. MTM and medication reviews also help pharmacy staff develop stronger relationships with patients and providers, improve the overall patient experience, and identify additional services that patients can benefit from (e.g., immunizations, med sync).

Over the years, the importance of community pharmacy involvement in MTM services has gained more attention and traction in the US. In 2016, CMS began including CMR completion rate in the Medicare Star Rating program. CMR completion rate is a measurement that looks at the percentage of patients enrolled in a MTM program who received a CMR during the year.

The Medicare Star Rating program was created in 2006 as a way to report on plan quality and reward Medicare plans with high quality. The program assesses Medicare plans on a variety of measurements, including adherence- and medication safety-related measurements. Based on a plan's performance, the plan will get a rating anywhere between 1 through 5, with 5 being the best and 1 being the worst. Plans with higher ratings can get rewarded by CMS with bonus payments and/or marketing advantages. When the CMR completion rate started counting towards the Star Rating score, Medicare plans began focusing on MTM more than they had before. Since local pharmacies often have a trusted relationship with patients, they can play a huge role in helping plans achieve high CMR completion rates.

But what does all this mean for pharmacies? Pharmacies that can help Medicare plans achieve high Star Ratings could get financial bonuses from the plan and/or be included in "preferred" pharmacy networks. For example, plans can select specific groups of pharmacies to be included in their preferred network. These preferred pharmacies will likely be able to offer lower copays to patients, compared to non-preferred pharmacies. This could mean more patients and more business for the pharmacy. To learn more about the Star Rating program, refer to our CE, *Quality Measures in Pharmacy Practice*.

How can technicians help with MTM or medication review services?

There are many ways pharmacy technicians can get involved in MTM services and medication reviews. Since pharmacies differ in how they approach these services and how they incorporate them into workflow, talk to

your pharmacist about how to best assist. Use the suggestions below to offer up ideas for how you can get involved.

Identify eligible patients. Find out how your pharmacy identifies patients who are eligible for MTM services or medication reviews. In some cases, this may involve going into another system (e.g., MTM software) to get this information. Take the time to add MTM/medication review eligibility information into the patient's profile. Since eligibility can change as time goes on, it's important to do this eligibility check on a regular basis. For example, each week you can print a list of eligible patients from the system and compare it with last week's list. Then you can focus on additions and deletions and make the appropriate changes within the patient profiles.

In other cases, your pharmacy may have specific criteria for determining patient eligibility. For example, some pharmacies may work directly with payers to offer MTM services. The eligibility criteria may include patients with a certain disease state (e.g., diabetes, high blood pressure), patients who are on a certain number of drugs, etc. Be familiar with reports that your dispensing system can generate. You may be able to print a report with a list of patients who could be eligible for MTM based on the specific criteria.

Once you have identified patients who are candidates for the service, take steps to notify the patient. This could include giving them a call or talking to them about it in person. If you are filling a prescription for a patient and see a message in their profile regarding program eligibility, put a note on the Rx. When the patient comes to pick up the Rx, whoever is helping the patient will know to offer the service. Or, as part of your review of patient eligibility, you can call the patient at that time. Either way, make sure to clearly explain the benefits and what the patient can expect. Here is an example of a 30-second "pitch" for offering MTM to a patient:

"Did you know your pharmacist can provide a 'medication check-up' to look at all the medicines you take, including prescriptions, over-the-counter products, vitamins, and supplements? We'll work as a partner with you and your prescriber to make sure you're getting the most benefit from your medicines. We can also help identify less expensive alternatives to save you money, make sure you're taking the right meds in the right way and at the right doses, and answer any questions you may have about your medicines. You'll get a complete medication list after the visit and a list of suggested actions to help improve your health. Would you like to schedule an appointment?"

Manage appointments. You can help schedule appointments and make appointment reminder calls. Schedule appointments for CMRs during pharmacist overlap or off-peak times, if possible. Call the patient a couple of days before the appointment, especially if it's for a face-to-face session. Remind the patient to bring all of the medications that they're taking, including OTCs, vitamins, and supplements. Also ask the patient to bring an updated medication list, recent lab results, their immunization card, and a list of questions or concerns. Encourage the patient to bring a friend or family member if that person helps the patient manage their meds. You can also explain what the patient should expect from the meeting.

Prepare for appointments. Help pharmacists prepare for an appointment by gathering paperwork, equipment (e.g., vaccination or health screening supplies), a printed list of all the meds the patient gets filled at your pharmacy, and any other relevant health-related information your pharmacy has access to.

Interact with the patient. When a patient arrives for a face-to-face appointment, you can meet with the patient first and gather vital signs, such as weight and blood pressure (if your pharmacy has the equipment). For both phone and face-to-face meetings, you can help out by becoming proficient in documenting medication lists and drug allergy histories. Ask the patient about smoking status and their vaccine history, and document their lab results if they provided a copy. Also ask the patient if they have any specific issues or concerns they want to discuss with the pharmacist. Gather all of this information from the patient, document it, and then pass it on to the pharmacist.

Document and bill. At the conclusion of a CMR or medication review, there may be a good amount of information to document. Depending on the payer, this documentation may need to follow a specific format. It might also need to be entered into an electronic system. Some pharmacists may be able to complete the documentation in the format it's needed while talking to the patient. But others may want to jot down notes, and then transfer these notes into the appropriate format. You may be able to help pharmacists transfer their notes, but the pharmacist should still double check any information you have transferred before the documentation can be finalized. Know your company's policy on document retention, such as where MTM- or medication review-related documentation needs to be stored and for how long.

Get trained on how to bill for MTM or medication review services. This can save pharmacists a lot of time. Billing may take place either through an electronic system, or by filling out a form and faxing or mailing it. Either way, develop an organized process that ensures prompt and accurate billing, so the pharmacy gets paid on time. Make sure to track payments requested and payments received on a regular basis (e.g., monthly) to identify any issues. If you are billing for services within an electronic system, get familiar with reports that can be generated. You may be able to run a report that shows you what was billed and what was paid during a certain timeframe.

Follow-up. Help the pharmacist with follow-up after an MTM service or medication review. The pharmacist may need to follow up with the patient, prescriber, or a specialist to resolve issues. Work with the pharmacist to develop a system for executing and tracking follow-up. For example, you could use paper trays to help develop a process for following up with prescribers. One paper tray could be labeled "Contact prescriber" and another could be labeled, "Prescriber contacted – waiting for response." You could arrange the documentation by date and review it a couple times a week to determine if additional follow-up is needed. You can also use a binder sorted by day of the month to assist with follow-up.

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--Continue to the next section for a "Cheat Sheet" on MTM and Medication Reviews—

"Cheat Sheet" for Getting Involved in MTM and Medication Reviews

What is the definition of MTM/med review?

MTM (US terminology) and med reviews (Canadian terminology) are enhanced patient care services focused on the identification and resolution of drug-related issues (e.g., adherence, drug interactions, unneeded therapy). These services involve spending time with a patient to review all their meds and identify problems a patient may be having. Based on the drug-related issues, pharmacists create a plan of action for the patient. Pharmacists also follow up with prescribers and specialists as appropriate to help get these issues resolved.

How is patient eligibility determined for MTM/med reviews?

Many patients can benefit from these services. However, because they can take a lot of time on the part of the entire pharmacy team, it's best to focus on patients who would benefit the most. Pharmacies may choose to focus on patients who are taking a certain number of meds, have a certain number of conditions, are nonadherent, have recently been discharged from a hospital, etc. If a pharmacy receives reimbursement from a payer (e.g., insurance companies, employer groups, state or provincial government, federal government) for these services, the payer will usually outline specific patient eligibility criteria.

What are the benefits of MTM/med reviews?

- Ability to help payers achieve high scores on quality measures (which can mean additional payments for pharmacies and inclusion in preferred pharmacy networks).
- Additional source of revenue for pharmacy.
- Improved patient care and patient satisfaction with their pharmacy.
- Opportunity to offer patients additional services (e.g., immunizations, med sync).

How can technicians get involved in MTM/med reviews?

- **Identify eligible patients** by completing eligibility checks on an on-going basis (e.g., once or twice a week) and adding eligibility info to patient profiles; use the 30-second "pitch" below to introduce MTM/med reviews to eligible patients.
- **Manage appointments** by scheduling them during pharmacist overlap or off-peak times and calling the patient a couple of days before the appointment to remind them to bring all their meds (Rxs, OTCs, vitamins, and supplements), recent lab results, immunization card, etc.
- **Help pharmacists prepare for appointments** by gathering required paperwork, equipment, and relevant health-related information your pharmacy has access to.
- **Assist with the appointment** by interacting with the patient to gather med lists, drug allergy histories, and other important info.
- **Document and bill** for services by being familiar with what needs to be documented and where, and by getting trained in billing practices.
- **Create a timely follow-up system** by working with the pharmacist to develop a process for executing and tracking patient or prescriber outreach.

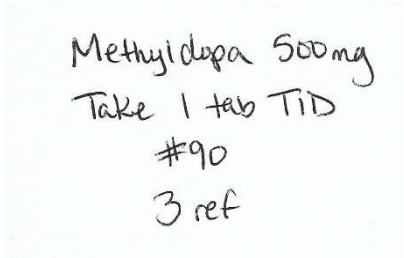
What is a 30-second "pitch" that can be used to offer MTM/med review services to patients?

"Did you know your pharmacist can provide a 'medication check-up' to look at all the medicines you take, including prescriptions, over-the-counter products, vitamins, and supplements? We'll work as a partner with you and your prescriber to make sure you're getting the most benefit from your medicines. We can also help identify less expensive alternatives to save you money, make sure you're taking the right meds in the right way and at the right doses, and answer any questions you may have about your medicines. You'll get a complete medication list after the visit and a list of suggested actions to help improve your health. Would you like to schedule an appointment?"

[May 2023; 390580]

Technician Tutorial:
Managing Drug Shortages

Drug shortages are a common occurrence in pharmacies, and a burden for the healthcare system and patients. Drug shortages are time-consuming, frustrating, and can increase healthcare costs and the risk for medication errors. Sometimes patients can't get needed treatments when meds are in short supply. For example, almost two-thirds of hospitals reported that they changed patient care or delayed therapy due to drug shortages. It's important for pharmacy teams to have efficient strategies for managing drug shortages.



A 32-year-old pregnant patient with high blood pressure drops off a prescription for methyldopa 500 mg, take 1 tablet 3 times a day. You don't have methyldopa in stock, and it was unavailable from your wholesaler the last time you tried to order it.

What is a drug shortage?

The Food and Drug Administration (FDA) defines a drug shortage as a time when the total available supply of all versions of an approved product doesn't meet the current demand, and a registered alternative manufacturer is not able to meet the current and/or projected demands. To pharmacies, it simply means that despite ordering adequate amounts of a med, you can't get enough to fill all the prescriptions or orders you get.

Why do drug shortages happen?

Drug shortages can happen for a variety of reasons, including drug recalls or withdrawals, discontinuations, unavailability of raw materials needed for production, or ripple effects from shortages of other similar products. Drug shortages can be caused by natural disasters, such as when a manufacturing plant is damaged and cannot produce its usual supply. They can also be caused by global pandemics, such as COVID-19. Pandemics can lead to increased demand for meds used to treat patients affected by the disease or manufacturing delays caused by impacts of the disease on the workforce.

Recalls are the most common cause of drug shortages. You can find more details about recalls and withdrawals in the last section of this document. These are important for you to know about because they may have an additional impact on your workflow beyond what you'd need to do for a med in short supply.

Examples of drug shortages caused by a pandemic are hydroxychloroquine and chloroquine. These meds were being tried to prevent or treat COVID-19. Demand quickly went up. Unfortunately, this led to access issues for patients already taking hydroxychloroquine for chronic conditions, such as rheumatoid arthritis or systemic lupus erythematosus.

What are some examples of critical drugs that have been in short supply?

In the US, there's a lot of focus on shortages of hospital meds. These have consistently included injectable epinephrine (used for resuscitation of patients in cardiac arrest); propofol (used to sedate patients in critical care or during surgery); and injectable furosemide (used to help patients get rid of fluid build-up in the body so the heart and lungs can work normally). There have also been shortages of some chemotherapy drugs, such

as leucovorin and vincristine. These shortages have caused cancer treatment delays. Shortages of electrolyte solutions such as calcium salts have been troublesome for compounding parenteral nutrition. Even IV fluids (e.g., normal saline) and med diluents (e.g., sterile water) have been in short supply. All of these shortages are serious and could result in suboptimal patient care or in some cases, patient harm.

You inform the pharmacist that you saw a supply shortage update come in from your supplier for methyldopa. The notice said there's a shortage of the active ingredient, which is causing the med to be on backorder. There is no resolution date provided. You tell the pharmacist that the patient, who is pregnant, has an Rx for methyldopa. The pharmacist mentions methyldopa one of the preferred meds for pregnant patients with high blood pressure, but there are other options. He says that he'll speak with the patient.

What strategies can I use to prevent problems during drug shortages?

Monitor drug shortage lists. These can help you anticipate shortages that might affect your pharmacy and help you know when a shortage is expected to resolve. FDA has a list of drugs in shortage at https://www.accessdata.fda.gov/scripts/drugshortages/default.cfm. FDA also has a mobile app called "DrugShortages" that might be useful to keep close tabs on shortages. The American Society of Health-System Pharmacists (ASHP) has a list at https://www.ashp.org/Drug-Shortages. Here you can find current and resolved shortages, the reason for a shortage, and more. In Canada, you can access https://www.drugshortagescanada.ca/ and https://medsask.usask.ca/professional-practice/drug-shortages.php to get details about current shortages and alternatives. Your wholesalers and distributors may also have lists of meds they usually stock that are in shortage.

Sometimes, pharmacy listservs will have information on drug shortages, and you can get automatic email updates if you subscribe online. Ask your pharmacist if you need help finding one to follow. In addition, your organization may share information such as email updates or newsletters about current drug shortages that are causing problems, which can be useful if you can't access other online resources.

If you work in the hospital, keep lines of communication open with your purchasing agent and your administrators to find out about potential drug shortages. This way, you can start thinking about how a particular shortage might affect your pharmacy or your practice area and consider ways to help.

Try to find out why the shortage is happening. This may affect your game plan. For example, you might be able to order a different strength of a med if one strength is short because of a discontinuation. Or you might need to order an alternative med if all strengths are short because of a manufacturing issue.

In the hospital setting, administrators could be making recommendations on how to handle drug shortages. However, your input is valuable, since your finger is on the pulse of what's happening with patient care.

Keep close tabs on your stock. It's important to know what's coming in and going out of the pharmacy. One big complaint about drug shortages is that they can happen with almost no notice. One day, a med simply won't come in from the wholesaler.

Check how much of a med your pharmacy is using by running usage reports. This information will help your pharmacy plan how to handle a specific shortage.

Also, when checking your stock, note expiration dates of meds in short supply. Use the ones with the shortest expiration first, to prevent waste. In the hospital, if your practice area doesn't move a med very quickly, contact someone in charge to see if you can trade your short-dated med for one with a longer expiration. That way, a practice area that uses the med more frequently can use the short-dated supply before it expires.

For meds in short supply, try to contact your supplier to get more details about availability. Ask about limits on the amount you can order, and when/if the med is expected to be available again.

Order sufficient supplies of alternatives. Having alternatives on hand can help ensure patients can be treated appropriately and avoid treatment gaps. You may be lucky enough to get a med in if you order a different generic or brand of what you need. Or, you may have to get a different product, such as a different strength or dosage form. In the community pharmacy setting, there will be times when an insurer does not cover an alternative product. This might require you to take additional steps, such as contacting insurers to get override or exception codes, or in the US, inputting certain dispense-as-written (DAW) codes. For example, DAW 4 can be used for a brand-name product when generic substitution is allowed, but the generic is not in stock. And DAW 8 can be used when the generic product is not available in the marketplace.

As an example, when certain strengths of injectable epinephrine are in short supply, such as 1 mg/10 mL prefilled syringes, other available strengths, such as 1 mg/mL vials, may have to be used instead. (Note that it's critical to use strategies to prevent dangerous mix-ups and errors with alternative products, and there is more information on this below.) Another example of an alternative is bumetanide, which is an option if the diuretic furosemide is unavailable. If bumetanide is available and furosemide is not available, it will be important to try to stock enough bumetanide to take up the slack.

Know when to allocate meds in short supply. Pharmacies may save shortage meds for certain patients. For example, during the COVID-19 pandemic, some community pharmacies saved hydroxychloroquine for lupus or rheumatoid arthritis patients. And hospitals saved metered-dose inhalers (MDIs), such as albuterol (or salbutamol in Canada), for COVID-19 patients, since nebulizer use can release large amounts of infectious airborne particles.

Refer questions about using meds past their expiration date to the pharmacist. Patients taking meds in short supply may wonder if they could take or use expired meds that they haven't disposed of. Send these questions to the pharmacist. FDA has a list of meds that can be used past their printed expiration date in an emergency. This list of extended use dates is at https://www.fda.gov/drugs/drug-shortages/search-list-extended-use-dates-assist-drug-shortages. For example, certain lots of *EpiPen* epinephrine auto-injector have an extended use date of four months.

Avoid hoarding drugs. Ordering excessive amounts of a med for your pharmacy, or even hoarding it in your hospital pharmacy satellite, can keep patients who need the med from getting it by creating "artificial shortages." Plus, hoarding can increase pharmacy costs. Instead, follow your pharmacy's guidance on how much you should stock, such as by running usage reports to find out how much you'll need. If you have no guidance, estimate how much you'll need over a certain period of time rather than ordering all you can get.

You can also help keep patients from hoarding meds. Be alert for large quantity prescriptions or unusual numbers of prescriptions for a shortage med. Patients may try to get meds "just in case," which can make drug shortages worse.

Communicate with other pharmacy staff, nurses, prescribers, and patients. This can help save time and avoid confusion. You might need to notify prescribers' offices that a particular med is temporarily unavailable and tell them what alternatives you do have. Or in the hospital, you might need to let nurses know a different strength of a med is being stocked instead of what's usually used, or that a shortage med is being dispensed from the pharmacy instead of from automated dispensing cabinets.

In some cases, you might be able to contact another pharmacy to see if they have a med a patient needs, if you don't have it. If a med is unavailable and a patient must be switched to another treatment, alternative options can be shared with prescribers.

Run a report to identify patients on a shortage med. Consider contacting them before they run out, especially when the shortage resolution date is unknown. It's a good idea to get ahead of things to avoid last-minute scrambling and treatment gaps. Help patients come up with a game plan, such as by offering to check with another pharmacy or having the pharmacist contact the prescriber to switch to an alternative.

Anticipate and safeguard against errors. As mentioned, an alternative product may have to be used during a drug shortage. Compared to the med you usually carry, alternative products may be made by different manufacturers, and have different appearances, strengths, package sizes, etc. Try to anticipate where errors might happen and suggest safeguards to prevent them. Watch for labels or packaging (e.g., cap color, vial size) that could lead to confusion. For example, the label for a product that you're using in place of a med that's short might look similar to a completely different product that's usually stocked in your pharmacy. This could cause mix-ups. Or stocking a different strength of a product, say a 2 mg/mL concentration, might confuse nurses accustomed to seeing a 1 mg/mL concentration. This could lead to an overdose. Consider measures such as using computer alerts, special labels, or shelf tags to avoid these problems.

Another activity that could lead to errors is when prepping individual doses of injectables in the pharmacy to prevent waste of meds in bulk vials. This requires drawing up individual doses into syringes. Ensure the labeling includes the total dose in the container, as well as the med concentration. This is what FDA requires for injectable med labels. Be sure an appropriate beyond-use date is also included on the label. For example, you wouldn't want to use the manufacturer's expiration date. Instead, you'd likely have a shorter date depending on whether doses are drawn up from single- or multidose vials.

Support your pharmacy's "go-to" person for managing drug shortages, if available. Some pharmacies have one person who coordinates everything surrounding drug shortages. Communicate effectively with this person, following any kind of guidance that's put into place. Also, give feedback on what's working and what's not. The intensity of drug shortages we've seen the last few years is greater than ever, so we're still learning better ways to reduce the impact on patient care.

You can learn more about drug shortages by reviewing our CE course, *Maintaining the Drug Supply Chain*.

The pharmacist speaks with the patient. The patient tells the pharmacist that methyldopa worked for her during her last pregnancy. She is open to another drug, as long as it will still be safe for her baby. The pharmacist spends time talking to her about labetalol and its use in pregnancy. The pharmacist then calls the prescriber to recommend switching to labetalol, and to obtain a new Rx.

What are additional considerations for when a drug is recalled?

As mentioned, drug recalls are the most common cause of drug shortages. Drug recalls are usually associated with a product defect or contamination. They're often voluntary, by the manufacturer, but can be mandated by the FDA or Health Canada. Information about drug recalls is issued by FDA and Health Canada. A specific batch or lot of a product may be recalled, or all batches or lots may be affected. There are three recall classes in the US, **Class I, II, and III**. Health Canada's system is similar, where **Type I**, **II**, and **III** correspond to FDA classifications.

Class I/Type I recalls involve products likely to cause **serious adverse events or death**. For example, some lots of *EpiPen* and *EpiPen Jr* have been recalled due to concerns that the autoinjector may not release the lifesaving med during a severe allergic reaction.

Class II/Type II recalls involve products that could cause **temporary but reversible effects**. These are often due to issues with product sterility. For example, some lots of *Refresh Lacri-Lube* eye ointment were recalled because of particles that got into the ointment when unscrewing the cap.

Class III/Type III recalls involve products **unlikely to cause adverse events**. These are usually manufacturing or packaging issues. For example, one lot of amlodipine 10 mg was recently recalled due to some 2.5 mg tablets found co-mingled within the bottle.

A product is usually **withdrawn** because its risks outweigh its benefits. Withdrawals often involve a product being taken off the market completely. For example, FDA requested that *Opana ER* (oxymorphone extended-release tablets) be withdrawn due to concerns about misuse and abuse.

You'll usually get recall and market withdrawal information from suppliers and/or internal notification (e.g., email, intranet). FDA and Health Canada issue statements, at https://www.fda.gov/Safety/Recalls/default.htm (US) and http://www.hc-sc.gc.ca/ahc-asc/media/advisories-avis/index-eng.php (Canada). What needs to be done will depend on the recall or withdrawal and your policies and procedures. The goal will often be removing the product from stock.

Since recalls often pertain to specific lot numbers, the first step will usually be to check stock for recalled lots. This might be simple in a community pharmacy or small hospital pharmacy with stock in one place. But it can be complex in a large hospital, with meds stored in various locations. The effort may be coordinated by one person. Check policies and procedures for what's expected of you.

In community pharmacy, also check prescriptions waiting to be picked up (will call). Look for refrigerated items, products needing to be reconstituted or mixed, etc. If possible, generate a usage report based on NDC number (or DIN in Canada) to identify prescriptions waiting to be picked up as well as prescriptions that have already been picked up.

Once recalled product has been removed from stock, it'll usually need to be sent back to the supplier. Follow directions on the recall notice and your company policies and procedures. Adjust inventory counts as recalled items are pulled and follow federal and state laws for controlled substances.

Patients who've received a recalled med may need to be notified. Manufacturers will usually issue a press release. Patients may need disposal directions, or instructions to bring unused med back to the pharmacy, get a replacement product, etc.

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--Continue to the next page for a Cheat Sheet for Managing Drug Shortages--

"Cheat Sheet" for Managing Drug Shortages

What is a drug shortage?

A drug shortage is when the total available supply of all versions of an approved product doesn't meet the current demand. To pharmacies, it simply means that despite ordering adequate amounts of a med, you can't get enough to fill all the prescriptions or orders you get.

Why do drug shortages happen?

Drug shortages can happen for a variety of reasons, including drug recalls or withdrawals, discontinuations, unavailability of raw materials needed to produce a drug, or ripple effects from shortages of other similar products. Drug shortages can be caused by natural disasters, such as when a drug manufacturing plant is damaged and cannot produce its usual supply. Global pandemics, such as COVID-19, can also lead to increases in demand for drugs used to treat the disease or manufacturing delays caused by impacts of the disease on the workforce.

What strategies can I use to prevent problems during drug shortages?

- Monitor shortage lists from FDA (or Health Canada), ASHP, and your wholesaler/distributor to learn more about shortages impacting your pharmacy, such as when the shortage is expected to resolve, available alternatives, etc.
- Try to find out why the shortage is happening to help determine your strategy, such as ordering a different strength of a med if just one strength is in short supply.
- Stay on top of your pharmacy's inventory by checking how much of the shortage med you're using and noting expiration dates of meds in shortage.
- Order sufficient supplies of alternatives by adding the usage of the shortage med to the current usage of the alternative med.
- Manage any payer rejects for alternative meds by using appropriate DAW codes (in the US) or reaching out to the payer for an override.
- Know when to allocate meds in short supply to ensure the right patients are getting needed meds according to your pharmacy's policies.
- Refer questions from patients about using meds past their expiration date to the pharmacist.
- Avoid hoarding meds. Don't order excessive amounts of a shortage med. Refer prescriptions for large quantities of a shortage med to the pharmacist.
- Communicate shortage issues with other pharmacy staff, prescribers, nurses, and patients to help save time, avoid confusion, and prevent gaps in treatment.
- Contact other pharmacies to see if they have the med a patient needs.
- Anticipate and prevent errors with alternative meds.

What are additional considerations for when a drug is recalled?

Recalls are the most common cause of drug shortages. Recalls are usually associated with a product defect or contamination. A specific batch or lot of a product may be recalled, or all batches or lots may be affected.

The potential impact of a patient using a product that's been recalled ranges from minimal to potentially deadly. Your main goal in the pharmacy will typically be identifying recalled products and removing them from stock. Follow instructions from FDA and Health Canada, and company policies and procedures.

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