Medication Barriers

These resources may be helpful to utilize as reading material for learners and in developing didactic or experiential learning. The resources are organized into medication barriers related to medication access, adherence, and health literacy.

A5. The pharmacy workforce should partner with patients and the interprofessional care team to identify, assess, and resolve barriers to medication access, adherence, and health literacy.

Learner Resources

Medication Access

Access to Care: Development of a Medication Access Framework for Quality Measurement
- This document reviews an Access to Care Roundtable which was organized by the Pharmacy Quality Alliance (PQA), with support from the National Pharmaceutical Council (NPC), to “develop a conceptual framework that better defines medication access and to identify priority gaps for future quality performance measurement based on commonly identified barriers.”

- This white paper on improving medication access was developed by the 2020 Task Force on Medication Access of the American College of Clinical Pharmacy (ACCP). The objective of this paper is to “describe major barriers and highlight important considerations for clinical pharmacists to assist in preventing, navigating, and resolving medication access challenges at the policy and practice levels.”

RxAssist Patient Assistance Program Center
- The website provides a comprehensive and searchable directory of pharmaceutical company Patient Assistance Programs. Information on program eligibility and the application process is provided for both healthcare professionals and patients.

Medication Adherence

- This systematic overview summarizes multiple systematic reviews of the efficacy of interventions to address medication nonadherence for adult patients with one of the following: diabetes and prediabetes, heart conditions, hypertension and prehypertension, stroke, and cognitive impairment.

This article provides a review on medication adherence. It reviews definitions of medication adherence, measures of adherence, behaviors related to medication taking, identification of and barriers to adherence, interventions and challenges to medication adherence.


This video is part of the CDC public health grand rounds series where speakers discuss research, interventions, education, and emerging tools and technologies that may help overcome the barriers to medication non-adherence.


This review outlines different medication counseling and education approaches that have been used to improve medication adherence and health outcomes using graphic illustrations-called pictograms.


This review summarizes 49 randomized studies of interventions to improve medication adherence. Categories of interventions and characteristics of successful interventions within each category are described.

Health Literacy


This primer reviews literature on health literacy; including risk factors for low health literacy, the impact of low health literacy, communication techniques, and tools to assess health literacy.


The National Action Plan to Improve Health Literacy “seeks to engage organizations, professionals, policymakers, communities, individuals, and families in a linked, multisector effort to improve health literacy.” The action plan includes seven goals and suggested strategies to improve health literacy.

Inclusion in Pharmacy Didactic Curriculum

Medication Access

This article describes and evaluates a health equity curriculum developed within a neuropsychiatric theme for second-year pharmacy students. The curriculum was delivered remotely and included didactic material, an asynchronous forum, synchronous online video discussions, and an objective structured clinical examination (OSCE).


This article reviews the design, implementation, and assessment of a lesbian, gay, bisexual, and transgender (LGBT) health and practice elective course for second- and third-year pharmacy students. Course components included topic discussions, reading assignments, guest speakers, active-learning, and an objective structured clinical examination (OSCE).


This article reviews a curriculum framework developed by a task force of the American Association of Colleges of Pharmacy (AACP) and the Pharmaceutical Services Support Center (PSSC) to guide pharmacy programs in education related to caring for underserved populations.

**Medication Adherence**


This article describes a 3-hour elective course to train pharmacy students in conducting patient-centered counseling regarding health issues using motivational interviewing skills.


This article describes a two-month medication adherence activity for first- and second-year pharmacy students. Students were required to adhere to a pre-specified medication regimen. A pre- and post-survey was completed related to perceived activity success and difficulty, adherence challenges, and lessons learned.


This article describes the design and evaluation of a calculation activity on medication adherence metrics in a didactic endocrine therapeutics course for second-year pharmacy students. Students calculated the proportion of days covered and medication possession ratios and reviewed a simulated adherence dashboard.
Health Literacy

• This article describes a health literacy module included within an elective course. Team-based learning and a community health fair activity was utilized to improve student understanding and application of health literacy concepts.

• This article reviews the inclusion and assessment of a health literacy module into a self-care course for first-year pharmacy students. The module included a lecture and workshop with active-learning activities.

• This article describes and evaluates the addition of health literacy active learning activities into a required patient-centered communication course for first-year pharmacy students.

• This article evaluates the inclusion of a health literacy patient case in a case-based learning laboratory to improve pharmacy student health literacy knowledge and skills.

• This article reviews the use of the Four Habits Model (FHM), a validated framework for assessing health care provider communication skills with patients, to improve communication skills for third-year pharmacy students. After practicing the FHM and receiving feedback, students were evaluated during a standardized patient encounter.

• This article reviews the implementation of active-learning exercises related to low health literacy in a required pharmacy course in cultural competency, health literacy, and health beliefs.

• This article describes the design and evaluation of a course on health promotion and literacy. Course objectives were taught with team-based learning and activities that included group presentations, reflections, and panel discussions.

- This article describes the implementation and evaluation of a simulation activity/assignments within a geriatric elective related to medication management challenges in low-vision patients.

Inclusion in Pharmacy Experiential Curriculum

Medication Access


- This study was designed to explore preceptor experiences teaching cultural intelligence in an experiential setting. Preceptor teaching strategies included case discussions, reflection, and simulation.

Medication Adherence


- This narrative review describes twenty studies describing educational interventions and learning assessments for students focused on medication non-adherence.


- This study evaluated differences in students on experiential rotation vs patient perceptions for medication non-adherence in community pharmacies.

Health Literacy


- This article reviews the impact of integrating health literacy and cultural competency content throughout a four-year pharmacy curriculum.


- This article evaluates curricular changes related to health literacy in an introductory pharmacy practice experience (IPPE) for third-year pharmacy students.