Department of Pharmacy
2012 Annual Report
Welcome from the Department of Pharmacy

Dawn Moore, PharmD, MS
Vice President and Chief Pharmacy Officer

It is my pleasure to present the 2012 Annual Report for the IU Health Department of Pharmacy. This year, we truly used the IU Health Pillars of Excellence as a guiding light to direct our departmental activities. As you read through this annual report, you will see that each section was designed to highlight our preeminence in the areas of: Quality and Safety, Service, People, Education, Finance and Growth, and Research.

This year we continued to improve the Quality and Safety of our services through the design and implementation of several large projects.

- Cerner Medication Reconciliation pilot
- CareAdmin Barcode Medication Administration (BCMA) rollout
- Expanded use of DoseEdge IV Workflow system in Riley Hospital for Children’s at IU Health inpatient pharmacy, as well as to prepare chemotherapy doses at Methodist
- Implemented Cerner CareMobile BCMA in Riley Dialysis Computerized Prescriber Order Entry (CPOE) for Pediatrics and Methodist Hospital Emergency Department
- Talyst software upgrade to AP3.2 at Riley allowing for expiration tracking
- Pyxis and hardware moves to support the University Hospital central pharmacy remodel
- Designed & launched a Medication Affordability webpage on our internal website Pulse
- Centralized and expanded compounding and repackaging services for several facilities
- Improved Medicare Advantage Pharmacy Claims Star Rating

In 2012, the pharmacy department created new initiatives that targeted Service to our community and its health through open community and patient education seminars.

- Patient Education Seminars:
  - Immunization efforts for influenza and pneumonia
  - Smoking-Cessation
  - Lipid Education
  - Ortho Classes
  - Chemotherapy Education Classes
  - Transplant Education Classes
  - Emergency Preparedness Programs
  - Medication Therapy Reviews
  - Blood Pressure & Cholesterol Screenings with education on disease states
- Continued Pharmacy Support for community project such as: AIDS Walk, Gleaner Food Bank, United Way, IU Health Fairs and Camp Riley
- Patient satisfaction initiatives: Discharge Rx Program, streamlined prior authorization process, indigent Rx support and direct clinical support

Our department functions as a team, from drug purchasing and stocking, dosing, drug dispensing and delivery, to patient education and support services. Every person providing and supporting medication use is vital. Our People and the diversity of their talents, is the foundation of our departmental strength.

- Our staff participated in over 430 different committees throughout the IU Health System, local, state and national organizations
- Our staff received over 40 awards for professional excellence
- Our staff held over 50 different professional appointments
- Our staff completed over 150 different acts of community service in 2012

This year’s Education efforts were focused on three major areas: Our Residency Program, Continuing Pharmacy Education Programs and our support of Student Rotations

- In 2012, IU Health received a full six year accreditation from the American Society of Health-System Pharmacists for each of our PGY1 and PGY2 residency programs
- The Pharmacy Informatics Residency program received full accreditation status, only the sixth fully accredited program in the nation
- Received $40,000 ASHP Foundation Pharmacy Residency Expansion Grant
- Our staff offered over 425 different presentations in 2012
- 430 Students completed rotations in 2012

Finance and Growth were of the utmost importance to every team member in 2012. Through fiscal responsibility and careful planning, the pharmacy department was able to cut costs AND continue to expand our services across the system.

- Continued standardization of outpatient retail pharmacies services, including software and programs to provide consistent pricing over the entire network
- Tighter inventory control in Pharmacy saving thousands of dollars across the system
- Created a system-wide Flu Vaccine agreement that saved the system $125K
- Redesigned the Pharmacy AP process resulting in a cost avoidance of $275K
- Expansion of CMS (Contract Management Strategies) to multiple facilities with a cost recovery of $46,000 in 2012
- Wrote a new Cardinal agreement, saving the system approximately $1.5M per year

In 2012, our department was very active in the field of Research.

- 303 Total Active Studies, with 144 new studies in 2012
- Partnered with the Indiana University Cancer Research Office (CRO) to initiate procedures for handling investigational product for eleven protocols at CICC locations

It is with great pride that I present to you the summary of the accomplishments of the IU Health Pharmacy Department for 2012. Our teamwork results in healthier patients and a healthier community, because Every Dose Matters.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>IU Health Mission, Vision, Values</td>
<td>8</td>
</tr>
<tr>
<td>Organizational Chart</td>
<td>9</td>
</tr>
<tr>
<td>Pharmacy Leadership</td>
<td>10</td>
</tr>
<tr>
<td>Highlights</td>
<td>12</td>
</tr>
<tr>
<td>System-Wide Services</td>
<td>15</td>
</tr>
<tr>
<td>Center for Medication Management</td>
<td>16</td>
</tr>
<tr>
<td>Center for Medication Safety</td>
<td>18</td>
</tr>
<tr>
<td>Central Region Oncology Pharmacy Services</td>
<td>20</td>
</tr>
<tr>
<td>Compounding</td>
<td>22</td>
</tr>
<tr>
<td>Education and Training</td>
<td>24</td>
</tr>
<tr>
<td>Global Projects</td>
<td>26</td>
</tr>
<tr>
<td>Home Care Pharmacy</td>
<td>28</td>
</tr>
<tr>
<td>Investigational Drug Service</td>
<td>30</td>
</tr>
<tr>
<td>Pharmacy Benefit Management</td>
<td>32</td>
</tr>
<tr>
<td>Pharmacy Clinical Information Systems (CIS) Council</td>
<td>34</td>
</tr>
<tr>
<td>Pharmacy Informatics and Meds Integration</td>
<td>36</td>
</tr>
<tr>
<td>Pharmacy Integrated Supply Chain Initiatives</td>
<td>38</td>
</tr>
<tr>
<td>Pharmacy Purchasing and Logistics</td>
<td>40</td>
</tr>
<tr>
<td>Retail Pharmacies</td>
<td>42</td>
</tr>
</tbody>
</table>
Table of Contents

Service Line Profiles

Arnett .......................................................... 46
Ball ............................................................. 48
Bedford ........................................................ 50
Blackford ..................................................... 52
Bloomington ................................................ 54
Goshen ........................................................ 56
La Porte ......................................................... 58
Methodist ..................................................... 60
Morgan ........................................................ 62
North ......................................................... 64
Paoli ............................................................ 66
Riley ............................................................ 68
Saxony ........................................................ 70
Starke ........................................................ 72
Tipton ........................................................ 74
University Hospital ...................................... 76
West ............................................................ 78
White ........................................................ 80
IU Health
Mission, Vision, Values

Indiana University Health's mission is to improve the health of our patients and community through innovation and excellence in care, education, research and service.

We value:

- Total patient care, including mind, body and spirit
- Excellence in education for health care providers
- Quality of care and respect for life
- Charity, equality and justice in health care
- Leadership in health promotion and wellness
- Excellence in research
- An internal community of mutual trust and respect

The vision that guides IU Health is as follows: "IU Health strives to be a preeminent leader in clinical care, education, research and service. Our excellence is measured by objective evidence and established best practices. Exemplary levels of respect and dignity are given to patients and their families, while professionalism and collegiality mark relationships between employees and physicians. IU Health continues to focus on innovation and excellence through collaboration among its partner hospitals and its affiliation with Indiana University School of Medicine."

However, we're not restricted to what happens inside each of our hospital walls. Our support extends to the greater Indiana community as well.

Our annual outreach efforts include:

- Reaching more than 500,000 people with more than 100 health education, wellness and service programs.
- Providing more than $96,004,638 in charity care to children and families statewide.
- Partnering and sponsorships with public agencies and private sector organizations to improve the health of the community.

Pharmacy Department Vision

IU Health Pharmacy Department strives to be a preeminent leader in advancing pharmacy practice through emphasizing that every dose matters. Our department functions as a team, from drug purchasing and stocking, dosing and dispensing, to delivery and patient education. Every person providing and supporting medication use is vital. With this focus, our team receives recognition for the quality and diversity of services we provide; our professional leadership in the health system as well as the community; for our research activities that further the field of pharmacy and improve patient outcomes; and our commitment to education excellence through educating healthcare providers, patients, and future leaders in pharmacy. Our teamwork results in healthier patients and a healthier community, because every dose matters.
Pharmacy Statewide Organizational Chart

Local Hospital Administration
- CICC Infusion Centers
- IUSCC Infusion Pharmacy
- Methodist Hospital Pharmacy
- Residency Coordinator
- Center for Medication Management
- Pharmacy Benefit Manager
- Pharm Net & Meds Integration Teams (Cerner Operations)

Pharmacy Project Leader
- Riley Hospital for Children Pharmacy
- Retail Pharmacy Services
- Saxony Hospital Pharmacy
- Springmill Infusion Center
- University Hospital Pharmacy
- Pharmacy Purchasing/Distribution

Vice President Pharmacy Services
- Investigational Drug Services

Financial Manager

Local Hospital Administration
- Amett Hospital Pharmacy
- Ball Community Pharmacy Network
- Ball Memorial Hospital Pharmacy
- Bedford Hospital Pharmacy
- Blackford Hospital Pharmacy
- Bloomington Hospital Pharmacy
- Goshen Hospital Pharmacy
- Home Care Infusion Pharmacy
- LaPorte Hospital Pharmacy
- Midwest Proton Radiotherapy Institute
- Morgan Hospital Pharmacy
- North Hospital Pharmacy
- Paoli Hospital Pharmacy
- Rehab Hospital of Indianapolis
- Starke Hospital Pharmacy
- Tipton Hospital Pharmacy
- West Hospital Pharmacy
- White Memorial Hospital Pharmacy

System Pharmacy Services
- 340B
### Pharmacy Leadership

<table>
<thead>
<tr>
<th>Ambulatory Services</th>
<th>Central Region Oncology Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julie Williams, PharmD, BCPS</td>
<td>Chris Fausel, PharmD, MHA, BCOP</td>
</tr>
<tr>
<td>Clinical Manager</td>
<td>Clinical Manager, Oncology Pharmacy</td>
</tr>
<tr>
<td><a href="mailto:jwilliams3@iuhealth.org">jwilliams3@iuhealth.org</a></td>
<td><a href="mailto:cfausel@iuhealth.org">cfausel@iuhealth.org</a></td>
</tr>
<tr>
<td>317-962-2821</td>
<td>317-948-6686</td>
</tr>
<tr>
<td><strong>Arnett Hospital</strong></td>
<td><strong>Goshen Hospital</strong></td>
</tr>
<tr>
<td>H. David George, RPh, MBA</td>
<td>Pat Schneider, RPh</td>
</tr>
<tr>
<td>Director of Pharmacy</td>
<td>Director of Pharmacy</td>
</tr>
<tr>
<td><a href="mailto:hgeorge@iuhealth.org">hgeorge@iuhealth.org</a></td>
<td><a href="mailto:PSchneider@iuhealth.org">PSchneider@iuhealth.org</a></td>
</tr>
<tr>
<td>765-838-5069</td>
<td>574-364-2651</td>
</tr>
<tr>
<td><strong>Ball Memorial Hospital</strong></td>
<td><strong>Investigational Drug Service</strong></td>
</tr>
<tr>
<td>Tina Love, RPh</td>
<td>Chris Lowe, PharmD, BCPS</td>
</tr>
<tr>
<td>Director, Inpatient Pharmacy</td>
<td>Director of Pharmacy</td>
</tr>
<tr>
<td><a href="mailto:tlove1@iuhealth.org">tlove1@iuhealth.org</a></td>
<td><a href="mailto:clowe@iuhealth.org">clowe@iuhealth.org</a></td>
</tr>
<tr>
<td>765-747-8405</td>
<td>317-944-0364</td>
</tr>
<tr>
<td><strong>Bedford Hospital</strong></td>
<td><strong>IU Health Retail Pharmacy</strong></td>
</tr>
<tr>
<td>James Harmon, RPh, MBA</td>
<td>Max Barnhart, RPh</td>
</tr>
<tr>
<td>Interim Director of Pharmacy</td>
<td>Sr. Administrative Director</td>
</tr>
<tr>
<td><a href="mailto:jharmon@iuhealth.org">jharmon@iuhealth.org</a></td>
<td><a href="mailto:mbarnhart@iuhealth.org">mbarnhart@iuhealth.org</a></td>
</tr>
<tr>
<td>812-275-1201 Ext:1384</td>
<td>765-751-5316</td>
</tr>
<tr>
<td><strong>Blackford Hospital</strong></td>
<td><strong>La Porte Hospital</strong></td>
</tr>
<tr>
<td>Gerald (Jerry) Carlson, RPh</td>
<td>Leonid Slobodskoy, PharmD, RPh</td>
</tr>
<tr>
<td>Director of Pharmacy</td>
<td>Director of Pharmacy</td>
</tr>
<tr>
<td><a href="mailto:gcarlso1@iuhealth.org">gcarlso1@iuhealth.org</a></td>
<td><a href="mailto:LSlobodskoy@iph.org">LSlobodskoy@iph.org</a></td>
</tr>
<tr>
<td>765-331-2120</td>
<td>219-326-2591</td>
</tr>
<tr>
<td><strong>Bloomington Hospital</strong></td>
<td><strong>Methodist Hospital</strong></td>
</tr>
<tr>
<td>Michael J. Melby, MS, FASHP</td>
<td>Tate Trujillo PharmD, BCPS, FCCM, FASHP</td>
</tr>
<tr>
<td>Director of Pharmacy and Clinical Informatics</td>
<td>Director of Pharmacy</td>
</tr>
<tr>
<td><a href="mailto:mmelby@iuhealth.org">mmelby@iuhealth.org</a></td>
<td><a href="mailto:ttrujill@iuhealth.org">ttrujill@iuhealth.org</a></td>
</tr>
<tr>
<td>812-353-9199</td>
<td>317-962-3318</td>
</tr>
<tr>
<td><strong>Center for Medication Management</strong></td>
<td><strong>Morgan Hospital</strong></td>
</tr>
<tr>
<td>Jennifer Reddan, PharmD, FASHP</td>
<td>JD Bowman</td>
</tr>
<tr>
<td>Director CMM</td>
<td>Chief Quality Officer/Director of Pharmacy</td>
</tr>
<tr>
<td><a href="mailto:jreddan@iuhealth.org">jreddan@iuhealth.org</a></td>
<td><a href="mailto:jboiwman3@iuhealth.org">jboiwman3@iuhealth.org</a></td>
</tr>
<tr>
<td>317-962-8156</td>
<td>765-349-6500 ext. 1115</td>
</tr>
<tr>
<td><strong>Center for Medication Safety</strong></td>
<td><strong>Central Region Oncology Services</strong></td>
</tr>
<tr>
<td>Jim Rinehart, RPh, MS, FASHP</td>
<td>Chris Fausel, PharmD, MHA, BCOP</td>
</tr>
<tr>
<td>Medication Safety Officer</td>
<td>Clinical Manager, Oncology Pharmacy</td>
</tr>
<tr>
<td><a href="mailto:jrinehart@iuhealth.org">jrinehart@iuhealth.org</a></td>
<td><a href="mailto:cfausel@iuhealth.org">cfausel@iuhealth.org</a></td>
</tr>
<tr>
<td>317-962-2697</td>
<td>317-948-6686</td>
</tr>
</tbody>
</table>

**Note:** The above information includes contact details for various pharmacy services and hospitals within a specific health organization.
Pharmacy Leadership

North Hospital
Jane Barrett, RPh
Director of Pharmacy
jbarrett@iuhealth.org
317-688-2774

Paoli Hospital
Pamella Bond, RPh
Vice President, Pharmacy, Laboratory, Informatics
pbond1@iuhealth.org
812-723-7485

Pharmacy Benefit Management
Nahid Jamzadeh, RPh
Director of Pharmacy
njamzadeh@iuhealth.org
317-962-8417

Pharmacy Informatics and Meds Integration
Chris Urbanski, RPh, MS
Director
curbansk@iuhealth.org
317-962-9193

Pharmacy Purchasing & Logistics
William (Bill) Shaw, RPh
Director, Pharmacy Purchasing/Logistics
wshaw@iuhealth.org
317-962-6389

Rehab Hospital of Indiana
Neil Patel, BS Pharmacy, MBA
Director of Pharmacy
neil.patel@RHIN.com
317-329-2236

Riley Hospital for Children
Michael McGregory, PharmD, MBA, BCPS
Director of Pharmacy
mmcgrego@iuhealth.org
317-948-2593

Saxony Hospital
Bill Trownse, PharmD
Pharmacy Manager
wtrownse@iuhealth.org
317.678.2288

Starke Hospital
Leonid Slobodskoy, PharmD, RPh
Director of Pharmacy
L.Slobodskoy@lph.org
219-326-2591

Tipton Hospital
Angela Morgan PharmD
Pharmacy Manager
amorgan@iuhealth.org
765-675-0926

University Hospital
Chris Lowe, PharmD, BCPS
Director of Pharmacy
clowe@iuhealth.org
317-944-0364

VP, Chief Pharmacy Officer
Dawn Moore, PharmD, MS
dmooreje@iuhealth.org
317-948-0319

West Hospital
Anne Stegemoller, PharmD
Director Of Pharmacy
astegemo@iuhealth.org
317-217-3055

White Memorial Hospital
Brian Bonner, RPh
Director of Pharmacy
rbonner@iuhealth.org
574-583-1792
Highlights of 2012

Committees, Honors /Awards and Professional Appointments

- Our staff participated in over 430 different committees throughout the IU Health System, local, state and national organizations in 2012.
- Our staff were recognized with over 40 awards in 2012.
- Our staff held over 50 different professional appoints in 2012.
- Our staff completed over 150 different acts of service to the community in 2012.
# Highlights of 2012

## Faculty Appointments

<table>
<thead>
<tr>
<th>Type of Appointment</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASHP Pharmacy Leadership Academy: Faculty Member</td>
<td>3.9%</td>
</tr>
<tr>
<td>Butler University: Adjunct/Affiliate Professor</td>
<td>59.2%</td>
</tr>
<tr>
<td>Butler University: Assistant Professor</td>
<td>5.3%</td>
</tr>
<tr>
<td>Butler University: Associate Professor</td>
<td>1.3%</td>
</tr>
<tr>
<td>Butler University: Full Professor</td>
<td>5.3%</td>
</tr>
<tr>
<td>Indiana University School of Medicine: Adjunct/Affiliate Professor</td>
<td>5.3%</td>
</tr>
<tr>
<td>Purdue University: Adjunct/Affiliate Professor</td>
<td>73.7%</td>
</tr>
<tr>
<td>Purdue University: Assistant Professor</td>
<td>3.9%</td>
</tr>
<tr>
<td>Purdue University: Associate Professor</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

## Staff Publications, Oral Presentations and Poster Presentations

- Our staff published over 60 different journal articles, book chapters or other forms of publication in 2012.
- Our staff completed over 425 different oral presentations in 2012 in institutions across our health system, nation and world!
- Our staff presented over 20 different posters at multiple conferences in 2012.
System-Wide Services
Center for Medication Management

The Center for Medication Management (CMM) provides system pharmacy services related to drug information requests, formulary management, drug use policy development, education and drug shortage tracking.
Center for Medication Management

The Center for Medication Management is where pharmacists throughout the IU Health system turn for objective, evidence based information on medications and medication-related topics. This is done with a staff of 9; 4 full time Pharmacists, 2 Drug Information Faculty Pharmacists and 2 Pharmacy Technicians. Jennifer Reddan, PharmD, FASHP is the Director of the Center for Medication Management.

Housed in Methodist Hospital, in 2012 the Center for Medication Management responded to over 400 requests from clinicians throughout the system.

### Drug Information Requests

<table>
<thead>
<tr>
<th></th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions Received</td>
<td>400</td>
</tr>
<tr>
<td>ADR Reports Coordinated/Researched</td>
<td>243</td>
</tr>
</tbody>
</table>

### Drug Shortages

<table>
<thead>
<tr>
<th></th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Shortages Processed in 2012</td>
<td>310</td>
</tr>
<tr>
<td>Designated as critical drug shortages</td>
<td>27</td>
</tr>
</tbody>
</table>

### 2012 Accomplishments by Pillars

#### Quality and Safety
- Began participation in Infusion Pump Informatics workgroup to review and compare smart pump metrics internally and against other health care systems
- Established a template for review of smart pump metrics

#### Service
- Volunteer at IU Health State Fair Booth, Healthy Eating

#### Education
- Precepted 2 Drug Information Fellows in Drug Information
- Provided 15 lectures in Nursing Orientation on Pharmacy Services for the AHC facilities – 790 nurses
- Provided IU Health Pharmacy CE on “A Drug Information Refresher: Resources Available and How to Use Them” (EJ Last)
- Provided CE to institutional pharmacists at Butler on “New Medications” (Joe Jordan)

#### Research
- Coordinated 14 pharmacy resident MUE projects for the System, which focus on high-volume, error-prone, or high-cost therapy of a medication, medication class, component of the med use process, and/or compliance assessment with a guideline/policy/order set/ restriction, etc
- Results of these reviews are made available to Drug Specialty Panels, Medication Safety Committee, System Pharmacy and Therapeutics Committee and/or others as appropriate

### Maintain Pharmacy PULSE Page

- 106,508 hits in 2012
- Online Formulary
  - 13,761 page views
  - 4,249 searches
  - 50 reports downloaded

### Other Accomplishments

Implemented a new online Formulary in April 2012:
- 2nd quarter: 1182 page views/month; 395 searches/month
- 3rd quarter: 2299 page views/month; 886 searches/month
- 4th quarter: 1884 page views/month; 375 searches/month
The mission and vision of the Center for Medication Safety is to reduce medication errors and provide a medication harm-free environment at Indiana University Health for all patients and staff.
Center for Medication Safety

The Center for Medication Safety staff are responsible for the review, collation and analysis of all medication safety data and trends. These objectives are achieved with a staff of 5: 4 full time Pharmacists and one Administrative Assistant. James Rinehart, RPh, MS, FASHP is the Director.

Objectives

(1) Develop and participate in efforts to prevent medication misadventures
(2) Provide evidence-based medication safety recommendations to health care professionals
(3) Cultivate a just culture within Indiana University Health
(4) Establish, evaluate and maintain safe medication processes, systems, guidelines, policies and procedures
(5) Facilitate system-wide standardization of processes to optimize safe medication use
(6) Support the use of technology to optimize safe medication use
(7) Support ongoing safe medication use education and mentoring of pharmacy, nursing, medical staff, and other patient care providers,
(8) Support and conduct medication safety research
(9) Provide and analyze medication safety data and trends.

Service Highlights

Although housed in Methodist Hospital, the Center for Medication Safety services the entire system; and in 2012 processed 5234 medication variances for the facilities affiliated with the Academic Health Center
- 88 completed interventions based upon the medication variances.
- Approximately 600 customized reports
- Actively involved with reviewing over 900 triggers
- Over 50 chart reviews for adverse drug events

2012 Accomplishments by Pillars

Quality
- Reviewed oral syringe inventories, multidose bulk products in Pyxis for AHC
- Revised the System Adverse Drug Reaction policy and the Academic Health Center Medication Variance policy
- Updated removal of premix product overwrap guideline
- Updated the medication 'Do Not Tube' list on Pulse
- Established a Look Alike - Sound Alike (LASA) medication policy for the Academic Health Center
- Updated the 'TALLman lettering' list (also known as the Look Alike - Sound Alike medication list) on Pulse
- Standardized Calcium Chloride Concentration for IU Health system
- Created dose range checking request process for Cerner 9 Hospitals

Service
- Indianapolis Coalition for Patient Safety
- Medication Safety Work Group of the Indianapolis Coalition for Patient Safety
- Participation in the 2012 Patient Safety Week rounding program
- Created a 5 in 1 dashboard report noting medication variance data for the monthly pharmacy medication variance meeting of central Indiana University Health hospitals
- Participation with the hydromorphone medication use evaluation initiative of the Indianapolis Patient Safety Coalition Medication Work Group

People
- James Rinehart served as delegate to the 2012 American Society of Health-System Pharmacists House of Delegates

Education
- Established a relationship with the Purdue University Center for Medication Safety Advancement to have a PGY-1 medication safety resident rotation at the Indiana University Health Center for Medication Safety
Central Region Oncology Pharmacy Services

**Indiana University Health Central Indiana Cancer Centers (CICC)**

Indiana University Health Central Indiana Cancer Centers offer prompt, convenient care in community based, state-of-the-art treatment centers around the Indianapolis area. These centers offer a complete range of advanced diagnostics and treatment services to provide comprehensive care.

**Indiana University Health Spring Mill Medical Clinic**

Spring Mill Medicine offers services in the areas of: allergy, endocrinology, gastroenterology, hematology/oncology, pulmonary, rheumatology and a sleep study clinic. The clinic is located in Carmel, Indiana.

**Indiana University Simon Cancer Center (IUSCC)**

The IU Simon Cancer Center is located on the 80-acre Indianapolis campus of the Indiana University School of Medicine. All facilities on the campus are within close proximity to each other. The office, laboratory, and patient care space used by the physician and research members of the IU Simon Cancer Center are housed in six patient care and six research facilities on campus.
Central Region Oncology Pharmacy Services

At IU Health Central Indiana Cancer Centers (CICC), the Department of Pharmacy consists of 8 members across 5 locations: Carmel, Fishers, East, Hancock County and South. Pharmacy staff includes 3 Specialty Practice Clinical Pharmacists and 5 Pharmacy Technicians. At the IU Health Spring Mill Medical Clinic, the Department of Pharmacy consists of 2 members: 1 Specialty Practice Clinical Pharmacist and 1 Pharmacy Technician. At the Indiana University Simon Cancer Center (IUSCC), the Department of Pharmacy consists of 9 members: 4 Specialty Practice Clinical Pharmacists, 2 General Practice Pharmacists and 3 Pharmacy Technicians. Chris Fausel, PharmD, MHA, BCPS, BCOP is the Clinical Manager for Oncology Pharmacy.

Service Specialties
- Oncology
- Investigational drugs
- Selected non-oncology infusion therapy
- Pre-authorization and patient counseling on oral antineoplastic agents
- Transfusions

2012 Accomplishments by Pillars

Quality
- CICC: 3 of 5 offices upgraded to USP 797 compliance. Spring Mill: Converted to USP 797 compliant pharmacy
- Spring Mill: Passed compliance with Indiana Board of Pharmacy
- Spring Mill: Clinical pharmacy check of chemotherapy regimens, dose calculations, lab evaluations, medication interactions, schedule of treatment and physician dictation
- Spring Mill & IUSCC: Clinical Education with follow-up counseling
- Spring Mill: Part of interdisciplinary team creating and reviewing oncology order sets in preparation for PowerChart
- Spring Mill: Provides a daily clinical pharmacy check/support to CICC-Carmel
- IUSCC: Medication variances are reviewed by an oncology quality team
- IUSCC: Medication reconciliation pilot project in the hematology clinic

Service
- Spring Mill: Volunteer/Consenter Susan G. Komen Tissue Bank
- IUSCC: Miles for Myeloma
- Great Catch Award (B. Cochran)

Education
- Spring Mill: Nursing in-services: Ixabepilone, Hypercalcemia, Treatment of hormone receptor positive breast cancer, treatment of prostate cancer, subcutaneous bortezomib, infusion reactions in oncology, dosing of erythropoiesis-stimulating agents, everolimus, carfilzomib and alpha-1 proteinase inhibitor
- BCOP Certification: Raj Duggal

Research
- Admixing investigational drugs
- IRB Representation: Duggal and Fausel

Finance and Growth
- Spring Mill: Obtained replacement product/credit to save approximately $25,000 for errors in mixing or misuse.
- IUSCC: 340 B drug pricing program

2012 IU Health Indianapolis Central Region Oncology

<table>
<thead>
<tr>
<th></th>
<th>CICC # of Daily Infusions per site</th>
<th>CICC Annual Drug Budget</th>
<th>CICC Annual Prescriptions Dispensed</th>
<th>Spring Mill Average Daily Census</th>
<th>IUSCC Average Daily Census</th>
<th>Spring Mill and IUSCC Annual Drug Budget</th>
<th>Spring Mill and IUSCC Annual Prescriptions Dispensed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10-30</td>
<td>$23,000,000</td>
<td>35,000</td>
<td>18</td>
<td>65</td>
<td>$20 million</td>
<td>14,000</td>
</tr>
</tbody>
</table>
Compounding

The compounding pharmacy is responsible for preparing compounded medications that are not otherwise commercially available.
The Compounding Center

The Indiana University Health Compounding Pharmacy is located at University Hospital. In addition to the creation of compounded medication, the pharmacy is also responsible for preparing high-risk compounded sterile preparations and products that are on manufacturer backorder. Additionally, the pharmacy packages, repackages, and barcodes medications into unit dose for inpatient use.

The compounding and repackaging operation is centralized in order to provide consistency with compounded preparations and unit-dose packaging used at IU Health. Compounding has a staff of 11 consisting of 1 full time Pharmacist, 3 part time Pharmacists, 6 full time Pharmacy Technicians and 1 part time Pharmacy Technician.

Service Specialties

- Compounding non-sterile and sterile preparations
- Compounding for manufacturer backorders
- Packaging (unit-dose, oral syringes/vials) of oral meds/narcotics
- Barcoding
- Drug information for compounding questions/requests

Practice Model

45 hours coverage, Monday thru Friday to provide centralized compounding and packaging services for the downtown and regional hospitals. Pharmacists are responsible for overseeing operations, quality assurance for compounding, maintaining all records, and investigating/reviewing information to develop new formulations compliant with USP<795> and USP<797> standards.

2012 Accomplishments by Pillars

Quality
- New repackaging software was implemented to scan the bulk bottles to create the barcode labels for the unit dose packagers
- New pharmacist checking procedure was implemented to reduce the number of packaging errors
- New third party laboratory is being used to improve the testing process for compounded items. The pharmacy is testing at within a 97% accuracy on compounded items
- All staff completed the formal compounding training program
- Preparing for PCAB-certification process
- Implemented new packaging systems to provide tamper-proof doses

Service
- Unit-dose package medications for Camp Riley

People
- Combined total of 96+ years of pharmacy experience from staff
- Received several thank-you cards from different departments for helping to resolve compounding or packaging issues

Education
- Compounding pharmacy is an advanced pharmacy rotation site for Purdue and Butler Universities and all staff participates in the students’ education

Finance and Growth
- In-sourcing medications that have been previously outsourced to save money and improve the quality and safety of these medications
- Centralizing and expanding compounding and repackaging services for several facilities to eliminate duplication of work
Education and Training

IU Health’s Pharmacy Department supports education and training through three major venues: Our Residency Program, Continuing Pharmacy Education Programs and our support of Student Rotations.
**Education and Training**

Education and Training is supported by each of the institutions and each pharmacy department employee within the system.

**Pharmacy Residencies**

In 2012, IU Health received a full six year accreditation from the American Society of Health-System Pharmacists based on the site survey visit this past January for each of our PGY1 and PGY2 residency programs. Only 10% of all pharmacy residency programs receive the full six year accreditation term.

- The Pharmacy Informatics Residency program received full accreditation status, only the sixth fully accredited program in the nation
- Received $40,000 ASHP Foundation Pharmacy Residency Expansion Grant to expand our PGY2 Critical Care Program

**Residency Program Highlights**

- 14 PGY1 residents, 8 PGY2 residents, 2 non-traditional residents
- Updated Pharmacy Residency Website
- Updated Resident Handbook
- 75+ preceptors
- 70+ PGY1 rotations
- Revised Learning Experience Descriptions

**Preceptor Development**

- New Preceptor Orientation
- New Facilitator Training
- New Preceptor Handbook
- Quarterly Preceptor Development
- Trainings offered live and online

**Student Rotations 2012**

<table>
<thead>
<tr>
<th>School</th>
<th>APPE Rotations</th>
<th>IPPE Rotations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Methododist</td>
<td>University</td>
</tr>
<tr>
<td>Butler University</td>
<td>92</td>
<td>29</td>
</tr>
<tr>
<td>Purdue University</td>
<td>48</td>
<td>71</td>
</tr>
<tr>
<td>Albany College</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Appalachian College</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LECOM</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ohio Northern</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Roseman University</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>University of Hawaii</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>154</strong></td>
<td><strong>108</strong></td>
</tr>
</tbody>
</table>

**Total Student Rotations 2012 = 430**

**Continuing Pharmacy Education Offerings**

- Methodist, University and Riley each offer a monthly CE event for pharmacists
- Updated internal Pulse Page to include online Preceptor CE activities
- Completed AHC continuing education pharmacy technician needs assessment
Global Projects

The Pharmacy Department at IU Health prioritizes the health of our patients and community. Often, this requires the joint efforts of those within the pharmacy department as well as working with departments across the hospital.
Global Projects

Other global projects include medication use evaluation coordination, adverse drug event monitoring and reporting, medication error prevention and medication-related guidelines, resources, policies and procedures development, evaluation and maintenance. These activities help increase practitioners’ knowledge about drug therapy to facilitate improved drug therapy use, medication safety and therapeutic outcomes.

- 14 Alaris Dataset Updates/rollouts completed
- Worked to develop and implement new IV Pump Safety Day procedure to ensure Alaris pumps are updated with the current IU Health smartpump dataset
- Created a place on Pulse for the inventory locations for premade compounded medication products for the Academic Health Center
- Numerous Enhancements for Computerized Prescriber Order Entry (CPOE)
- Numerous Cerner Updates for customized discern alerts, product builds, customized concentration and enhanced product notes
- Revised the Hazardous Medication List and Policy
- Revised the High Alert Medication Pharmacy policy
- Establish 'minimum interval' alerts for non-scheduled (PRN) frequencies
- Established new Pyxis display for insulin lispro HUMAl og to avoid confusion with long acting insulins
- Established the Insulin U-500 CONCENTRATED policy, operational procedures and system order set
- Initiated retraining of AHC pharmacy staff for proper bar code placement on medications and nursing staff for education regarding which bar code to scan
- Implemented a new nebulizing device (AeroGen™) and the syringe system (AeroNeb™)

System Pharmacy and Therapeutics (P&T) Committee

The SPTC is a multi-facility, multi-disciplinary Committee charged with maintaining the IU Health Formulary, Formulary-management initiatives, medication or pharmacy policies and procedures, and providing system leadership for medication management to facilitate the safe and effective use of medications throughout IU Health.

### System P&T Committee

<table>
<thead>
<tr>
<th>Category</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapeutic Interchanges</td>
<td>13</td>
</tr>
<tr>
<td><strong>New</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Updated</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Retired</strong></td>
<td></td>
</tr>
<tr>
<td>Formulary Additions</td>
<td>18</td>
</tr>
<tr>
<td><strong>New Products</strong></td>
<td></td>
</tr>
<tr>
<td><strong>with Restrictions</strong></td>
<td>13</td>
</tr>
<tr>
<td>Line Extensions</td>
<td>33</td>
</tr>
<tr>
<td>Restrictions added on current Formulary Product</td>
<td>12</td>
</tr>
<tr>
<td>Formulary Deletions</td>
<td>47</td>
</tr>
<tr>
<td>Product Standardizations</td>
<td>4</td>
</tr>
<tr>
<td>(concentration, preservative containing, etc)</td>
<td></td>
</tr>
<tr>
<td>Medication Use Guidelines/Protocols</td>
<td>7</td>
</tr>
<tr>
<td>System Pharmacy Policies</td>
<td>8</td>
</tr>
<tr>
<td><strong>New</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Updated</strong></td>
<td></td>
</tr>
<tr>
<td>System Pharmacy Policies</td>
<td>7</td>
</tr>
<tr>
<td><strong>New</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Updated</strong></td>
<td></td>
</tr>
<tr>
<td>Standardized Dosing Nomograms</td>
<td>5</td>
</tr>
<tr>
<td><strong>New</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Updated</strong></td>
<td></td>
</tr>
<tr>
<td>Standardized Dosing Nomogram</td>
<td>2</td>
</tr>
<tr>
<td><strong>New</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Updated</strong></td>
<td></td>
</tr>
</tbody>
</table>
Home Care Pharmacy

When a patient no longer needs to receive treatment in a hospital, we believe they deserve to be treated in the comfort of their own home without compromising the level of care provided. Indiana University Health Home Care continues to define the highest standards of hospital-based home care through our excellence in patient care, support for early discharge, and better outcomes for our patients, including reduction in preventable readmissions.
Home Care Infusion Pharmacy

The IU Health Home Care-Infusion Pharmacy is located on North Meridian Street in Indianapolis, Indiana.

We are one of the largest, most comprehensive home care organizations in the Midwest and continue to provide innovative programs customized for each one of our patients. We provide the statewide provision of infusion pharmacy and nutrition services from our central location in Indianapolis.

Pharmacists coordinate the infusion component of the patient’s total plan of care with the nurse and/or the patient/caregiver and the physician. Pharmacists are responsible for monitoring all lab results with recommended changes communicated to the physician. They also coordinate with nursing on all care related issues, and assess, counsel and directly interact with patients receiving home infusion therapies.

Pharmacy staff includes 33 members: 12 Pharmacists, 8 Pharmacy Technicians, 2 Registered Dietitians and 11 Customer Service Specialists. Kent Carmer, RPh is the Pharmacy Manager.

Practice Model

The “first dose pharmacists” coordinates with our Home Care Intake dept, nursing, and customer service specialists to gather assessment information and set up new patient therapies, then hand off to the assigned caseload pharmacists who will follow patient throughout home therapy.

The cleanroom pharmacist has responsibility for overseeing activities of cleanroom technicians, coordinating, and checking all compounded products with any required product quality testing or sampling. Pharmacists are available in the office during posted business hours of 8-5 Mon-Fri (pharmacy is actually staffed 7:30-7:30 Mon-Fri, and 9-5 on Saturday with a pharmacist on call 24/7/365).

2012 Accomplishments by Pillars

Quality
- Prepared and distributed 73,680 IV doses including TPN, antibiotic, hydration fluids, IV push medications, and chemotherapy
- A total of 35 medication incidences were reported by patients, nurses, and pharmacy staff. None of these medication incidences required additional treatment, intervention, or resulted in patient harm

People
- Home Care pharmacy had zero staff turnover

Education
- Home Care serves as a rotation site for the IU Health pharmacy technician training program, as well as providing shadowing and rotation experiences for pharmacy students and residents

Service Specialties
- Antibiotics
- Chemotherapy
- CSF
- IVIG
- Inotropes
- TPN
- Pain Management
- Specialty Injectables
- IV Line Care
- Growth Hormone
- We also provide home Enteral Nutrition supplies, equipment and nutrients.

2012 IU Health Home Care Infusion

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>New IV Patient Referrals</td>
<td>3565</td>
</tr>
<tr>
<td>New ENT Patient Referrals</td>
<td>4372</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$3 Million</td>
</tr>
<tr>
<td>Annual Prescriptions Dispensed</td>
<td>35,940</td>
</tr>
</tbody>
</table>
Investigational Drug Service

The Investigational Drug Service (IDS) supports the safe use of investigational products in patients who are being treated in either inpatient or outpatient settings. Investigators delegate the role of coordinating the drug portion of a clinical trial to IDS. Our goal is to ensure that investigational drugs are used in accordance with the protocol specifications while following the policies and procedures of IU Health and regulatory groups. IDS provides service to the Clinical Research Center, a partner with Indiana Clinical and Translational Sciences Institute at University Hospital.
Investigational Drugs

The Investigational Drug Service (IDS) supports inpatient and outpatient study protocols at IU, Methodist and Riley Hospitals and outpatient study protocols at associated clinics, including the Neuroscience building at Methodist, Indiana University Simon Cancer Center, Springmill clinic and the five Central Indiana Cancer Centers (CICC). IDS is able to accomplish this with a staff of 7: 3 full time Pharmacists and 4 full time Pharmacy Technicians and is overseen by Chris Lowe, PharmD, BCPS.

Key Operating Statistics

<table>
<thead>
<tr>
<th></th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Active Studies</td>
<td>303</td>
</tr>
<tr>
<td>New Studies Started</td>
<td>144</td>
</tr>
<tr>
<td>Studies Closed</td>
<td>108</td>
</tr>
<tr>
<td>Study Amendments/Updates</td>
<td>268</td>
</tr>
<tr>
<td>IRB Meetings Attended</td>
<td>40</td>
</tr>
<tr>
<td>IRB Protocols Reviewed</td>
<td>139</td>
</tr>
<tr>
<td>In-Services or Presentations</td>
<td>31</td>
</tr>
<tr>
<td>Monitor Visit Hours</td>
<td>580</td>
</tr>
<tr>
<td>Outpatient Dispenses (per year)</td>
<td>2771</td>
</tr>
<tr>
<td>Inpatient/Clinic IV Dispenses (per year)</td>
<td>3220</td>
</tr>
</tbody>
</table>

Practice Model

The Investigational Drug Service is open 8:00 a.m. to 4:30 p.m., Monday through Friday. One pharmacist is on-call and available by pager 24 hours a day, seven days a week. IDS collaborates with the inpatient pharmacy staff at each hospital to provide service around the clock to our investigators and patients.

Program Highlights

- Trained 2 new pharmacists
- Partnered with the Indiana University Cancer Research Office (CRO) to initiate procedures for handling investigational product for eleven protocols at CICC locations
- Developed policies and standard operating procedures for temperature controlled shipping

2012 Accomplishments by Pillars

Quality

- Training Record: Initiated the protocol specific training record to ensure that staff has been trained to the procedures for each protocol prior to dispensing
- Partnered with CRO to initiate procedures for handling investigational product for eleven protocols at the CICC locations. Educated site staff to the protocol specific information as well as to the role of the IDS
- Protocol Review: Reviewed and modified 120 pharmacy procedures to include the appropriate use of intravenous sets and closed system transfer devices
- Improve tracking, capture and reporting of workload statistics

Service

- Annual Holiday Riley Adopt-a-Family

Education

- IDS Orientation and Tour
- Research Coordinator Education Program (RCEP)
- Introduction to IDS One Hour Lecture
- One hour lecture as part of IU Health Pharmacy Technician Program
- Protocol Specific In-Services

Research

- Bonnie Klank, PharmD appointed to IRB: 03 & 04; alternate to 02 & 05
- Annette Head, RPh appointed to IRB-02; alternate to 01, 03, 04 and 05
- Melissa Allard, PharmD appointed to IRB-05; alternate to 01, 02, 03 and 04

Finance and Growth

New Service Areas in 2012

- Emergency Medicine
- Pediatric Pulmonary/Critical Care
- Intensive Care Unit
- Purdue Pharmacy Practice
- Obstetrics
- Adult Anesthesia
- Dermatology

Total Billed Activity = $539,464.89
Pharmacy Benefit Management

Pharmacy Benefit Management works with clients to implement and maintain a pharmacy benefit that meets their specific needs and goals while ensuring it is clinically sound, safe, and effective. To manage client drug expense, we take a collaborative approach to our utilization management tools and clinical programs through communication and involvement with the providers, members, and pharmacies.
Indiana University Pharmacy Benefit Management (PBM)

Pharmacy benefit management is responsible for commercial and Medicare Advantage pharmacy claims processing, benefit decisions (such as copays), formulary management, patient compliance & medication therapy management to assure cost effective and quality medication choices in a managed care setting. Nahid Jamzadeh, RPh, is the Pharmacy Director for the Pharmacy Benefit Management Program. PBM is located at Once Independence Center in Indianapolis, Indiana.

Service Highlights

- Ongoing review of Medicare Advantage ESRD medication utilization
- Ongoing internal audit of Rx claims
- Multiple collaborative drug therapy management agreements to communicate with physicians via various EMR's for drug therapy changes.
- Ongoing monitoring and auditing of Medicare Advantage pharmacy claims for compliance with CMS
- Pharmacy reminder phone calls, patient education letters, provider communications for compliance issues, and continuous monitoring.
- Free selected diabetic meds for lower income employees
- Drug utilization reviews to decrease polypharmacy, duplication of therapy, promote cost effective choices & improve compliance.
- Prior authorization program for selected medications with high cost and side effects to ensure proper utilization.
- Prior authorization of Medicare Part B/commercial injections given in physician setting.
- Incentivized co-pay structure to promote IU Health retail pharmacies

2012 Accomplishments by Pillars

Quality

- Improved Medicare Advantage Pharmacy Claims Star Rating
- Increased utilization and prescribing of ACE and ARB medications in diabetic hypertensive patients
- Improved compliance of diabetic Medicare Advantage patients with statins and oral diabetic, ACE, and ARB medications

Service

- Physician collaborations and meetings to provide feedback on their prescribing, opportunities for cost effective and quality changes with their utilization trends
- Attending GRACE (high-risk Medicare Advantage geriatric patients) meetings to monitor and evaluate drug therapy

Education

- Offered three classes for members in three locations: medication review, blood pressure & cholesterol screenings with education on disease states
- Offered open community patient education seminars
- Clinical pharmacists attended the AMCP conference and Perform Rx seminar

Finance and Growth

- Cost of medications, per member per month, is below the budget and overall national trends
- Improved generic utilization trend for both Medicare Advantage and commercial product
- Increased membership for Medicare Advantage and commercial product

Other Accomplishments

- Completed a CMS program audit
- Participated in HR Benefit Changes Events and educated providers and members on new clients regarding formulary differences
- Participated and directed commercial P&T Committee and attended Medicare Advantage P&T Committee
Pharmacy Clinical Information Systems (CIS) Council

The Pharmacy Clinical Information Systems (CIS) Council provides system oversight related to all medication orderable modifications and associated processes supported by the electronic medical record. The Pharmacy CIS Council evaluates, prioritizes and approves requests from all Cerner sites. Once approved, Pharmacy CIS tracks and works to ensure accurate and timely completion of each request.
Pharmacy Clinical Information Systems (CIS) Council

The Pharmacy CIS Council is composed of pharmacy representatives from each Cerner facility, PharmNet and Meds Integration personnel, Med Safety and the Center for Medication Management. The CIS council provides a structure by which pharmacy personnel can request changes to the electronic medical record in a collaborative, fun, cohesive manner with the assurance that all requests will be addressed.

Major Projects
- 371 requests approved in 2012
- Standardized Clinical and Operational Tasks across the IUH Cerner System
- Provided coordination to achieve standard process for labeling and managing total volume calculations
- Developed new order entry formats and/or methods to support the entry and charting of complicated medication orders (e.g. CRRT, Pentacel, epidurals)
- Developed and approved policies designed to support standard Cerner system operations (e.g. Auto Verification, Change Control Governance)

CIS Council Requests

<table>
<thead>
<tr>
<th>Type of Review</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discern Alert (new/ modification)</td>
<td>42</td>
</tr>
<tr>
<td>Auto Product Select Issue</td>
<td>1</td>
</tr>
<tr>
<td>Build modification</td>
<td>87</td>
</tr>
<tr>
<td>Pyxis Clinical data category</td>
<td>1</td>
</tr>
<tr>
<td>Product/IV Set comment addition/deletion/ modification</td>
<td>46</td>
</tr>
<tr>
<td>Dispense category change</td>
<td>13</td>
</tr>
<tr>
<td>New build</td>
<td>92</td>
</tr>
<tr>
<td>Nomenclature change</td>
<td>19</td>
</tr>
<tr>
<td>Order sentence addition/change</td>
<td>21</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
</tr>
<tr>
<td>Product label print specifications</td>
<td>5</td>
</tr>
<tr>
<td>Report modifications</td>
<td>4</td>
</tr>
<tr>
<td>Product Tasks</td>
<td>23</td>
</tr>
</tbody>
</table>

2012 Accomplishments by Pillars

Quality
- Developed change control governance policy and vetted via internal Kaizen Improvement Process led by Cardinal Health
- Developed end user acceptance as part of quality process related to requests moving into production
- Completed audit of outstanding approved, submitted requests
- All initiatives/requests are vetted and approved with the ultimate goal of providing a system to support the highest level of patient safety possible
- Standardized and improved the respiratory medication order entry process across the Cerner System
- Standardized D/C interaction days to support appropriate Discern Alert firing
- Standardized IV tubing requirements/related nomenclature

Education
- Distribute monthly summarized System e-Letter to all Cerner sites
- Maintain and update pharmacist Cerner training material and program in conjunction with Learning Solutions
- Distribute educational material as needed to support new Cerner applications (message center, proposed order function, auto verification, respiratory process, radiology process)
- Provides system-wide, ongoing education regarding Pharmacy CIS operations (form completion, submission process, quality assurance process)

Research
- Participated in Kaizen process to further enhance change control governance structure related to electronic medical record changes secondary to medication and medication orderable adds

Finance and Growth
- Added IU Health Saxony Hospital as a voting facility to the Council
Pharmacy Informatics & Meds Integration

The complex technologies that constitute pharmacy informatics can reduce medication errors, streamline medication-related processes, monitor patient status, and provide pharmacists, physicians, nurses, and other clinicians with instant access to critical information at the point of care. This team provides project management, implementation and operations support for medication-use systems, automation, and technologies for the IU Health system.
Pharmacy Informatics and Meds Integration

The Pharmacy Informatics and Meds Integration team is a clinical Information Services (IS) team that reports to the IS Department. Chris Urbanski, BS PharmD, MS is the director. The department is housed within IUH Information Services at South Campus.

Key Systems Supported
- Cerner (including but not limited to PharmNet, CPOE, CareMobile, CareAdmin, eMAR, medication clinical decision support, Medication Reconciliation, PowerChart Oncology)
- Pyxis (MedStation, Pyxis Connect, PARx, CII Safe)
- DoseEdge IV workflow
- Talyst Carousels
- McKesson Robot-Rx
- Various unit-dose packagers/software
- Sentry 340B software

Service Highlights
- Cerner Medication Reconciliation pilot to improve medication rec process
- CareAdmin Barcode Medication Administration (BCMA) rollout
- DoseEdge - Expanded use of DoseEdge IV Workflow system in Riley Hospital for Children, at IU Health inpatient pharmacy as well as to prepare chemotherapy doses at Methodist
- Implemented Cerner CareMobile BCMA in Riley Dialysis
- Computerized Prescriber Order Entry (CPOE) for Pediatrics and Methodist Hospital Emergency Department
- Ball: McKesson Robot-Rx hardware upgrade
- Talyst software upgrade to AP3.2 at Riley allowing for expiration tracking
- Pyxis and hardware moves to support the UH central pharmacy remodel

2012 Accomplishments by Pillars

Quality
- BCMA Near-Miss Reporting to identify potential staff education opportunities, measure program benefits, and discover potential systems and process improvements
- Sunrise Disease Manager Server Upgrade enabling a more reliable environment and a more efficient backup process
- Implemented Minimum Interval alert functionality to fire an alert if a clinician administers a medication "too early"

Service
- Sponsored two IU Health families registered through EAP during the holidays

People
- Great Catch Award - Jason Eder, Analyst-Pharmacy Informatics for the renal task system that identified a “near-miss” for a patient with declining renal function

Education
- Developed an elective rotation option with the Talyst Corporation in Seattle, Washington

Finance and Growth
- Expanded services by creating dedicated support teams for oncology and pediatric needs
- Reduced consultant travel costs by altering travel schedule
- Redefined the billable units for all chemotherapy projects. This effort coincides with the implementation of Pha-Seal and increases our billing compliance

Other Accomplishments
- CareFusion Projects - Upgraded the Pyxis Medstations to SR4 at University, Saxony, HVM sites, and Riley Hospitals
- ParX 5.0 Upgrade at Methodist Hospital
- Pyxis Connect Upgrade: University, Methodist, Riley, West, North, Ball, and Blackford Hospitals
- Moved all Riley Simon Family Tower moves into new 5th floor space
Pharmacy Integrated Supply Chain Initiatives

Supply chain management’s goal is to help cost effectively improve patient safety in the administration of drugs to improve patient care. Pharmacy integrated supply chain initiatives develop strategies for driving efficiency through the integration of pharmacy supply chain initiatives.
The Patient Protection and Affordable Care Act was signed into law in 2010. In the face of this new environment, we looked at ways we could impact the effects that these new regulations would have on IU Health. To help reduce costs while improving quality, we decided that we would completely rethink the way we did business with our drug suppliers. We sent out an RFI asking vendors to guarantee a $12 million margin improvement over 36 months either by cost reduction or enhanced revenue. This guarantee had to be net of expenses and had to be quantifiable and validated by IU Health’s Finance Department. After reviewing the RFI’s we signed an agreement with Cardinal Health to be our supply chain partner.

At the completion of the original 36 month contract, ending in February 2012, we realized a validated net margin improvement of $34,404,451.34, a full $22,404,451.34 over the guaranteed $12 million. These savings were tracked via Statements of Work (SOW) mutually agreed upon by IU Health and Cardinal Health. Upon completion of the initial 36 month contract, the retail portion of the program was transitioned over to IU Health to maintain and grow. Several initiatives impacting the hospital setting will be continued and tracked on a new scorecard.

Since completion of the original 36 month contract in February 2012, system-wide contracts that leverage IU Health’s ability to move market share have saved over $165,000; optimization of our GPO portfolios have saved over $575,000; implementing various P&T initiatives have saved over $725,000; and eRecovery* has added two new sites and saved $759,000. Overall, the initiatives are projected to provide a net margin improvement of over $3.5 million over the final 10 months of 2012.

Our progressive model of collaborating with our supply chain partner has been recognized nationally through various publications and is being implemented at other IDN’s across the nation.

---

**Statement of Work (SOW) Scorecard**

<table>
<thead>
<tr>
<th>SOW</th>
<th>SOW Name</th>
<th>Mar - Dec 2012 Total Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>COGS Savings</td>
<td>$1,609,981</td>
</tr>
<tr>
<td>5</td>
<td>eRecovery</td>
<td>$759,256</td>
</tr>
<tr>
<td>7</td>
<td>System Drug Contracts*</td>
<td>$167,542</td>
</tr>
<tr>
<td>11</td>
<td>Med Cost Control*</td>
<td>$575,022</td>
</tr>
<tr>
<td>15</td>
<td>Inventory Management*</td>
<td>$172,081</td>
</tr>
<tr>
<td>14</td>
<td>Med Cost Control (Clinical/Utilization)*</td>
<td>$727,852</td>
</tr>
<tr>
<td>42</td>
<td>Drug Waste Recovery</td>
<td>$27,669</td>
</tr>
<tr>
<td>PS</td>
<td>Pharmacy Solutions</td>
<td>$(458,333)</td>
</tr>
</tbody>
</table>

$3,581,069

* 4th quarter 2012 numbers were projected for scorecard
Pharmacy Purchasing & Logistics

Pharmacy Purchasing & Logistics coordinates the purchasing of all medications for the Academic Health System and surrounding clinics.
Pharmacy Purchasing & Logistics

The Pharmacy Purchasing & Logistics department manages drug shortages. This is accomplished by locating other sources of product, selecting alternative therapies, communicating with clinicians and coordinating the re-distribution of supply throughout the system to assure all IU Health patients have needed medications.

Pyxis

The Pharmacy Purchasing & Logistics department is responsible for distributing medications to the Pyxis cabinets on the floor and providing drugs to the inpatient pharmacies and clinic areas.

Key Operating Statistics

| Number of Statewide IDN Contracts and Savings | $165,000 |
| Number of Doses Compounded | 835,000 |
| Number of Doses Dispensed | 6.5 Million |
| Integrated Supply Chain Initiative Savings | $3.5 Million |

2012 Accomplishments by Pillars

Quality

- We added a Fluidose packager to help handle the increase utilization of liquid medications

Service

- Participate in MESH-Medical Multi-Agency Coordination Center for Hospital Preparedness

Finance and Growth

- Created a system-wide Flu Vaccine agreement that saved the system $125K
- Redesigned the Pharmacy AP process resulting in a cost avoidance of $275K
- Expansion of eRecovery to West and North Hospitals
- Expansion of CMS (Contract Management Strategies) to multiple facilities with a cost recovery of $46,000 in 2012
- Wrote a new Cardinal agreement that expected to save the system approximately $1.5M per year

Service Highlights

The Pharmacy Purchasing & Logistics Department writes IDN contracts that benefit the IU Health system as well as manage our Novation GPO Pharmacy contracts. We help manage the 340B program for IU Health.
Retail Pharmacy

The Indiana University Health Retail Pharmacies offer the convenience of "one-stop shopping" for customers.
Retail Pharmacy

The Retail Pharmacies:
• Fill prescriptions the same day as hospital/physician appointment
• Fill prescriptions for patients to take home upon being discharged from the hospital
• Refill prescriptions online, by phone or by fax
• Over-the-counter medications available for purchase
• Honors most major prescription card programs

Service Highlights

Services offered at select locations:
• Immunization Services
• Durable Medical Equipment
• Specialty Compounding
• Patient Assistance
• Blood Pressure Screenings
• Medication Therapy Management

2012 Accomplishments

• Refinement and co-ordination of Symphony software, robotics, & automation in outpatient pharmacy locations
• Arnett developed and rolled out a courier service to provide retail pharmacy services to 800 employees at 17 locations
• Continued standardization of outpatient retail pharmacies services, including software and programs to provide consistent pricing over the entire network
• Rolled out 7 AHC sites on Sentrex 340B program
• Restructured the retail pharmacy IS, Compliance and Billing departments for more efficient work and reduced costs

2012 Accomplishments by Pillars

Quality
• Monthly departmental quality meetings
• Site compliance with hand hygiene improved by 54%
• Development of quality infrastructure
• Roll-out of PQC to all locations
• Medication safety integration with inpatient pharmacy
• Hardwired employee rounding and hand-washing observation
• PDSA's : Supporting documentation and development of training for MCR specialty billing, hand hygiene

Service
• Patient admission and education materials created
• Expanded immunization program across network
• Collaborated with Employee PBM, IU Health Plan and IU Health PBM to expand access to employees, improve services provided and reduce overall IU Health pharmacy costs

People
• Retail billing management change
• Change in reporting structure

Education
• JCR CSR Symposium & Mock Survey
• Roll out of new competencies across network

Finance and Growth
• Improved billing and coding error rates at 4 sites:
  East 9.76% to 0
  Georgetown 4.88% to 0
  Methodist 36.59% to 0
  South 2.44% to 0
• Decreased percent outstanding collections:
  4.43% from Q1 to Q3
  5.6% from Q1 to Q4
• Opened Arnett Retail Pharmacy
• Discharge Programs expansion resulting in 10% increase in scripts filled

2012 IU Health Retail Pharmacies

| Locations | 21 |
| Prescriptions Filled | 913,560 |
| Staff | 156 |
| Operating Margin | $10,241,928 |
| Discharge Rx’s | 167,018 |
| 340B Status | 12 Active |
Service Line Profiles
Indiana University Health Arnett Hospital is a full-service, 184-bed hospital with an adjacent outpatient surgery center committed to providing exceptional care and service for your whole family. IU Health Arnett's legacy of excellence in healthcare spans more than 80 years and we continue to be a trusted leader in northern Indiana healthcare market. IU Health Arnett has 24 facilities, 18 located in Lafayette/West Lafayette and 6 in the surrounding communities. Our secure patient base draws from a mix of industrial and university communities in a 12 county area.
IU Health Arnett Pharmacy Department

At IU Health Arnett Hospital, the Department of Pharmacy consists of 49 members offering inpatient and outpatient services, across the hospital, ambulatory surgery center, 2 satellite oncology infusion centers, 54 clinics and 1 retail pharmacy location. Pharmacy staff includes 4 Specialty Practice Clinical Pharmacists, 14 Generalist Practice Clinical Pharmacists, 28 Pharmacy Technicians, a Buyer, an Inventory Technician and a Project Coordinator. David George, RPh, MBA is the Administrative Director of Disease Management and Pharmacy Services.

Service Specialties

- Outpatient Cancer Infusion Centers and Radiation Oncology
- Ambulatory Surgery Center
- Purdue faculty onsite for Med/Surg Rounding
- Riley NICU Satellite
- Lifeline Base (helicopter and ambulance)
- Trauma Center
- Interventional Radiology
- Chemoembolization Services
- Coumadin Clinic (2 sites)
- Retail Pharmacy

Pharmacy Practice Model

IU Health Arnett uses a hybrid centralized/decentralized staffing model with 2 outpatient cancer center satellites. Clinical services and rounds include: CV services, Rounding Services (Med/Surg, ICU, NICU). We offer 24 hour coverage with a decentralized unit dose model supported by decentralized and centralized pharmacy operations. The hospital utilizes Pyxis unit base cabinets to provide a “cartless” medication delivery system that includes ambulatory surgery center.

2012 Accomplishments by Pillars

Quality

- Achieved goals with VTE quality initiative
- Implemented Stroke “Get with the Guidelines” accreditation program
- Improved VTE1, VTE2 SCIP measures
- Achieved AADE accreditation for outpatient program
- Achieved Diabetes Recognition Program for primary care offices
- Exceeded goals with Arnett quality panel
- Daily Awareness Safety Huddle
- Monthly Medication Variance Review program

Service

- Improved our patient satisfaction measures to above baseline
- Developed Pharmacy/Nursing newsletter
- Completed legal name change for ambulatory clinics
- Habitat for Humanity participation

People

- Achieved staffing levels planned for the year
- Larry Bisiriyu awarded the Arnett Aspend Award winner for great service

Education

- All technicians achieved National Certification (CPhT)
- Explorer program for high school students

Finance and Growth

- Exceeded contribution margin goals by 7%
- Maintained controllable expenses by 15% below flex budget

Other Accomplishments

- Opened Arnett Greenbush Retail pharmacy
- Awarded Wabash National Occupational Medicine pharmacy contract
- Awarded Wabash National Network Agreement contract for pharmacy services

2012 IU Health Arnett Hospital

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Census</td>
<td>167</td>
</tr>
<tr>
<td>Annual Admissions</td>
<td>9689</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$26.8 mil</td>
</tr>
<tr>
<td>Hospital prescriptions</td>
<td>3.24 mil</td>
</tr>
<tr>
<td>Oncology prescriptions</td>
<td>14,800</td>
</tr>
<tr>
<td>Retail prescriptions</td>
<td>17,900</td>
</tr>
</tbody>
</table>
Indiana University Health Ball Memorial Hospital was founded in 1929 as both a teaching hospital and regional tertiary referral center. We've introduced healthcare to underserved populations and geographic areas such as Upland, New Castle and Hartford City. This not-for-profit organization boasts a clinical staff of more than 400 physicians, representing more than 45 medical specialties including the Cancer Center, cardiac services, orthopedic services and specialized women and children’s services. Most recently, the new, patient-centric 5 story south wing was unveiled. The $120 million facility includes 300,000 square feet of new and revitalized space, including 108 all-private patient rooms. IU Health Ball Memorial Hospital has been awarded with more than 35 top national and international awards to prove its efforts.
IU Health Ball Memorial Hospital
Pharmacy Department

At IU Health Ball Memorial Hospital, the Department of Pharmacy consists of 80 members offering inpatient services across the hospital. Pharmacy staff includes 33 Generalist Practice Clinical Pharmacists, 42 Pharmacy Technicians, a Purchasing Technician, Senior Purchasing Technician and a Secretary. Tina Love, RPh, is the Director of Inpatient Pharmacy Services.

Pharmacy Practice Model
IU Health Ball Memorial Hospital uses a 24 hour hybrid centralized unit dose/decentralized Pyxis model supported by McKesson Robot for first doses and 24-hour cart fill, and Pyxis cabinets for narcotics, PRNs, and emergency floor stock medications. Clinical staff pharmacists provide clinical services house-wide, and one pharmacist covers clinical and order entry for ICU for 8 hours per day, Monday through Friday. Pyxis Connect is utilized for order scanning. After hours order entry services are provided to IU Health Blackford.

2012 IU Health Ball Memorial Hospital

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Census</td>
<td>242</td>
</tr>
<tr>
<td>Annual Admissions</td>
<td>17,456</td>
</tr>
<tr>
<td>(through November 2012)</td>
<td></td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$23,100,000</td>
</tr>
</tbody>
</table>

2012 Accomplishments by Pillars

Quality
- Clinical Intervention documentation was resumed in May 2012
- Team rounds in the Cardiac Intensive Care unit in February, on 6N orthopedic patients in August, and on 9N medical floor in September

Service
- Administration of influenza vaccine to employees through Employee Health.
- Relay for Life, Blackford County Community Health Fair, and Heart Failure screen

People
- Matt Knoth received two certifications: Board-Certified Nutritional Support Pharmacist and a Certified Nutritional Support Clinician
- “Good Catch” Recipients: Jennifer Dotson in March and Susanna Nalliah in June

Research
- 12 open studies in Cancer, along with the TAO study in Cardiology

Education
- Technician Pharmacology Course
- Parenteral Nutrition Training presented to Ball State University dietetic interns
- “Heart Failure and Success” presented to VHA Central Pharmacy Council, VHA group in Minnesota and VHA “best practices” webinar
- Pharmacology of Heart Failure Therapy: presented at Heart Failure Symposium
- Pain Management in Oncology, presented at Oncology Education Series
- Prescription Writing Course, presented to IU School of Medicine Students
- Five pharmacists completed BLS certification, 12 achieved ACLS, 3 passed pharmacist board exam, 2 technicians earned national certification

Finance and Growth
- A new oncology pharmacy and Coumadin Clinic was opened in the outpatient Cancer Center in January

Cost Savings (through Nov 2012)

<table>
<thead>
<tr>
<th>Category</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand-to Generic</td>
<td>$620,817</td>
</tr>
<tr>
<td>eRecovery</td>
<td>$336,554</td>
</tr>
<tr>
<td>340 B</td>
<td>$1,408,637</td>
</tr>
<tr>
<td>Total</td>
<td>$2,366,008</td>
</tr>
</tbody>
</table>
Indiana University Health Bedford Hospital operates as a critical access hospital with inpatient, outpatient and ambulatory care services and 24-hour emergency room and EMS services.

IU Health Bedford Hospital is a modern, Joint Commission accredited rural health care facility which offers up-to-date technology and medical practices. It also employs a physician group practice, Indiana University Health Bedford Physicians, which is a multi-specialty practice providing medical services in internal medicine, family practice, general surgery, orthopedics, obstetrics and gynecology, and pediatrics. Nurse practitioners in adult and pediatric primary care have been added to expand medical care.
IU Health Bedford Hospital Pharmacy Department

At IU Health Bedford Hospital, the Department of Pharmacy consists of 7 members offering inpatient services across the hospital. Pharmacy staff includes 3 Generalist Practice Clinical Pharmacists and 4 Pharmacy Technicians. James Harmon, RPh, MBA is the Interim Director of Pharmacy.

Pharmacy Practice Model

All pharmacists are 1 FTE each, working five 8 hour shifts per week. Pharmacists rotate through the weekend schedule by working every 3rd weekend. All pharmacists rotate through the on-call schedule. The pharmacy director is included in this work and on-call rotation. Medication orders are entered electronically by the nursing staff after pharmacy hours. These medication orders are reviewed and verified by the pharmacist at the beginning of the next shift.

11 hour coverage on weekdays. 8 hour coverage on weekends with a decentralized unit dose model supported by central pharmacy operations utilizing Pyxis unit base cabinets to provide a “cartless” medication delivery system.

2012 Accomplishments by Pillars

Quality
- Expansion of quality reviews in ER (narcotic use)
- No verbal orders for medications unless code situation
- Review of kinetics program - education on current policy
- Black Box medication reviews of formulary items: Fentanyl Patches and the required opioid reviews. Change to process to require a pharmacist review of all new Fentanyl Patch orders prior to Pyxis removal
- Added temperature probe for increased (7 day a week) monitoring for medication storage
- Review and revision to medications in the Crash Cart (ACLS guidelines)
- Addition of ISMP newsletter/action agendas to P&T committee for review
- Change of process to review patients receiving contrast media from a prospective to current review
- Review of potential ADRs in ER

Service
- Changed the refilling of the Pharmacy technicians to not interfere with nurses activities
- Revision of PAR values in Pyxis to improve technician productivity
- Timely notifications of drug shortage issues/alternatives to hospital staff (physicians, nursing, administration, pharmacy)
- United Way Kindergarten Roundup

2012 IU Health Bedford Hospital

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Admissions</td>
<td>1250</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$2,053,569</td>
</tr>
<tr>
<td>Annual Prescriptions Dispensed</td>
<td>2,270,000</td>
</tr>
</tbody>
</table>
On April 8, 1923, Indiana University Health Blackford Hospital opened its doors to serve the residents of the community. IU Health Blackford Hospital moved in February 2000, and the hospital became certified by Medicare as a critical access hospital.

In January 2005, IU Health Blackford Hospital opened a new campus. The facility included a new 15-bed hospital with all private rooms, a new attached medical office building and a new ambulance garage. The complex is built on one floor and occupies more than 55,000 square feet of space. The new buildings are beautifully designed to accommodate all patient and visitor needs.
At IU Health Blackford Hospital, the Department of Pharmacy consists of 5 members offering inpatient and outpatient services. Pharmacy staff includes 3 Generalist Practice Clinical Pharmacists (including the director) and 2 Pharmacy Technicians. Jerry Carlson, RPh is the Director of Inpatient and Outpatient Pharmacy.

Service Specialties
- Pharmacokinetic Services
- Nutritional Services
- Renal/hepatic dose monitoring, both inpatient and outpatient services provided
- Cardiac rehab med counseling
- Pharmacists are immunization certified, also have Diabetes Educator on staff

Pharmacy Practice Model
10 hour coverage Monday-Friday and 5-hour coverage Sat/Sun (inpatient) with coverage gaps contracted with Ball Memorial Hospital to provide 24 hr pharmacist coverage. Central pharmacy operations utilizing Pyxis unit base cabinets to provide a “cartless” medication delivery system. Computerized MAR and Pyxis Profile utilized. Also operating outpatient pharmacy with hours M-F 8am-6pm with same pharmacy staff simultaneously (staff is cross-trained to cover both areas.)

2012 Accomplishments by Pillars

Quality
- Antibiotic Stewardship - all antibiotics are reviewed and documentation completed regarding antibiotic appropriateness in regards to cultures and sensitivities, allergies, age, drug interactions, and renal/hepatic function
- Therapeutic Duplication - all medication profiles are reviewed and documented by a pharmacist in regards to identifying and reducing/eliminating therapeutic duplications as defined by policy
- Barrier Isolator has replaced laminar flow hood for USP 797 compliance purposes
- Implemented new medication replacement procedures for crash carts/ambulance med kits during after-hours

Service
- Participated in IU Health Blackford Community Health Fair
- Cardiac rehab medication counseling,
- Pharmacist-led Diabetes education for employees

People
- Staff pharmacists, Nikkole McBride, PharmD and Marty Stammen, RPh were named as IU Health Blackford Hospital Employees of the Month in 2012
- Marty Stammen was recognized for "Good Catch" in recognizing potential medication errors prior to reaching the patient

Education
- All staff completed barrier isolator for IV sterile compounding training
- Staff pharmacist completed Pharmacist Immunization Certification in 2012

Finance and Growth
- Reduce drug expenditures in both the hospital (inpatient) and outpatient settings; accomplished being under budget in drug expenditures, as well as total expenditures, for both areas
IU Health Bloomington, located in Bloomington, Indiana, is a 355 acute-bed hospital and regional health care provider that provides high-quality services to an eleven county region in south central Indiana.

IUH Bloomington’s core services are structured through specialized service lines. By doing so, a health care environment is created that fosters progressive leadership, innovation and quality that will lead to preeminent patient care. The hospital’s main service lines include: Cardiovascular Services, Cancer Services, Women & Children Services, Orthopedics and Sports Medicine Services, Neuroscience Services, Emergency and Urgent Care, Hospice, Diabetes Center, Wound Center, and Community Health Programs.
IU Health Bloomington Hospital
Pharmacy Department

At IU Health Bloomington Hospital, the Department of Pharmacy consists of 57 members. Coverage is provided in the following areas: inpatient, outpatient, home health, anticoagulation clinic, southern Indiana physicians primary care, and Volunteers in Medicine Indigent Clinic. Pharmacy staff includes 4 Specialty Practice Pharmacists, 21 Generalist Practice Clinical Pharmacists, 26 Pharmacy Technicians and 6 Support Personnel. Michael Melby, RPh, MS, FASHP is the Director of Pharmacy and Clinical Informatics.

Pharmacy and Technology
- Pharmacy technology is leveraged to facilitate high quality patient care. Integral technology products include, but are not limited to, DoseEdge, Med Carousels (2), CPOE (100%), Alaris, Barcode Administration, Rx Optimize (web based clinical tool), Anesthesia Automated Dispensing, and a PARATA robot
- DoseEdge Expansion to oral liquid doses
- Rx Optimize (web based clinical pharmacy tool) implemented
- CPOE workflow alterations allowed for increase in pharmacist-provided clinical services: addition of 1 FTE

Pharmacy Practice Model
- Team based primary care in a patient-centered medical home model
- IU Health Bloomington Pharmacy telepharmacy services provided for IU Health Paoli Pharmacy
- Pharmacy technicians take medication histories in the Emergency Department 24/7/365

2012 Accomplishments by Pillars

Quality
- Readiness Rounds implemented
- Trauma Code Response by Pharmacy
- Reduced ED visits: 1,337 in 2012

Service
- Hoosiers Outrun Cancer - Largest Hospital Team (Pharmacist Led)
- Habitat for Humanity
- Wonderlab Health Career Fair
- Medication Safety Booth at McDoel Baptist Church Children’s Fair
- Participated in Hospital Career Camp

People
- IPA Pharmacy Technician of the Year (Chris Lantz)
- IU Health Bloomington Outstanding Leadership Award (Michael Melby)
- Myron Miller Pharmacy Award (Charity McGannon)
- 2012 IU Health Bloomington Hospital Foundation Excellence in Caring Award (Raja Hanania)
- 12 Pharmacy technicians completing technician ladder

Education
- 7 BCPS Credentialed Pharmacists
- Pharmacists invited to guest lecture on collaboration and professionalism in the workplace to Purdue University College of Pharmacy (R. Hanania and J. Reiter)
- International pharmacist trained in ICU under Clinical Specialist (Raja Hanania)
- Lean Six Sigma trained Green Belt (Charity McGannon)
- Hosted IPA Annual State Technician’s Meeting

Finance and Growth
- Initiation of immunization administration service by anticoagulation clinic pharmacist
- DoseEdge cost avoidance: $37,500
- Strategic change of wholesale provider cost savings: $1.5 million
- Drug budget reduction via VHA Consultant review: $610,000 in cost savings

2012 IU Health Bloomington Hospital

<table>
<thead>
<tr>
<th>Average Daily Census</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Admissions</td>
<td>13,132</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$13,301,409</td>
</tr>
<tr>
<td>Prescriptions Dispensed</td>
<td>53,992</td>
</tr>
<tr>
<td>Annual Doses Dispensed</td>
<td>1,714,592</td>
</tr>
</tbody>
</table>
IU Health Goshen, provided the first health system of its kind in Elkhart County, Indiana and includes more than 18 locations in six nearby towns. Goshen helps coordinate healthcare services in the area to ensure that the community’s needs are met, ensures a reduction in the duplication of services and uses local resources wisely.

- Developed IU Health Goshen Center for Cancer Care to provide a comprehensive, integrated approach to cancer care, which includes world-renowned specialists, advanced treatments and technology, complementary and alternative medicine and supportive services – all in one place.
- Dedicated $30 million to add 135,000 square feet to IU Health Goshen Hospital in response to population growth and demographic shifts in Elkhart County.
- Offers even more comprehensive health care close to home through expanded services that include IU Health Goshen Wound Center, IU Health Goshen Hospital Heart & Vascular Center, IU Health Goshen Acid Reflux Center and IU Health Goshen Physicians Orthopedics & Sports Medicine.
IU Health Goshen Hospital Pharmacy Department

At IU Health Goshen Hospital, the Department of Pharmacy consists of 17 members offering centralized inpatient services. Pharmacy staff includes 9 Generalist Practice Clinical Pharmacists and 8 Pharmacy Technicians. Pat Schneider, RPh is the Director of Pharmacy.

Service Specialties

- Journal of the American College of Cardiology found heart failure readmissions and overall hospital readmissions were among the best in the nation
- Cancer
- Cardiovascular Care
- Pain Management

Pharmacy Practice Model

Decentralized unit dose model supported by centralized order entry and CPOE review utilizing Pyxis unit based cabinets. Provide 24 hour Pharmacy services as of October 2012. One pharmacist performs clinical functions daily for entire house including ICU rounds Monday through Friday.

2012 Accomplishments by Pillars

Quality

- Restructuring of IU Health Goshen MSAC to include ADRs, falls, and code blue reports
- Screening of pre-op antibiotics for appropriate selection
- OnQ pain pump & OR irrigation solution compounding in pharmacy
- Initiation of 24 hour pharmacy services
- Implementation of Sentri 7 to expand clinical capabilities
- Standardization of Pyxis Medstations on units with elimination of medication carts

Education

- Precepted 6 P3/P4 Pharmacy students

Service

- Supported Run for Cancer Research
- Supported Community Screening Day in Kosciusko County

People

- Indiana University Health Goshen Hospital ranks among the “100 Best Places to Work in Healthcare” in the country, according to Modern Healthcare, the nation’s leading healthcare weekly publication

Research

- IU Health Goshen Center for Cancer Care (CCC) has been named an “expanded access” program site for the investigational drug Alpharadin (radium-223 chloride). The Goshen Center for Cancer Care is the only site in the Midwest offering this drug

Finance and Growth

- Converted to Cardinal as drug wholesaler
Indiana University Health La Porte Hospital is a full-service, 227-bed acute care hospital committed to providing high-quality, coordinated patient-centered care. The Hospital serves residents of La Porte, Berrien, Lake, Starke, St. Joseph, Marshall, Pulaski and Porter Counties through the main hospital campus in La Porte, IU Health Starke Hospital in Knox, Indiana and several outpatient and office locations across its service area. IU Health La Porte Hospital was the first in all of Northern Indiana to be named a Magnet designated hospital.
IU Health La Porte Hospital
Pharmacy Department

At IU Health La Porte Hospital, the Department of Pharmacy consists of 28 members working from a central staffing model with rotating clinical assignment daily. Pharmacy staff includes 9 full time, 2 part time and 2 resource Generalist Practice Clinical Pharmacists, 12 full time and 2 part time Pharmacy Technicians, and 1 Purchaser. Leonid Slobodskoy, PharmD RPh is the Director of Pharmacy Services

<table>
<thead>
<tr>
<th>2012 IU Health La Porte Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Census</td>
</tr>
<tr>
<td>Annual Admissions</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
</tr>
</tbody>
</table>

Pharmacy Practice Model

Department hours are 6am-11pm daily with remote order entry and verification during overnight hours with nursing supervisor accessing pharmacy satellite pyxis night cabinet
- 21 Pyxis MedStations; 15 profiled, 6 non-profiled
- Non-Pyxis medications hand delivered to nursing units for first 24 hours of doses. Patient specific loads by technicians daily M-F
- Inpatient pharmacists 20% order entry and 80% order verification
- Utilization of clinical office space M-F for 2 clinical pharmacists
- Batch filling of IV's

2012 Accomplishments by Pillars

Quality
- Patient-specific Pyxis loads
- Monthly medication error review
- All policies being updated
- Pyxis discrepancy override reports
- Pharmacist clinical/order-entry metrics review
- Anomalous Pyxis report tracks CII trends and usage
- Review of Alaris pump CQI data
- Look-alike and sound-alike program

Service
- Volunteer at Women's Fair
- Boston Middle School career fair
- Volunteer with Little Fish program
- Pharmacist verification of medications dispensed at Community Health Center
- Optimizing Pyxis to decrease medication delivery times
- Starting rounding program with nursing

People
- Great Catch Award for drip dobutamine concentration standardization between La Porte and Starke hospitals
- Pharmacy win program

Education
- Nursing Education: USP 797, nursing orientation, Stericycle
- Cardiopulmonary rehab classes
- Coumadin and Lovenox education

Finance and Growth
- Expanding night services without additional resources (going to 24 hours)
- Pharmaceutical recovery program
- Changed hood certification company which provides significant cost savings
- Started medication use evaluation projects for high-cost medications
- Moved from frozen Galaxy bags to in-house compounding to reduce expenditures and waste
- Batching IVPB's to reduce expenditures
- Tighter inventory control in pharmacy
For more than 100 years, Indiana University Health Methodist Hospital has provided excellent, cutting-edge medical care to patients. IU Health Methodist Hospital is nationally ranked for transplant care, orthopedic services and urology care and has an award-winning cardiac critical care unit. IU Health Methodist is also well known for its excellent Level One Trauma Center, one of only two in the state. Beyond the awards and recognition, there is a commitment from our physicians and staff to provide the best care for each individual patient and his or her family. Our medical team works continually to advance patient care and make breakthroughs that will benefit today’s patients and the generations to follow.
IU Health Methodist Hospital
Pharmacy Department

At IU Health Methodist Hospital, the Department of Pharmacy consists of 123 members in a decentralized model. Pharmacy staff includes 23 Specialty Clinical Pharmacists, 51 Generalist Practice Pharmacists, 45 Pharmacy Technicians and 4 Support Personnel. Tate Trujillo, PharmD, BCPS, FCCM, FASHP is the Director.

Service Specialties
- Cardiovascular
- Neurology / Neurosurgery
- Trauma
- Critical Care
- Orthopedics

Pharmacy Practice Model
24 hour coverage with a decentralized unit dose model supported by central pharmacy operations utilizing Pyxis unit base cabinets to provide a “cartless” medication delivery system. Decentralized staff/clinical pharmacists cover all units for 8-16 hours daily or via our ICU satellite. Clinical specialists cover oncology, ICU, ID/HIV, peds, medicine, nutrition, transplant, cardiovascular surgery, trauma, and emergency medicine.

Service Highlights
- Established a new geography-based model for decentralized pharmacists to improve the distribution of services
- Expanded intraoperative antibiotic dispensing from the OR Satellite Pharmacy
- Providing admixture services to the ED for all IV products

2012 Accomplishments by Pillars

Quality
- Instituted Computerized Physician Order Entry (CPOE) in the ED
- Switched ED Pyxis machines from full override to profiled machines
- Reduced medications available to override on unit-specific override lists
- Installed DoseEdge in the central pharmacy IV room for compounding chemotherapy products
- Re-aligned clinical specialist pharmacists to support the Accountable Care Unit model
- Pharmacist support of Transition Clinic

Service
- Supported EAP Thanksgiving and Christmas families
- Participated in United Way Carnival
- Donated a gift basket for the Methodist Health Foundation’s Silent Auction
- Decreased turn around times for dispensing IV products to the ED
- Developed customized medication cards for nursing staff to assist with HCAHPS medication-related questions
- Designed & launched a Medication Affordability webpage on Pulse

People
- Promoted 2 pharmacy technicians
- Established consistent all department (pharmacists and technicians) meetings
- Instituted the “Tater” award to recognize employees for outstanding service to the pharmacy department
- 2012 Tater winners include: Herning, Jones, Ivanson, Rainey, Fisher, Stanley, Filotei, Leinbach
- Great Catch Winners: Tanner & Ansara

Education
- Nursing education: Aseptic technique
- Staff pharmacist education: Standardized Warfarin monitoring and dosing
- Implemented “track” student program

Finance and Growth
- 16% increase in prescriptions to the MH prescription center from LifeCare Clinic increasing revenue by 27%
Located in Martinsville, Indiana University Health Morgan Hospital offers personalized patient care and a range of diagnostic and treatment services. A recipient of the American College of Surgeon’s “Outstanding Achievement Award” ranks the Regional Cancer Center among the top 15% in the US. IU Health Morgan Hospital is also fully accredited by The Joint Commission, College of American Pathologists, and the American College of Radiology.
IU Health Morgan Hospital Pharmacy Department

At IU Health Morgan Hospital, the Department of Pharmacy consists of 7 members offering inpatient services across the hospital. Pharmacy staff includes 4 Generalist Practice Clinical Pharmacists and 3 Pharmacy Technicians. JD Bowman is the Chief Quality Officer/Director of Pharmacy.

Service Specialties

- Heart Failure
- COPD
- Pneumonia
- Sepsis
- Prostatectomy
- Bowel Obstruction
- GI Bleed
- Respiratory Failure
- Hip Fracture
- Heart Attack

Pharmacy Practice Model

Indiana University Health Morgan Hospital utilizes a central pharmacy processing model with remote distribution utilizing automatic dispensing cabinets. Approximately 95% of all medications are dispensed utilizing this model. Hours of operation are: Monday-Friday 0700 - 2000, Saturday/Sunday 0700 - 1200.

2012 Accomplishments by Pillars

Quality
- Implemented technology for remote visual verification and checking of oncology chemotherapy preparations allowing pharmacist to review work of pharmacy staff at hospital’s oncology center

Service
- Supported Good Shepherd free clinic with staff and services
- Staffed Morgan County Fair information booth
- United Way kindergarten book reading at library
- Donated school supplies to One Road
- Donated food to local food pantry
- Staffed Senior Expo booth and provided medication counseling
- Heart Walk participants

Education
- Chemotherapy competency training course completed by all staff preparing chemotherapy
- Aseptic technique competency training completed by all staff preparing sterile products

Finance and Growth
- Meeting 75th percentile goal in productivity standards YTD

<table>
<thead>
<tr>
<th>2012 IU Health Morgan Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Census</td>
</tr>
<tr>
<td>Annual Admissions</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
</tr>
<tr>
<td>Annual Prescriptions Dispensed</td>
</tr>
</tbody>
</table>
Indiana University Health North Hospital is more than a full-service hospital in Hamilton County; it's a new healthcare environment for northern Indianapolis. It is where the very best from IU Health – IU Health Methodist Hospital, IU Health University Hospital and Riley Hospital for Children at IU Health – have collaborated to bring state-of-the-art technology, more than 100 years of health care experience and compassionate caregivers together for superior patient treatment.

IU HEALTH NORTH HOSPITAL FEATURES

- 189 all-private patient rooms, including private NICU and PICU rooms
- 14 technologically advanced surgical suites with a focus on non- and minimally-invasive procedures
- On-site diagnostics, imaging and lab
- A unified records system and seamless linkage with IU Health's downtown Indianapolis locations.
IU Health North Hospital
Pharmacy Department

At IU Health North Hospital, the Department of Pharmacy consists of 33 members using a decentralized model. Pharmacy staff includes 2 Specialty Practice Clinical Pharmacists, 13 Generalist Practice Clinical Pharmacists, 11 full time and 6 supplemental Pharmacy Technicians and 1 buyer. Jane Barrett, RPh, is the Director of Pharmacy.

Service Specialties

- NICU
- PICU/Peds
- Cath lab
- Bariatric
- Minimally Invasive Surgery
- Labor and Delivery
- PP
- Pediatric Hematology/Oncology

Pharmacy Practice Model

Twenty-four hour coverage with a decentralized unit dose model supported by central pharmacy operations utilizing automated medication dispensing machines.

- Decentralized staff/clinical pharmacists on all units for 16 hours daily and clinical pharmacist coverage in medical/surgical and pediatric/NICU
- OR pharmacy satellite with 10 hr coverage M-F

2012 Accomplishments by Pillars

Quality
- Ongoing work with the system Pharmacy and Therapeutics Committee to standardize products/concentrations utilized within the system
- Maximizing automation technology within OR setting
- Fine tuning medication reconciliation process through multidisciplinary team and pharmacy integration into discharge process/patient education
- First place poster winner for IU Health North Quality Week featuring The North Star: an internal electronic pharmacy resource
- Integration into multidisciplinary pain rounds

Service
- Yearly holiday sponsor of a Peds/HemeOnc family
- Participate in IU Health Day of Service

Education
- Pharmacologic Management of Pain; May and November 2012 Presentation to pain resource nurses
- NICU 101, 102, and 103; February, June, and September (Presentation to staff pharmacist/technicians by clinical pharmacist)
- Provide experiential rotation for pharmacy students

Finance and Growth
- Streamlined OR pharmacy satellite process to decrease inventory dollars
- Decreased pharmacy inventory by 95K

2012 IU Health North Hospital

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Census</td>
<td>110</td>
</tr>
<tr>
<td>Annual Admissions</td>
<td>11,156</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$3.5 million</td>
</tr>
<tr>
<td>Annual Prescriptions Dispensed</td>
<td>2,750,000</td>
</tr>
</tbody>
</table>
Indiana University Health Paoli Hospital is a 24 bed hospital that specializes in rural, community-based services to serve south central Indiana. IU Health Paoli includes a 24-hour emergency room with an Air Evacuation helicopter, New Life Center, community outreach programs and visiting specialist services.
IU Health Paoli Hospital
Pharmacy Department

At IU Health Paoli Hospital, the Department of Pharmacy consists of 5 members using a decentralized model. Pharmacy staff includes 2 Generalist Practice Clinical Pharmacists and 3 Pharmacy Technicians. Pamella Bond, RPh, Vice President Ancillary Services and Clinical Informatics is the Pharmacy Director.

Service Specialties

- Pharmacokinetic dosing for Aminoglycosides and Vancomycin
- TPN Monitoring

Pharmacy Practice Model

IU Health Paoli utilizes a decentralized unit dose model supported by a 40 hour per week central pharmacy operation and remote order entry by IUH Bloomington Hospital Pharmacy during off hours.

- Utilize Acudose cabinets to provide a cartless medication delivery system.
- Fill outpatient prescriptions for associates and discharged patients.

2012 Accomplishments by Pillars

Quality

- Implemented scanning on restock as a quality measure
- Relocated scanner to nursing unit
- Compliance improved from 56% to 72%

Service

- Community Service Day - Habitat for Humanity

2012 IU Health Paoli Hospital

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Daily Census</strong></td>
<td>4.25</td>
</tr>
<tr>
<td><strong>Annual Admissions (Including Newborns)</strong></td>
<td>629</td>
</tr>
<tr>
<td><strong>Annual Drug Budget</strong></td>
<td>$1,298,723</td>
</tr>
<tr>
<td><strong>Annual Prescriptions Dispensed</strong></td>
<td>8591</td>
</tr>
</tbody>
</table>
Since 1924, Riley Hospital for Children at Indiana University Health has been Indiana's only comprehensive children's hospital, providing the most advanced care possible for our young patients. As one of the nation’s leading pediatric hospitals and Indiana’s first and only comprehensive hospital dedicated exclusively to the care of children, each year, more than 215,000 inpatients and outpatients are served from across Indiana, the nation and the world. Riley Hospital for Children at IU Health is honored to once again be ranked among the top children’s hospitals in the country by *U.S. News & World Report*’s Best Children’s Hospitals. In the ten specialty areas that were ranked by the same organization, we're ranked nationally in all ten of them.
Riley Hospital for Children
IU Health Pharmacy Department

At Riley Hospital for Children at IU Health, the Department of Pharmacy consists of 70 members using a mixed model of generalists and specialists. Pharmacy staff includes 16 Specialty Practice Clinical Pharmacists, 24 Generalist Practice Clinical Pharmacists and 30 Pharmacy Technicians. Michael McGregory, PharmD, MBA is the Director of Pharmacy.

Service Specialties
- Cardiology
- Neonatal ICU
- Pediatric ICU
- Burn
- Complex Care
- Neurology
- Infectious Disease
- Nephrology
- Endocrine
- Gastrointestinal
- Nutritional Support
- Emergency
- Trauma
- Transplant
- Pulmonary
- Oncology

Pharmacy Practice Model

24-hour coverage with a hybrid centralized unit dose / decentralized Pyxis distribution model. Patient specific oral liquids are dispensed in LEAN optimized 2 hour “cart fill” batches from the central pharmacy while scheduled oral solids, narcotics, PRN’s and emergency floorstock medications are dispensed via Pyxis automated dispensing cabinets.

Decentralized staff/clinical pharmacists cover NICU (days), PICU (days/evenings), and Simon Family Tower units (days). Inpatient and outpatient cancer infusion services are supported by a dedicated hematology/oncology satellite pharmacy. Clinical specialists cover cardiology, neonatal ICU, pediatric ICU, burn, complex care, neurology, infectious disease, nephrology, endocrine, gastrointestinal, nutritional support, emergency/trauma, transplant, pulmonary and oncology services.

2012 Accomplishments by Pillars

Quality
- Implemented pediatric CPOE
- Reduced pharmacy errors
- Continued expansion of DoseEdge IV Workflow System into the main IV room
- Completed design of new Simon Family Tower OR
- Piloted new pump safety audits in coordination with national children's hospital collaborative to reduce adverse drug events

Service
- Provided over 1300 flu and 100 Tdap vaccines free of charge to patients’ families via Family Flu Vaccine Program
- Expanded services for decentralized pharmacist program
- Developed NICU medication distribution model to accommodate transition to private rooms

People
- AHC Values Leadership Award presented to Clinical Specialist Team for CPOE content development
- 2012 Successful Systems of Providers Award for Family Flu Vaccine Program by the Indiana Immunization Coalition

Education
- 4 new pharmacy resident rotations

Research
- Received grant funding for 2 research projects with pharmacist PI’s

Finance and Growth
- Reduced annual inventory by $450,000 by implementing new LEAN inventory management

2012 IU Health
Riley Hospital for Children

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Census</td>
<td>203</td>
</tr>
<tr>
<td>Annual Admissions</td>
<td>10,473</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$13.4 million</td>
</tr>
<tr>
<td>Annual Doses Dispensed</td>
<td>1.2 million</td>
</tr>
</tbody>
</table>
Indiana University Health Saxony Hospital is located within the residential and commercial development known as Saxony in the rapidly growing community of Fishers. With a primary focus on surgical services for cardiovascular, orthopedic and spine, IU Health Saxony Hospital provides area residents with the latest advancements in medical care and treatment. The 42-bed hospital includes an intensive care unit, six operating rooms, a full emergency department, a helipad for medical transport and a medical office complex. Our healthcare team includes physicians from Indiana University Health Physicians, as well as some of the area’s most highly regarded independent practitioners.
IU Health Saxony Hospital
Pharmacy Department

At IU Health Saxony, the Department of Pharmacy consists of 9 members using a hybrid central model. Pharmacy staff includes 7 Generalist Practice Pharmacists and 4 Pharmacy Technicians. Bill Trownsell, PharmD is the Pharmacy Manager.

Service Specialties
- Open Heart Surgery
- Total Joint Replacement
- Vascular Surgery (limited to CEAs)
- Urology Services
- Emergency Medicine
- Cardiology Services
  - Electrophysiology
  - Cardiac Cath Labs

Pharmacy Practice Model
Saxony has one centralized pharmacy located in direct proximity to the OR and ICU units that operates 24/7/365. Currently Saxony utilizes a clinical-staff pharmacist model where in all pharmacists perform both clinical and distribution functions. Clinical services consist of anticoagulation management, anticoagulation education, pharmacokinetic drug therapy management, medication reconciliation assistance, and code blue participation hospital wide. With the exclusion of medication reconciliation, Saxony is a fully CPOE facility.

Service Highlights
- Converted Definity® from materials management to pharmacy dispense, with ordering processing documentation.
- Global Trigger Tool (ADEs Measurement)
- Anticoagulation Metrics (NPSG3)

2012 IU Health Saxony Hospital

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Census</td>
<td>9</td>
</tr>
<tr>
<td>Annual Admissions</td>
<td>1150</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$1,453,424</td>
</tr>
<tr>
<td>Annual Doses Dispensed</td>
<td>103,103</td>
</tr>
</tbody>
</table>

2012 Accomplishments by Pillars

Quality
- Developed side effects quick reference for nursing to improve HCAHPS scores
- Initiated pharmacist meet and greet task for all inpatients
- Developed Cerner task to track meet and greet activities
- Participation in hand hygiene task force
- Participation in pre-op multidisciplinary total joint case review
- Assist with CareAdmin compliance
- Open Heart Surgery Medicine Standardization (Perfusion Tray, Cardioplegia & Vein Graft Solutions)
- Assist with IV pump safety day Alaris Guardrails updates
- Provided Cathlab with a pharmacy prepared UD syringe of nitroglycerin for intra-crownary use
- Participation in Multi-Disciplinary Open Heart Surgical Candidate Review
- RhO(d) Order Process Streamline

Service
- Participation in the Scott's Firefighters Challenge, Heart Walk
- Biannual Community Recycling event
- Good Samaritan Food Drive
- Clothes Drive For Methodist & Saxony ED Patients
- Business After Hours with Fishers Chamber of Commerce
- Riley Cereal Drive

Education
- Participate in twice weekly pre-op total joint patient education classes
- Provide patient education for anticoagulation therapy
- Meds Indications/Side Effects Patient Ed
- ED In-service: tPA Preparation
- Monthly Mock Code Blue Scenarios

Finance and Growth
- Below budget in drug expense for 2012
- Activation staff reviewed stock & identified $8800 worth of excess inventory returned for credit
- Outpatient Rx Concierge Service
Indiana University Health Starke Hospital, an acute care facility—located in Knox, Indiana—provides the residents of Starke County and neighboring communities of Kankakee Valley access to exceptional healthcare and unsurpassed patient experiences. As the only hospital in the county, we have a long history of serving the nearly 40,000 people of our area for the past 60+ years. Starke Hospital became an IU Health partner in July of 2009. Since the partnership began, our local hospital has added more than 80 new physicians to its Medical Staff with office locations close to home and has invested millions of dollars into new technology to assure the highest level of care to the community.
At IU Health Starke Hospital, the Department of Pharmacy consists of 3 members using a centralized model with multidisciplinary coverage. Pharmacy staff includes 1 Specialty Practice Clinical Pharmacist, 1 Generalist Practice Clinical Pharmacist and 1 Pharmacy Technician. Leonid Slobodskoy, PharmD, RPh is the Director of Pharmacy Services.

Pharmacy Practice Model
Eight hour coverage/day with a unit dose based dispensing model provided by centralized pharmacy operations and supported by Pyxis Duo-Stations. Central pharmacy is located on the Med/Surg nursing unit. On call pharmacist support and utilization of Pyxis Duo-stations for after hours needs. Staff/clinical pharmacists on units and offer clinical specialist coverage in Infectious Disease, Nutritional Support, Anticoagulation, and Electrolyte replacement. Remote order entry and clinical pharmacist support provided by IU Health LaPorte after regular hours and continuing until 11pm.

Service Specialties
- ER
- Med/Surg
- ICU
- Outpatient Therapies

Service Highlights
- Pyxis medication and refill timing optimization program
- Segregated inpatient medication room creation for each floor
- New Pharmaceutical recovery program
- Pharmacy Win program creation

2012 Accomplishments by Pillars

Quality
- Patient specific medication Pyxis loads
- Pyxis inventory standardization
- Alaris Pump usage and maintenance
- Anomalous CII
- Narcotic usage reporting
- Pyxis discrepancy override reporting
- Monthly medication event reporting analysis meeting
- Standardization of medication strengths to align with LaPorte
- Upgraded Med-surg Pyxis with an add-on machine to stock more meds, keeping access to pharmacy down

Service
- La Porte County Women's Fair
- La Porte School Corp. Career Fair
- Support Starke Health Fair
- La Porte Foundation "Lil FISH" Program
- Volunteer Family Day

People
- Great Catch Award for drip dobutamine concentration standardization

Education
- USP <797> Compliance: Nursing Admin
- Cardio-Pulmonary Rehab course
- CPOE education for physician/RN core
- Stericycle education
- Nursing orientation education
- Alaris dataset education
- Pharmacist certification with BCPS

Finance and Growth
- Hood certification modification
- High-cost medication analysis, education, policy implementation
- "Missing medication" expenditures
- Pharmacy inventory control

2012 IU Health Starke Hospital

<table>
<thead>
<tr>
<th>Annual Admissions</th>
<th>843</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Drug Budget</td>
<td>$360,000</td>
</tr>
</tbody>
</table>
Indiana University Health Tipton Hospital is equipped to take expert care of a variety of medical concerns. We have over 50 board-certified physicians in more than 20 specialties. Our support personnel are among the finest healthcare professionals anywhere.

**Medical Services at IU Health Tipton:**

- Cancer
- Cardiology Services
- Emergency Services
- Lab Services
- Maternity Services
- Occupational Services
- Orthopedics and Sports Medicine
- Pediatric Services
- Radiology
- Rehabilitation Services
- Respiratory
- Sleep Disorder Center
- Specialty Care Center
- Surgical Services
IU Health Tipton Hospital Pharmacy Department

At IU Health Tipton Hospital, the Department of Pharmacy consists of 4 members using a centralized, non-24 hour model. Pharmacy staff includes 4 Generalist Practice Clinical Pharmacists and 6 Pharmacy Technicians. Angela Morgan, PharmD, is the Manager of Pharmacy Services.

Service Specialties
- Orthopedic
- Outpatient Endoscopy
- Outpatient Oncology
- General Medicine
- Surgery

Pharmacy Practice Model
Tipton utilizes a central pharmacy location for order processing, pharmacist consultation and IV preparation. Inpatient pharmacy coverage is 10 hours/day on weekdays and 8 hours/day on weekends with pharmacist on call coverage 24/7/365. IV infusions are prepared and dispensed as patient-specific orders, all other medications are distributed via Pyxis Medstations utilizing Pyxis Profile for CDU, Med/Surg, ICU, and Recovery Room.

Outpatient pharmacy services include IV antibiotics and chemotherapy. Tipton also dispenses prescription and OTC medications to IU Health associates, volunteers, and auxiliary members. The Outpatient Pharmacy Window hours are 7:00 to 7:30 and 12:30-4:00 M-F, 11:00 to 12:00 Saturday and Sunday. The Outpatient window is closed on holidays.

2012 Accomplishments by Pillars
Quality
- Pharmacy staff built order sets in preparation for CPOE implementation and provided support during go-live
- The department expanded use of PARx bar code scanning for Pyxis fill to include all medications (Previously scanned only the controlled substances.)
- Implemented use of Phaseal system
- Completed med reconciliation data collection for Anthem scorecard

Service
- Implemented QS1 Point-of-Sale System for outpatient pharmacy
- Coordinated with Tipton County Recycling and Tipton City Police at the IU Health Tipton Spring Health Fair to provide unwanted medication disposal
- Staff donated books for kindergarten countdown
- Assisted with supplies for Henryville tornado victims
- Donated a silent auction basket for hospital foundation fundraiser
- Pharmacy team staffed the IU Health Tipton Hospital Pork Festival Booth

Education
- Hosted a medical student to shadow in pharmacy
- Provided externship experience for Butler pharmacy rotation
- Hosted high school, school-to-work student (interested in pharmacy as a career)
- All staff trained on web-based event reporting program, Risk Plus
- Developed educational materials for CPOE and other order processing-related needs for physicians, nursing, ancillary staff, and pharmacy

Finance and Growth
- Joined System P&T committee January 2012 with ongoing efforts to align formulary, therapeutic interchanges, and policies with system
- Under budget for drug expenses for year 2012

2012 IU Health Tipton Hospital

<table>
<thead>
<tr>
<th>Average Daily Census</th>
<th>15.24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Acute Care Admissions</td>
<td>1030</td>
</tr>
<tr>
<td>Annual Outpatient Visits</td>
<td>7,243</td>
</tr>
<tr>
<td>Annual ER Visits</td>
<td>5,511</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$2 million</td>
</tr>
<tr>
<td>Annual Prescriptions</td>
<td>5,223</td>
</tr>
</tbody>
</table>
A major teaching hospital recognized as a leader in technology, Indiana University Health University Hospital offers patients access to treatments, therapies and procedures that are found only in the most advanced academic medical centers. From solid organ transplant to cancer, we have the tools and the talent to meet the needs of those who need us most. Many of these innovations begin in the Indiana University School of Medicine research laboratories, advancing the outcomes for patients and their loved ones. Our ties to academia provide the constant stimulus to stay on the cutting edge of medicine.
IU Health University Hospital
Pharmacy Department

At IU Health University Hospital, the Department of Pharmacy consists of 80 members using a decentralized model. Pharmacy staff includes 16 Specialty Practice Clinical Pharmacists, 25 Generalist Practice Clinical Pharmacists, 38 full time Pharmacy Technicians and 1 Administrative Assistant. Chris Lowe, PharmD, BCPS is the Director.

Pharmacy Practice Model
24 hour coverage with a decentralized unit dose model supported by central pharmacy operations utilizing Pyxis unit base cabinets to provide a "cartless" medication delivery system. Decentralized staff/clinical pharmacists on all units for 15 hours daily (with the exception of the ICU satellite 24 hours daily) University Hospital also provides services to the OR suites via the OR satellite.

Service Specialties
- Solid Organ Transplant
- Bone Marrow Transplant
- Hematology/Oncology
- Critical Care
- Pulmonary
- Gastroenterology/Liver
- Urology

Service Highlights
- Implemented Patient Contact Program - Ensuring patients meet a pharmacist upon admission to the hospital, and providing them a 24/7 hotline to have medication questions answered
- Participation in Sepsis Mortality Improvement Project; optimizing antibiotic therapy options and supportive care measures

2012 Accomplishments by Pillars

Quality
- Improved pharmacy medication reconciliation rates to 75% (increased from 66% in 2011)
- 54,000 dosing consult evaluations completed
- Implementation of CPOE for Outpatient Dialysis (Hemodialysis Units and Home Dialysis Clinic)

Service
- Riley Adopt-A-Family Christmas
- Susan Komen Race for the Cure Team

People
- 37% of pharmacists are board certified

Education
- Responsible for nearly 275 publications/presentations; 25 of which were to a national audience

Research
- Kellie Jones, PharmD, BCOP: An Oncology Focused Clinical and Research Experience in Eldoret, Kenya. SAIL Grant Award Winner. Purdue University. Award Amount: $7,000
- Patrick Kiel, PharmD, BCOP, BCPS: Efficacy and synergy of a poly(ADP-ribose) polymerase-1 (PARP-1) inhibitor, olaparib, with cisplatin against aggressive non-Hodgkin’s and mantle cell lymphoma cell lines. HOPA Research Grant. Award Amount: $50,000

Finance and Growth
- Antibiotic stewardship efforts produced savings of approximately $700,000
- 25% reduction in albumin use after paracentesis
- Led IVIG dosing change for the system that will save over $300,000

<table>
<thead>
<tr>
<th>2012 IU Health University Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Census</td>
</tr>
<tr>
<td>Annual Admissions</td>
</tr>
<tr>
<td>Annual Drug Budget</td>
</tr>
</tbody>
</table>
Indiana University Health West Hospital is a special place to give and receive healthcare services, and was built with the comfort and needs of our patients, visitors and caregivers in mind. The use of natural materials and colors, peaceful garden views, cheerful natural light and soft, healing music set a soothing tone, establishing IU Health West Hospital as a place where patients can set aside stressful distractions and focus on what’s important: getting well.
IU Health West Hospital Pharmacy Department

At IU Health West Hospital, the Department of Pharmacy consists of 25 members using a centralized model for rotating staff and a decentralized model for clinical staff. Pharmacy staff includes 10 Generalist Practice Clinical Pharmacists, 12 Pharmacy Technicians, and 3 Support Personnel. Anne Stegemoller, PharmD, is the Director of Inpatient Pharmacy.

Service Specialties
- TPN/Nutrition Support Consult (Adult)
- Pharmacokinetic Consult
- Anticoagulation Monitoring & Education
- Medication Reconciliation
- Renal Dosing & Monitoring
- Cardiac and Pulmonary Rehab
- Pain Management Pharmacy Consult
- ACLS Certified Pharmacists

Pharmacy Practice Model
24 hour coverage with a decentralized unit dose model supported by central pharmacy operations utilizing Pyxis unit base cabinets to provide a “cartless” medication delivery system. Rotating clinical pharmacist rounds on all Med/Surg and ICU/PCU units 8 hours daily and participates in multi-disciplinary rounds for ICU/PCU.

Practice Highlight
We are honored that the Pharmacy Pain Consult program at West has been highlighted and recognized as a best practice in the IU Health System. Our hospital has been ranked above the 90% percentile in Valued Based Purchasing pain perception scores for all of 2012.

2012 Accomplishments by Pillars

Quality
- Creation of Best Practice Committee: composed of pharmacists and technicians whose primary focus is on implementing and sustaining the best and safest practices
- Medication Safety Committee implemented several safe practice initiatives: staff education and alert notification for Methadone/Nalbuphine interaction, safe calcium chloride infusion practices, improved narcotic discrepancy reporting
- Creation of the multi-disciplinary West Anticoagulation subcommittee

Service
- "Take Back" program: provides a drop-off twice a year for patients to bring in their expired or unused medications
- Health Screeners at various IU Health sponsored events
- Habitat for Humanity; Race for the Cure; Light the Night; B&O Run/Walk

People
- Several staff were recognized with local Star Awards for providing remarkable service and care
- Nomination for the Presidential Values Leader's Award - Individual Health Care Provider (H. Nair)
- BCPS Certification (D. Martin)
- National Certification Exam for Pharmacy Technicians (N. Hiatt & L. Lawson)

Education
- Cardinal Specialty training - January
- Acute Myocardial Infarction Quality Monitoring - April
- Code Cart Review - May
- Smart Pump Training 101 - August
- Annual PhaSeal Review - October

Finance and Growth
- + 19.8% margin for actual operating expenses vs. flex operating expenses.
- Reduced average medication cost per adjusted patient day for 2012 by $4.90

2012 IU Health West Hospital

| Daily Census | 90 |
| Annual Admissions | 20,040 |
| Annual Drug Budget | $3,000,000 |
| Annual Prescriptions Dispensed | 750,000 |
Indiana University Health White Memorial Hospital is located in Monticello, Indiana. The hospital was built in 1956 to serve the local area and since then has grown to serve several surrounding areas. IU Health White Memorial is a Critical Access Hospital. It offers a comprehensive range of services that includes general medical/surgical services, a 24-hour emergency department, sophisticated diagnostic imaging services, laboratory, chemotherapy, home health and therapy services, as well as Labor and Delivery Suites that provide a home-like setting yet contain all of the equipment needed to assist with labor, delivery and recovery. All patient rooms are private and boast warm colors and natural light to enhance comfort and healing. A family-friendly environment offers pullout beds for overnight stays and wireless internet access.
IU Health White Memorial Hospital

Pharmacy Department

At IU Health White Memorial Hospital, the Department of Pharmacy consists of 5 members using a hybrid-centralized model. Pharmacy staff includes 3 Generalist Practice Clinical Pharmacists and 2 Pharmacy Technicians. Brian Bonner, RPh, is the Director of Pharmacy.

Service Specialties

- General Medical
- Surgical Services
- Emergency Department
- Chemotherapy
- Outpatient IV Therapy
- Specialty Practice Clinics

Pharmacy Practice Model

Service is provided 7:30am to 4pm seven days a week and 7:30am to Noon on holidays from a central pharmacy. Pharmacy technology is provided through the following systems: Pyxis 4000 MedStations and CPSI computer software throughout the facility with eMAR, Med-Verify Bar Coding, CPOE and electronic Medication-Reconciliation. Technology coordination allows for the facility to be cartless, with a daily IV round. Pharmacists are available during operating hours for patient education per request.

2012 Accomplishments by Pillars

Quality
- Implementation of technology to assist with the tracking and improvement of medication quality and safety. The three technologies implemented were: CPOE, Alaris Smart Pumps, and electronic medication reconciliation
- Process improvement for multidisciplinary communication
- Improved communication protocols enacted to reduce med errors: Simple memos, phone calls, and face-to-face visits
- ISMP Safety Alerts enacted

Service
- 100% departmental participant in the Day of Service in building a house for Habitat for Humanity
- Participated in Kindergarten Round up for North White School System in July

Education
- Communication trainings for multidisciplinary team
- Med Error Education completed for multidisciplinary Team
- CPOE Education
- Alaris Education
- Med Reconciliation Training

Finance and Growth
- 340B drug cost savings $238,500 equating to 22% of total drug costs for 2012 (less December)

2012 IU Health White Memorial Hospital

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Census</td>
<td>14</td>
</tr>
<tr>
<td>Annual Admissions</td>
<td>1,058</td>
</tr>
<tr>
<td>(Excluding Newborns)</td>
<td></td>
</tr>
<tr>
<td>Annual Drug Budget</td>
<td>$1,616,485</td>
</tr>
<tr>
<td>Annual Prescriptions Dispensed</td>
<td>17,900</td>
</tr>
</tbody>
</table>
A private, nonprofit organization, Indiana University Health is Indiana's largest comprehensive health system and is comprised of hospitals, physicians and allied services dedicated to providing preeminent care throughout Indiana and beyond. Our unique partnership with the Indiana University School of Medicine gives our highly skilled physicians access to innovate treatments using the latest research and technology.

Discover the strength at iuhealth.org