

## Kyle E. Hultgren, PharmD

## EDUCATION

**Purdue University**, West Lafayette, IN  
College of Pharmacy  
Doctor of Pharmacy, May 2006

## PROFESSIONAL EXPERIENCE

**Center for Medication Safety Advancement** Indianapolis, IN      March 2010 – Present  
Director

I am the founding director of the Center for Medication Safety Advancement at the Purdue University College of Pharmacy. I was charged to create a unique engagement office in an academic setting that operated on an entrepreneurial small business consulting level, which required us to be financially self-sustaining. I created the first strategic plan that carried CMSA from grant-funded to a self-funded and financially sustainable organization while growing CMSA to 45 employees and contractors and revenues over \$5M annually in less than two years.

**Imagine Medical Device, Inc.** Fishers, IN March 2015 – December 2018  
Founder and CEO

I founded this company to commercialize my patented technology for concentrated insulin syringes. I created a viable prototype, raised an initial round of venture funding, and am working with manufacturers to license this technology.

**Purdue University College of Pharmacy**      West Lafayette, IN      March 2010 – Present  
Courtesy Clinical Assistant Professor of Pharmacy Practice

I am the course coordinator and original creator of the core course ‘Patient Safety and Informatics’ – the College’s first core course in safety. During this time, I also wrote and developed the materials for a case-based and simulation-based education model to enhance the facilitation of team learning in safe medication use practices, the first of its kind in the nation. I lead research in large data set analysis for patient safety.

**Lean Systems Redesign Process Improvement Course** June 2009 – October 2015  
Co-author

I wrote a three-day training and certification program in Lean for the Veterans Health Administration and used it to train over 9,000 healthcare professionals in over 100 different locations nationwide in Systems Redesign methodologies. Additionally, I developed a unique simulation-based interactive approach to learning process improvement.

**Purdue University PharmaTAP** Indianapolis, IN June 2008 – March 2010  
Project Improvement Manager (June 2008 – 2009)  
Director (June 2009 – March 2010)

I engaged with healthcare entities in Indiana on patient safety performance improvement projects including Lean initiatives. I would focus not only on the medication use process but how all processes in the facility were inter-connected and how crucial it was to design an optimal workflow around them. Additionally, I managed, coordinated, and facilitated large, multi-center research project grants.

**Clarian Health** Indianapolis, IN May 2006 – June 2008  
Staff Pharmacist – Indiana University Hospital

I worked as a decentral staff pharmacist to ensure the safe delivery of medications to all patients in the hospital. This included providing support to physicians and nurses regarding patient drug therapy, performing drug dosing, therapeutic monitoring, and patient education.

## **PROFESSIONAL COMMITTEE MEMBERSHIP**

**URAC Measures Advisory and Research Group**  
Advisory Board Member. December 2015 – Present

**Pharmacy Quality Alliance (PQA) – Academic Affairs Committee**  
Medication Safety Strategy Subcommittee Chair. June 2016 – June 2018

**Indiana Medication Management Partnership (IMMP)**  
Voting Board Member. January 2012 – October 2015

**Agency for Healthcare Research and Quality (AHRQ)**  
Member of Community Pharmacy Technical Expert Panel

**Co-Chair of Patient Safety – Indiana Action Coalition for the Future of Nursing**  
Provide insight and support to the work of the Indiana Action Coalition in furtherance of the Institute of Medicine's report on the future of nursing. May 2011 – Present

**Scientific Advisory Board – PerceptiMed**  
Provide expert opinion and guidance to a startup company designing and implementing new safe medication use dispensing technology. April 2011 – June 2018

**Chair of the Rx-SafeNet Practice Based Research Network Advisory Board**  
Chair of the Advisory Board for research project selection and overall counsel.  
Assisted in the development of the Network through contribution of time and effort in creation of policies and procedures to govern the organization. January 2010 – Present

**Chair of the Medication Safety Partnership of Indiana**  
Assisted in developing Indiana's first Coalition of Community Pharmacies with the mission of preventing patient harm through the application of safe medication systems. June 2008 – June 2011

## **PATENTS/LICENSES/REGISTRATIONS**

SafetySim technology – software code and algorithm pending Registration  
A mid-fidelity, agent based, tablet driven medication safety simulation  
Perimeter Fill Syringe – a novel syringe geometry to maximize patient safety  
1) D784,530 awarded April 2017 (design)  
2) 10,086,143 awarded October 2018 (utility)  
3) 16/150,256 (application number) notice of award January 31, 2020  
SafeRx – large comparative database of FAERS and social media data

## **PROFESSIONAL AFFILIATIONS**

Pharmacy Quality Alliance 2015 – present  
Academic Affairs Committee Co-Chair 2015 – 2017  
PQA Scholar Mentor  
2016 – Michael Peters, 2017 – Bailey Eason  
American Society of Health-System Pharmacists 2008 – present  
American Pharmacists Association 2008 – present  
Indiana Pharmacists Alliance 2006 – present  
Political Action Committee 2006 – 2015  
ISHP President Elect – 2011  
ISHP President – 2012  
Member of IPA Board of Directors 2011 – 2012  
International Pharmaceutical Federation (FIP) 2012 – present  
Aircraft Owners and Pilots Association 2014 – present  
Experimental Aircraft Association 2016 - present

## **SELECT PRESENTATIONS**

Hultgren KE and Simpson C. Operational Safety Workshop: Agile Methods for Pharmacy. Two Part Series. Lecture series at ASHP Summer Meeting Medication Safety Collaborative. Boston, MA. June 2019.

Hultgren KE and Place AJ. Teaching Interdisciplinary Medication Safety: Engaging Learners from the Classroom to the Clinic. Lecture to the Midwest Medication Safety Symposium. Indianapolis, IN. September 2018.

Hultgren, KE. Teaching Patient Safety to Medical Professionals. Keynote address at Universidad de Valparaíso School of Pharmacy. Valparaíso, Chile. April 2018.

Hultgren KE. Strategies to Reduce Errors Associated with Technology. Plenary for the Pharmaceutical Care Conference. Ministry of Health, Sultanate of Oman. February 2017.

Hultgren KE. Measuring Safety and Preventing Harm Associated with Medication Use. Address to the Purdue University President's Council. Naples, FL. February 2017.

Hultgren KE, Scott SA, White JK. Storytelling in the Pecha Kucha Style. Session for the Medication Safety Collaborative at ASHP Summer Meeting. Baltimore, MD. June 2016.

Hultgren KE. Promoting Patient Safety Through Integration of Large Data Sets, Metrics, and Dashboards. Symposium to Promoting Patient Safety through Pharmacy Practice, Technology and Research conference. Doha, Qatar. April 2016.

Hultgren KE. Leveraging Human Factors to Improve Medication Safety. Address to 8<sup>th</sup> Medication Safety Conference. Abu Dhabi, UAE. November 2015.

Jahn MA, Caldwell BS, Hultgren KE. Developing Medication Safety Training Applications with Software Patients for Human Teams. International Ergonomics Association Triennial Congress. Melbourne, Australia. August 2015.

Hultgren KE. Dashboards for Medication Safety. Address to 7<sup>th</sup> Medication Safety Conference. Abu Dhabi, UAE. November 2014.

Hultgren KE. Rational Design of Safe Healthcare Practices. Address to WorkSafeBC Symposium. Vancouver, BC. May 2014.

Hultgren KE. Simulating the Medication Use Process. Keynote Address at Resilience Week, Cognitive Systems Track. San Francisco, CA. August 2013.

Hultgren KE. Systems Thinking: Patient-Centered Medication Safety. Keynote Address and full day symposium at Iowa QIO State Meeting addressing medication safety. Altoona, IA. June 2013.

Hultgren KE. Adverse Drug Events and Readmissions: The Global Picture. Lecture to the Foundation for Healthy Communities and the New Hampshire Partnership for Patients Adverse Drug Event series. Concord, NH. March 2013.

Hultgren KE. Clinical Microsystems: A Framework for ADE Prevention. Keynote Address at the Missouri Hospital Association Hospital Engagement Network Learning Session. Columbia, MO. December 2012.

Hultgren KE. Visual Management for Safe Medication Use Practices. Presented to AMPATH Pharmacy team at Moi University Teaching and Referral Hospital. Eldoret, Kenya. June 2012.

Hultgren KE, MacLaughlin N, Soo-Hoo W, Hartman C. Taking Lean Beyond the Framework. Presented at the ASHP Midyear Clinical Meeting. New Orleans, LA. December 2011.

Enright SM, Hultgren KE, Chou J, Burgess H, White S. IDEAS: Collaborative Change for Shared Value. Presented at the 2011 ASHP Summer Meeting. Denver, CO. June 2011.

Hultgren KE. Clinical Microsystems and Lean. Presented at the 8<sup>th</sup> Annual Clinical Microsystems Festival. Jönköping, Sweden. March 2011.

Hultgren KE. Clinical Microsystems and Lean. Presented at the Dartmouth Institute Microsystem Academy Fall 2010 Art and Science of Coaching and Improving Quality. Lake Morey, VT. October 2010.

Enright SM, Hultgren KE, Small RH, Burgess H, Anderson ER, Jorgenson JA, Godfrey M. Quality by Design: Building Microsystem Stretch for Strategic Medication Safety Goals – a three-part learning community event at ASHP Summer Meeting 2010. Tampa, FL. June 2010.

## PUBLICATIONS

Evoy KE, Covvey J, Peckham A, Ochs L, and Hultgren KE. Reports of gabapentin and pregabalin abuse, misuse, dependence, or overdose: an analysis of the Food and Drug Administration Adverse Events Reporting System (FAERS). *Research in Social and Administrative Pharmacy*. 2018; 06.018.

Hultgren KE and Hertig JB. Quality Improvement and Patient Safety. Book chapter in *Introduction to Health Care Delivery*. Plake KS et al. 2017; p. 185 – 206.

Hertig JB, Hultgren KE, Weber RJ. Using Contemporary Leadership Skills in Medication Safety Programs. *Hosp Pharm*. 2016; 51(4): 338-344

Hertig JB, Hultgren KE, Parks S, Rondinelli R. Development and Assessment of a Medication Safety Measurement Program in a Long-Term Care Pharmacy. *The Consultant Pharmacist*. 2016; 31(2). February 2016.

Livin A, Hertig JB, Hultgren KE. A Call for Standardized Metrics to Assess Health IT Impact on Medication Safety. *Hosp Pharm*. 2013; 48(10): 801-802.

Jeffries JA, Jeffries PR, Hertig JB, Hultgren KE. Embracing Pharmacy E-Learning: Models of Success. *Pharmacy*. 2013; 1(1):43-52.

Snyder ME, Frail CK, Seel LV, Hultgren KE. Experience developing a community pharmacy practice-based research network. *Innov Pharm*. 2012; 3(2): Article 78.

Seel LV, Hultgren KE, Snyder ME. Establishing the Medication Safety Research Network of Indiana (Rx-SafeNet): perspectives of community pharmacy employees. *Innov Pharm*. 2012; 3: Article 79.

Hultgren KE. Medication Administration Errors and Community Practice. *The RxConsultant*. Volume XXI: Number 8. September 2012.

Tian R, Duffy V, Birk C, Abel S, and Hultgren KE. The Performance of BCMA-aided Healthcare Service: Implementation Factors and a Conceptual Model. Human-Computer Interaction International Conference 2009. San Diego, CA.

## PEER REVIEW ACTIVITY

Journal of the American College of Clinical Pharmacy	2018 – Present
Pharmacy	2016 – Present
ACCP Pharmacotherapy Self-Assessment Program (PSAP)	2015 Book 2
Chapter reviewer: Adverse Drug Event Epidemiology	
Currents in Pharmacy Teaching and Learning	2014 – Present
Journal of Pharmaceutical Health Sciences Research	2014 – Present
The Joint Commission Journal on Quality and Patient Safety	2012

## **AWARDS & HONORS**

Exceptional Poster at Midwest Medication Safety Symposium - 2018  
Exceptional PQA Scholar-Mentor Poster at PQA Annual Meeting – 2017  
Purdue University College of Pharmacy Dr. Aziz Teaching Award – 2016  
Indiana Pharmacists Alliance Medication Safety Award – 2015  
Purdue Innovators Hall of Fame Inductee – Class of 2015  
Glen J. Sperandio Health-System Pharmacist of the Year for Indiana - 2013  
Surescripts Safe-Rx Award for e-prescribing excellence as member of Indiana team – 2010  
Indiana Governor's Award for Tomorrow's Leaders – 2009 Award Recipient  
Four-time Silver Award for Excellence recipient at Clarian Health – since January 2007

## **COMMUNITY AND VOLUNTEER WORK**

### **Southeastern Swim Club**

Parent volunteer to help coordinate swim meets for local swim team  
Meet Director – Indiana Age Group State  
USA Swimming Official – Starter

### **Brooks School Elementary PTO Dad's Club Chair**

Organize events to engage fathers with their children at Brooks School Elementary  
Math and Science Night Co-Chair

### **Indianapolis Mini-Marathon Executive Board – Finish Line Coordinator**

Lead the efforts of over 100 volunteers at our nation's largest half marathon

### **Hamilton County Medical Reserve Corps**

Work with other health professionals in readiness training for biological disaster

## **LICENSURE and CERTIFICATION**

Indiana Pharmacist License  
Permit Number 26022009A

Pharmacy-Based Immunization Certification  
Certificate Number 202-0011

Private Pilot Single Engine Land with Instrument Rating  
Certificate Number 3415091