Patient History Taking: Medication History

What Is Taking a Patient Medication History?

› Patient history taking (PHT) is the systematic and structured questioning by a healthcare clinician of a patient, family member (e.g., spouse), or other caregiver to gain information about a patient’s past and current health. The information obtained assists in determining a medical diagnosis, developing a nursing care plan, and providing appropriate therapy

• What: Medication history gathered during PHT is a detailed description of the patient’s current medication use (e.g., over-the-counter medications [e.g., laxatives, analgesics, vitamins, diet supplements, herbs], prescription medications [e.g., antihypertensive agents, antidiabetic drugs, narcotics], eye drops, lotions, sprays, creams), including frequency, dosage, and length of time used, as well as information on medications the patient recently stopped using. Information on medication sensitivities and allergies is also collected during the medication history (for more information on other aspects of PHT, see additional topics in the Nursing Practice & Skill series on PHT)

• How: Healthcare providers use direct questioning and a combination of verbal communication techniques (e.g., letting the patient speak without interruption, asking closed-ended questions, reiterating the information heard/gathered in summary form) to elicit information from the patient about his/her medication history, which is then documented in accordance with facility protocol and medical record format (e.g., manual or electronic). A checklist or structured form can be used to promote the accuracy of the medication history

• Where: PHT is performed in every setting where health care is provided (e.g., inpatient, outpatient, clinic, hospital, home). Maintaining patient privacy is a critical component of patient history taking, so PHT should be undertaken in an area where there is no potential for information to be overheard by persons not involved in the patient’s care

• Who: Registered nurses, advanced practice nurses, physician assistants, physicians, social workers, and case managers all conduct PHT interviews. Depending on the patient’s wishes, family members may be present during PHT

What is the Desired Outcome of Taking a Patient Medication History?

› The desired outcome of taking a patient medication history is to identify medications currently being taken by the patient in order to evaluate the appropriateness of the medication, prevent medication interactions, and evaluate if the patient is experiencing adverse drug events

› Typically, taking a medication history during PHT is performed following taking the patient’s social history and prior to performing a physical assessment. Healthcare clinicians use information gathered from the medication history to help guide them in making medication decisions (e.g., when and whether it is safe to prescribe medication; treatment efficacy of the current medication) in the management of the patient’s current health concern and to create an individualized plan of care for the patient

Why is Taking a Patient Medication History Important?

› PHT is part of establishing a therapeutic relationship between the clinician and patient. Taking a medication history during PHT can aid in
• identifying the patient’s
  – medication knowledge (e.g., generic names of medication)
  – level of medication management (e.g., timing, dose, route of administration)
  – adherence to the prescribed medication regimen
  – barriers to taking medication as prescribed (e.g., financial, inability to read medication labels)
  – health concerns and patient complaints that could be related to medication use, including
    – adverse drug events
    – drug interactions
• determining a diagnosis
• establishing a realistic and appropriate individualized plan of care
• avoiding the administration of medications that were previously ineffective
• avoiding the administration of medications to which the patient is allergic
• avoiding the need to perform costly diagnostic tests and procedures
• reducing the risk for legal complications

Taking an accurate medication history is a necessary step in medication reconciliation (i.e., the process of comparing the medications the patient is taking with those that are ordered in order to ensure that necessary medications are continued and errors are prevented).

An incomplete medication history increases risk for adverse drug events and medication errors

Facts and Figures

› After implementing the use of a structured, systematic assessment tool for use by nurses in taking medication histories, investigators at a community hospital found that the percentage of patients with medication discrepancies decreased from 42% to 20% (Henneman et al., 2014)
› Researchers evaluated non-mandatory education sessions and the implementation of a checklist on the ability of nurses and physicians to take an accurate medication history. Following the teaching session, there were fewer overall medication discrepancies, but the number of patient medication records with at least one discrepancy did not change (Lea et al., 2016)
› Researchers in two studies determined that using trained pharmacy technicians to compile medication histories for patients in the emergency department resulted in significantly fewer errors and was more cost-effective than having nurses compile medication histories (Pevnicket al., 2018; Rubin et al., 2015)
› Researchers evaluated the use of an IT-guided checklist when taking medication histories on the accuracy of history taking. The overall number of medication discrepancies decreased by roughly 40%, and the number of discrepancies per patient decreased from 2.3 to 0.6 following implementation of the IT-guided checklist (Huber et al., 2017)
› Researchers reported that patients in the emergency department who are anxious are more likely to be inaccurate in reporting their medication history (Shapiro et al., 2017)
› The Australian Commission on Safety and Quality in Health Care developed an online course to guide clinicians on how to obtain a thorough and accurate medication history (Australian Commission on Safety and Quality in Health Care, n.d.)
› The World Health Organization (WHO), as a component of its High 5s Project, has developed a protocol for medication reconciliation that requires best possible medication history (BPMH), which includes all prescribed medications, all over-the-counter medications, all herbal remedies, all non-prescribed medications (i.e., medications the treating clinician did not advise the patient to take), and all recreational drugs. The information should be gathered by patient/family interview and verified by another source (e.g., patient medical record). The BPMH should be completed within 24 hours of admission (WHO, 2014)

What You Need to Know Before Taking a Patient Medication History

› The value of the information obtained during PHT is dependent on the reliability of the patient or family member being interviewed
  • Polypharmacy (i.e., use of multiple medications by one patient), the use of generic drugs, and multiple drug names can impair a patient’s accurate recall of medication use
  • Patients are more likely to report medications taken for conditions they consider to be important (e.g., cardiovascular disease) than those taken for conditions that they do not consider to be important (e.g., headache)
  • As appropriate and available, validate verbal information received with a list of medications from the patient’s medical record or community pharmacist, or with the patient’s medication in their possession
Information on current over-the-counter medication use may only be available from the patient/family and is generally not found in past medical records.

- Many patients do not consider over-the-counter and herbal medications to be important and will not provide information on their use unless specifically asked about these types of medication.

Patients are more likely to be involved in medical care and be open to education when the relationship between the patient and healthcare provider is one of trust, empathy, and respect.

- Taking the time during initial appointments to establish a trusting relationship and helping patients recognize that the healthcare provider cares about them will lead to increased efficiency in communication during future appointments.

Patients may perceive the healthcare provider to be in a position of power and feel intimidated to openly share their concerns or to expand on concerns unless they are directly asked to share by the healthcare provider.

- The healthcare provider should use techniques (e.g., agreeing with or acknowledging the patient’s valid ideas, seeking the patient’s opinion) to empower the patient during PHT.

- The healthcare provider should also verbalize to patients an understanding of how difficult it can be to discuss personal issues and concerns with strangers and individuals they do not know very well.

Cultural beliefs and traditions can influence the communication, health maintenance, and diet of patients.

- It is important to be knowledgeable about and respect cultural differences in the acceptable degree of familiarity between clinician and patient and differing practices regarding eye contact, physical touch, and interactions between men and women.

Preliminary steps that should be performed before taking a patient’s medication history include the following:

- Review the facility/unit specific protocol for taking a patient history, if one is available.
  - Typically, a facility protocol will mandate the use of a specific form or checklist when taking a patient history. The form functions as a structured guide that should include the basic components of a patient’s medical history, including medication history.
  - In the absence of an approved form, many clinicians use various mnemonics to prompt thoroughness in taking the patient’s medical and medication history.
- Review the treating clinician’s order for PHT, if written.
  - Note: A specific order for PHT is not usually necessary because most facilities require nurses to take a patient’s medical and medication history as part of the standard admission procedure.
- Review the patient’s medical records to identify previous medication concerns to address or further research during PHT.
- If possible, prior to the interview, encourage the patient to bring current medications with them to ensure this information is collected accurately.
- Verify that the interview area is private, quiet, and comfortable for the patient.

Gather the following items prior to beginning the patient interview:

- Facility-approved method of documentation (e.g., patient history form or checklist, electronic medical record).
- Educational or reference materials.

How to Take a Patient Medication History

- Identify the patient using at least 2 identifiers, according to facility protocol.
- Establish privacy by closing the door to the patient’s room and/or drawing the curtain surrounding the patient’s bed.
- Introduce yourself to the patient and family member(s), if present; explain your clinical role; assess the coping ability of the patient/family and for knowledge deficits and anxiety regarding PHT.
  - Determine if the patient/family requires special considerations regarding communication (e.g., due to illiteracy, language barriers, or deafness); make arrangements to meet these needs if they are present.
  - Use professional certified medical interpreters, either in person or via phone, when language barriers exist.
- Explain the procedure for PHT and its purpose, including the importance of gathering information on the patient’s medication history; answer any questions and provide emotional support as needed.
- As appropriate, ask family members and other visitors to leave the patient’s room in order to promote privacy.
- Convey a caring and nonjudgmental attitude to the patient by developing a positive and accepting rapport (i.e., not being influenced by preconceptions or personal bias).
- Begin the interview by obtaining general biographical data, including the patient’s address, telephone number, sex, age, birthdate, birthplace, marital status, education, religion, race, nationality, cultural background, the names of other members of his or her household, and emergency contact information (see Nursing Practice & Skill ... Patient History Taking: Identifying General Information).
• Ask returning patients specific questions about topics discussed at prior visits (e.g., activities in which they are involved or health issues specific to them)
• Be aware of your own body language and facial expressions to avoid being interpreted as hurried, unpleasant, or judgmental; demonstrate respect, courtesy, empathy, and cultural sensitivity
  › Assure the patient/family that all information collected will be maintained in a secure manner and available only to clinicians responsible for the patient’s care
  › Consider the patient’s culture when performing a PHT, as necessary
• Ask the patient if he/she manages his/her medications, or if a family member or other caregiver assists with medications
  • Include the person assisting with medications in the patient interview, as available and appropriate
• Review all medications that the patient has brought with him/her
  • Be aware that the patient may not have brought in all medications, particularly over-the-counter medications
  • Check the name on the medication label to verify that it is prescribed to the patient
    – If the name on the label is not the patient’s, question the patient to determine if the patient is taking another person’s medications
  • Check the date that the medication was prescribed as this can assist in determining if this is a current medication and in evaluating patient adherence
• For each medication,
  – show the container to the patient
  – ask if he/she is taking the medication
  – ask when and how the patient is taking the medication to determine if the patient is taking the medication as prescribed
  › If the patient has transferred from another health care facility (e.g., long-term care facility), review with the patient/family the list of medications in the patient’s medical record
  › If the patient is a returning patient, review with the patient/family the medications listed in the patient’s previous medical record to determine accuracy and adherence
• Ask the patient/family if he/she is taking any medications not already discussed
  • Ask to list the names, route of administration, dose, frequency, duration of use, reason for taking the medication, and level of adherence to the prescribed medication
  • Ask specific questions about the use of over-the-counter medications/preparations, dietary supplements, and herbal medications
    – Ask about use of eye drops, nose drops, creams/ointments, and other non-oral medications as patients often only think of oral medication when asked
  • Ask questions specific to any chronic or ongoing medical concerns, or conditions common to the patient’s age group (e.g., ask an elderly patient if taking any medications to control cholesterol, ask a woman of childbearing age about use of contraceptive agents)
  • Ask about medications recently discontinued or that have had dosage adjustments
  • Ask about barriers to taking medications as prescribed (e.g., financial concerns, lack of transportation to retrieve medications, adverse drug events)
  • Ask if he/she has ever taken medication prescribed for someone else, including what medication was taken, how often, and for how long
  • Ask about medication sensitivities and allergies, including specific signs and symptoms he/she experienced
  • Ask if the patient/family has any concerns about current medications, and allow the patient/family to speak without interruption
    – Patients may use this time to discuss their concerns or struggles with taking medications (e.g., difficulty remembering what to take and when, trouble reading the labels, financial burden of medication costs), which can aid in evaluating patient adherence and safety with the medication regimen
    – Demonstrate empathy for the patient. Do not offer an opinion until the patient has been able to fully express and clearly identify his/her concerns
  • Allow an opportunity to ask questions and clarify information he/she has shared
  › Ask the names of all pharmacies the patient uses
  › As appropriate, include a facility pharmacist in the medication history taking process
• Summarize and restate the information taken on patient medication history as needed throughout the interview to confirm understanding and accuracy
 Allow adequate time to document following each patient interaction to be sure that detailed and accurate information is recorded in the patient’s medical record.

 Document all information gathered during PHT in the patient’s medical record, including the following:
  • Date and time of interview
  • A complete and detailed description of the patient’s medication history, including prescription medications, over-the-counter medications/preparations, dietary supplements, and herbal medications
    – Use quotation marks to denote the patient’s exact words
  • Any cultural information that is relevant to the patient’s care
  • Patient/family member education, including topics presented, response to education provided/discussed, plan for follow-up education, and details regarding any barriers to communication and/or techniques that promoted successful communication

**Other Interventions That May be Necessary Before, During, or After Taking a Patient Medication History**

  • Review all information received with a secondary source, as available
  • Contact the patient’s usual pharmacist to confirm medications, as needed
  • Provide the patient with an accurate list of all medications and dosing orders at the conclusion of the patient interaction (e.g., at the conclusion of the outpatient visit, at patient discharge)

**What to Expect After Taking a Patient Medication History**

  • Information gathered during PHT combined with the patient’s report of current signs and symptoms will guide the healthcare provider in performing a focused physical examination, ordering diagnostic tests, and creating an individualized treatment regimen
    • Information gathered during PHT combined with physical examination findings and test results will be used in diagnosing and treating the patient
    • Medication history will be taken into account and an individualized treatment plan will be created for the patient
  • All information disclosed by the patient will be maintained in strictest confidence to maintain patient privacy

**Red Flags**

  • Risk for polypharmacy is increased due to multiple healthcare providers caring for a single patient and advances in medication development, including the development of medications to treat current conditions as well as those that treat potential risk factors for disease
  • Failure to take a complete medication history increases patient risk for adverse drug events and medication errors
  • Failure to verify the use of alternative or complementary therapies can result in dangerous interactions between medications and the unknown agents
  • A lack of understanding of the patient’s cultural beliefs and customs can lead to miscues by the healthcare provider during PHT, resulting in patient discomfort, poor communication, and inadequate information (for more information, see the series of Evidence-Based Care Sheets on providing culturally competent care)
  • Failure to identify the patient’s beliefs regarding illness, response to medical advice, and medication use can lead to miscommunication and frustration in patient management

**What Do I Need to Tell the Patient/Patient’s Family?**

  • Prior to the interview for taking the medication history, encourage the patient to
    • bring all current medications to the appointment to be sure information is collected accurately
    • bring the names and contact information for all healthcare providers who currently prescribe or who have prescribed for the patient in the recent past
    • write down questions and concerns with the current medication regimen for discussion during the interview
    • identify the primary health and medication concerns at the beginning of the interview to be sure there is adequate time to discuss them
  • Advise the patient that all information collected is recorded in a secure and private medical record that is accessed only by his/her healthcare providers
References


