Patient 4– Hospital Information Week 3			
Setting	Inpatient Medical/Surgical Unit		
Scenario	Patient is post-op following aortic and mitral valve replacement surgery.		
Patient Information	**Name: Martin James** **DOB: 5/6/1949** **Race**: Black **Room #: 543** **Gender: Male** **Age: 73** **Patient ID #:** 387542 **Allergies**: Bactrim (rash)		
CC	Heart failure		
HPI	Patient was admitted to the hospital with symptoms of heart failure. He had surgery to replace the aortic and mitral valves. Three days post-op, purulent drainage was noted from the surgical site. Patient was diagnosed with bacteremia and mediastinitis and started on ceftazidime and gentamicin. SCr and BUN have increased over baseline and patient shows signs of volume overload. Patient has completed ceftazidime and needs a few more weeks of antibiotic therapy per ID. He now appears to have drug-induced renal failure from the gentamicin.		
Family History	Mother- died of pneumonia at age 72 Father- died of diabetes at age 50	**PMH**	Osteoarthritis, HTN, a-fib
Social History	• Retired coal miner • Does not drink alcohol • Does not use tobacco products Does not use illicit drugs	**Vaccine History**	Tetanus 2 yr ago Shingles 6 year ago Flu last fall COVID fully vaccinated and boosted
Physical Exam	• HEENT: PERRLA, EOMI. Patient wears glasses. Poor dentition. • Neck: + JVD • Lungs: basilar crackles, inspiratory wheezes • Heart: S1 and S2 normal, no S3, irregular rhythm • Abdomen: soft, nontender, + BS, - HSM • Extremities: 2+ankle/sacral edema • Neurological: A&O to person and place but not time		
VS	BP: 152/90 HR: 80 RR: 126 T: 99.9 F O2 sat 98% Wt: 73 kg on admission, 87 kg today HT: 5'10"		

Note: patient is based on "Not a Cute Consequence" patient case from Pharmacotherapy Casebook—a Patient Focused Approach, 7th edition.

<table>
<tr><td>Labs</td><td colspan="3">Na: 138 mEq/L BUN: 52 mg/dL (17 on admission) Hgb: 9.2 g/dL
K: 3.9 mEq/L SCr: 3.2 mg/dL (1.3 on admission) Hct: 28.5%
Cl: 104 mEq/L CrCl: 21.2 ml/min (52.2 ml/min on admission) RBC 4.0 X $10^3/mm^3$
CO2: 25 mEq/L WBC: 9.9 X $10^3/mm^3$
Glu: 130 mg/dL Plt: 263 X $10^3/mm^3$</td></tr>
<tr><td>Cultures</td><td colspan="3">Blood cultures x4 + Serratia marcescens S to gentamicin, piperacillin/tazobactam, ceftazidime, and levofloxacin, R to ampicillin.
Repeat blood cultures came back negative today.</td></tr>
<tr><td rowspan="5">Intake and Output (I & O)</td><td>Date</td><td>Intake</td><td>Output</td><td>Weight</td></tr>
<tr><td>3 days ago</td><td>3200 ml</td><td>1100 ml</td><td>77 kg</td></tr>
<tr><td>2 days ago</td><td>2500 ml</td><td>1050 ml</td><td>82 kg</td></tr>
<tr><td>yesterday</td><td>2500 ml</td><td>1250 ml</td><td>85 kg</td></tr>
<tr><td>today</td><td></td><td></td><td>87 kg</td></tr>
</table>

Note: patient is based on “Not a Cute Consequence” patient case from Pharmacotherapy Casebook—a Patient Focused Approach, 7th edition.

Hospital orders written						
Medication	**Dose**	**Route**	**Frequency**	**Scheduled time**	**Last administered**	**Notes**
Gentamicin	180 mg	IV	Q48h	1700	1700 2 days ago	Changed dose from 180 mg IV q24h 1 wk ago, and 240 mg IV q24h previously. Found to have caused drug-induced renal failure—iSBARR needed to change to Levofloxacin 500 mg PO every other day.
Ceftazidime	1 g	IV	Q12h		0600 today	Last dose received today; order DCd
Lisinopril	40 mg	PO	Daily	0800	0800 yesterday	
Furosemide	80 mg	PO	Q12h	2000	0800 today	X 2 days, DC tomorrow
Digoxin	0.125 mg	PO	Daily	0800	0800 today	Check digoxin level
Hydromorphone	0.5 mg	IV	Q4h prn			For severe pain; started 3 days ago
Ibuprofen	400 mg	PO	Q4h prn			For mild/moderate pain

Note: patient is based on "Not a Cute Consequence" patient case from Pharmacotherapy Casebook—a Patient Focused Approach, 7th edition.

Home Medication List: Verified by pharmacy on admit	
Medication:	**Allergies:**
Benazepril 40 mg PO daily	Bactrim—caused rash
Digoxin 0.125 mg PO daily	
Atorvastatin 40 mg PO daily	
Senior Men's Multivitamin PO daily	
Co-Q-10 100 mg PO daily	

Note: patient is based on "Not a Cute Consequence" patient case from Pharmacotherapy Casebook—a Patient Focused Approach, 7th edition.

Pharmacy Medication Reconciliation Form

Patient Name: Martin James **Date of Birth: 5/6/1949** **Room #:543**	**Allergies:** sulfa-rash	**Immunization History:** *Tetanus 2 yr ago* *Shingles 6 yr ago* *Flu last fall* *COVID—fully vaxed & boosted*
Community Rx Info: any **Prescription Insurance: any**	**Social History: retired coal miner** **Does not drink, smoke, or use drugs**	

Complete Medication History Prior to Admission (write legibly)								Med Reconciliation	
Medication Name	**Strength**	**Route**	**Freq**	**PRN?**	**Last Dose (date/time)**	**Adverse Effects**	**Adherence**	**Action**	***Reason for discontinue, hold, modify**
Benazepril 40 mg PO daily	*40 mg*	*PO*	*Daily*	☐		*None*	*Always takes*	M	Formulary substitution to Lisinopril 40 mg PO daily
Digoxin 0.125 mg PO daily	*0.125 mg*	*PO*	*Daily*	☐		*None*	*Always takes*	C	
Atorvastatin 40 mg PO daily	*40 mg*	*PO*	*Daily*	☐		*None*	*Always takes*	C	
Senior Men's Multivitamin PO daily	*1 tablet*	*PO*	*Daily*	☐		*None*	*Always takes*	M	Formulary substitution to Vitamax PO daily
Co-Q-10 100 mg PO daily	*100 mg*	*PO*	*Daily*	☐		*None*	*Always takes*	H	Not formulary, supplement not medically necessary in hospital
				☐					

Additional Notes:	Action Key - **C:** Continue **D:** Discontinue* **H:** Hold* **M:** Modify* (*provide reason)
Med History obtained by (sign and print name):	**Date:**

Medication Reconciliation – (Finalized Medication List = Hospital Orders)

Patient Name:_____ **DOB**: _____ **Room**: _____

	Medication (name/strength)	Dose	Route	Frequency	Notes
1.	Lisinopril	40 mg	PO	Daily	Formulary substitution for benazepril
2.	Digoxin	0.125 mg	PO	Daily	
3.	Atorvastatin	40 mg	PO	Daily	
4.	Vitamax	1 tab	PO	Daily	Formulary substitution for Senior Men's multivitamin
5.	Gentamicin	180 mg	IV	Q48h	****Causing drug-induced renal failure—iSBARR to change to Levofloxacin 500 mg PO daily****
6.	Ceftazidime	1 gram	IV	Q12h	Received the last dose today
7.	Furosemide	80 mg	PO	Q12h	X2 days, received last dose today
8.	Acetaminophen	650 mg	PO	Q6h prn	For mild/moderate pain
9.	Hydromorphone	0.5 mg	IV	Q4h prn	For severe pain

****Must be written legibly for grading****

iSBARR Form

i	Introduction (name/title/unit)	Hello, my name is ……and I am the pharmacist working on this unit today.
S	Situation	I am concerned that Martin James is having an adverse drug reaction.
B	Background	He was admitted a few days ago with heart failure and had surgery to replace his aortic and mitral valves. He developed a post-op infection and has been receiving ceftazidime and gentamicin due to *Serratia marcescens* in the blood. He has completed his ceftazidime course, but is still taking gentamicin and the ID doctor said to continue antibiotic therapy for a few more weeks. However, his renal function has declined significantly over the past few days.
A	Assessment	Gentamicin can cause renal failure, and it looks like this has happened to this patient.
R	Recommendation	I recommend that we change his antibiotics to Levofloxacin 500 mg PO every other day (adjusted for renal function), which he can continue to take at home.
R	Repeat	OK, I will discontinue the gentamicin and put in the order for levofloxacin 500 mg PO daily. Thank you!

Jayhawk Medical Center Medication List and Instructions

Patient Name:		
Admission Date:	**Discharge Date:**	**Service:**
Principal Diagnosis This Admission:		
Secondary Diagnosis:		
Allergies (reactions):		

Medications added this visit: (begin taking these)
Levofloxacin 500 mg by mouth every other day for infection. Acetaminophen 325 mg, 2 tablets by mouth every 6 hours as needed for pain
Medications changed this visit: (modify what you previously were taking)
Medications discontinued this visit: (stop taking these)

FINAL DISCHARGE MEDICATION LIST					
MEDICATION/ROUTE/DOSAGE/FREQUENCY/DURATION	*Comments*	**Morning**	**Afternoon**	**Evening**	**Bedtime**
Benazepril 40 mg by mouth daily		X			
Digoxin 0.125 mg by mouth daily		X			
Atorvastatin 40 mg by mouth daily		X			
Senior Men's Multivitamin by mouth daily		X			
Co-Q-10 100 mg by mouth daily		X			
Levofloxacin 500 mg by mouth every other day		X			
As needed medications					
Acetaminophen 325 mg, 2 tablets by mouth every 4 hours	As needed for pain				