

Opportunities for Improving Core Measure Performance Through Pharmacist Intervention



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Sponsored by:





Objectives

- Understand the impact of the Patient Protection and Affordable Care Act (H.R. 3590) on health-system reimbursement
- Describe key activities performed by a pharmacist that can improve value-based purchasing scores



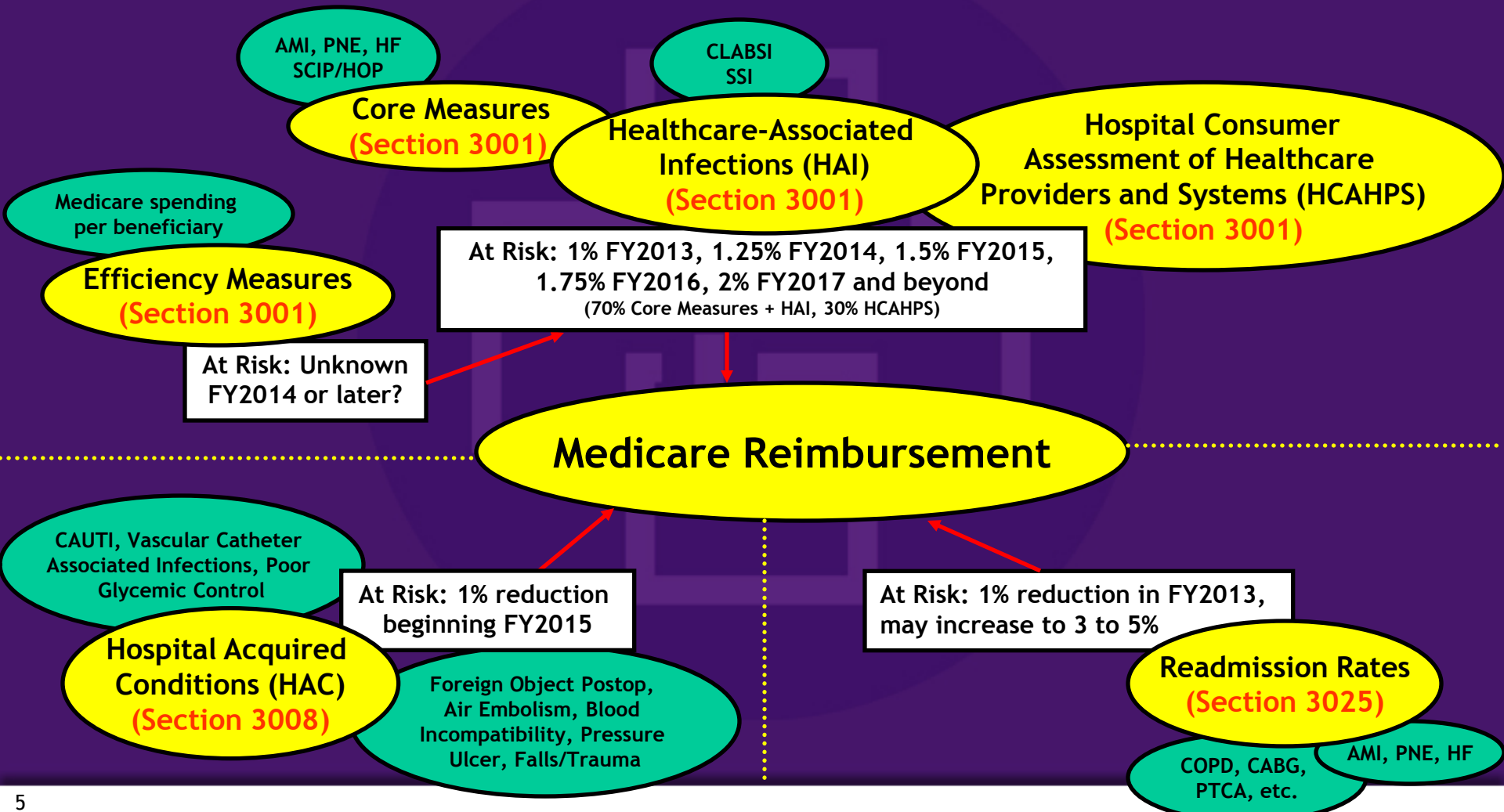
Why now?



Why now?

- The Patient Protection and Affordable Care Act (H.R. 3590)
 - Establishes Value-Based Purchasing
 - “Hospital Performance Score”
 - Reimbursement dollars withheld then awarded based on positive performance
 - Percentage of Medicare reimbursement at risk

HR 3590 The Patient Protection and Affordable Care Act Value-Based Purchasing (VBP)



VBP Model

HR 3590

Sect 3001

(Linear Scenario)

Note: this only includes
Core Measures + HCAHPS
(Efficiency Measures and
HAls to be determined)

NRHS at risk: 1 to 2 % or
\$550,000 to \$1,007,000

Potential loss based
on linear model =
\$211,000 to \$386,000

Norman Regional Hospital

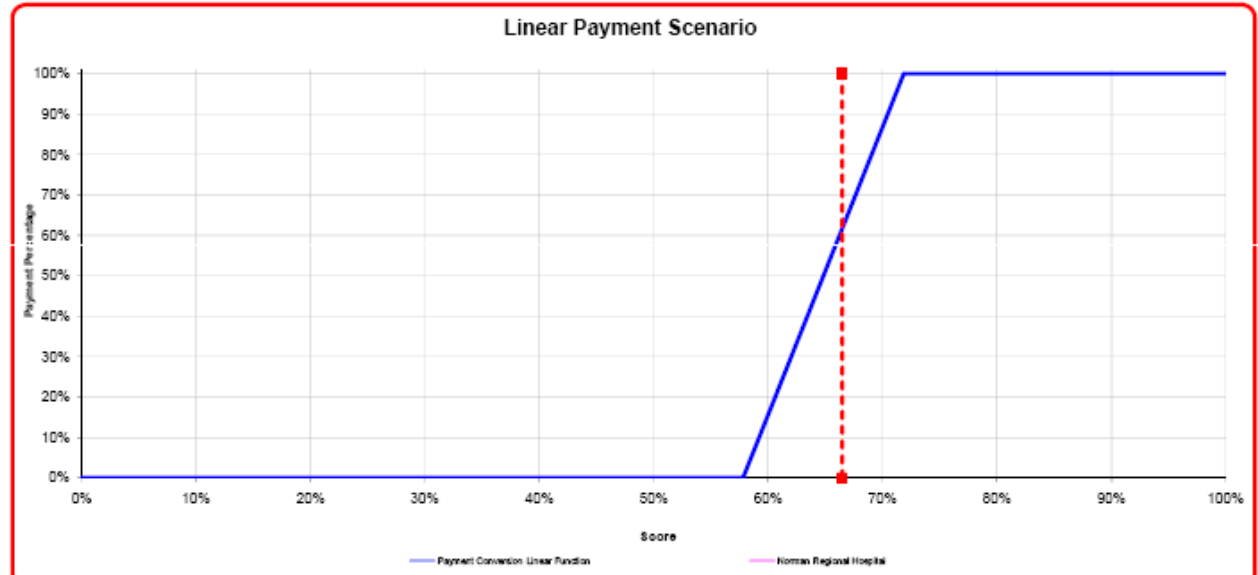
Value-Based Purchasing

Payment Impact Estimate - Linear Payout Function

Scoring Period: July 2008 - June 2009

Assumes No Distribution of Excess Pool Dollars

Norman Regional Hospital		FFY 2013	FFY 2014	FFY 2015	FFY 2016	FFY 2017
Process Measures Score:	85%	1% Carve-Out	1.25% Carve-Out	1.5% Carve-Out	1.75% Carve-Out	2% Carve-Out
HCAHPS Score:	23%	\$550,000	\$710,000	\$710,000	\$854,000	\$1,007,000
Overall VBP Score:	66%	\$339,000	\$438,000	\$438,000	\$527,000	\$621,000
Payment Percentage:	62%	(\$211,000)	(\$272,000)	(\$272,000)	(\$327,000)	(\$386,000)
Oklahoma State		FFY 2013	FFY 2014	FFY 2015	FFY 2016	FFY 2017
Process Measures Score:	77%	1% Carve-Out	1.25% Carve-Out	1.5% Carve-Out	1.75% Carve-Out	2% Carve-Out
HCAHPS Score:	23%	\$14,762,000	\$19,043,000	\$19,043,000	\$22,905,000	\$27,015,000
Overall VBP Score:	61%	\$6,236,000	\$8,044,000	\$8,044,000	\$9,675,000	\$11,411,000
Payment Percentage:	42%	(\$8,526,000)	(\$10,999,000)	(\$10,999,000)	(\$13,230,000)	(\$15,604,000)



VBP Model

HR 3590

Sect 3001

(Curvilinear Scenario)

Note: this only includes
Core Measures + HCAHPS

(Efficiency Measures and
HAls to be determined)

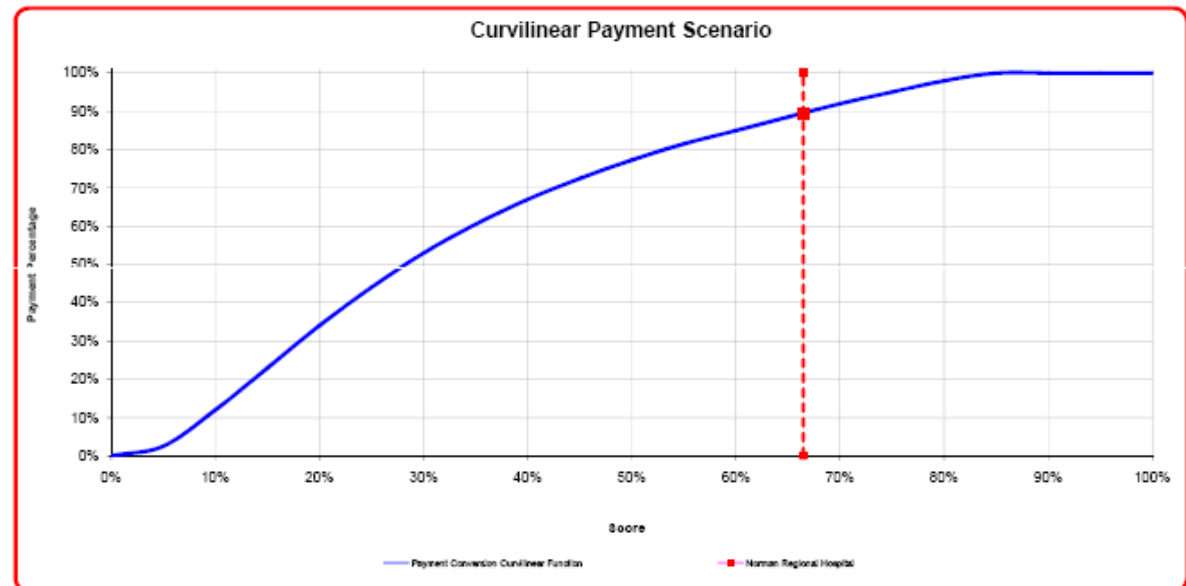
NRHS at risk: 1 to 2 % or
\$550,000 to \$1,007,000

Potential loss based
on linear model =
\$57,729 to \$105,696

Norman Regional Hospital Value-Based Purchasing

Payment Impact Estimate - Curvilinear Payment Function
Scoring Period: July 2008 - June 2009
Assumes No Distribution of Excess Pool Dollars

Norman Regional Hospital		FFY 2013	FFY 2014	FFY 2015	FFY 2016	FFY 2017
		1% Carve-Out	1.25% Carve-Out	1.5% Carve-Out	1.75% Carve-Out	2% Carve-Out
Process Measures Score: 85%	Dollars Contributed to VBP	\$550,000	\$710,000	\$710,000	\$854,000	\$1,007,000
HCAHPS Score: 23%	Expected Payment from VBP	\$492,271	\$635,478	\$635,478	\$764,363	\$901,304
Overall VBP Score: 66%	Excess Pool Dollars	(\$57,729)	(\$74,522)	(\$74,522)	(\$89,637)	(\$105,696)
Payment Percentage: 90%						
Oklahoma State		FFY 2013	FFY 2014	FFY 2015	FFY 2016	FFY 2017
		1% Carve-Out	1.25% Carve-Out	1.5% Carve-Out	1.75% Carve-Out	2% Carve-Out
Process Measures Score: 77%	Dollars Contributed to VBP	\$14,762,000	\$19,043,000	\$19,043,000	\$22,905,000	\$27,015,000
HCAHPS Score: 23%	Expected Payment from VBP	\$12,677,042	\$16,353,402	\$16,353,402	\$19,669,940	\$23,199,451
Overall VBP Score: 61%	Excess Pool Dollars	(\$2,084,958)	(\$2,689,598)	(\$2,689,598)	(\$3,235,060)	(\$3,815,549)
Payment Percentage: 86%						





VBP Model

HR 3590

Sect 3025

NRHS at risk:

1% or ~\$550,000

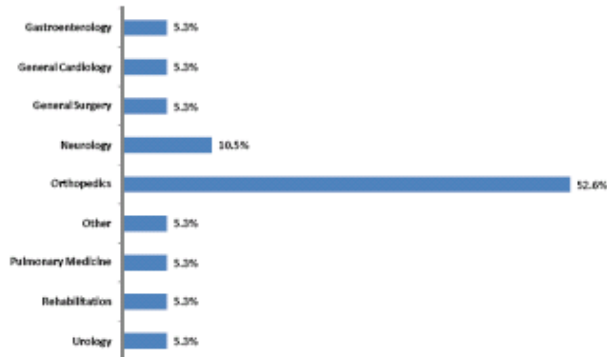
Medicare Hospital-Acquired Condition (HAC) Analysis
Based on Federal Fiscal Year (FFY) 2009 Medicare Inpatient Claims Data

Norman Regional Hospital

This report provides an analysis of the ten Medicare HAC categories recognized by the Centers for Medicare and Medicaid Services as preventable HACs. The Medicare program currently reduces payments to hospitals for certain cases where one of the conditions recognized under the HAC categories was not present on admission (POA) and, therefore, considered to be acquired in the hospital. Beginning in FFY 2012, CMS will publicly report eight of these HAC categories under the inpatient pay-for-reporting (RHODAPU) program. In addition, beginning in FFY 2015, hospitals in the bottom quartile of risk-adjusted HAC rates will be subject to a 1.0% payment penalty under Medicare as mandated by the Affordable Care Act (ACA) of 2010.

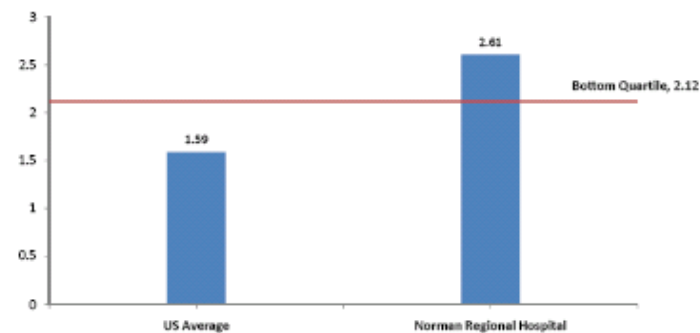
	Foreign Object Retained After Surgery	Air Embolism	Blood Incompatibility	Pressure Ulcer	Falls & Trauma	Catheter Associated UTI	Vascular Catheter Associated Infection	Poor Glycemic Control	Total
Medicare HACs Reported Using POA Indicator (Numerator)	No HACs Reported	No HACs Reported	No HACs Reported	No HACs Reported	9	1	4	No HACs Reported	19
Medicare Discharges Related to the HAC Category (Denominator)	2,153	7,292	7,292	7,292	7,292	7,292	7,292	2,097	7,292
	All Surgical Cases	All Cases	All Cases	All Cases	All Cases	All Cases	All Cases	All Diabetic Cases	All Cases
Estimated Medicare HAC Rate per 1,000 Discharges	0.00	0.00	0.00	0.00	1.23	0.14	0.55	0.00	2.61
Discharges Subject to Reduced Medicare Payment Because the HAC Reported was the Only Qualifying CC/MCC	0	0	0	0	1	0	0	0	1

Distribution of Medicare HACs by DRG Product Line, Total Cases: 19



This graph shows hospital's reported Medicare HACs, distributed by Diagnosis-Related Group (DRG) product line and may display a potential focus area.

Estimated Medicare HAC Rates
Rate per 1,000 Discharges



This graph depicts average Medicare HAC rates per 1,000 discharges for the nation and hospital. A line representing the bottom quartile is also shown. As mandated by the ACA, hospitals with a HAC rate above this line would be at risk for a 1.0% Medicare inpatient payment penalty beginning in FFY 2015.

Notes:

-Data are from the FFY 2009 Medicare inpatient claims file (MedPAR file), the latest publicly available data and the first full year in which POA indicators were used to identify HACs.

-The denominators used to calculate HAC rates in most instances are all Medicare cases. In instances where a subset of Medicare cases is clearly related to a HAC category, that subset is used as the denominator to calculate the HAC rate. The denominators used may not represent those that will ultimately be used by CMS to calculate HAC rates.

VBP Model
HR 3590
Sect 3008

NRHS at risk:
1% or \$621,311

Medicare Readmissions Analysis
Estimated Impact of Proposed Payment Policy
Norman Regional Hospital

	Heart Attack	Heart Failure	Pneumonia
Number of Patients	198	531	800
Number of Readmissions (risk-adjusted)	36	131	142
Risk-Adjusted Readmission Rate	18.4%	24.6%	17.7%
U.S. 30-day Readmission Rate	19.9%	24.5%	18.2%
Statistical Relationship to U.S. Average	No different than U.S. National Rate	No different than U.S. National Rate	No different than U.S. National Rate
Predicted/Expected Ratio	0.92	1.00	0.97
Predicted/Expected Ratio - 1	0.00	0.00	0.00
Medicare Payments	\$752,400	\$1,541,800	\$2,124,000
Estimated Excess Payment	\$0	\$6,300	\$0

	Hospital Impact
Total Estimated Excess Payments	\$6,300
Total Medicare DRG Payments	\$62,131,100
Uncapped Payment Adjustment Factor	0.01%
Capped Payment Adjustment Factor	0.01%
Estimated Impact	(\$6,300)

Notes:

CMS does not provide statistical relationships for indicators with fewer than 25 cases, these are noted with the following message: "Number of Cases Too Small".

CMS calculates statistical confidence intervals for each hospital's readmission rate. If the hospital's readmission rate is within the U.S. average +/- the confidence interval, the rate is considered to be no different than the U.S. national rate.

The 1.0% cap is based on the U.S. Senate's Patient Protection and Affordable Care Act, as amended on December 19, 2009.

Data Sources:

Hospital and national readmission rates from CMS Hospital Compare, July 9 release. Data reflects aggregate data for three years: July 1, 2005 through June 30, 2008.

DRG payments from the 2008 Medicare Claims Database (MedPAR). Data reflects claims for the October 1, 2007 through September 30, 2008 rate year.



VBP Summary

- Norman Regional Health System
 - 3 campuses (average daily census ~220 total)
 - Financial risk:
 - ~\$1,000,000 in FY2013 increasing to ~\$2,000,000 or greater by FY2017
 - Competitive risk:
 - Increased transparency of:
 - Hospital-Acquired Conditions (HAC)
 - Hospital-Acquired Infections (HAI)
 - Efficiency Measures



Why a Pharmacist?



Performance Measures

- Acute Myocardial Infarction (AMI)
- Heart Failure (HF)
- Pneumonia (PNE)
- Surgical Care Improvement Project (SCIP)
- Hospital Outpatient Quality Data Reporting Program (HOP QDRP)
- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)

Centers for Medicare & Medicaid Services (CMS) Quality Agenda and Medication Use

- Many are medication related

	Medication Related Indicator
Pneumonia (PNE)	5 of 7
Heart Failure (HF)	2 of 4
Acute Myocardial Infarction (AMI)	6 of 9 (+2 test measures)
Surgical Care Improvement Project (SCIP)	7 of 10
Hospital Outpatient Measures (HOP)	5 of 7
Children's Asthma Care (CAC)	3 of 3
<i>Process of Care Measures (Total)</i>	27 of 40
Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)	1 of 10

Joint Commission (JC) Quality Agenda and Medication Use

- Many are medication related

	Medication Related Indicator
Perinatal Care (PC)	1 of 5
Hospital Based Inpatient Psychiatric Services (HBIPS)	2 of 7
Stroke National Hospital Inpatient Quality Measures (STK)	7 of 8
Venous Thromboembolism Measures (VTE)	5 of 6



Additional Measures

Future measures development:

- Current test measures
 - AMI-T1a - LDL Cholesterol Assessment
 - AMI-T2 - Lipid-Lowering Therapy at Discharge
- Additional SCIP measures
 - Antibiotic redosing in OR
 - Expansion of normothermia beyond colorectal procedures
- Global vaccination measures (2012 ?)
 - Expand denominator population of hospital vaccination measure to include ALL eligible patients (not just pneumonia patients)
- Outpatient diabetes measures (2013 ?)
- COPD measures (?)

American Society of Health System Pharmacists (ASHP)

Leadership Agenda *(approved May 25, 2010)*

- Ensure that pharmacists are leaders in implementing all medication-related changes to the health care delivery system
 - Rationale:
 - The Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010 create opportunities for pharmacists to improve safety and quality of medication use as members of interdisciplinary teams.
 - Changes to the payment system for hospitals and providers will enhance the capabilities of pharmacists to bring value to patients and the health care delivery system.



ASHP 2015 Initiative

- **Goal 3: Increase the extent to which health-system pharmacists actively apply evidence-based methods to the improvement of medication therapy**
 - In 90% of hospitals, pharmacists will be actively involved in the development and implementation of evidence-based drug therapy protocols and/or order sets.
 - In 90% of hospitals, pharmacy departments will actively participate in hospital-wide efforts to ensure that patients receive evidence-based medication therapies required by the CMS hospital quality initiative, Joint Commission Core Measures, and/or state-based quality improvement and public reporting efforts.
 - In 70% of hospitals, pharmacists will actively be involved in medication- and vaccination-related infection control programs.



ASHP 2015 Initiative

- **Goal 4: Increase the extent to which pharmacy departments in health systems have a significant role in improving the safety of medication use.**
 - 90% of hospital pharmacies will participate in ensuring that patients receiving antibiotics as prophylaxis for surgical infections will have their prophylactic antibiotic therapy discontinued within 24 hours after surgery end time.
- **Goal 6: Increase the extent to which pharmacy departments in health systems engage in public health initiatives on behalf of their communities.**
 - 85% of hospital pharmacies will participate in ensuring that eligible patients in health systems receive vaccinations for influenza and pneumococcus.
 - 80% of hospital pharmacies will participate in ensuring that hospitalized patients who smoke receive smoking-cessation counseling.

CMS Recognition of Pharmacist Role

- Core Measures Specification Manual
 - Previously specified physician/APN/PA only for documentation of contraindications to medications
 - Started with Version 2.4b (discharges 04/01/08-09/30/08)
 - Acceptable for **PHARMACIST** to document medication contraindications
 - Started with Version 3.0 (discharges 10/01/09-03/31/10)
 - Acceptable to utilize **PHARMACIST** documentation for:
 - Pseudomonal risk (PNE)
 - Hold of medication (ex ACE/ARB) constitutes implied reason for not prescribing at discharge (AMI/HF)
 - Bradycardia with beta-blocker (AMI)

www.qualitynet.org (“Hospitals–Inpatient” → “Specifications Manual” → “Version 2.4b” → “Alphabetical Data Dictionary” → then for look sections related to various medication contraindications)

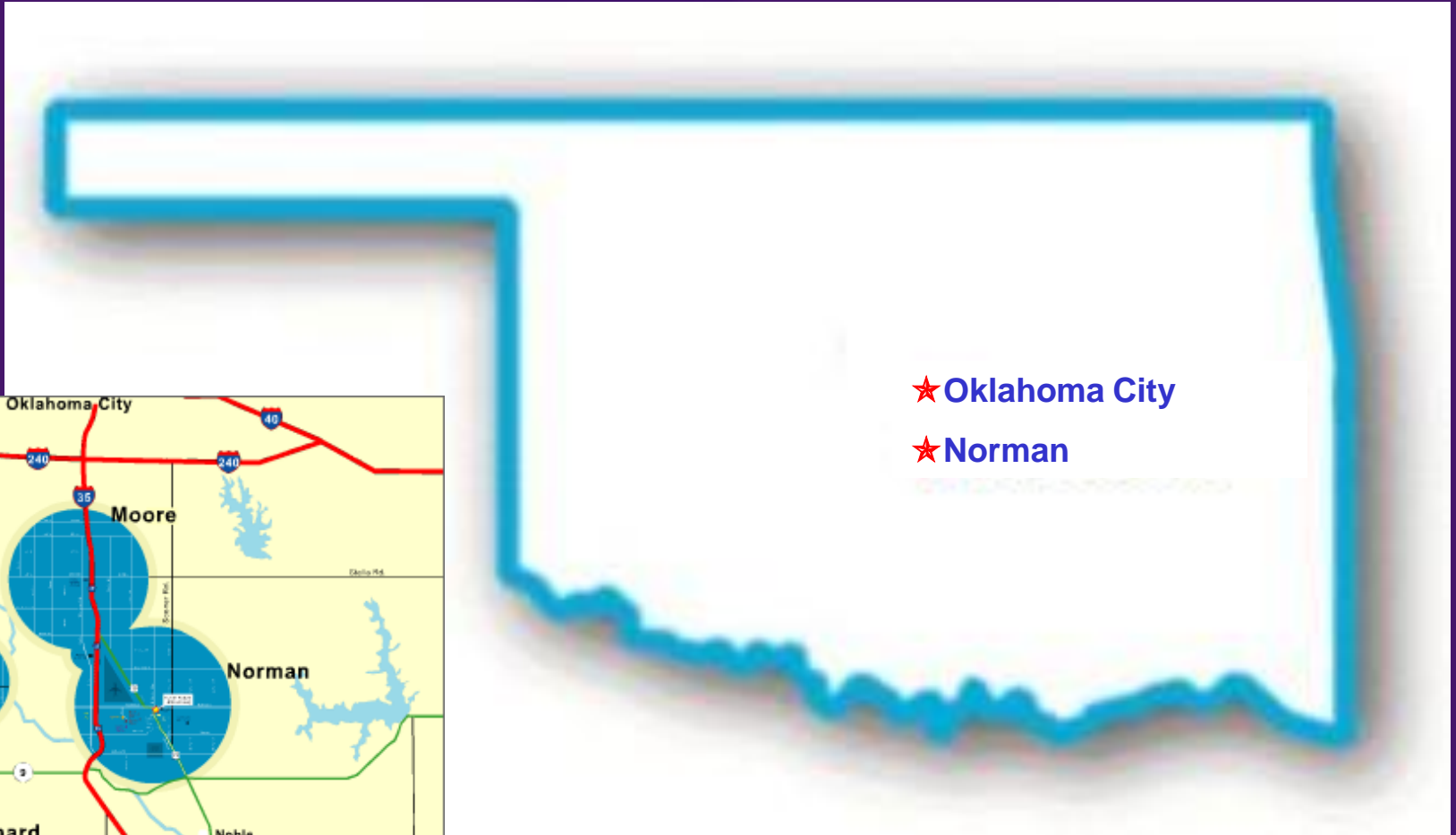


Hospital Acquired Conditions (HAC)

- 1) Objects left in surgery
- 2) Air embolism
- 3) Blood incompatibility
- 4) Stage III and IV pressure ulcers (decubitus ulcers)
- 5) Falls and trauma
- 6) Catheter-associated urinary tract infection (CAUTI)
- 7) Vascular catheter-associated infection
- 8) Glycemic control (diabetic ketoacidosis/nonketotic hyperosmolar coma)

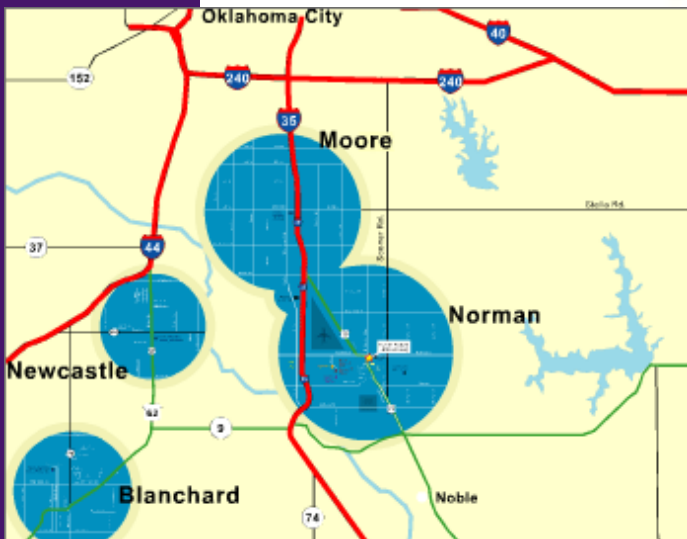


Role of the Pharmacist



★ Oklahoma City

★ Norman



Norman Regional Health System



- Porter Campus (321 beds)
 - Approx 1300 admits/month (excluding newborns)
 - 44 bed Emergency Room
 - Approx 5300 visits/month



- Moore Campus (45 beds)
 - ~145 admits/month
 - 10 bed Emergency Room
 - Approx 2100 visits/month



- Healthplex Campus (135 beds)
 - Opened October 2009
 - Womens/Childrens, Cardiac, Orthopedics
 - 10 bed Chest Pain Center
 - Approx 1200 visits/month



Norman Regional Health System

- Not for Profit Public Trust Organization
 - Board appointed by Mayor/City Council
- No Academic Affiliation
- 224 Active Medical Staff
 - Vast majority private practice
 - Hospitalist program
 - 24/7 Intensivist program
 - Provide wide range of services
 - Excluding burns, transplants, and pediatric ICU.

Norman Regional Health System

- Pharmacy Services

- 21.6 FTE Pharmacists
 - Covering all campuses, not including PRN staff
 - Includes Director, Manager, Clinical Supervisor
 - Additional PGY-1 Residency Positions (2)
- 11.7 FTE Technicians
 - Covering all campuses, not including PRN staff
 - Includes Operations Supervisor
- 1.0 FTE Department Assistant
- OR Satellite services Mon-Fri 2 campuses (Porter/Healthplex)
- 24 hour coverage 2 campuses (Porter/Healthplex)
 - After hours order entry for Moore Medical Center
- System-wide fill of employee prescriptions (Porter)
- Clinical Pharmacy Services (Porter/Healthplex/Moore)

Norman Regional Health System

- **Pharmacists**

- Residency Training (7)
 - PGY-1 + Specialty Residency (2)
 - PGY-1 (3)
 - Specialty Residency (2)
- BCPS Certification (4)
- One faculty member (SWOSU)
 - Specialty Residency
 - BCPS, BCNSP

- **Technicians**

- **PTCB Certification** (not required in Oklahoma)
 - Full Time (4)
 - Part Time (2)
 - PRN (4)

Norman Regional Health System

Pharmacist Involvement in Core Measures/SCIP

- 1995
 - OR satellite pharmacist starts project
 - Involved in pre-op antibiotic selection/timing well before SIP/SCIP
- 2002
 - Clinical coordinator starts pneumonia project
- 2005
 - Clinical pharmacist FTE added for AMI/HF project
 - Pharm.D., PGY-1 + Specialty Residency in Cardiology
 - Initial role - to develop program and to educate others



Clinical Pharmacy Services

- Daily assignments for targeted programs
- 7 day a week rotation
- Consistent patient follow-up

Betsy 647-1139 Debbie 647-5532 Lisa 559-4066 Stefanie 559-0539
 Brad 559-3073 Fran 690-9128 Nancy 559-1400 Trevor 559-0712
 Brian 327-0854 Jummie 629-7099

August

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 Debbie-Call Brian-Clinical ADR-LM	2 Debbie-Call Jimmie-Off(DP) Betsy-PTD (DP) HFlex-BH (FE) AC-SS/LM Vaccine-SS/LM P/C/S CM-BH AM/HF-FE ADR-LM ADR tr- SS/LM Nancy-Students	3 Jimmie-Call Betsy-PTD (JM) HFlex-BH (FE) AC-SS/DP Vaccine-SS/DP P/C/S CM-SS/DP AM/HF-LM ADR-LM ADR tr-SS/DP	4 Fran-Call Lisa-Off (FE) Betsy-PTD (JM) HFlex-BH (FE) AC-SS/DP Vaccine-SS/DP P/C/S CM-BH AM/HF-SS/DP ADR-LM ADR tr-SS/DP	5 Payday Betsy-Call Fran-Off (LM) HFlex-BH(JM) AC-SS/DP Vaccine-SS/DP P/C/S CM-SS/DP AM/HF-SS/DP ADR-LM COPD presentation	6 Lisa-Call Debbie-Off Brian-PTD(JM) HFlex-FE (LM) AC-SS/BN Vaccine-SS/BN P/C/S CM-SS/BN AM/HF-SS/BN ADR-DP	7 Lisa-Call Fran-Clinical ADR-DP
8 Lisa-Call Fran-Clinical ADR-DP	9 Lisa-Call Brian-Off (DP) HFlex-FE (JM) AC-SS/BN Vaccine-SS/BN P/C/S CM-SS/BN AM/HF-SS/BN ADR-DP	10 Betsy-Call Lisa-Off(BH) HFlex-FE (JM) AC-SS/DP Vaccine-SS/DP P/C/S CM-SS/DP AM/HF-SS/DP ADR-DP	11 Jimmie-Call Lisa-Off (BH) HFlex-SS/FE (DP) AC-DP Vaccine-BH P/C/S CM-SS/FE AM/HF-BN ADR-DP ADR tr-SS/FE PRECEPTOR'S CONFERENCE Nancy- Conference	12 Brian-Call Betsy-Off (BH) Jimmie-PTD (BH) HFlex-SS/FE (DP) AC-DP Vaccine-SS/FE P/C/S CM-SS/FE AM/HF-LM ADR-DP ADR tr- SS/FE	13 Lisa-Call HFlex-SS/BN (DP) AC-FE Vaccine-JM P/C/S CM-SS/BN AM/HF-BH ADR-BH ADR tr-SS/BN	14 Lisa-Call Betsy-Clinical ADR-BH
15 Lisa-Call Betsy-Clinical ADR-BH	16 Lisa-Call Fran-Off (LM) HFlex- SS/BN(DP) AC-JM Vaccine-DP P/C/S CM-SS/BN AM/HF-BH ADR-BH ADR tr-SS/BN Nancy-SWOSU	17 Debbie-Call HFlex-BN(DP) AC-SS/LM Vaccine-SS/LM P/C/S CM-SS/LM AM/HF-SS/LM ADR-BH	18 Debbie-Call Brian-Off (DP) HFlex-BN(DP) AC-FE Vacc-TK/LM(DP) P/C/S CM-TK/LM AM/HF-JM ADR-BH	19 Payday Debbie-Call Jimmie-Off(DP) HFlex-BN(DP) AC-FE Vacc-TK/LM(DP) P/C/S CM-TK/LM AM/HF-BH ADR-BH DM presentation	20 Brian-Call Lisa-Off(BH) HFlex-JM(BH) AC-FE Vacc-TK/BN(DP) P/C/S CM-TK/DP AM/HF-BN ADR-FE	21 Brian-Call Jimmie-Clinical ADR-FE
22 Brian-Call Jimmie-Clinical ADR-	23 Brian-Call Betsy-Off(BH) HFlex-JM(BF) AC-FE Vaccine-TK/DP P/C/S CM-TK/DP AM/HF-TK/DP ADR-FE	24 Brad-Call HFlex-JM(BF) AC-BN Vaccine-TK/DP P/C/S CM-TK/DP AM/HF-TK/DP ADR-FE Float: BH, FE	25 Brad-Call Fran-Off(BH) HFlex-JM(BF) AC-BN Vaccine-TK/DP P/C/S CM-TK/DP AM/HF-TK/DP ADR-FE	26 Fran-Call Debbie-Off HFlex-JM(BF) AC-BH Vacc-TK/BN(FE) P/C/S CM-TK/BN AM/HF-TK/BN ADR-FE HTN presentation	27 Fran-Call Brian-Off(BF) HFlex-DP AC-JM Vacc-TK/BN(FE) P/C/S CM-TK/BN AM/HF-TK/BN ADR-JM	28 Fran-Call Debbie-Clinical ADR-JM
29 Fran-Call Debbie-Clinical ADR-JM	30 Betsy-Call Fran-PTO(BH) Jimmie-Off(BN) HFlex-DP AC-BH/BN/DP Vacc-TK/BF P/C/S CM-TK/BF AM/HF-TK/BF ADR-JM	31 Brian-Call Fran-PTO(BH) HFlex-DP AC-TK/BN(BF) Vaccine-JM P/C/S CM-TK/BN AM/HF-TK/BN ADR-JM				

2010



Pharmacist Role in PNE

- **Order set maintenance development**
 - Appropriate antibiotic selection
- **Concurrent inpatient review**
 - Identified through PNE order set use
 - “Dummy Order” in Meditech used for identification
 - Interventions
 - Vaccinations (nurse assesses/pharmacist leaves order)
 - Accuracy of documentation
 - Antibiotic timeliness
 - Blood cultures (in relation to antibiotics)
 - Smoking cessation
 - Insures smoking cessation nurse is contacted
 - Insures appropriate documentation occurs



Concurrent PNE Review Form

Prior Paper System

Pneumonia CareMap Screening Form		Initials	Comments	Interpretation
Admission Date/Time	Date: Time:			Earliest time on chart – In ED review ED face sheet and nurses notes, for direct admissions, review face sheet time, initial orders, and nursing notes.
Transfer From Another ED?	Yes → skip to "Smoking Status" No			
Working Diagnosis on Admission?	Yes No → skip to "Smoking Status"			Mention of Pneumonia on admission orders, mention of pneumonia or "infiltrate" in initial impression or admitting diagnosis, use of pneumonia CareMap orders on admission? Mention of pneumonia later in stay (including progress notes, H&P, etc... dictated later than admission) does not qualify as working diagnosis on admission (see Working Diagnosis Criteria).
Antibiotics Prior to Admission?	Yes No			Review ED and Nurses Admission Medication History as well as Physician H&P. Interview patient to document time (or approximate time) of last dose as necessary.
Time of First Antibiotic	Date: Time:			
Within 4 Hours of Arrival?	Yes No			If default time charted or drug not charted at all, contact nurse involved.
Antibiotic(s) Ordered?	Drug Name(s)			
PCN/Ceph Allergy?	Yes No			
Creatinine Clearance	Date: Cl _{cr}			If doses adjusted, leave the screening form in the follow-up section and continue to monitor renal function for future dose adjustments
Renal Dose Adjustment?	Yes No			
ICU Transfer Within 24 Hours?	Yes No			See ICU Transfer or Admission Within First 24 Hours Criteria (transfer must be related to Pneumonia in order to answer yes)
Antibiotic Consistent With Guidelines?	Yes → skip to "First Blood Cx" No			See Appendix F Appropriate antibiotics should be administered within 24 hours of admission (i.e. if it takes 2 antibiotics to make the regimen appropriate, both should be administered within 24 hours)
Healthcare Associated PN?	Yes No			See Healthcare Associated PN Criteria.
Pseudomonal Risk?	Yes No			See Pseudomonal Risk Criteria (applies to ICU admission only).
Immunocompromised?	Yes No			See Compromised Criteria to determine status.
Time of First Blood Cx Drawn	Date: Time:			Check lab time and 3 rd page of ED nurses notes...use the earliest time.
Drawn Before 1st Antibiotic?	Yes No			If blood cultures are drawn in the ED or if the patient is admitted/transfered to ICU for pneumonia, the cultures should be drawn before antibiotics.
Pulse Ox or ABG Performed Within First 24 hours?	Yes No			If no documentation on initial review and within 24 hours, notify nurse to perform pulse ox immediately and document per Pneumonia CareMap orders.
Smoking Status: Nursing Doc. Smoking Status: Admission Hx Smoking Status: H&P Documented Smoking Educ?	Smoker Non-smoker Smoker Non-smoker Smoker Non-smoker Yes No			A smoker includes those who have quit within the last year... If discrepancies with H&P and nursing assessment, notify Smoking Cessation Nurse at ext. 3175 and nurse taking care of patient to provide information.
Pneumococcal Vaccination	Prior Hx Order Left Non-candidate			Make sure orders are left on all patients without contraindications.
Influenza Vaccination (October-March Only)	Prior Hx Order Left Non-candidate			Make sure orders are left on all patients without contraindications.

Renal Dose Adjustments Pending? YES or NO Consult? YES or NO Initial When Completed: _____ Discharge Date: _____ Patient Sticker



Pharmacist Role in PNE


- **Vaccination Program**
 - 1999-Championed by Pharmacist & Infection Control Chair
 - Healthy People 2010 Goal
 - Pharmacist screening/ordering
 - All patients based on nursing assessment
 - Prior - required manual faxing of paper assessment
 - Current - Meditech auto prints online nursing assessment to pharmacy
 - Medical staff approved standing orders
 - Nurse vaccinates upon discharge
 - Vaccination history maintained in electronic medical record (Meditech)
 - Prior history also appears on admission face sheet



Pharmacist Role in PNE

- **Vaccination Program**
 - Started with pneumococcal vaccination
 - Worked with area nursing homes in 2000
 - Now includes seasonal influenza vaccination
 - Drive thru flu clinic (Norman/Moore)
 - Report generated to attending physician offices on a monthly basis of newly vaccinated inpatients
- **Currently revamping program**
 - Orders to be placed via CPOE by pharmacist
 - Vaccine order drops to nursing status board and eMAR
 - Vaccination/declination within 24 hrs of order

Pharmacist Role in PNE Vaccination

 **Norman Regional Hospital**
901 N. Porter • Box 1308 • Norman, OK 73070

Name: _____ Date: _____
Address: _____

DO NOT SEND THIS PRESCRIPTION HOME WITH PATIENT!

Administer Pneumovax Vaccine prior to discharge.
(see orders in chart)

DISCARD IF VACCINE ADMINISTERED

(Check if applicable and TUBE TO PHARMACY)

Patient Refused
 Previous Vaccination (Date: _____)
 Cancelled by Physician

NORMAN REGIONAL HOSPITAL

PHYSICIAN'S ORDERS

USE MEDIUM BALL POINT PEN AND PRESS FIRMLY

DATE TIME

Routine Standing Orders - Pneumococcal Vaccine Administration

1. Give Pneumococcal Vaccine 0.5 mL IM x 1 dose prior to discharge, **UNLESS** otherwise ordered by the attending physician.
2. Discharge patient with vaccine administration record.
3. If patient refuses vaccine, previous vaccination identified, or order canceled by physician, complete Pneumovax[®] Rx in front of chart and tube to pharmacy.

SPO* 392 12/03

Page 1 of 1

DO NOT WRITE ON OR BELOW THIS AREA
ORDERS MAY BE CUT OFF BY FAX MACHINES

Patient Sticker



Pharmacist Role in PNE Vaccination

- Results

PNEUMOCOCCAL VACCINATION (12/06/99-06/30/10)	
Patient's Screened	N= 94,051
Prior Histories	N= 16,993
Non-candidates	N= 55,631
Vaccines administered	N= 13,366

2004 National Partnership for Immunization Award Recipients



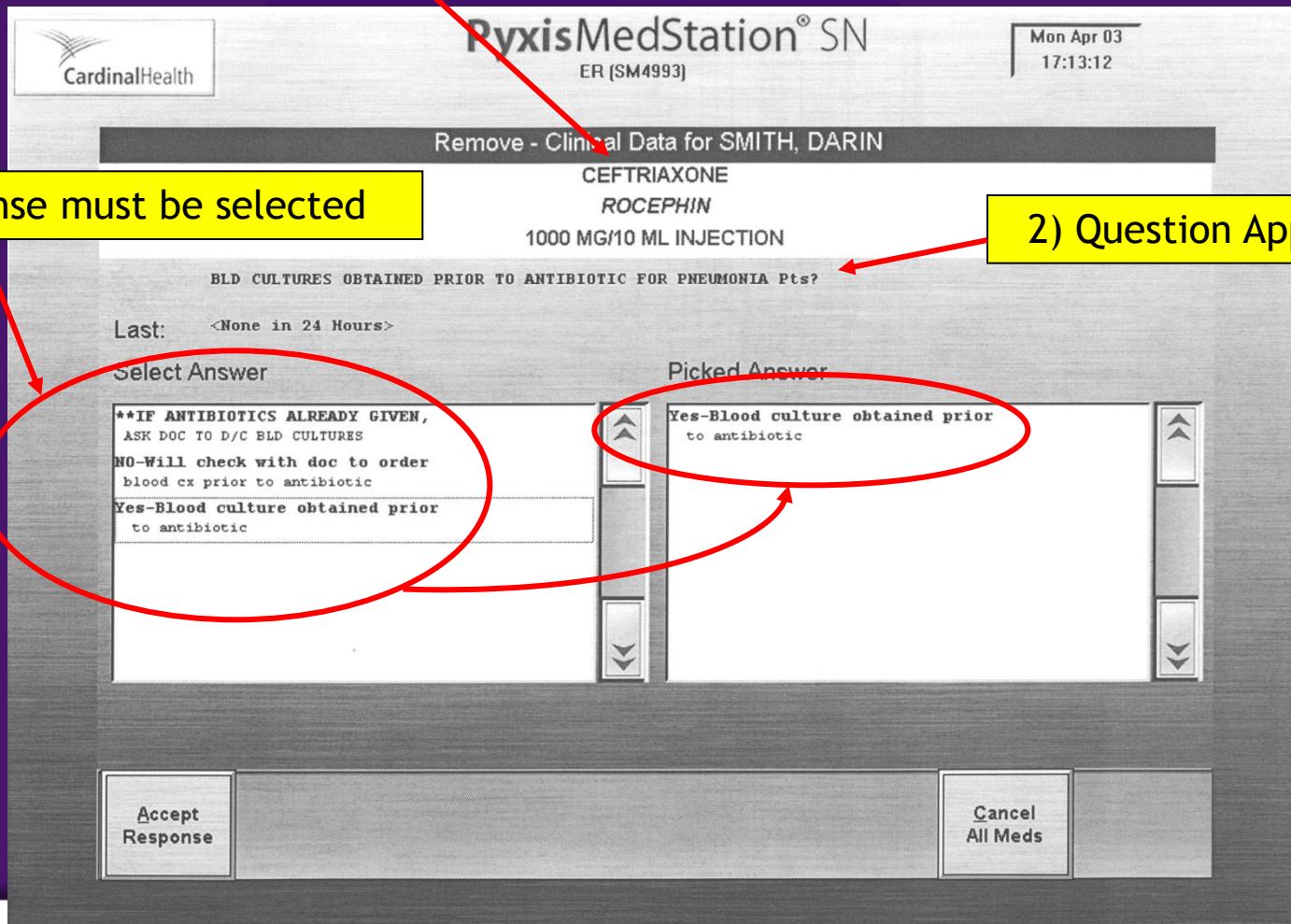
Pictured: Yvette Morrison, Pharm.D., BCPS

Example: Automated Dispensing Cabinet Alert

1) ER nurse pulls one of the following:
ceftriaxone, doxycycline, moxifloxacin, or ampicillin/sulbactam

3) A response must be selected

2) Question Appears



CardinalHealth

PyxisMedStation[®] SN
ER (SM4993)

Mon Apr 03
17:13:12

Remove - Clinical Data for SMITH, DARIN

CEFTRIAZONE
ROCEPHIN
1000 MG/10 ML INJECTION

BLD CULTURES OBTAINED PRIOR TO ANTIBIOTIC FOR PNEUMONIA Pts?

Last: <None in 24 Hours>

Select Answer

**IF ANTIBIOTICS ALREADY GIVEN,
ASK DOC TO D/C BLD CULTURES

NO-Will check with doc to order
blood cx prior to antibiotic

Yes-Blood culture obtained prior
to antibiotic

Picked Answer

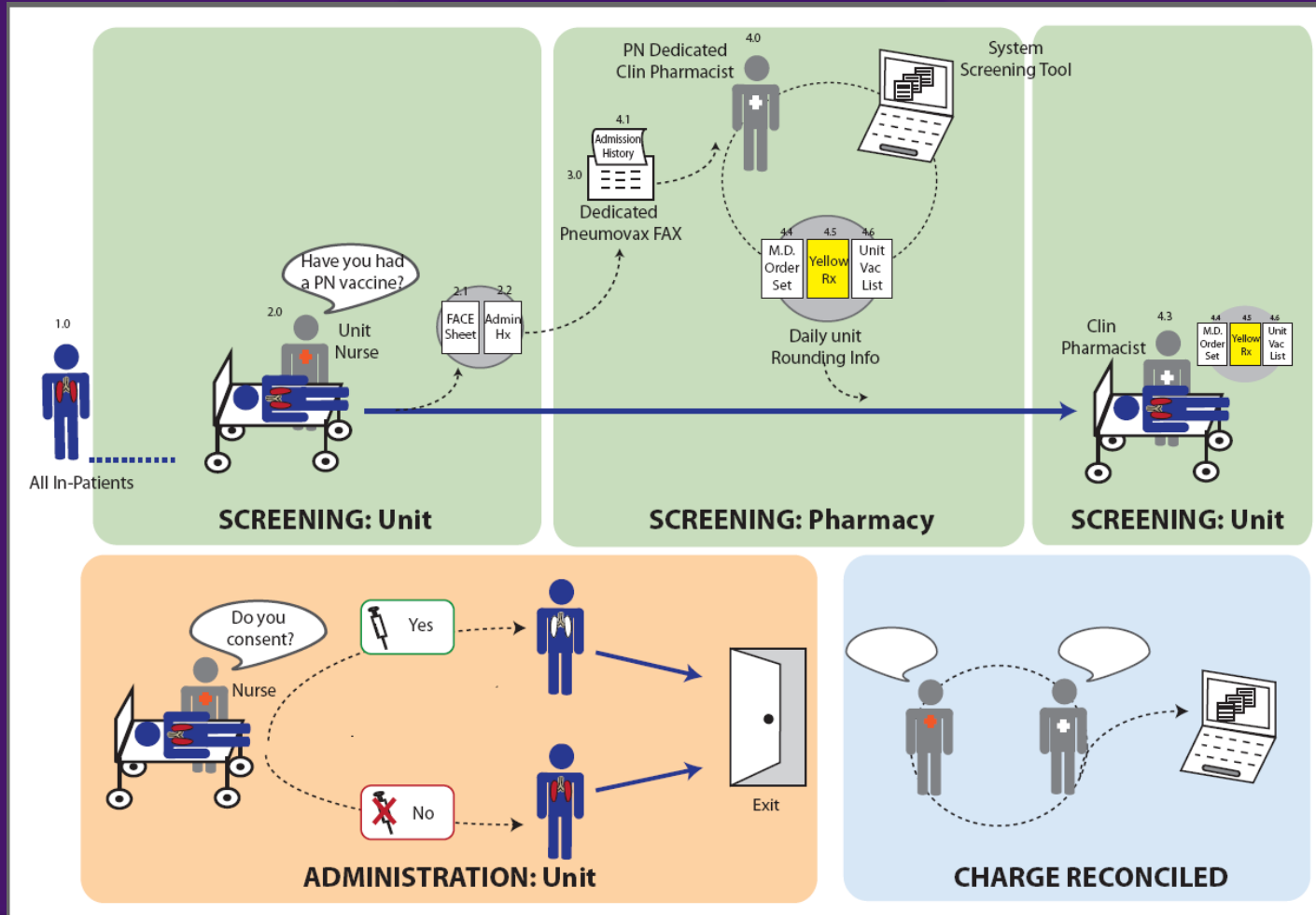
Yes-Blood culture obtained prior
to antibiotic

Accept Response

Cancel All Meds

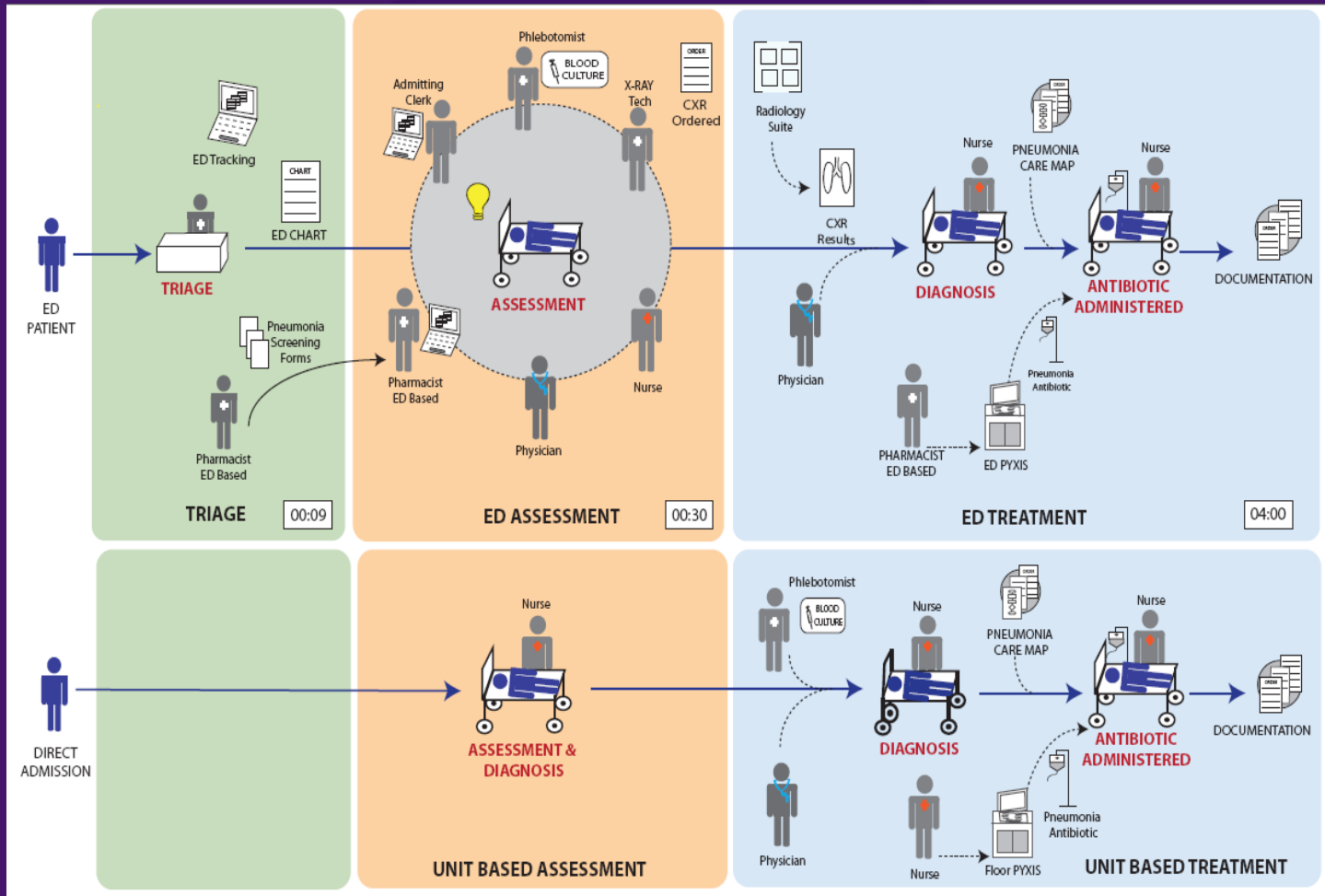
VHA Blueprint

Pneumonia: Vaccine Assessed/Administered



VHA Blueprint

Pneumonia: Antibiotic within 4 Hours





Pharmacist Role in AMI

- Order set development and maintenance
- Member of Door-to-PCI Committee
- Concurrent inpatient review
 - Identified via troponin list (via Meditech)





Patient Identification

CHF/AMI Program Active Patients



Patient Name	Account #	Room #	Follow-up Needed	AMI Dx	CHF Dx
HEALTHPLEX					
DOE, JOHN	855207656	H3709-1		NO	NO
DOE, JOHN	855340348	H4710-1	DOE, JOHN	NO	YES
DOE, JOHN	855346371	H4709-1	DOE, JOHN	PENDING	NO
DOE, JOHN	855350891	H4705-1	DOE, JOHN	PENDING	YES
DOE, JOHN	855334551	H4702-1	DOE, JOHN	PENDING	NO
DOE, JOHN	855312611	H4715-1		YES	YES
DOE, JOHN	855318407	H4701-1		NO	NO
PORTER					
DOE, JOHN	855323281	N4918-1		NO	NO
DOE, JOHN	855268507	N3216-1		NO	YES
DOE, JOHN	855268507	N3216-1		NO	YES
DOE, JOHN	855250748	N5072-1		NO	NO
DOE, JOHN	855039991	N5102-1		NO	NO
DOE, JOHN	855321068	N4067-1		NO	NO
DOE, JOHN	855343193	N3222-1	DOE, JOHN	YES	YES
DOE, JOHN	855343193	N3222-1	DOE, JOHN	YES	YES
DOE, JOHN	855234874	N3201-1		NO	NO
DOE, JOHN	855259079	N3217-1	DOE, JOHN	NO	YES
DOE, JOHN	855259079	N3217-1	DOE, JOHN	NO	YES
DOE, JOHN	855311429	N2207-1		NO	NO
DOE, JOHN	855317770	N3221-1		NO	NO
DOE, JOHN	855296985	N4917-1		NO	NO
DOE, JOHN	855321971	N3067-1		NO	NO
DOE, JOHN	855323257	N2205-1	DOE, JOHN	NO	YES
DOE, JOHN	855334003	N3083-1		NO	NO
DOE, JOHN	855325349	N3088-1		NO	YES
DOE, JOHN	855344351	N5080-1	DOE, JOHN	PENDING	PENDING
DOE, JOHN	855340224	N3202-1		NO	YES
DOE, JOHN	855250331	N4077-1		NO	NO
DOE, JOHN	855276780	N3211-1		NO	NO
DOE, JOHN	855340984	N4941-1		NO	NO
DOE, JOHN	855352044	N4938-1	DOE, JOHN	PENDING	PENDING
DOE, JOHN	855291495	N5084-1		NO	NO
DOE, JOHN	855334348	N4102-1		NO	NO
DOE, JOHN	855345927	N4932-1	DOE, JOHN	NO	YES
DOE, JOHN	855350718	N4939-1	DOE, JOHN	NO	YES
DOE, JOHN	855341514	N3206-1		NO	NO



Pharmacist Role in AMI

- Order set development and maintenance
- Member of Door-to-PCI Committee
- Concurrent inpatient review
 - Identified via troponin list (via Meditech)
 - Interventions
 - Timely administration of ASA on arrival
 - ACE/ARB at discharge for decreased LVF
 - ASA/Beta-blocker at discharge
 - Counsel patients about ASA at discharge
 - Smoking cessation
 - Insures nurse is contacted/appropriate documentation occurs
 - Checklist on charts
 - Leave reminder notes on Medication Reconciliation form to address ASA/BB/ACE-ARB at discharge



Concurrent AMI Review Form

Prior Paper System

Admission Indicators	Initials	Comments	Plan/Action Taken
1) Notified of patient how? <input type="checkbox"/> Caremap <input type="checkbox"/> Troponin list <input type="checkbox"/> Dr List <input type="checkbox"/> Other _____			
2) Transferred from another ED? <input type="checkbox"/> Yes <input type="checkbox"/> No			
3) Arrival date/time ____/____/____ - _____			
4) Aspirin within 24 hours of arrival? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Documented contraindication		See appendices for contraindications for ASA within 24 hours	
5) β -blocker within 24 hours of arrival? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Documented contraindication		See appendices for contraindications for β -blockers within 24 hours	
6) LVF Assessment? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Reason for not assessing			
7) LVSD? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> EF _____			<input type="checkbox"/> PIN re: ACE/ARB <input type="checkbox"/> Entered <input type="checkbox"/> PIN re: Documentation of ACE/ARB <input type="checkbox"/> Entered contraindications
8) Checklist placed on chart? <input type="checkbox"/> Yes			<input type="checkbox"/> Entered in MIDAS
9) Smoker within last year? <input type="checkbox"/> Yes <input type="checkbox"/> No		If H&P states smoker and nurses notes state "non-smoker" this must be clarified. Make certain appropriate documentation/education has been completed. Contact smoking cessation nurse @ ext 3175 if discrepancies exist for appropriate counseling of patient. Nurse taking care of patient can also be instructed to educate and document smoking cessation.	
10) Smoking status verified? <input type="checkbox"/> Yes (i.e. H&P vs nurses notes)			<input type="checkbox"/> Contacted smoking cessation nurse <input type="checkbox"/> Entered <input type="checkbox"/> Left order for education <input type="checkbox"/> Entered
11) If yes, counseling provided? <input type="checkbox"/> Yes <input type="checkbox"/> No			
12) ASA prescribed at discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Documented contraindication			
13) β -blocker at discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Documented contraindication			
14) If LVSD, ACE/ARB at discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Documented contraindication			

Discharge Date _____

AMI YES AMI NO

Entered in MIDAS

D/C Prior to review

Complete

Patient Sticker



AMI Checklist

Norman Regional Hospital Outcome Indicator AMI Physician Checklist	
Date: _____	
Indicator	
Aspirin within 24 hours of arrival	<input type="checkbox"/> Aspirin administered within 24 hours OR No Aspirin due to: <input type="checkbox"/> ASA allergy <input type="checkbox"/> Active bleeding <input type="checkbox"/> Other (<i>please specify</i>):
Beta blocker within 24 hours of arrival	<input type="checkbox"/> Beta blocker administered within 24 hours OR No beta blocker due to: <input type="checkbox"/> Beta-blocker allergy <input type="checkbox"/> Bradycardia less than 60 beats per minute <input type="checkbox"/> 2 nd or 3 rd degree heart block <input type="checkbox"/> Systolic blood pressure less than 90 mmHg <input type="checkbox"/> Other (<i>please specify</i>):
Aspirin at discharge	<input type="checkbox"/> Continue aspirin _____mg at home OR No Aspirin due to: <input type="checkbox"/> ASA allergy <input type="checkbox"/> Active bleeding <input type="checkbox"/> Discharged on Coumadin <input type="checkbox"/> Other (<i>please specify</i>):
Beta blocker at discharge	<input type="checkbox"/> Continue _____ OR No beta blocker due to: <input type="checkbox"/> Beta-blocker allergy <input type="checkbox"/> Bradycardia less than 60 beats per minute <input type="checkbox"/> 2 nd or 3 rd degree heart block <input type="checkbox"/> Systolic blood pressure less than 90 mmHg <input type="checkbox"/> Other (<i>please specify</i>):
ACE Inhibitor/ARB at discharge for LVSD (Moderate, Severe, or EF less than 40%) <i>Must address both ACEI and ARB for contraindications if not prescribed</i>	<input type="checkbox"/> Not applicable, LV function normal OR <input type="checkbox"/> Continue the following Rx at discharge: OR No ACEI due to: <input type="checkbox"/> ACE Inhibitor allergy <input type="checkbox"/> Cough <input type="checkbox"/> Renal failure <input type="checkbox"/> Moderate or severe aortic stenosis <input type="checkbox"/> Hypotension <input type="checkbox"/> Hyperkalemia <input type="checkbox"/> Other (<i>please specify</i>): No ARB due to: <input type="checkbox"/> ARB allergy <input type="checkbox"/> Renal failure <input type="checkbox"/> Moderate or severe aortic stenosis <input type="checkbox"/> Hypotension <input type="checkbox"/> Hyperkalemia <input type="checkbox"/> Other (<i>please specify</i>):
Patient Label	Physician Signature _____

Reminder tab stapled to checklist that sticks out of bottom of chart

AMI
CHECKLIST



Pharmacist Role in HF

- Order set development and maintenance
- Concurrent inpatient review
 - CHF - report encompassing BNP, cardiology consults, HF CareMap use, HF readmissions
 - Combined with AMI troponin List
 - Interventions
 - Generate and leave on chart copy of prior LVF exams
 - ACE/ARB at discharge if decreased LVF
 - Smoking cessation
 - Insures smoking cessation nurse is contacted
 - Insures appropriate documentation occurs
 - Leave nursing order on chart to provide educational Home Journal
 - Leave reminder notes on Medication Reconciliation form to address ACE-ARB at discharge



Concurrent HF Review Form

Prior Paper System

Admission Indicators	Initials	Comments	Actions
1) Notified of pt how? <input type="checkbox"/> Care-map <input type="checkbox"/> BNP list _____ <input type="checkbox"/> Midas readmit <input type="checkbox"/> Dr. List <input type="checkbox"/> Other _____			
2) Smoker within last year? <input type="checkbox"/> Yes <input type="checkbox"/> No		If H&P states smoker and nurses notes state "non-smoker" this must be clarified. Make certain appropriate documentation/education has been completed. Contact smoking cessation nurse @ext 3175 if discrepancies exist for appropriate counseling of patient. Nurse taking care of patient can also be instructed to educate and document smoking cessation.	<input type="checkbox"/> Contacted smoking cessation nurse <input type="checkbox"/> Entered <input type="checkbox"/> Left order for education <input type="checkbox"/> Entered
3) Smoking status verified (ie. H&P versus nurses notes) <input type="checkbox"/> Yes			
4) If yes, counseling provided? <input type="checkbox"/> Yes <input type="checkbox"/> No			
5) LVF Assessment? <input type="checkbox"/> Yes <input type="checkbox"/> Echo ordered <input type="checkbox"/> Adenosine Thallium ordered <input type="checkbox"/> No <input type="checkbox"/> Reason documented for not assessing		LVSD is documented as EF less than 40%, or a narrative description consistent with moderate or severe systolic dysfunction.	<input type="checkbox"/> Printed prior echo prior echo <input type="checkbox"/> Entered <input type="checkbox"/> Placed on chart <input type="checkbox"/> Entered <input type="checkbox"/> PIN re: LV function assessment <input type="checkbox"/> Entered
6) LVSD? <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Entered
7) Checklist placed on chart <input type="checkbox"/> Yes			<input type="checkbox"/> Entered
8) ACE/ARB ordered during stay? <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> PIN re: ACE/ARB <input type="checkbox"/> Entered <input type="checkbox"/> PIN re: Documentation of ACE/ARB contraindications <input type="checkbox"/> Entered
9) Documented contraindications to ACE/ARB <input type="checkbox"/> Yes <input type="checkbox"/> No			
10) CHF Home Journal Given? <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Order left <input type="checkbox"/> Entered
11) Medications addressed at discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No			
12) Final discharge review? <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Entered

Discharge date _____

CHF YES CHF NO
D/C Prior to review

Entered in MIDAS
Complete

Patient Sticker



HF Checklist

Reminder tab
stapled to checklist
that sticks out of
bottom of chart

NORMAN REGIONAL HOSPITAL	
Outcome Indicators Heart Failure Physician Check List	
Date: _____	
Indicator	
LV function addressed	<input type="checkbox"/> Yes Value _____ (Mild, moderate, severe, or value if known) <input type="checkbox"/> Will measure EF after discharge
ACE Inhibitor/ARB at discharge for LVSD (Moderate, Severe, or EF less than 40%) <i>Must address both ACEI and ARB for contraindications if not prescribed</i>	<input type="checkbox"/> Not applicable, LV function normal OR <input type="checkbox"/> Continue the following Rx at discharge: _____ OR No ACEI due to: <input type="checkbox"/> ACE Inhibitor allergy <input type="checkbox"/> Cough <input type="checkbox"/> Renal failure <input type="checkbox"/> Moderate or severe aortic stenosis <input type="checkbox"/> Hypotension <input type="checkbox"/> Hyperkalemia <input type="checkbox"/> Other (please specify): _____ AND No ARB due to: <input type="checkbox"/> ARB allergy <input type="checkbox"/> Renal failure <input type="checkbox"/> Moderate or severe aortic stenosis <input type="checkbox"/> Hypotension <input type="checkbox"/> Hyperkalemia <input type="checkbox"/> Other (please specify): _____
Education provided Discharge education must include: 1. What to do if symptoms worsen 2. Weight monitoring 3. Diet 4. Activity 5. Follow up instructions 6. Medications	<input type="checkbox"/> Heart Failure Home Journal ordered <input type="checkbox"/> Complete medication list (all meds) provided to patient at discharge
_____ <i>Physician Signature</i>	
70700MR0009.0206	Page 1 of 1
Patient Label	

**HEART
FAILURE
CHECKLIST**

HF Education Order & Education Tool



NORMAN REGIONAL HOSPITAL
PHYSICIAN'S ORDERS

USE MEDIUM BALL POINT PEN AND PRESS FIRMLY

DATE _____ TIME _____

Routine Standing Order – Heart Failure Education

1. Provide Heart Failure Home Journal and educate patient and/or caregiver (*caregiver defined as the patient's family or any other person who will be responsible for care of the patient after discharge*)
2. Education to include:
 - a. Diet instruction
 - b. Weight monitoring
 - c. What to do if symptoms worsen
 - d. Follow-up appointment instructions
 - e. Level of activity
3. Document all education in CareManager

S.O. _____
Physician Signature/Date/Time
Approved by Medicine Department 09/05

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ORDERS MAY BE CUT OFF BY FAX MACHINES

Patient Sticker



Core Measure Volumes

- FY10 Avg. Qualifying Cases Per Month
 - Pneumonia = 67 (810 Annual)
 - AMI = 22 (262 Annual)
 - HF = 32 (384 Annual)



Core Measure- Clinical Pharmacy Interventions

January 1, 2010 - June 30, 2010

AMI Interventions

Total Patients Screened	2543
AMI Suspected Diagnosis	159
ASA- Note left on chart	1
ASA- Physician contacted	2
AMI Checklist placed on chart	144
Smoking Cessation- Order per PharmD	14
Smoking Cessation- Smoking Cessation contacted	17
ASA at discharge- Added to MRF	72
ASA at discharge- Note left on MRF	22
Beta-Blocker at discharge- Note left on MRF	105
ACE-I/ARB for LVSD- Note left on MRF	36
ACE-I/ARB for LVSD- Note for contraindication	9
Total AMI Interventions	422

Pneumonia Interventions

Total Patients Screened	731
Antibiotic Selection- ICU+ Non-ICU	6
Antibiotics within 6 hours of arrival	12
Influenza Vaccine	13
Pneumococcal Vaccine	74
Other	8
Smoking Cessation- Smoking Cessation contacted	89
Renal Dosing Adjustment	72
Blood Cultures within appropriate time	2
Total Pneumonia Interventions	276

Heart Failure Interventions

Total Patients Screened	2543
Heart Failure Suspected Diagnosis	523
LVF Assessment- Physician queried with note	42
LVF Assessment- Prior Report Left on chart	151
ACE-I/ARB for LVSD- Note left on MRF	67
ACE-I/ARB for LVSD- Note for contraindication	35
Checklist placed on chart	478
Heart Failure Education- Follow-up call	97
Heart Failure Education- Order Left	268
Heart Failure Education- Other	26
Smoking Cessation- Order per PharmD	14
Smoking Cessation- Smoking Cessation contacted	41
Total Heart Failure Interventions	1219

Stroke Interventions

Total Patient Screened	360
Anticoagulation for A-fib	4
Checklist placed on chart	34
Cholesterol therapy PIN	93
Other	1
Smoking Cessation- Smoking Cessation contacted	14
Total Stroke Interventions	146

COPD Interventions

Total Patient Screened	97
*Documentation process in development.	

TOTAL PATIENTS SCREENED	3731
TOTAL INTERVENTIONS	2063



Pharmacist Role in SCIP

- Work with Surgeons to develop standardized post-op orders by procedure type
 - Order sets address:
 - Antibiotic selection/duration
 - DVT prophylaxis
 - Attempt to standardize start time of LMWH
 - Screening/Intervention Program
- 2 (0.9) FTE OR Satellite Pharmacists Mon-Fri
 - Porter and Healthplex campuses
 - Works with surgeons to develop/update orders for pre-op antibiotic selection/beta-blocker use
 - Places reminder stickers on antibiotics regarding appropriate timing



Example labels

SET UP, BUT DO NOT START ANTIBIOTIC
It will be started by the circulating nurse on
the way to surgery

WITHIN 60 TO 120 MINUTES
BEFORE START OF CASE.

Start Antibiotic
at _____



Example Order Set: SCIP Measures

11. Antibiotics: (Check if desired.) Give 1st dose immediately in PACU.

- Ancef 1 gram IVPB every 8 hours x 3 doses + Metronidazole 1 gram IVPB every 8 hours x 3 doses
- Mefoxin 1 gram IVPB every 6 hours x 4 doses
- Unasyn 1.5 grams IVPB every 6 hours x 4 doses
- Ancef 1 gram IVPB every 8 hours X 3 doses
- Other _____

β-lactam allergic:

- Clindamycin 600 mg IVPB every 8 hours x 3 doses + Cipro 400 mg IVPB every 12 hours x 2 doses
- Clindamycin 600 mg IVPB every 8 hours x 3 doses + Gentamicin 80 mg IVPB every 8 hours x 3 doses
- Clindamycin 600 mg IVPB every 8 hours X 3 doses

NORMAN REGIONAL HEALTH SYSTEM
PHYSICIAN'S ORDERS

USE MEDIUM BALL POINT PEN AND PRESS FIRMLY

DATE: _____ TIME: _____

POST OP ORDERS - General Surgery

1. Routine PACU care, then transfer to a Med/Surg or PCU or With Telemetry or ICU or WC or ACU - discontinue when stable and discharge criteria met
2. Vital signs every 4 hours or routine.
3. I & O every shift.
4. Activity: _____
5. Lab: _____
6. Key: _____
7. Diet: _____
8. IV fluids: 1000 mL at _____ mL/hour (check if desired, D 1/2NS is default if nothing checked)
 - o D 1/2NS
 - o Lactated Ringers
 - o 0.9% Normal Saline
 - o add 20 mEq/Liter potassium chloride
9. IV Pain Meds: Morphine _____ mg IV every _____ hours PRN pain
 Dilaudid _____ mg IV every _____ hours PRN pain (usual 0.5 to 2 mg IV every 4 hours PRN pain)
 Morphine PCA Load: _____ mg Dilaudid PCA Load: _____ mg (usual 0.5 to 2 mg)
 Continuous: _____ mcg per hour Continuous: _____ mcg per hour (usual 0.1 to 1.5 mcg/hour)
 Demand: _____ mcg every _____ minutes Demand: _____ mcg every _____ minutes (usual 0.1 to 0.5 mg every 5 to 15 minutes)
 Lockout: _____ mg per 4 hours Lockout: _____ mg per 4 hours (usual 4 mg)
10. Check if desired: (If yes, repeat 4 or more or if unusual, note why)
 - o Toradol 30 mg IV in PACU, then 15 mg IV every 6 hours x 48 hours
 - o Loraz 5 mg/500 mg 1 tablet (moderate pain) to 2 tablets (severe pain) PO every 4 hours PRN pain
 - o Loraz 7.5 mg/500 mg 1 tablet (moderate pain) to 2 tablets (severe pain) PO every 4 hours PRN pain
 - o Percocet 5 mg/250 mg 1 tablet (moderate pain) to 2 tablets (severe pain) PO every 4 hours PRN pain
 - o Tylenol 650 mg PO every 4 hours x 4 doses
11. Antibiotics: (Check if desired.) Give 1st dose immediately in PACU.
 - Ancef 1 gram IVPB every 8 hours x 3 doses + Metronidazole 1 gram IVPB every 8 hours x 3 doses
 - Mefoxin 1 gram IVPB every 6 hours x 4 doses
 - Unasyn 1.5 grams IVPB every 6 hours x 4 doses
 - Ancef 1 gram IVPB every 8 hours X 3 doses
 - Other _____
12. Complete 5 mg IV Lovenox
 - o 40 mg subcutaneous every 24 hours (if CLcr less than 30 mL/min, use Lovenox 30 mg)
 - o Heparin 5,000 units subcutaneous every 8 hours beginning in am
 - o SCD (If used as monotherapy, patient is identified as having a high risk of bleeding re: _____)
 - o TED hose (If used as monotherapy, patient is identified as having a high risk of bleeding re: _____)
 - o Heparin 5,000 units subcutaneous every 8 hours beginning in am
 - o SCD (If used as monotherapy, patient is identified as having a high risk of bleeding re: _____)
 - o TED hose (If used as monotherapy, patient is identified as having a high risk of bleeding re: _____)
13. DVT prophylaxis: (if nothing ordered below, patient to have Lovenox)
 - o Lovenox 40 mg subcutaneous every 24 hours (If CLcr less than 30 mL/min, Use Lovenox 30 mg)
 - o Heparin 5,000 units subcutaneous every 8 hours beginning in am
 - o SCD (If used as monotherapy, patient is identified as having a high risk of bleeding re: _____)
 - o TED hose (If used as monotherapy, patient is identified as having a high risk of bleeding re: _____)
14. Enoxaparin (Defunct) 20 mg IV twice daily, unless No Prophylaxis is desired
15. Aspirin 81 mg PO daily
16. Aspirin 81 mg PO daily
17. Aspirin 81 mg PO daily
18. Aspirin 81 mg PO daily
19. Discharge home when stable and meets criteria for observation patients.
20. Post-op appointment at _____ Office _____ Revisit Care Center _____ in _____ week(s)

Physician's Signature _____ Date/Time _____

SPO 668 807 (06680708) pg. 1 of 1 Patient Sticker

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13. DVT prophylaxis: (if nothing ordered below, patient to have Lovenox)

- Lovenox 40 mg subcutaneous every 24 hours (If CLcr less than 30 mL/min, Use Lovenox 30 mg)
- Heparin 5,000 units subcutaneous every 8 hours beginning in am
- SCD (If used as monotherapy, patient is identified as having a high risk of bleeding re: _____)
- TED hose (If used as monotherapy, patient is identified as having a high risk of bleeding re: _____)



Other Opportunities...

- HCAHPS
 - Patients who reported that staff “always” explained about medicines before giving it to them.
 - During this hospital stay, were you given any medicine that you had not taken before?
 - Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?
 - Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?
- Readmissions
 - Medication compliance
- Surgical Site Infections
- VTE Prophylaxis
- Stroke Measures
- Falls and Trauma
- Glycemic Control



Keys to Success

- C-Suite dialogue regarding pharmacist's role and proposed financial implications of Core Measure Success/Failure
- Develop physician and nursing relationships
- Concurrent intervention strategies
- Pick one or two areas to work on at a time, build on successes
- Produce meaningful and timely data regarding measure failures
- Insure that data is presented often to as many key individuals as possible



For more information contact:

**Darin Smith, Pharm.D., BCPS
Director, Pharmacy Services and
Performance Improvement**

**Norman Regional Health System
dsmith@nrh-ok.com**

Questions?