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**EDUCATIONAL SESSION ABSTRACT**  
**2014 ASHP Summer Meeting**  
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**101**

**Multi-Faceted Improvement Initiative to Detect and Improve Prevention of Severe Hypoglycemia**

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Hypoglycemia is a recognized problem common among hospitalized diabetic patients and is associated with increased length of stay and mortality. In 2008, BJC HealthCare (BJC), a diverse 12 hospital system, commenced a system-wide initiative to eliminate adverse drug events (ADEs). After implementation of an automated, comprehensive adverse drug event surveillance system, baseline data collection and analysis revealed severe hypoglycemia events, defined as blood glucose <40 mg/dL, represented 75% of all ADEs and was subsequently targeted for immediate intervention. A pharmacist lead, multi-disciplinary task force was formed and subsequently designed and implemented an innovative, interdisciplinary systematic approach to reduce severe hypoglycemia. It consisted of identifying events by hospital and unit, elevating awareness, implementing foundational best-practices, collecting hospital specific causative factors, and ultimately, implementing informed interventions. During their improvement initiative, they optimized the use of automation to identify harm and collect causative factors, created quality scorecards, and implemented of a system-wide process to disseminate the results to inform local interventions. The BJC Hypoglycemia Task Force reduced system-wide hypoglycemia rates while saving time and resources. In this interactive activity, attendees will also apply key lessons-learned by BJC HealthCare from their system-wide initiative to practice cases of patients who experienced severe hypoglycemia. BJC Healthcare is the recipient of the 2013 ASHP Research and Education Foundation Award for Excellence in Medication-Use Safety.

**Learning Objectives:**

1. Develop a high-level strategy to identify, track, and raise awareness of adverse drug events in a hospital or health system
2. Demonstrate how to modify the IHI Trigger Tool to collect adverse drug event causative factors in any hospital setting.
3. Formulate a plan to prioritize hypoglycemia mitigation strategies in a hospital or health system.

**Self-Assessment Questions: (True or False)**

1. A strategy of interpreting internal data, raising institutional awareness, investigating events to inform interventions, and gaining multi-disciplinary expert clinical insight is an efficient and effective way to improve medication safety.

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2. It is best to delay implementation of best practices until a complete understanding of the causes of adverse drug events is known.
3. Health-Systems should seek innovative ways to utilize Clinical Decision Support tools to identify patients at high-risk of adverse drug events and develop mitigation strategies.

**Answers:** 1. True; 2. False; 3. True

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**The Top ISMP Medication Safety Issues for 2014**

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Although hospitals have focused on, and improved, medication safety in the past 10 years, there is still significant harm from medications occurring in hospital patients today. Some medication safety issues are reoccurring, while others have appeared more significant in the past year. As a federally-certified patient safety organization (PSO), ISMP receives confidential reports of medication errors and vaccine errors nationally from its own reporting programs, FDA, on-site medication safety assessments in hospitals, and other sources. This presentation will discuss the top medication safety issues based on patient harm and frequency, as determined by ISMP from submitted medication error reports it received, and on-site medication safety assessments conducted by ISMP in hospitals over the past year. Effective strategies will be presented for improving medication safety for these top issues. In addition, ISMP has developed six Targeted Medication Safety Best Practices for Hospitals for 2014-15. The purpose of specifically highlighting these best practices is to identify, inspire, and mobilize widespread, national adoption of consensus-based best practices on specific medication safety issues that continue to cause fatal and harmful errors in patients, despite repeated warnings in ISMP publications. These best practices are realistic practices, already adopted by many organizations, upon which hospitals can focus their medication safety efforts over the next two years. They are specifically designed to focus on the hospital practice setting, although some may be applicable to other healthcare settings. All best practices have been reviewed by an external expert advisory panel and approved by the ISMP Board of Trustees. These best practices will be presented.

**Learning Objectives:**

1. List the top three medication safety issues reported to ISMP in the past year with one successful practice to mitigate the error potential for each.
2. List the six 2014-15 Targeted Medication Safety Best Practices for Hospitals.
3. Cite at least one website with guidelines that can improve medication safety.

**Self-Assessment Questions:** (True or False)

1. What is the leading drug class in terms of the number of reported harmful errors to ISMP in the last year?
  - a. Insulins

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- b. Opioids
  - c. Anticoagulants
  - d. Neuromuscular Blocking Agents.
2. The most effective strategy for reducing look-alike, sound alike errors is related to labeling of medication storage areas. (True or False)
  3. One of the highest reported categories of medication errors are a result of a drug shortage. (True or False)
  4. As long as the pharmacy dispenses oral solutions in oral syringes, the potential for a serious medication error is eliminated. (True or False)
  5. ISMP is now recommending the need to standardize the measurement and communication of patient weight using only units of measure in the metric system. (True or False)

**Answers:** 1. (B); 2. (F); 3. (T); 4. (F) 5. (T)

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**105-1**

**Creating a Culture of Safety**

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Many organizations focus on results rather than taking a deeper dive to explore the behaviors that drive results. Understanding these behaviors and the experiences that have led to these behaviors is key to culture change. Strategies for examining and changing experiences will be explored.

**Learning Objectives:**

1. Define a safety culture.
2. Discuss strategies for changing culture.
3. Determine ways to develop a learning culture.

**Self -Assessment Questions:** (True or False)

1. Culture is the collection of behaviors that drive organizational results.
2. In order to have a learning culture people must be treated fairly when an error occurs and reporting must be valued.
3. A learning culture is key to change within an organization.

**Answers:** 1. True; 2. True; 3. True

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**108-1**

**Building and Leading an Interprofessional Medication Safety Team**

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“High reliability is the study of human performance in complex systems and includes: systems thinking, analysis of serious safety events, techniques to minimize the probability of errors, structured leadership methods to build and reinforce accountability and tactics to move individuals to a culture where safety is the core value that drives all aspects of the organization. Many healthcare systems are adopting concepts used by High Reliability Organizations like aviation, nuclear power, and others, to meet production requirements while experiencing fewer than their fair share of accidents or events. This program will focus on those concepts and tools used in a variety of High Reliability Organizations to improve reliability while creating a culture of safety built around focused leadership, standardized processes and procedures, and above all else, teamwork.”

**Learning Objectives:**

1. Review statistics of harm in healthcare.
2. Describe the attributes/principles of a Highly Reliable Organization (HRO) and their application in high-risk, high-consequence environments including healthcare.
3. Discuss the concepts of Collegial Interactive Teamwork (CIT) and its contribution to the establishment of a reliability and safety culture in an HRO.

**Self-Assessment Questions:**

1. *The Journal of Patient Safety* stated that preventable harm was the fifth leading cause of death in the United States.
2. When describing Weick and Sutcliffe’s principles of High Reliability Organizations (HRO), preoccupation with failure means paying attention to what’s happening on the front line.
3. Which of the following is not a tool of CITs?
  - A. Situational Awareness
  - B. Speaking up for Safety
  - C. Smiling and Greeting Others
  - D. Critical Thinking

**Answers:** 1. False; 2. False; 3. (C)

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**109-1**

**Best Practices for Handling U-500 Insulin and Other New Insulin Concentrations**

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Use of concentrated insulin human regular (U-500) is becoming increasingly prevalent due to an escalating number of obese patients with severe insulin resistance. Due to the unavailability of a U-500 insulin syringe, providers rely on measuring doses of U-500 insulin with a U-100 syringe and teaching patients to communicate doses in “syringe units”. Often, patients do not understand the difference between U-100 and U-500, and inaccurately communicate their actual dose when admitted to the hospital. Program examines approach taken by multi-hospital health-system to identify and address potential for error with inpatient use of U-500 insulin. Will also review new insulin concentrations, currently in clinical trials, including clinical benefit and patient safety risks.

**Learning Objectives:**

1. Review the pharmacology and patient safety risks associated with utilization of U-500 insulin.
2. Review variety of tools, resources, and measures to demonstrate improved outcomes and reduced risk associated with U-500 insulin.
3. Discuss properties of new U-200 and U-300 products and their potential safety challenges in acute care.

**Self-Assessment Questions:**

1. Mr. Smith takes 30 Units of U-500 insulin TID with meals. To administer his dose he draws his U-500 insulin up to the “30 unit” mark on a U-100 insulin syringe. The 30 unit marking is equal to 0.3 mL. What is Mr. Smith’s actual dose of U-500 insulin?
  - a. 15 Units
  - b. 30 Units
  - c. 150 Units
  - d. 300 Units
  
2. True or False. Successful error reduction plans include a multitude of mitigation strategies that are layered to gain maximum effect.
  - a. TRUE
  - b. FALSE

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3. In clinical trials, ultra-long acting insulins have demonstrated decreased incidence of nocturnal hypoglycemia.

- a. TRUE
- b. FALSE

**Answers:** 1. (c); 2. (a); 3. (a)



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**109-2**

**Best Practices – Addressing Drug Shortages**

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Drug shortages pose unique medication safety challenges. A potential framework for addressing these challenges is to use a disaster planning framework. Evaluate necessary responses to drug shortages by evaluating shortage type. Prepare by developing a plan and building a team that can be flexible and creative. Consider building a team using a checklist to identify the right team member for key decision points and assignments related to addressing drug shortages.

**Learning Objectives:**

1. Evaluate specific medication safety best practice examples that could be implemented at your practice setting.
2. Apply medication safety strategies to a practice case.

**Self-Assessment Questions:**

1. Drug shortages pose unique safety challenges as each situation is different.
2. Rationing decisions are best made by a single person managing the drug shortage.
3. A best practice in addressing drug shortages is to build a team and a framework for responding.

**Answers:** 1. True; 2. False; 3. True

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**109-3**

**Best Practices in Medication Safety: Maintaining a Culture of Safety**

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An organizational culture of safety is fundamental to achieving medication safety – the prevention of patient harm related to medication use. The characteristics of a patient safety culture are described, along with guiding principles which are beneficial for enhancing and maintaining a strong safety culture. Tactics are presented to enhance the culture of safety, with examples of application at different organizational levels.

**Learning Objectives:**

1. Describe the characteristics of a culture of safety.
2. List three guiding principles to integrate a culture of safety into daily work.
3. Identify three tactics which may be used to enhance the culture of safety.

**Self-Assessment Questions:**

1. Characteristics of a patient safety culture include a strong punitive error reporting program, limited communication built on hierarchical power, and lack of teamwork.
2. Modeling, hardwiring communication, and system design are guiding principles which may be used to integrate a culture of safety into daily work.
3. A culture of safety may be enhanced by employing daily safety rounds and huddles, mentoring, and creating a non-punitive, user-friendly safety event reporting system.

Answers: 1. False; 2. True; 3. True

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**111**

**Results from the ASHP 2013 National Survey on Informatics, Technology and Automation: Where Do We Stand?**

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Gumpper, K.F.

The medication use process (MUP) is the context within which the profession of pharmacy focuses its efforts to ensure safe and efficacious medication therapy. Information technology and automation play key roles in the MUP, supporting safe and efficient medication dispensing and distribution. This presentation provides an expanded update of the first national survey of pharmacy informatics within U.S. hospitals and health systems. Attendees will learn the status of a wide array of technology and automation devices as well as processes that rely on these tools to support pharmacists' activities. Comparisons will be drawn to 2007 data as well as to a separate 2013 publication. Attendees will be able to compare and contrast their institution with peer institutions as well as hospitals of other types and size. Topics include but are not limited to Meaningful Use of EHRs, CPOE and CDSS, BCMA, smart pumps, and ePedigree.

**Learning Objectives:**

1. Name two overall trends in adoption and usage of informatics initiatives and technologies occurring on the national level.
2. Describe how the presence or absence of specific technologies and may affect the operations of the pharmacy department and/or the medication-use process.
3. Explain how such data may be used to leverage informatics initiatives in your setting.

**Self-Assessment Questions:** (True or False)

1. CPOE adoption has plateaued across all hospital types and sizes.
2. All states are expected to comply with the California ePedigree law by 2017.
3. Pharmacy managers can use the results of this survey to support their argument for additional pharmacy information technology staff.

**Answers:** 1. False 2. False; 3. True

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**114-1**

**Knowledge Management – Concepts and Application**

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As a core component of Meaningful Use Stage II requirements, enabling a user to review the attributes as indicated for all clinical decision support resources implies the use of a structured library of these knowledge assets. We will build a basic knowledge management data repository during the session. Bring your laptops.

**Learning Objectives:**

1. Compose a knowledge repository.
2. Choose relevant components of the available repository categories for your organizational model.
3. Extend the thought process to a less basic model of the knowledge repository.

**Self-Assessment Questions:** (True or False)

1. Basic knowledge repositories are difficult to create.
2. Knowledge repositories are useful for supporting Meaningful Use Stage II core requirements.
3. Clinical decision support should be reviewed periodically to validate content.

**Answers:** 1. False; 2. True; 3. True

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**117-1**

**Standardizing Clinical Pharmacy Documentation**

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Clinical pharmacy documentation is an activity that is vital to the success of our profession. Recommendations from the Pharmacy Practice Model Initiative urge pharmacists to ensure appropriate tools are available and systems are in place to efficiently document pharmacist interventions in the electronic health record (EHR). Further, these systems should link pharmacist interventions to improved patient outcomes. SNOMED-CT is a medical terminology vocabulary used to document clinical information. Requirements set forth by the federal government require healthcare professionals to use SNOMED-CT to document clinical information that is transferrable through health information exchanges (HIEs). The Pharmacy HIT Collaborative, a coalition of pharmacy associations dedicated to ensure pharmacists are integrated in the national health information exchange framework, have developed SNOMED-CT documentation codes for pharmaceutical care. These codes should be used for systematic documentation of pharmacy services in the EHR and correlated with improved patient outcomes to justify pharmacy services.

**Learning Objectives:**

1. Discuss coding vocabularies and taxonomies associated with structured documentation of pharmacy services.
2. Examine ongoing efforts to standardize the documentation of pharmacy services across the profession.

**Self-Assessment Questions:**

1. Which of the following are objectives of goals of the Pharmacy HIT Collaborative?
  - A. Identify minimum data set and functional EHR requirements for the delivery, documentation, and billing of pharmacist-provided services
  - B. Promote the meaningful use of EHRs that supports safe and effective medication use, continuity of care, and access to pharmacist services in conjunction with other members of the patient care team
  - C. Ensure HIT infrastructure supports medication therapy management services
  - D. All of the above
2. Which of the following are coding terminologies required to be documented in certified-EHRs per Meaningful Use Stage 2 standards?

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- A. LOINC
  - B. RxNorm
  - C. SNOMED-CT
  - D. All of the above
3. Which of the following is an example of a process measure?
- A. Thirty-day readmission rate
  - B. All-cause mortality in pneumonia patients
  - C. Percentage of patients who received admission medication reconciliation
  - D. Percentage of patients rating that they were always educated about side effects before receiving a new medication in the hospital

**Answers:** 1. (D); 2. (D); 3. (C)

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**117-2**

**Leveraging the Electronic Health Record (EHR) to Meet Advanced Practice Expectations**

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Structured documentation is a key component in leveraging an electronic health record (EHR) to meet advanced practice expectations and ultimately improve patient outcomes. As healthcare reimbursement shifts from a traditional fee-for-service to a pay-for-performance model, it is imperative to demonstrate the positive impact pharmacy services can have on patient outcomes and subsequently reimbursement. One center's department of pharmacy utilized structured documentation as part of a strategic plan to implement practice model improvements and demonstrate their role in improving quality of care. Structured documentation captured process metrics that were carefully selected to demonstrate the relationship between pharmaceutical care and vital outcome metrics. Additionally, it served as a tool to direct the efforts of frontline pharmacy staff and to streamline workflows. Increased efficiency allows for reallocation of resources towards other activities, providing a secondary impact on these outcome measures. Improvements in various process and outcome metrics were immediately identified and have demonstrated sustained improvements over time. Future opportunities exist for standardizing documentation between practice sites across the country, ultimately leading to improvements in interoperability between EHRs in various healthcare settings.

**Learning Objectives:**

1. Demonstrate the importance of structured documentation for the analysis of pharmacy services.
2. Determine how to leverage data analytics to best assess the impact of the pharmacy team on patient outcomes.
3. Describe one institution's experience at successful implementation and identify ways such successes can be applied in your setting.

**Self-Assessment Questions:**

1. Structured documentation has the potential to do which of the following?
  - A. Decrease time pharmacists are spending on administrative tasks
  - B. Provide data so process metrics can be compared to outcome measures
  - C. Track departmental performance on key initiatives
  - D. All of the above
2. Which of the following inpatient metrics is not publically reported?

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- A. Amount of patients that were always aware of a new medication's indication and potential side effects
  - B. Institution specific antibiotic resistance rates
  - C. Amount of patients that developed a VTE that did not receive appropriate prophylaxis
  - D. 30-day readmission rates for heart failure
3. Which of the following concepts are key points for designing a system that utilizes structured documentation?
- A. You have to be an IT pharmacist to help design a system that utilizes structured documentation
  - B. Ensure structured documentation hardwires workflows, collects data and measures strategic process outcomes
  - C. Create goals up front and design the system to meet them
  - D. B and C

**Answers:** 1. (D); 2. (B); 3. (D)



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**New Drugs in Primary Care 2014**

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As drug therapy experts, pharmacists are often called upon for facts and opinions about recently introduced drugs. New drugs are introduced at a rate that exceeds the reading time of many busy practitioners. This presentation is intended to provide a broad-based discussion and objective information about new drug options. Drugs that will be discussed include, but are not limited to: canagliflozin, dapagliflozin, fluticasone/vilanterol, umeclidinium/vilanterol, vortioxetine, levomilnacipran, sofosbuvir, simeprevir, conjugated estrogens/bazedoxifene, doxylamine/pyridoxine, icosapent ethyl, alogliptin, ospemifene, dextromethorphan/quinidine.

**Learning Objectives:**

1. Assess new trends in drug development.
2. Understand indications, pharmacology, adverse effects and dosing of the products discussed.
3. Determine the role these products will play in the participants' practice.
4. Evaluate the economic implications of these choices.
5. Examine products in the short-term pipeline that will be important to the practice of the participants.

**Self-Assessment Questions:**

1. The dosing device for Breo® and Anoro® is called?
  - A. Aerochamber
  - B. Discus
  - C. Ellipta
  - D. Forspiro
2. The mechanism of action of sofosbuvir involves:
  - A. Polymerase inhibition
  - B. Protease inhibition
  - C. Fusion protein inhibition
  - D. Neuraminidase inhibition
3. The pharmaceutical has a labeled indication for dyspareunia:
  - A. bazedoxifene
  - B. tamoxifene
  - C. vortioxetine
  - D. ospemifene

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4. Which blood sugar would alogliptin influence the most?
  - A. fasting
  - B. post-prandial
  - C. bedtime
  - D. 3am measurement
5. Which liver enzyme system is blocked by small doses of quinidine?
  - A. 1A2
  - B. 3A4
  - C. 2D6
  - D. 2C19

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**120**

**Survey Says! An Interactive Approach to Chronic Pain**

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Chronic pain affects an estimated 125 million persons in the US. As treatment options become more diverse and complicated, pharmacists are uniquely poised to play an integral role in the care of these patients. This 90 minute session will review fifteen of the most pressing / current issues in a fun, game-style format. Topics will include CR / LA opioids, methadone, pharmacogenomics, NSAIDs, peri-operative analgesia, Project Lazarus, and others. Participants will leave with clinic pearls directly applicable to their practice, regardless of setting.

**Learning Objectives:**

1. Given an actual or simulated patient, determine the most likely pathogenesis of a pain complaint.
2. Recommend a rational analgesic regimen, and justify the selection of each element of the pharmaceutical plan.
3. Recommend monitoring parameters for both therapeutic effectiveness and potential toxicity, and modify the therapeutic plan as necessary.

**Self-Assessment Questions:**

1. The phenomenon of a normally PAINFUL stimuli producing an exaggerated PAINFUL response is BEST defined as:
  - A. Hyperalgesia
  - B. Hyperesthesia
  - C. Paresthesia
  - D. Allodynia
2. Which two opioids may have CLINICALLY SIGNIFICANT decreases in analgesic activity with the INHIBITION of CYP 2D6?
  - A. oxycodone and hydromorphone
  - B. hydrocodone and fentanyl
  - C. codeine and tramadol
  - D. methadone and levorphanol
3. Approximately how much parenteral (IV) morphine would be required to equal 30mg of orally administered morphine?

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- A. 10mg
- B. 15mg
- C. 30mg
- D. 60mg

**Answers:** 1. (A); 2. (C); 3. (A)

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**122**

**Pharmacogenetics in Action: From Guidelines to Practice**

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In recent years, clinical pharmacogenomics has emerged as an umbrella term defined as 'using genetic testing to improve the clinical outcomes of pharmacotherapy.' As new technologies (e.g., micro-arrays, whole exome sequencing, next-generation sequencing) find their way into more health system settings, we anticipate more opportunities to improve drug disposition and response while reducing toxicity and harm. These benefits are most clear with respect to adverse drug reactions. Preventable adverse drug reactions are a leading cause of morbidity and mortality in the United States and represent a major social and financial burden. Should pharmacogenomics be able to make even small inroads into this area, it would clearly represent a great financial and ethical benefit to health systems, providers, and the health communities they serve. Substantial literature has emerged over recent years showing the potential of pharmacogenomics to accelerate the realization of personalized medicine, using therapeutic regimens tailored to each individual's genetic profile. Despite such persistent press, pharmacogenomics has had little utilization in clinical practice outside of academic settings; however, there are indications that a more pragmatic view is emerging – one that could align pharmacogenomics with broader health system strategies aimed at reducing costs, improving care, and improving health.

**Learning Objectives:**

1. Provide an overview of the CPIC consortium and the CPIC guidelines.
2. Craft justification for hiring a pharmacogenetic pharmacist in your setting.
3. Describe the lessons learned from implementing a pharmacogenetic service in an integrated health-system model.
4. Describe the lessons learned from setting up a pre-emptive pharmacogenetic service model.

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**125**

**Creating A Powerful Executive Presence**

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This session is for anyone wanting to improve his or her executive presence. It doesn't matter if you work in the central pharmacy or in the boardroom of a large corporation, attention to your executive presence will help you become more respected and influential. By focusing on how executive presence is created and recognized the session will sensitize you to what others are using to form their opinions of you and what you can authentically do to enhance the way you are perceived.

**Learning Objectives:**

1. Explain how our executive presence (our persona) is created.
2. List the expressive dimensions others use to create us in their minds.
3. Describe how the knowledge gained from the session to help create a more powerful and influential interpersonal presence.

**Self-Assessment Questions:** (True or False)

1. We are born with our executive presence.
2. Others use our eye contact as an evaluation of our presence.
3. It is possible to enhance one's presence.

**Answers:** 1. False; 2. True; 3. True

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**127**

**Creating and Delivering Great Messages**

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Great messages are engaging and persuasive. They immediately let our audiences know what we want and motivate them to take the actions we want them to take. The skills needed to create and deliver great messages, however, must be learned and practiced. This two-hour session focuses on enhancing those skills. Be showing how your eyes, face, body, voice, the pace of your speech, and the architecture of your messages can be used to clarify and inspire, it will help move your messages to a new level of effectiveness.

**Learning Objectives:**

1. Identify and list audience centric messages, faster and easier.
2. Explain how to present with greater clarity and confidence.
3. Describe how to sell your ideas more effectively.

**Self-Assessment Questions:** (True or False)

1. Don't worry about your audience when giving a presentation as your great message will bring them along.
2. Being organized in your presentations will demonstrate your confidence.
3. Simple concise messages sell better.

**Answers:** 1. False; 2. True; 3. True

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**Precepting for Multiple Levels of Learners**

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Growing numbers of experiential learners, a finite amount of pharmacist time to perform a broad range of duties, and a recent interest in shifting away from a traditional apprenticeship model to a medical model of precepting are necessitating that pharmacist preceptors plan for and execute skill in managing learners with varied interests, abilities, attitudes, and knowledge bases. Key concepts and strategies are presented to successfully implement an Attending Pharmacist-Resident Pharmacist-Student Pharmacist model where the primary preceptor works within and across the varied levels of learners they host. The needs and potential scope of practice of IPPE students, APPE students, PGY1 residents, and PGY2 residents are compared. Advance planning for learning, clear articulation of roles and responsibilities, strategic sequencing of learners, establishment of learning communities, taking a broader view of the available learning environment, and leveraging other team members and co-learners to help teach are methods that work in both inpatient and ambulatory care settings. A paternalistic teacher-student relationship is not compatible with the attitudes and behaviors desired for preceptors and learners in this new model. Preceptors must shift their mental frame of precepting away from a watching-by-my-side view to a working-with-a-safety-net view. Spending quality contact time with each individual learner in addition to shared teaching sessions with the group maintains personalization of the experience while still efficiently managing a community of learners. Learners need to be more aware of others, take increased responsibility for their own learning, and frequently practice self-reflection. Both preceptors and learners must remain focused on patient-centered care and improved outcomes.

**Learning Objectives:**

1. Differentiate how learning needs vary between IPPE students, APPE students, PGY1 residents, and PGY2 residents.
2. Design effective strategies to meet learning needs between multiple levels of learners efficiently and effectively.
3. Design effective strategies to supervise multiple levels of learners.

**Self-Assessment Questions:** (Multiple Choice)

1. Which learning objective can be achieved by all levels of learners?
  - A. Establish collaborative professional pharmacist-patient relationships;



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- B. When necessary make and follow up on patient referrals;  
C. Dispense medication products following the organization's policies and procedures; D. Evaluate patient progress and redesign patient-centered medication regimens.
2. Which APPE student precepting role is suitable to delegate to a PGY1 resident in August?
- A. Signing off on the student's chart notes;
  - B. Conducting an initial learning needs assessment of the student;
  - C. Overseeing student completion of medication reconciliation patient interviews;
  - D. Assessing the student's competency in resolving drug-related problems.
3. When planning for multiple levels of learners, what is most likely to decrease primary preceptor stress?
- A. Scheduling a PGY2 resident to independently precept in December;
  - B. Taking one learner at a time every rotation;
  - C. Having residents and students start in the practice area on the same date;
  - D. Avoiding scheduling students for learning experiences in July.

Answers: 1. (A); 2. (C); 3. (D).

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**The Joint Commission Update for 2014**

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The Joint Commission's medication standards and medication related National Patient Safety Goals provide a foundation for medication safety and satisfactory compliance is critical for successful accreditation with the Joint Commission or CMS. This presentation will highlight key changes to the medication standards for 2013 and 2014 as well as highlight practical ways to address new standards as well as those standards that represent the most frequently scored. The Joint Commission is positioning itself to address medication-related national issues that continue to impact hospital pharmacy practice. An update on these topics will be presented.

**Learning Objectives:**

1. Describe two significant changes to the medication management standards and National Patient Safety Goals for 2014.
2. Evaluate strategies to address safety concerns and regulatory requirements for medication samples.
3. Identify at least one key issue found on survey relating to the top four challenging medication management standards.
4. Analyze strategies to support regulatory compliance in managing medication therapy in your practice setting.

**Self-Assessment Questions:** (True or False)

1. The Joint Commission has issued new standards specific to the use of sample medications
2. Hospitals without 24 hour pharmacy services are still required to perform a review of the medication order for appropriateness when the pharmacy is closed.
3. Reconciling medications must be performed upon transfer to different levels of care in the hospitalized patient.

**Answers:** 1. False; 2 True; 3 False

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**New Connector Standards for Medical Devices**

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This program will be an overview designed to raise awareness about upcoming changes to small-bore medical device connections, about how the healthcare system can prepare for this change, and how teams at institutions and agencies can begin planning for this new system. Issues about the new connectors including definitions, regulatory and system wide language, impact and timing will be included. These new connectors will modify enteral nutrition, hydration, and medication delivery. Communication around these changes is being handled by the Global Enteral Device Supply Association GEDSA [www.stayconnected2014.org](http://www.stayconnected2014.org).

**Learning Objectives:**

1. Describe changes in international standards for small bore connectors.
2. Develop a preliminary plan for implementing newly designed devices in your healthcare setting.