## Deaconess Health System Ambulatory Clinical Pharmacy Services

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## **Deaconess at a Glance**

- Founded in 1892
- 10 acute/specialty care hospital system
  - 789 acute care beds in IN
  - 142 acute care beds in KY
- 31,000+ inpatient discharges annually
- 95,800+ emergency department visits
- 8,200+ employees

- Not-for-profit, governed by a local board of directors
- Leading regional tertiary provider – serving 26 counties in IN, IL, KY
- Level II trauma center
- Deaconess Cancer Services is an MD Anderson Network<sup>®</sup> affiliate
- Riley Hospital for Children affiliate



#### **Deaconess Hospital Facilities**





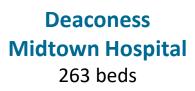




**The Heart** Hospital 24 beds



**Deaconess** Gibson **Hospital** 25 beds



**Deaconess Gateway Hospital** 259 beds

The Women's Hospital 86 beds (Joint Venture)



**Deaconess Henderson Hospital** 117 beds



Deaconess Union Co. Hospital 25 beds (critical access)



**Deaconess Cross Pointe** 58 beds



**Encompass Deaconess** 88 beds, + 24 beds at Midtown



Orthopedic **Neuroscience** Hospital 74 beds

#### **Affiliate Relationships**

Wabash General Hospital



LAWRENCE COUNTY Memorial 🕂 Hospital







# Why are Ambulatory Clinical Pharmacy Services necessary?

- Over 10,000 drugs on the market, many with complex dosing and medication use parameters
- Patients are living longer with increasing medication regimen complexity
- Appropriate, effective, and safe medication use reduces ER visits and hospitalizations and helps the patient achieve goals of care
- Clinical pharmacists have the medication expertise to help providers as a member of the care team
  - Analyze medication regimen to optimize and simplify
  - Help patients understand therapies
  - Help with side effects and medication adherence
  - Improve outcomes
  - Reduce total cost of care



#### **Ambulatory Clinical Pharmacy Services**

- Anticoagulation Clinic
- Medication Management Clinic
- Oncology and Infusion service
- Embedded pharmacists in ambulatory practices
  - Endocrinology
  - PCP



## Anticoagulation Clinic



- Complete anticoagulation care for over 20 years -staffed with Certified Anticoagulation Care Providers (CACP)
  - Management of warfarin therapy
  - Optimize bridge therapy for procedures
  - Selection and monitoring of Direct Oral Anticoagulants (DOACs)
    - Our hospital admissions data shows dosing errors of 40% for patients admitted on a DOAC managed by a provider rather than anticoagulation clinic
  - Assure appropriate duration of therapy
  - Assess for drug, diet and disease state interactions
  - Use newer method of TTR (time in therapeutic range) to guide closer monitoring and assessment of anticoagulation appropriateness, reducing complications
    - Not utilized by providers in our region to help with management



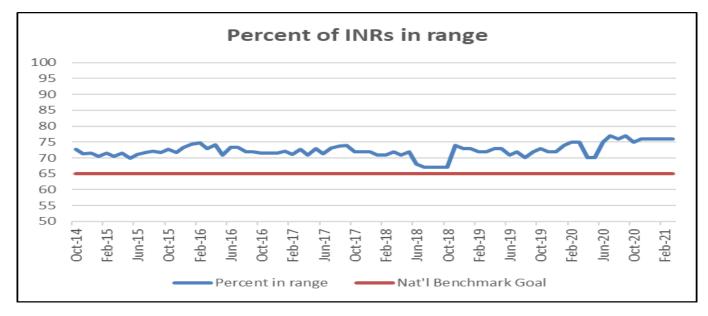
## **Anticoagulation Clinic Outcomes**



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- Events rates are very low
  - 2.4% all events and 0.3% major events, well below usual care rates
- Percent INR in range exceeds the benchmark



• Bill under hospital as a facility fee, unable to bill directly for pharmacist management

#### **Medication Management Clinic**

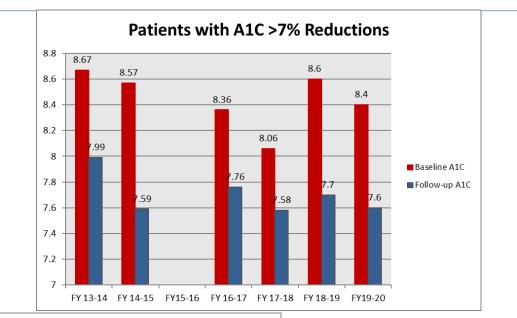
#### What is Medication Management?

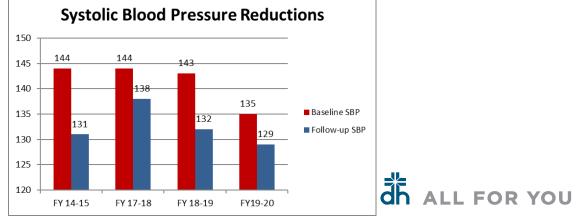
- Provide extensive education on disease states and medications
- Review medication regimen to assure:
  - Guideline-based
  - Simplified
  - Cost effective
  - Address drug interactions, side effects and appropriate dosing
- Adjust therapies to maximize patient adherence and goals of therapy
- Review and explain lab results
- Help with affordability
- Bill under hospital as a facility fee, unable to bill directly for pharmacist management



#### **Medication Management Clinic Outcomes**

- Average HbA1c reduction 0.72 (50% improvement)
- Average SBP reduction 9 points
- Average DBP reduction 5.5 points
- First year of program for own diabetic employees showed
  - 5.6% reduction in ER visits (4 ER visits and \$10,212)
  - 89.3% reduction in hospitalizations (15 admissions and \$201,663)

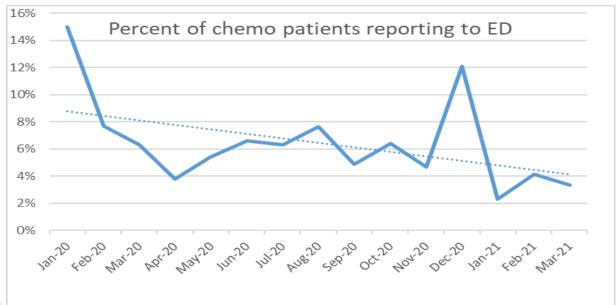




#### **Oncology and Infusion Service**



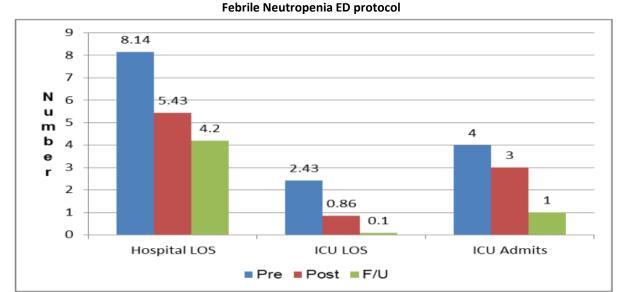
- Lowered 30 day ER visits for chemotherapy patients with implementing a standardized highly emetogenic protocol
- Implemented aggressive biosimilar platform – saving area health care system at least \$10M over last 5 years
- Dose rounding protocol implemented 10 years before payers required it = cost savings
- Implemented changing pre-meds from IV to oral route = cost savings





#### **Oncology and Infusion Service**

- ER febrile neutropenia protocol reduced ICU LOS by 1.64 days and all LOS by 2.77 days
- Implemented infusor balls saving 64 inpatients days per month for medications that can be given by continuous outpatient infusion
  - R-EPOCH used to be a 5 day inpatient stay that is now completed outpatient
- Moved rabies vaccination to urgent care – cost avoidance of 3 ER visits per patient
- No billing for this service







#### • Endocrinology (June 2020)

- Improve access
  - See patients for increase or changes to therapies to obtain goal quicker
  - Manage patients on insulin pumps
  - Manage continuous glucose monitor (CGM) patients
  - Improve access for physicians to see new patients
- Improve metrics
  - Hemoglobin A1c
  - Eye and foot exams
  - Statin use for secondary prevention
  - Improve medication adherence
- Only able to bill incident to 99211 for this service which does not cover the cost of the pharmacist



- Endocrinology Outcomes
  - Results of 1<sup>st</sup> 8 months (even with pandemic)
    - Reduction of A1c for pharmacist co-managed patients of 0.67% versus 0.17% for provider alone
  - Patient only testing fasting blood sugar and taking 3 types of insulin with resultant hypoglycemic episodes and ER admissions. Once working with pharmacist and therapies adjusted/simplified, A1c dropped from 10.5% to 6.6%. No ER admissions since interventions.



#### • Primary Care office (new July 2020)

- Complete Annual Wellness Visits (AWV) not being completed by other providers
- Monitor for gaps in care immunizations, laboratory monitoring, etc
- Chronic disease management to optimize medication therapy
- Transitions in Care management as part of the team complete medication reconciliation fixing issues and recommending or changing therapies with provider after hospitalization
- This location does not have adequate specialist access in the area and a pharmacist is able to expand access and provide this care close to home, without the expense of a specialist
- Able to bill AWV incident to provider, but other services only incident to 99211 which does not cover the cost of the pharmacist



- PCP office patient examples
  - 2 post-hospitalization patients with drastic potassium dosage changes where pharmacist coordinated getting lab drawn sooner and avoided readmission
  - 64yo female with A1c 10.5% found from a report of patients with A1c >9%. Worked with patient every 1-2 weeks to titrate her insulin resulted in a 3 month reduction in A1c to 8.4% (-2.1%)



#### Opportunities

- Payment for services rendered outside of dispensing
- Electronic health record (EMR) recognition for improved reporting of metrics and quality
- Provider status
  - Ohio (S.B. 265) added to definition of providers
  - Kentucky (H.B. 48) insurer "shall provide reimbursement to a pharmacist for a service or procedure at a rate not less than that provided to other nonphysician practitioners"

- Other non-physician health care professionals that receive payment for their services
  - NPs, PAs, CNS, CRNA
  - Certified nurse midwives
  - Respiratory therapists
  - Physical, occupational and speech therapists
  - Dieticians
  - Clinical social workers
  - Mental health therapists
  - Home health agencies
  - Dentists
  - Audiologists
  - Chiropractors
- All see patients independent of the physician, do not require incident to billing





- Health care is changing need team based-care
- Pharmacists provide improved outcomes and cost savings
  - Demonstrated with our services as well as many studies
  - Proven reduction in the total cost of care
- Employers work with your insurance providers to pay pharmacists for their non-dispensing services
- Insurance companies pay pharmacists for clinical services provided







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