PROPOSAL: The Pharmacist's Role in Clinical Informatics

SUBMITTED BY: The Board of Directors

DATE: September 29, 2016

SITUATION:

1. CSHP Professional Policy #2010-04 directs CSHP to adopt ASHP policies and other guidance documents as CSHP Professional Policy

2. To adopt as CSHP policy all ASHP Policy Positions, Guidelines, Bulletins, and all official Statements in the current edition of the Best Practices for Health-System Pharmacy of the ASHP, except when such policies differ substantially from CSHP policy.

3. To endorse the use of ASHP Position Statements, Guidelines, and Technical Assistance Bulletins by its members in their practice settings; ASHP Statement 1534 addresses the Pharmacist’s Role in Clinical Informatics

4. CSHP will review all ASHP Policy Positions by 2020 for possible adoption as CSHP Professional Policy.

5. “Pharmacy informatics is the scientific field that focuses on medication-related data and knowledge within the continuum of health care systems—including its acquisition, storage, analysis, use and dissemination—in the delivery of optimal medication-related patient care and health outcomes.” - Healthcare Information and Management Systems Society (HIMSS), October 2006

6. Through pharmacy informatics, pharmacists employ health information and communications technology to develop systemized approaches to patient care using evidence-based medicine and other clinical decision-making tools. Computerized Provider Order Entry (CPOE), e-prescribing, telepharmacy, bedside bar-coding, electronic medication administration records (eMARs), automated dispensing cabinets, inventory management systems, smart pumps, robotic IV automation, and other innovations are improving medication use and patient safety.

7. All pharmacy schools are now required to incorporate informatics into their curriculum. The Accreditation Council for Pharmacy Education (ACPE) has included this requirement in its accreditation standards and guidelines for the professional program in pharmacy leading to the doctor of pharmacy degree (adopted Jan 15 2006, effective July 1, 2007). Nationally, there are now 23 ASHP-accredited PGY2 residency programs in Pharmacy Informatics.

8. The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 provides HHS with the authority to establish programs to improve health care quality, safety, and efficiency through the promotion of health IT, including electronic health records and private and
secure electronic health information exchange. Pharmacists are included in the definition of “providers” in this act.

9. APhA Policy Health Information Technology 2009 urges public and private entities to include pharmacist representatives in the creation of standards, the certification of systems, and the integration of medication use systems with health information technology.

10. The American Board of Medical Specialties (ABMS) recognition of clinical informatics as a physician subspecialty will likely play an important role in evolving pharmacy informatics beyond its current state to one with a clinical edge, centered on analytics and delivering information and knowledge at the point of care. The ABMS decision may also impact the development of a standardized, interprofessional educational roadmap for individuals seeking a career in pharmacy informatics.

11. Pharmacy informatics has grown to be an integral discipline within the clinical informatics domain, centered on the effective management and delivery of medication-related data, information, and knowledge across systems that support the medication-use process.

12. CSHP already has policies addressing informatics but does not have a policy specifically addressing the role of the pharmacist in informatics;
   - #2015-21: Education and Training in health care informatics
   - #2015-36: Risk Assessment of Health Information Technology
   - #2015-62: Statement on the pharmacy technician’s role in pharmacy informatics
   - #2014-19: Interoperability, Standardization and Use of Health Information and other Patient-Care Technologies
   - #2015-35: Defining and Promoting Meaningful Use of Health Information Technology

The ASHP Statement on the Pharmacist’s Role in Clinical Informatics states that:

a. Pharmacists’ professional identity, education, training, and experience with medication management make them ideal candidates to play a significant role and fill a critical need in pharmacy informatics. Their firm understanding of core pharmacy operations, clinical practice, the medication-use process, standards, and regulations and their long history of utilizing technology to support medication management provide the essential components for effectively transitioning into this role.

b. Despite the growing number of formally trained pharmacist informaticists, the path and skills required for a career in informatics has varied considerably, emphasizing the need to build core competencies and grow the number of available programs.

c. Pharmacists who practice clinical informatics must collaborate with other healthcare and information technology professionals to promote the safe, efficient, effective, timely, and optimal use of medications. They contribute to the transformation of healthcare by analyzing, designing, implementing, maintaining, and evaluating information and communication
systems that improve medication-related outcomes and strengthen the pharmacist-patient relationship.

d. The role of a pharmacist informaticist revolves around their knowledge of pharmacy practice, safe medication use, clinical decision-making, and improving medication therapy outcomes, combined with their understanding of the discipline of informatics and HIT systems. Their primary roles and responsibilities must encompass five broadly defined categories:

i. *Data, information, and knowledge management*—Managing medication-related information while promoting integration, interoperability, and information exchange.

ii. *Information and knowledge delivery*—Delivering medication-related information and knowledge throughout the clinical knowledge lifecycle, from the point of knowledge generation through cataloging, embedding knowledge into the workflow, and measuring the usage and effectiveness of that knowledge.

iii. *Practice analytics*—Developing point-of-business analytic solutions for improving decision-making.

iv. *Applied clinical informatics*—Applying user experiences, research, and theoretical informatics principles to improve clinical practice and usability.

v. *Leadership and management of change*—Leading and participating in the procurement, development, implementation, customization, management, evaluation, and continuous improvement of clinical information systems. Additionally, as the medication expert, leading health-system, professional, industry, regulatory, standards-setting and governmental organizations to sound conclusions regarding the use of technology in medication management and patient care.

e. As the scope for the development and complexity of systems that support medication management continues to grow, so does the need for individuals to lead, manage and evaluate them. A pharmacist informaticist is uniquely qualified and possesses the necessary skills to fulfill this need. Their knowledge of pharmacy practice and safe medication use, combined with their understanding of informatics concepts, methods and tools, provide the framework for effectively leading and participating in the procurement, customization, development, implementation, management, evaluation and continuous improvement of clinical information systems.

**TARGET:**

1. CSHP provides resources to its members, their patients and the public per the 2012-2015 Strategic Plan.
2. CSHP develops professional policy in congruence with other professional organizations, but adopts policy as an independent professional society.

3. CSHP does not have a professional policy on The Pharmacist’s Role in Clinical Informatics.

**PROPOSAL:**

That CSHP adopt as professional policy:

**The Pharmacist’s Role in Clinical Informatics**

California Society of Health-system Pharmacists supports the Pharmacist’s Role in Clinical Informatics www.ashp.org/: 

a. Pharmacists’ professional identity, education, training, and experience with medication management make them ideal candidates to play a significant role and fill a critical need in pharmacist informaticists. Their firm understanding of core pharmacy operations, clinical practice, the medication-use process, standards, and regulations and their long history of utilizing technology to support medication management provide the essential components for effectively transitioning into this role.

b. Despite the growing number of formally trained pharmacist informaticists, the path and skills required for a career in informatics has varied considerably, emphasizing the need to build core competencies and grow the number of available programs.

c. Pharmacists who practice clinical informatics must collaborate with other healthcare and information technology professionals to promote the safe, efficient, effective, timely, and optimal use of medications. They contribute to the transformation of healthcare by analyzing, designing, implementing, maintaining, and evaluating information and communication systems that improve medication-related outcomes and strengthen the pharmacist-patient relationship.

d. The role of a pharmacist informaticist revolves around their knowledge of pharmacy practice, safe medication use, clinical decision-making, and improving medication therapy outcomes, combined with their understanding of the discipline of informatics and HIT systems. Their primary roles and responsibilities must encompass five broadly defined categories:

   i. *Data, information, and knowledge management*—Managing medication-related information while promoting integration, interoperability, and information exchange.

   ii. *Information and knowledge delivery*—Delivering medication-related information and knowledge throughout the clinical knowledge lifecycle, from the point of knowledge generation through cataloging, embedding knowledge into the workflow, and measuring the usage and effectiveness of that knowledge.
iii. *Practice analytics*—Developing point-of-business analytic solutions for improving decision-making.

iv. *Applied clinical informatics*—Applying user experiences, research, and theoretical informatics principles to improve clinical practice and usability.

v. *Leadership and management of change*—Leading and participating in the procurement, development, implementation, customization, management, evaluation, and continuous improvement of clinical information systems. Additionally, as the medication expert, leading health-system, professional, industry, regulatory, standards-setting and governmental organizations to sound conclusions regarding the use of technology in medication management and patient care.

e. As the scope for the development and complexity of systems that support medication management continues to grow, so does the need for individuals to lead, manage and evaluate them. A pharmacist informaticist is uniquely qualified and possesses the necessary skills to fulfill this need. Their knowledge of pharmacy practice and safe medication use, combined with their understanding of informatics concepts, methods and tools, provide the framework for effectively leading and participating in the procurement, customization, development, implementation, management, evaluation and continuous improvement of clinical information systems.


**CSHP BOARD ACTION:** The CSHP Board of Directors has approved this proposal for consideration by the 2016 House of Delegates

**HOUSE OF DELEGATE ACTION:** Approved as presented.