

Global Issues in Medication Management: Implications for Home Health Nurses



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Questions/Answers Questions facilitated by S. Breakwell, DNP, PHNA-BC

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Introduction:

Barbara Piskor

MPH, RN, NEA-BC, President of the International Home Care Nurses Organization



- Welcome from the International Home Care Nurses Organization (IHCNO) and Fairfield University's Marion Peckham Egan School of Nursing and Health Studies



Objectives: By the end of the webinar, participants will be able to:

- Discuss initiatives launched by the World Health Organization to increase medication safety globally
- Compare and contrast current issues regarding polypharmacy, medication reconciliation and medication concordance
- Describe current findings and preventive measures related to Adverse Drug Events
- Apply findings from international medication management exemplars to other home care practice settings
- Describe how the *International Guidelines for Home Healthcare Nursing* can be used to encourage professionalism and excellence in medication management

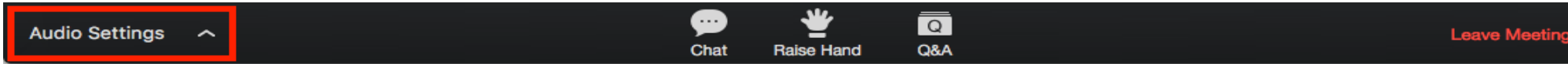
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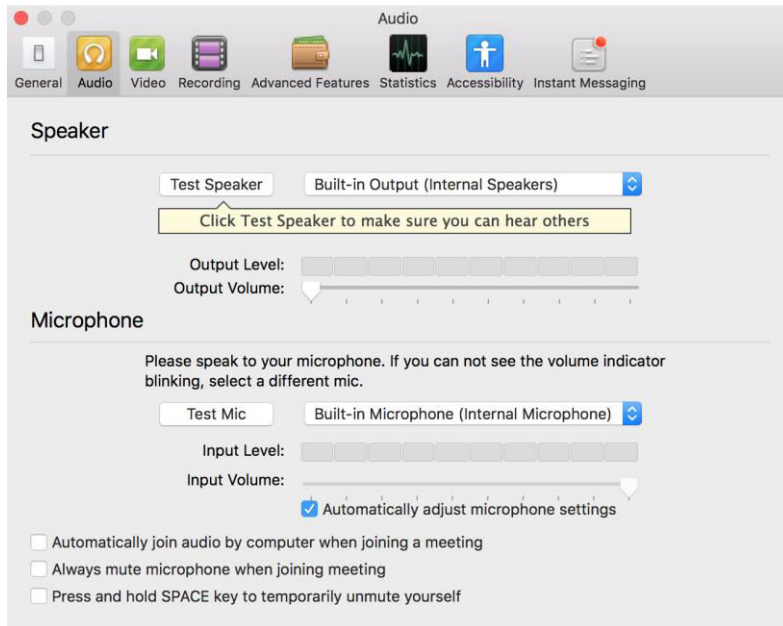
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1. Click Q&A to open the Q&A window.

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Part 1: Global Initiatives Past and Present

Presented by Diana R. Mager, DNP, RN-BC,
Associate Professor

Marion Peckham Egan School of Nursing and Health Studies
Fairfield University, CT USA



World Health Organization **High 5s Initiative** (2006)

Launched in 2006 as a 5-year project

High 5s Mission: to facilitate implementation and evaluation of standardized patient safety solutions within a global community to reduce patient safety problems; to develop and implement problem specific Standardized Operating Protocols (SOPs) in 5 areas

6 countries involved originally: Australia, Canada, Germany, the Netherlands, New Zealand, the United Kingdom, United States

Later joined by: France, Singapore and Trinidad and Tobago



High 5s Standardized Operating Protocols (SOPs)

- Goal was to develop 5 SOPs
 - Two were completed
 - One of two related to medication:
- SOP: Medication accuracy at transitions in care (led by Canada)



Results: Medication Accuracy at Care Transitions: **2013 Interim Report**

- Approximately 80 hospitals participated; not all responded to data collection surveys at the end of instituting the SOP
- Overall findings revealed that lack of staffing and lack of financial resources limited them from fully instituting the SOP

WHO: The High 5s Project December 2013. Retrieved from http://www.who.int/patientsafety/implementation/solutions/high5s/High5_Interim_Report.pdf?ua=1

- Overview: Guide developed by the WHO for multi-disciplinary audience, aimed at educators and students in healthcare fields to improve patient safety
 - How to identify safety risks and manage them
 - How to identify adverse events, report and analyze them
 - Teamwork, Communication
 - Building a Culture of patient safety
- Topic #11: Improving Medication Safety
 - Power point with written manuscript to accompany it

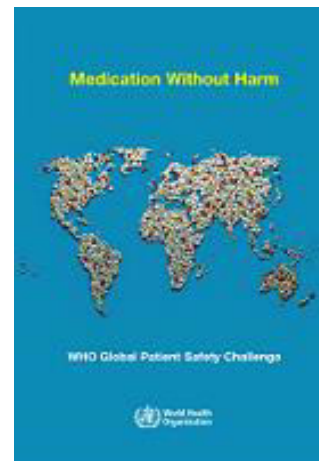
Available at:

http://apps.who.int/iris/bitstream/handle/10665/44641/9789241501958_eng.pdf;jsessionid=D5ADC9D31F3D2558BD81B3F30FB7BB0B?sequence=1

Global Patient Safety Challenge: Medication without Harm (2017)

- Downloadable at

<http://apps.who.int/iris/bitstream/handle/10665/255263/WHO-HIS-SDS-2017.6-eng.pdf?sequence=1>



- Medication Without Harm - Global Patient Safety Challenge on Medication Safety. Geneva: World Health Organization, 2017. License: CC BY-NC-SA 3.0 IGO

Global Patient Safety Challenge: Medication without Harm

- WHO Philosophy: “Errors are inevitable and are provoked in large part by weak health systems, and so the challenge is to reduce their frequency and impact” (Medications without Harm, p. 4)
- Challenge Goal: to decrease severe, avoidable medication-related harm by 50% over 5 years (2017-2021) by making improvements at each stage of the medication process:
 - Prescribing, dispensing, administering, monitoring and use
- Retrieved from: <http://www.who.int/patientsafety/policies/global-launch-medication-without-harm-Bonn/en/>

Global Safety Challenge: Facts

- Globally cost of medication errors estimated at \$42 billion (US dollars) annually
- Unsafe medication practices/errors: Leading cause of avoidable harm in healthcare worldwide
- People living in low income countries experience twice as many “disability-adjusted life years lost” due to medication harm than those in high income countries
- Errors occur mostly during medication administration but there are risks at other stages of the medication process



World Health
Organization

Global Safety Challenge: Objectives

- 1. Assess: scope and nature of avoidable harm; strengthen monitoring systems
- 2. Create framework for action aimed at patients, professionals and member states to facilitate improvements at all stages
- 3. Develop guidance, materials, technologies, and tools to support the setting up of safer medication use systems to reduce errors
- 4. Engage key stakeholders, partners and industry to raise awareness
- 5. Empower patients, families and carers to become actively involved and engaged in treatment or care decisions, ask questions, spot errors and effectively manage their medications.

(Medications without Harm, p. 6)



Global Safety Challenge: 4 Fundamental Problems

The Challenge actions are focused on four fundamental problems:

1. Patients: not always medication-wise; passive recipients; not empowered to make processes safer
2. Medicines: Complex, names and packaging can be confusing, unclear; look-alike/sound alike drugs are frequent sources of error
3. Health Care Professionals: sometimes prescribe or administer in ways that increase risk of harm
4. Systems/Practices: often complex, dysfunctional, and can be made more resilient to risk and harm if they are better designed

Global Safety Challenge: Actions

- Focus: Take early action and manage 3 key areas:
 - **High risk situations**
 - **Polypharmacy**
 - **Transitions of Care**
- Ask countries to convene experts, health care professionals, leaders, stakeholders and patient representatives
- WHO to facilitate the process through guidance, developing strategies and leaders, strengthening the quality of monitoring; promoting research, continuing to engage with regulatory agencies, developing ways to engage with and empower patients to safely manage their medications

(Medications without Harm, p. 8)

Part 2: General Medication Practices

Presented by Diana R. Mager, DNP, RN-BC,
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Fairfield University, CT USA



Adverse Drug Events (ADEs)

Definition: **harm** or **injury** caused from medical intervention related to a drug

ADEs can occur in any setting: acute, long term, outpatient and home care

Each year in the USA, ADE outpatient settings account for:

- Over 3.5 million physician office visits
- An estimated 1 million emergency department visits
- Approximately 125,000 hospital admissions



Office of Disease Prevention and Health Promotion (updated 8/24/18) Overview Adverse Drug Events. Retrieved from: <https://health.gov/hcq/ade.asp>



National ADE Action Plan

3 Key Drug Classes Targeted

- Anticoagulants
- Diabetes Agents
- Opioids
- Office of Disease Prevention and Health Promotion (updated 8/24/18) . National Action Plan for ADE Prevention Retrieved from: <https://health.gov/hcq/ade-action-plan.asp>

2 Root Causes Named for ADEs

Proximate Factors

- Older adults
- Multiple Providers
- Non Adherence
- Inherited factors
- Health Literacy
- Provider factors

Latent Factors

- Failure to incorporate Health Literacy principles
- Limited provider time
- Poor care coordination
- Formulary restrictions

WHO: Adverse Drug Reactions Monitoring (1971)

- International system for monitoring adverse drug reactions
- 131 countries are full members
- International data base that evaluates reports of reactions: currently: WHO Programme for International Drug Monitoring
- Actions may include changing published information about benefit-harm profile; restricting or amending use; or rarely withdrawing it from the market; commissioning further research; alerting the public
- <https://www.who-umc.org/safer-use-of-medicines/safer-use-of-medicines-the-basics/what-happens-to-reports/>

Institute for Health Improvement (IHI)

Not for Profit Organization



Leading the improvement of healthcare worldwide

Helps accelerate change by cultivating promising concepts for improving patient care and turning those ideas into action

Thousands of health care providers participate in IHI's work

(www.ihl.org)



What is Medication Reconciliation?

“...the process of creating the most accurate list possible of all medications a patient is taking — including drug name, dosage, frequency, and route — and comparing that list against the physician’s admission, transfer, and/or discharge orders, with the goal of providing correct medications to the patient at all transition points within the hospital”

Institute for Healthcare Improvement (2018) Medication Reconciliation to Prevent Adverse Drug Events. Retrieved from:

<http://www.ihp.org/Topics/ADEsMedicationReconciliation/Pages/default.aspx>



3-Steps in Medication Reconciliation Process:

- **Verification:** collection of the medication history
- **Clarification:** ensuring medications and doses are appropriate
- **Reconciliation:** documentation of changes in the orders

“Medication Reconciliation” was developed by a Nurse: Jane Justesen from the Luther Midelfort-Mayo Health System in Eau Claire, Wisconsin, as part of an IHI initiative

Challenges to Implementing Successful Medication Reconciliation Processes:



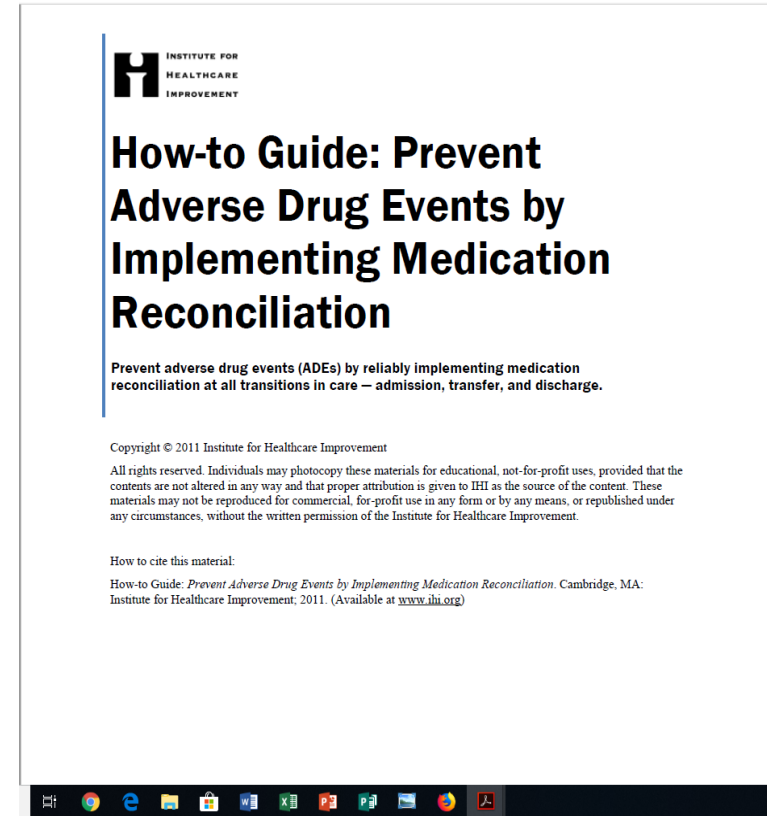
- No clear “owner” of the process
- No standardized process to ensure the medication list is available
- Provider reluctance to order medications they may be unfamiliar with
- Health care provider time constraints
- Focus on completing a form rather than on meeting intent of the intervention
- Patients may not know medication names, doses or frequencies
- Ensuring that the original medication list is linked to provider orders as the patient transitions through different levels of care

How-to Guide: *Prevent Adverse Drug Events by Implementing Medication Reconciliation*. Cambridge, MA: Institute for Healthcare Improvement; 2011. (Available at www.ihp.org)

Well-Designed Medication Reconciliation Processes Include:

- Uses a patient-centered approach
- Easy-to-complete process for all involved
- Minimizes the potential for drug interactions and therapeutic duplications by making the patient's list available to prescribers when they are prescribing
- Provides the patient with an up to date list of medications
- Ensures that other providers who need to know have information about changes in patient medication plans
- How-to Guide: *Prevent Adverse Drug Events by Implementing Medication Reconciliation*. Cambridge, MA: Institute for Healthcare Improvement; 2011. (Available at www.ihl.org)

Medication Reconciliation: Institute for Health Improvement



Access the guide at:

<http://www.ihp.org/resources/Pages/Tools/HowtoGuidePreventAdverseDrugEvents.aspx>

Medication Concordance

- Different than compliance/adherence
- It is an approach to medication prescribing: a negotiation between prescriber and patient, where the patients beliefs and wishes are respected, and an agreement is reached
- The negotiation includes whether, when, and how medications will be taken
- Concordance refers to the nature of the patient/clinician interaction, and not on the medication-taking behaviors of the patient



Medication Adherence/Compliance

- Adherence Definition: the extent to which a patient is able to follow recommendations for prescribed treatments.
- Adherence is a multi-dimensional issue; can occur at any phase of medication treatment
- Compliance Definition: extent to which a patient follows the recommendations of the prescriber; similar to adherence, but implies the prescriber is in control, and the patient is subservient.
- Effects of nonadherence can range from worsening of diseases, increased health care costs overall, to death

Hugtenburg, J. G., Timmers, L., Elders, P. J., Vervloet, M., & van Dijk, L. (2013). Definitions, variants, and causes of nonadherence with medication: a challenge for tailored interventions. *Patient Preference and Adherence*, 7, 675–682. <http://doi.org/10.2147/PPA.S29549>

Polypharmacy



- **Multiple definitions** within the literature **with little consensus**
- The majority focus on numbers of medications (> 5 or > 6)
- Some include length of time on a medication regimen
- Some include appropriateness of medications ordered

Masnoon, N., Shakib, S., Kalisch-Ellett, L., & Caughey, G. E. (2017). What is polypharmacy? A systematic review of definitions. *BMC Geriatrics*, 17, 230. <http://doi.org/10.1186/s12877-017-0621-2>

Medication Errors

- What constitutes a medication error? Multiple Definitions in Literature
- **National Council for Med Error Reporting and Prevention:** “any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of a healthcare provider, patient, or consumer. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing, order communication, product labelling, packaging, and nomenclature, compounding, dispensing, distribution, administration, education, monitoring, and use”
- WHO states after systematic literature review, over 26 definitions found

Classify Medication Errors Based On:



- Stage in the sequence of medication use: prescribing, transcribing, dispensing, administration, monitoring
- Types of error: wrong medication, dose, frequency, administration, route, or patient

Rates of reported medication errors vary greatly depending on how “errors” is defined, and due to varied medication error classification systems

WHO (2016) Medication Errors. Technical Series on Safer Primary Care. Retrieved from <http://apps.who.int/iris/bitstream/handle/10665/252274/9789241511643-eng.pdf?sequence=1>

How to **Decrease** Medication Errors

- Systems approach to the problem
- Medication reviews and reconciliation
- Computerized and automated information systems
- Education (provider and patient)
- Decreasing polypharmacy

Best success with a multi-faceted approach to improve medication practices

Part 3: Global Exemplars in Medication Management

The IHCNO wishes to thank our international contributors for sharing exemplars:

- ❖ Ralueke Ekezie, CEO, Blue Torch Home Care Limited, Nigeria
- ❖ Dr. Alice Tso, DBA, MHA, BA, RN, RM, Onward Home Care Owner, Hong Kong
- ❖ Elena Nikolaidou, Community Nurse, Manager Home Health Nursing Services, Cyprus



Ralueke Ekezie RN, RON, Owner and CEO, Blue Torch Home Care Limited, Nigeria



- **Major Concern:** Prescription renewals and self prescribing
Reluctance to visit the hospital
No link between public hospital physicians and patient after discharged home
No means of communication if medications run out before appointment dates
- **Results:**
Less medication controls, pharmacies sell medications to clients
Use of previous prescriptions to buy medications over the counter
Use of family-member prescribers
- **Response:**
Home Care referral helps with communication between physician and patient
Educate about issues surrounding self medication and family member prescriptions
Developed an agency drug chart where all prescribed drugs are recorded

Dr. Alice Tso, DBA, MHA, BA, RN, RM, Onward Home Care Owner, Hong Kong



- **Major Concern:**

- Safe Self-Administration of medications by patients at home

- **Results:**

- Difficult to verify which drugs and doses the patients are taking

- Filling medication boxes can lead to errors

- Unit dose packs are preferred but are not yet available

- **Response:**

- Reform needed to change ordering to unit dose systems

- Local professional pharmacy associations exploring more solutions

Elena Nikolaidou, Community Nurse, Manager Home Health Nursing Services, Cyprus



- **Major Concern:** Medication Errors at home
 - Patients are older, live with family and/or carer
 - Carer may not speak native language of the patient
 - Many drugs expired
- **Results:**
 - Insufficient communication
 - Medication errors
 - Nursing spending extended time on medication management
- **Response:**
 - Increasing time spent on medication management
 - Increasing number of visits
 - Using written guidelines in English for the carers

Summary

- Medication management is a global issue, regardless of healthcare setting, provider role, or country of origin.
- Numerous initiatives through the World Health Organization, the Institute for Healthcare Improvement, and others, have attempted to alleviate medication errors, adverse events, access, and non-adherence.
- The multi-faceted nature and complexity of contributing factors in medication management create challenges for both patients and providers.
- Home care nurses play a **pivotal** role in this endeavor:
 - Educating patients and their families
 - Advocating for simple, clear and appropriate, patient-centered medication orders
 - Conducting thorough medication reconciliation and alleviating discrepancies
 - Using leadership abilities to promote change at system and policy levels

Part 4: International Guidelines for Home Health Nursing (2017)

Presented by Mary Narayan, MSN, RN, HHCNS-BC, CTN-A, COS-C




mary.narayan@ihcno.org

International Guidelines for Home Health Nursing

<https://ihcno.org/>

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International Guidelines for Home Health Nursing

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Guideline Topics

1. Assessment
2. Diagnosis (Problem)
3. Goal
4. Planning
5. Implementation
6. Evaluation
7. Ethics
8. Education
9. Evidence-Based Practice/Research
10. Quality of Practice
11. Communication
12. Leadership
13. Collaboration
14. Professional Practice Evaluation
15. Resource Utilization
16. Environmental Health
17. Cultural Competence

Guidelines with Interpretive Statements

#/Topic	Guideline	Interpretative Statements
1 Assessment	The home health nurse performs a comprehensive assessment of the patient, collecting data that affects the patient's health and well-being.	Home health nurses are frequently the sole health care provider in the patient's home. Patients in home care are dependent on nurses to identify all the factors that could affect their health outcomes/goals. Nurses must assess the patient's health status and needs holistically using a systematic and ongoing process. Depending on the patient's unique situation, this comprehensive assessment may need to include physical, functional, nutritional, psychosocial, emotional, behavioral, cognitive, sexual, and spiritual assessments. The nurse may also need to evaluate the patient's medication plan, learning needs, cultural preferences, caregiver needs, financial needs, home environment and community resources that may affect the care plan.
2 Diagnosis	The home health nurse analyzes the assessment data to determine the patient's problems and needs.	The patient's home health problems and needs are based on the patient's medical diagnoses and other factors identified during the assessment that could affect the patient's health and well-being. (Examples of other factors include insufficient funds for medications and symptoms that are bothersome to the patient, such as trouble sleeping.) The nurse develops a list of problems and needs, which are sometimes identified as "actual or potential problems" or "nursing diagnoses."
3 Goal Identification	The home health nurse identifies desired care goals individualized to the patient.	Once problems and needs are identified, the nurse discusses them with the patient, family, and other caregivers. Together, they should determine goals that honor the patient's desires, priorities and preferences. (Goals are also known as "expected outcomes.") Each goal should be SMART (specific, measurable, achievable, relevant and time-defined).

Guidelines 1- 6

1 Assessment	The home health nurse performs a comprehensive assessment of the patient, collecting data that affects the patient's health and well-being.
2 Diagnosis	The home health nurse analyzes the assessment data to determine the patient's problems and needs.
3 Goal Identification	The home health nurse identifies desired care goals individualized to the patient.
4 Planning	The home health nurse develops a plan that prescribes strategies and interventions to attain the desired goals.
5 Implementation	The home health nurse implements the individualized patient plan of care.
6 Evaluation	The home health nurse evaluates the patient's progress toward the desired goals.

Guidelines 7 - 11

7 Ethics	The home health nurse practices ethically.
8 Education	The home health nurse seeks the knowledge and skills needed for providing excellent care to patients in their homes.
9 Evidence-Based Practice/Research	The home health nurse integrates evidence and research findings into practice.
10 Quality of Practice	The home health nurse contributes to quality nursing practice.
11 Communication	The home health nurse communicates effectively.
12 Leadership	The home health nurse demonstrates leadership.

Guidelines 13 - 17

13 Collaboration	The home health nurse collaborates with the patient's physician/ healthcare provider, other healthcare team members and with the patient/ family/caregivers.
14 Professional Practice Evaluation	The home health nurse evaluates one's own practice in relation to standards, guidelines, statutes and regulations.
15 Resource Utilization	The home health nurse uses resources to plan and provide safe, effective and financially responsible nursing services.
16 Environmental Health	The home health nurse practices in an environmentally safe and healthy manner.
17 Cultural Competence	The home health nurse practices in a manner that is congruent with cultural and inclusion principles.



#/Topic	Guideline	Medication Implications
1 Assessment	The home health nurse performs a comprehensive assessment of the patient, collecting data that affects the patient's health and well-being.	At transition to home healthcare, and intermittently as need, perform a comprehensive medication assessment, including: <ul style="list-style-type: none"> • Medication reconciliation and identifying duplicate therapy and polypharmacy that could be simplified • High risk drugs requiring extra teaching and monitoring • Ineffective drug therapy (meds not achieving their purpose) • Drug/food interactions • Ineffective plan for regular drug administration of right drug, right dose, right time, right method • Patient knowledge of side effects vs early signs of adverse effects • Patient cognitive, visual, and manual deficits affecting med adherence. • Factors that affect adherence, such as health literacy, side effects, cost, renewal issues
2 Diagnosis	The home health nurse analyzes the assessment data to determine the patient's problems and needs.	Identify actual and potential medication problems, such as ineffective drug therapy, patient knowledge deficits, barriers to adherence, unmanageably complex medication regimes, etc.
3 Goal Identification	The home health nurse identifies desired care goals individualized to the patient.	Develop a goal for each type of medication problem to assure a safe, effective and acceptable medication plan.
4 Planning	The home health nurse develops a plan that prescribes strategies and interventions to attain the desired goals.	Brainstorm strategies with the patient that will close the gap between the patient's actual/potential problems and achieving medication goals.
5 Implementation	The home health nurse implements the individualized patient plan of care.	Administer meds. Make referrals to pharmacists, medication assistance programs, etc., as needed. Provide teaching and coaching to engage patient in safe medication practices. Communicate with provider about medication issues.
6 Evaluation	The home health nurse evaluates the patient's progress toward the desired goals.	Reassess using the same criteria and questions as at admission. Use teach-back and demonstration evaluation strategies.

#/Topic	Guideline	Medication Implications
7 Ethics	The home health nurse practices ethically.	Understand medication assessment and management as a crucial element within the nurse's ethical responsibilities as part of promoting patient health.
8 Education	The home health nurse seeks the knowledge and skills needed for providing excellent care to patients in their homes.	Recognize that nurses need ongoing learning to maintain the knowledge and skills needed to help patients use medications safely and effectively. Take responsibility for acquiring needed medication knowledge and assessment/management skills.
9 Evidence-Based Practice/Research	The home health nurse integrates evidence and research findings into practice.	When seeking to enhance medication management knowledge and skills, use research/evidenced based resources or guidelines based on scientific findings.
10 Quality of Practice	The home health nurse contributes to quality nursing practice.	Include improving nurses' medication management knowledge and skills in agency quality improvement programs.
11 Communication	The home health nurse communicates effectively.	Communicate effectively with patients, families, physicians/providers and the health care team about medication issues. Use communication strategies such as therapeutic communication, teaching-learning communication strategies, and SBAR communication.
12 Leadership	The home health nurse demonstrates leadership.	Lead by example: Be a role-model for conducting good medication assessments/reconciliations/management and choosing interventions that successfully help patients adhere to safe and effective medication regimes. Advocate for agency-wide medication management quality improvement programs.

#/Topic	Guideline	Medication Implications
13 Collaboration	The home health nurse collaborates with the patient's physician/healthcare provider, other healthcare team members and with the patient/family/caregivers.	Collaborate with the patient/caregivers, physician/care provider and pharmacist to assure the patient has a safe, effective medication regime that makes patient adherence easy.
14 Professional Practice Evaluation	The home health nurse evaluates one's own practice in relation to standards, guidelines, statutes and regulations.	Self-evaluate for medication practices that are congruent with evidence-based medication guidelines (Examples: IHI, 2011; WHO, 2011)
15 Resource Utilization	The home health nurse uses resources to plan and provide safe, effective and financially responsible nursing services.	Promote safe and effective medications and medication practices at the least cost.
16 Environmental Health	The home health nurse practices in an environmentally safe and healthy manner.	Stay up-to-date about best practices for disposing of medications and medication devices in nurse's geographic area.
17 Cultural Competence	The home health nurse practices in a manner that is congruent with cultural and inclusion principles.	Investigate the patient's cultural needs and preferences and how they might affect the medication plan.

Current IHCNO Endeavors

- Join the International Home Care Nurses Organization (IHCNO) at <https://ihcno.org/>

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International Activity

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- In addition, a recorded version as well as the power points are available at <https://ihcno.org/>

IHCNO wishes to thank the webinar committee:
Co-Chairs Diana R. Mager & Susan Breakwell
Members Barbara Piskor, Mary Narayan &
Denise McEnroe-Petitte & Joie Glenn

Questions facilitated by S. Breakwell, DNP, PHNA-BC

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