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**NEWS RELEASE****UNC Medical Center Receives \$50,000 Award for Excellence in Medication Safety from the ASHP and Cardinal Health Foundations**

*Winning initiative addressed rare and serious complication of heparin administration*

**Orlando, FL (Dec. 4, 2017)** -- Last night, UNC Medical Center in Chapel Hill, North Carolina, was honored with the 2017 Award for Excellence in Medication Safety by the ASHP Foundation and the Cardinal Health Foundation. The award is the only national honor that recognizes a pharmacist-led interprofessional team for implementing significant systemwide improvements related to medication safety in a hospital or health system.

At a ceremony held during the 2017 ASHP Midyear Clinical Meeting in Orlando, UNC Medical Center received \$50,000 to further innovations in medication safety. Two finalists, Aurora Health Care in Milwaukee, Wisconsin, and VA Ann Arbor Healthcare System in Michigan, were also recognized and each received \$10,000.

“It is our hope that the finalists and recipients of this award will be an inspiration to other institutions looking to expand their medication safety efforts,” said Stephen J. Allen, ASHP Foundation chief executive officer. “UNC Medical Center and the two finalist organizations tackled tough challenges that confront every hospital and health system in the United States. This program is an opportunity to recognize those who make improvements that not only benefit their institutions, but the entire profession.”

Bill Owad, senior vice president of Operational Excellence at Cardinal Health, said, “As the healthcare industry continues to face enormous changes, the role that pharmacists play in improving the safety and quality of care is more critical than ever. This year’s Excellence in Medication Safety honorees address the key issues of better patient outcomes, cost containment, and efficiency. The Cardinal Health Foundation applauds their work.”

The award recipient and finalists were chosen by an interprofessional review panel of accomplished safety experts who evaluated all applicants. Finalists were selected based on the initiative’s scope, pharmacist leadership, demonstrated impact, innovation, sustainability, and generalizability. Reviewers visited each finalist’s site before selecting the award recipient.

## **Awardees' Initiatives**

### ***2017 Recipient: UNC Medical Center***

Chapel Hill, NC

*Improving the Safety and Management of Patients with Suspected or Confirmed Heparin-Induced Thrombocytopenia*

Heparin, unfractionated heparin, and other heparin derivatives are among the most frequently prescribed medications worldwide<sup>1</sup>. Heparin-induced thrombocytopenia (HIT) is a rare and serious complication of heparin administration. Continued heparin administration in this population leads to a hypercoagulable state with a greatly increased risk for thrombosis and significant implications for morbidity and mortality, potentially manifesting as a deep vein thrombosis, pulmonary embolism, or stroke. An unsupported but documented heparin allergy can result in a patient receiving high-risk and costly alternative anticoagulants during subsequent admissions.

A pharmacist-led multidisciplinary team at UNC Medical Center set out to improve the care of patients with suspected or confirmed HIT. Medication error reports and retrospective review revealed a significant opportunity for improvement in this process. UNC Medical Center's initiative involved five key areas: creating evidence-based guidelines, developing a standardized multidisciplinary workflow, utilizing the electronic health record (EHR) to improve patient safety, implementing a patient education program, and initiating a HIT stewardship program. Post-implementation results showed a reduction in the incidence of heparin product administration in patients undergoing HIT testing and an increase in the rate of appropriate heparin allergy documentation at discharge. Overall, this project built on established patient care processes, made vital improvements that were modest in resources, and resulted in improved safety for patients with suspected or confirmed HIT. UNC Medical Center is in the process of implementing the initiative in their larger system throughout North Carolina.

### ***2017 Finalist: Aurora Health Care***

Milwaukee, WI

*Metric Is Our New "Weigh" Patient Safety Initiative*

Weight-related medication dosing errors can lead to catastrophic patient outcomes. While pharmacists are accustomed to assessing medication dosing exclusively on the metric system, most individuals typically express their weight in pounds, and many healthcare workers record weight in the medical record as pounds versus kilograms. At Aurora Health Care, a pharmacist-led team developed and implemented an initiative to prevent weight-related errors by standardizing the expression of patient weight to metric units across a health system. Prior to this project, organizational systems unintentionally promoted error because variation existed in the units in which patient weights were

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<sup>1</sup> Dasararaju R, Singh N, Mehta A. Heparin induced thrombocytopenia: review. *Expert Rev Hematol* 2013;6:419–28.

obtained, displayed, and shared between caregivers. In the most harmful scenarios, this could result in two-fold dosing errors of high-alert, weight-based medications such as heparin. Advances in technology, such as smart pumps, have weight-based safety features designed to eliminate dosing errors if programmed properly and require accuracy of input data such as weight.

Aurora focused on medication errors related to intravenous infusion that can present the greatest potential for harm. Their initiative was broad in scope and included addressing equipment needs, such as scales in the emergency room, EHR build, and communication and education in inpatient and ambulatory settings. Aurora was able to achieve an 81-percent decrease in the reprogramming of smart pumps related to weight conversion, resulting in significant time savings of staff, enhanced application of the safety features of smart pumps, and a reduction of risk for patients.

***2017 Finalist: VA Ann Arbor Healthcare System***

Ann Arbor, MI

*Code Cart Tray Redesign Project*

Accuracy and every second counts when the team is responding to a patient for a code. The care of patients in these life and death situations is dependent upon split-second decisions relating to the selection and preparation of medications available in an emergency tray or cart. Knowing that human factors play a significant role in choices healthcare workers make in a code situation, the VA Ann Arbor Healthcare System focused on improving the selection and preparation of medications. The Pharmacy Chief conceptualized the improvement project based on human factor concepts from the food industry, and together with the medication safety officer, engaged a team consisting of system redesign staff, industrial engineering students, nurses, pharmacy technicians, and a code cart (medication tray) vendor on a multi-step process to redesign the medication tray insert. The multidisciplinary team worked closely with the vendor to produce prototypes and, with input from users, a final prototype was selected for extensive testing.

Results of the testing demonstrated marked improvement of the accuracy of drug selection with the redesigned system. Selection errors were tracked through the process, and all but one type of error was eliminated upon multiple test scenarios while also demonstrating that retrieval time was faster. In fall 2016, all carts were updated with the re-engineered trays house-wide and throughout all of their care settings. Two months later, the team retested the pilot scenarios and found that selection errors were reduced or eliminated using the new system. The VA Ann Arbor's innovative initiative demonstrated the value of expanding the multidisciplinary team by including engineers and product vendors in healthcare quality improvement initiatives and led to an improved code medication tray insert that has now been implemented in hundreds of organizations both in the United States and internationally.

**About the Award for Excellence in Medication Safety**

The Award for Excellence in Medication Safety was established in 2004 to recognize on a national level pharmacy professionals who have assumed a leadership role in promoting

safety in the medication-use process. For more information regarding this award, visit [www.ashpfoundation.org/excellenceaward](http://www.ashpfoundation.org/excellenceaward). For details about the specific initiatives being recognized this year, visit [www.ashpfoundation.org/2017AWEXFinalists](http://www.ashpfoundation.org/2017AWEXFinalists).

### **About the ASHP Research and Education Foundation**

The ASHP Research and Education Foundation ([www.ashpfoundation.org](http://www.ashpfoundation.org)) was established in 1968 by ASHP ([www.ashp.org](http://www.ashp.org)) as a nonprofit, tax-exempt organization. As the philanthropic arm of ASHP, our vision is that patient outcomes improve because of the leadership and clinical skills of pharmacists, as vital members of the healthcare team, accountable for safe and effective medication use. Our mission is to improve the health and well-being of patients through appropriate, safe, and effective medication use.

### **About the Cardinal Health Foundation**

The Cardinal Health Foundation supports local, national and international programs that improve healthcare efficiency, effectiveness, and excellence and the overall wellness of the communities where Cardinal Health's (NYSE:CAH) more than 37,000 employees live and work. The Cardinal Health Foundation also offers grants to encourage community service among its employees and works through international agencies to donate much-needed medical supplies and funding to those who need them in times of disaster—because Cardinal Health is #AllInForGood. To learn more, visit [www.CardinalHealth.com/community](http://www.CardinalHealth.com/community) or Cardinal's Facebook page at [www.facebook.com/CardinalHealthFoundation](http://www.facebook.com/CardinalHealthFoundation).

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