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Inventory Purchasing Standardization Across a System

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| Disclosures

- The presenter has no real or perceived conflicts of interest related to this presentation

Note: This program may contain the mention of suppliers, brands, products, services or drugs presented in a case study or comparative format using evidence-based research. Such examples are intended for educational and informational purposes and should not be perceived as an endorsement of any particular supplier, brand, product, service or drug.

| Learning Objectives

At the end of this session, participants should be able to:

1. Review basic standardization definitions when comparing automation solutions
2. Describe internal and potential external political hurdles pharmacy teams need to be equipped to manage
3. Identify useful strategies in managing standardization



Why Standardize?

| Why Standardize Purchasing Tools

- Medication costs constitute a large portion of hospitals supply expense
- Largest volume of medications reside within the pharmacies, with satellite inventory in automation cabinets
- Pharmacy costs continues to grow above the rate of inflation
- Drug sourcing is more complex in comparison over traditional med/surg supplies
- Wasted/outdated medications may not always contain value in inventory (return for credit) or cumbersome to determine
- Inability to “run out” of key medications is not acceptable for patient safety in healthcare



Inventory Analysis Terms—Problems

Presentation will not address directly

- Just in time (JIT): the ability for a business to obtain necessary inventory as it is needed and not beforehand
 - JIT has become painful for hospitals as our ability to care for patients considering natural disasters or pandemics require a more stable pharmacy supply chain
- Inventory Turns: the measurement of how often inventory is acquired/used in a given time frame, traditionally annually
 - The bulk of inpatient dispenses are low-cost items with high volume administration. High cost items traditionally inflate/deflate inventory turns in comparison
- Pharmacy Waste: valuation of medications that have been expired and sent back to the manufacturer or holding/expiring company
 - Not all waste is captured
 - Not all medications have the ability to returned for value-direct discard/disposal
 - Valuation may not reflect the actual purchase price
- Formulary: a designation by healthcare entity for a preferred agent in the therapy/class with clinical equivalence/cost comparison information been evaluated
 - We all have piles of non-formulary medications
- WAC/GPO/340B buckets: not all systems may have distinct purchasing rules that apply to them. This changes how systems compare supply chain standardization opportunities

Where Did We Start...

St. Luke's Health System (SLHS)



8 medical centers



200+ clinics and centers



2.58 million clinic & hospital outpatient visits



56,645 hospital admissions



2,998 Health Partners providers



103,090 children served at Idaho's only children's hospital



210,270 emergency department visits



1,495 volunteers & board members

St Luke's Health System (SLHS)



St. Luke's Boise



St. Luke's Elmore



St. Luke's Jerome



St. Luke's Magic Valley



St. Luke's McCall



St. Luke's Meridian



St. Luke's Nampa



St. Luke's Wood River

| St. Luke's Health System (SLHS)—System Facts

- St. Luke's Health System employees: **14,434**. *We're Idaho's largest private employer.*
- Physicians with privileges on St. Luke's Medical Staff: **2,998**
- Inpatient facilities: **1,005** licensed beds

✓ Boise: 430 beds

✓ Meridian: 174 beds

✓ Nampa: 87 beds

✓ Magic Valley: 224 beds

✓ Wood River: 25 beds

✓ Elmore: 25 beds

✓ Jerome: 25 beds

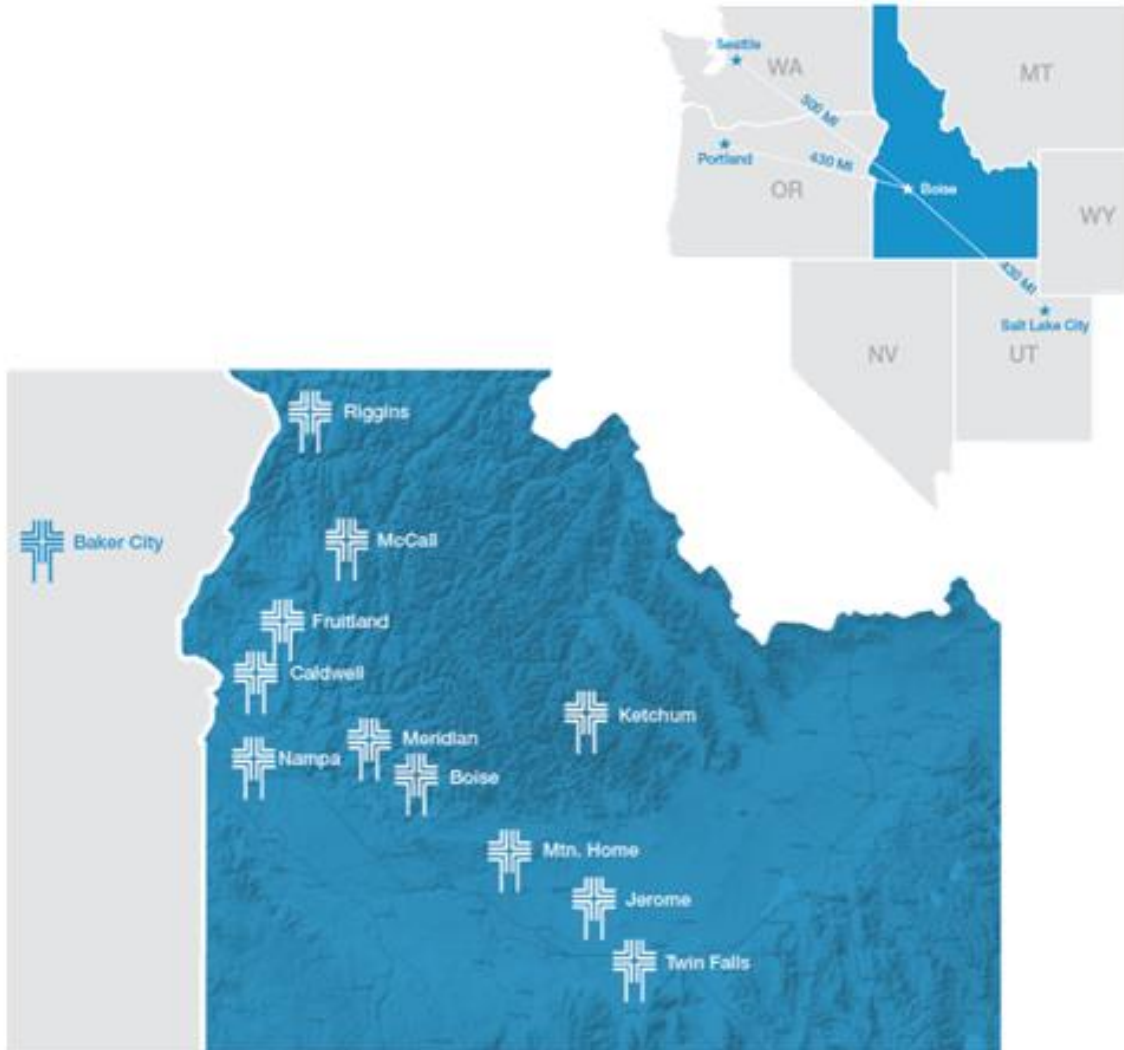
✓ McCall: 15 beds

✓ Rehabilitation

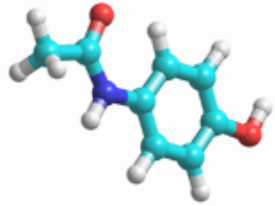
Hospital: 34 beds



St. Luke's Health System (SLHS)



SLHS Pharmacy Journey



pre 2017

- Independent, site based leadership and purchasing
- 2 outpatient pharmacies
- Limited alternative delivery mechanisms (meds to beds)
- Limited clinical program expansion (Medication Historians)
- Limited 340b participation
- Limited Specialty Pharmacy Program



2017-2019

- System leadership structure, hired Chief Pharmacy Officer
- System purchasing structure and optimization
- 340b expansion
- Outpatient pharmacy expansion to Nampa
- Bedside prescription delivery expansion
- Introduction of clinical utilization initiatives
- Formulary standardization
- Wholesaler change
- Partnership with CPS



2020 & Beyond

- Part of the clinical division and care team
- Continued standardization and risk management
- Integrated clinical utilization work into Cross Functional Governance
- Specialty Pharmacy Expansion
- Hospice and Home Infusion Pharmacy
- Innovation relative to script delivery mechanisms
- Staff Development and technician pipeline creation

| SLHS Pharmacy Purchasing Foundation

- Central buyers did:
 - Review orders for 2 hospitals (Boise, Meridian)
 - Coordinate ordering/distribution amongst 170+ clinics
 - Run weekly system drug shortage meeting, not all sites participated
- This team did not
 - Have full system inpatient oversight
 - Review cancer center orders
 - Provide input for OP orders
 - Have a standard clinic template for medication ordering



| Standardization of the Purchases (2017)

Evaluate reports/analytic sources

Outline which reports we would evaluate/frequency

Prioritize projects/review process

Expand the review process

Evaluate Reports/Analytic Sources

PAGE-BY: Company: St. Luke's Health System, LTD Group: SLHS Division: SLHS Facility: St. Luke's Elks Rehabilitation Hospital 3408: No Account #: Description: 100134348: ST LUKES REHAB HOSP GPO IP

Purchased NDC	Month	Distributor Item	Purchased Description	Purchased Contract #	Purchased Manufacturer	Wholesaler	Distribution Center	UD UU	Sale UOM	Purchased Package size	Optimal NDC	Optimal Description	Optimal Contract	Optimal Manufacturer	Optimal Package Size	Availability Flag	Non-Optimized Net Purchases
00703861023	Jul 2019	10148735	ENOXAPARIN 120 MG/0.8 ML SYR		Teva Parenteral	ABC	ABC DC SALT LAKE CITY	--	EA	10.000000 X 1.000 SR	63323056990	ENOXAPARIN 120	4531	App/fresenius	10.000000 X 1.000	Y	\$221.69
68094011061	Jul 2019	10183734	MELATONIN 3 MG TABLET		Precision Dose	ABC	ABC DC SALT LAKE CITY	UD	EA	1.000000 X 100.000					0000000 100.000		\$82.72
00496088207	Jul 2019	10054446	LMX 4 PLUS KIT		Ferndale Lab.	ABC	ABC DC SALT LAKE CITY	--	EA	1.000000 X 1.000 KT	24357070107	ANECREAM 4% KIT	4554	Focus Health	1.000000		
60687015501	Jul 2019	10162309	METFORMIN HCL 500 MG TABL			ABC	ABC DC SALT LAKE CITY	UD	EA	1.000000 X 100.000	51079017220	METFORMIN HCL 500	4591				

HPG report in back

This report is outsourced

CONTRACT CONVERSION OPPORTUNITY REPORT
 Contract Compliance and Optimization Metrics For Review Period 7/1/2019 - 7/31/2019
 C077 - ST. LUKE'S REHAB HSP
 GPO: HEALTHTRUST
 WHLS: ABC

Response period ended on Aug 27, 2019

Response period has closed for this report. Read-only Mode

Excel PDF Legend



Same items flagged

Purchased										Best Bid Book Conversion (Total Potential Savings)			
DESCRIPTION	AVG PRICE	QTY	EXT	BID	FIRST PURCH	LAST PURCH	NDC	ITEM NUM	DESCRIPTION	MULT	ADJ BID		
00703861023 ENOXAPARIN 120MG/0.8ML SYG 10X0.8ML (Teva Pharmaceuticals USA)	\$221.69	1	\$221.69	<input type="checkbox"/>	07/15/2019	07/15/2019	63323056990	10148711	ENOXAPARIN SODIUM 120MG/.8ML SYRINGE (ML) SUBCUTANEOUS (FRESENIUS KABI USA LLC)	1.00	\$109.50		
68084002701 WARFARIN SOD 2.5 MG TAB 100 UD AHP (American Health Packaging)	\$22.31	1	\$22.31	<input type="checkbox"/>	07/18/2019	07/18/2019	00056017675	10027455	COUMADIN 2.5 MG TABLET ORAL UD (BRISTOL-MYERS SQUIBB CO)	1.00	\$3.88		
00496088207 LMX4 PLUS 4% CRM 5X5 GM (Ferndale Laboratories Inc)	\$44.07	1	\$44.07	<input type="checkbox"/>	07/14/2019	07/14/2019	24357070107	10051435	AneCream with Tegaderm 4% kit topical 1 box	1.00	\$27.50		
24208055555 BACITRACIN-POLY B OPH ONT 3.5 GM (Bausch Health US (formerly Valeant Pharmaceuticals))	\$21.31	1	\$21.31	<input type="checkbox"/>	07/29/2019	07/29/2019	00574402135	10146422	POI OPI PH				

Vendor report in front

Outline Which Reports We Would Evaluate/Frequency

- Utilized primary distributor “Lost Savings Report” on a monthly basis
 - Originally around \$250k a month, more specific to distributor generic programs
- HPG/Vendor report on a monthly basis
 - Around \$230k a month in product substitution, BUT helpful to outline drug shortage costs

*Outlined weaknesses in each report

This outlined the need to standardize HOW we purchased medications, how we aligned across the system

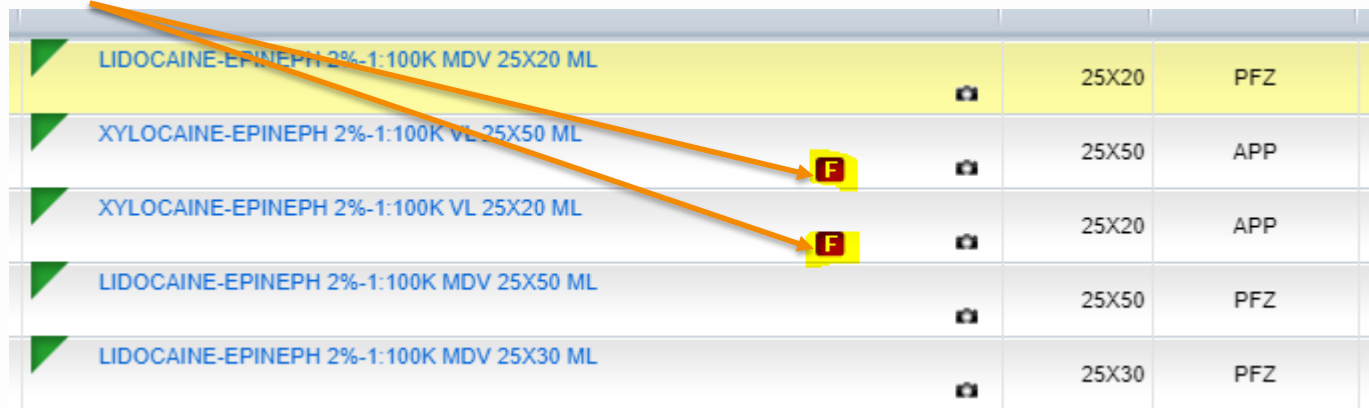
- How can we enable all team members with purchasing rights to align with contractual needs?
- How can we communicate product changes?
- How do we increase compliance?



Source: Add source of your data here in size 11 font.

Prioritize Projects/Review Process

- Central buying team became the “owners” of the ABC catalog/formulary flagging and selection
- Created “groupings” within ABC for formulary/standardization preferences
 - Some areas did NOT have a GPO account, adjusted the standard to what maximized value
 - Example: oncology infusion centers were purchasing the GPO best priced items, financially not in their interest
 - Substituted the best WAC/340B for 9 generic medications and saved over \$1.1 million in 2018
 - Dialed in the products for GPO based facilities
- Adjusted each groups “formulary” item, made visible to front end purchaser
 - Formulary was the indication ABC gave us control to indicate the preferred item



LIDOCAINE-EPINEPH 2%-1:100K MDV 25X20 ML	📷	25X20	PFZ
XYLOCAINE-EPINEPH 2%-1:100K VL 25X50 ML	F 📷	25X50	APP
XYLOCAINE-EPINEPH 2%-1:100K VL 25X20 ML	F 📷	25X20	APP
LIDOCAINE-EPINEPH 2%-1:100K MDV 25X50 ML	📷	25X50	PFZ
LIDOCAINE-EPINEPH 2%-1:100K MDV 25X30 ML	📷	25X30	PFZ

- If we needed absolute compliance, central buying team would remove from system catalog
 - In case of shortages, central buying team maintained absolute catalog visibility



Prioritize Projects/Review Process

- Not all projects created savings-BUT safety first!
 - Reports of staff being injured while opening ampules
 - Evaluated items we have purchased in ampules that we could transition to vials (not all could)
 - Some transitions had a savings, overall project increased \$200k per year

Generic Abbrev Desc	Form Code	JEROME	MCCALL	MV	NAMPA	TV	WR	Grand Total													
ALFENTANIL HCL	AMP			1	8	2	15	26													
ALFENTANIL HCL	AMPUL				8		6	14													
ALPROSTADIL	AMP					1		1													
ALPROSTADIL	AMPUL						3	3													
ARSENIC TRIOXIDE	AMP						25	25													
ARSENIC TRIOXIDE	AMPUL						18	18													
BENZTROPINE MESYLATE	AMP																				
BENZTROPINE MESYLATE	AMPUL																				
BUDESONIDE	AMP																				
BUDESONIDE	AMPUL																				
BUPIVACAINE HCL/DEX-WATER/PF	AMP																				
BUPRENORPHINE HCL	AMP																				
CALCITRIOL	AMP																				
CALCITRIOL	AMPUL																				
CARBOPROST TROMETHAMINE	AMP																				
CARBOPROST TROMETHAMINE	AMPUL																				
CHEMO THEAPY DILUENT NO.1/PF	AMP																				
CHEMO THEAPY DILUENT NO.1/PF	AMPUL																				
CHLORPROMAZINE HCL	AMP																				
CHLORPROMAZINE HCL	AMPUL																				
CYCLOSPORINE	AMP																				
ALPROSTADIL	AMP							9316906						1			1	Yes, ABC #10017848	Generic ok? Isn't labeled as Peds, yes 3/29	switched 4/9	
ALPROSTADIL	AMPUL							9316906						3			3	Yes, ABC #10017848	Generic ok? Isn't labeled as Peds, yes 3/29	switched 4/9	
ARSENIC TRIOXIDE	AMP							63459060010									25	Vial available as 12mg 6ml vial ABC #10183841		No changes made due to strength difference	
ARSENIC TRIOXIDE	AMPUL							63459060010									18	Vial available as 12mg 6ml vial ABC #10183841		No changes made due to strength difference	
BENZTROPINE MESYLATE	AMP							143972905						6			12	18 Yes, ABC #10113750		switched 4/9	
BENZTROPINE MESYLATE	AMPUL							143972905									3	3 Yes, ABC #10113750		switched 4/9	
BUPRENORPHINE HCL	AMP							12496075705						3			41	2 46 Yes, ABC #10153802	generic ok?, yes 3/29	switched 4/9	
DICYCLOMINE HCL	AMP							58914008052						9			8	55 72 Yes ABC #10163937	generic ok?, yes 3/29	switched 4/9	
DICYCLOMINE HCL	AMPUL							58914008052									2	26 28 Yes ABC #10163937	generic ok?, yes 3/29	switched 4/9	
EPHEDRINE SULFATE	AMP							17478051500		3	3						18	366 390 Yes ABC #10173725		switched 4/9	
EPHEDRINE SULFATE	AMP							17478041510									3	3 Yes ABC #10173725		switched 4/9	
EPHEDRINE SULFATE	AMPUL							17478051500									88	16 104 Yes ABC #10173725		switched 4/9	
EPINEPHRINE	AMP							409724101										0	Yes ABC #10124617, epinephrine Dc'd \$1.20 amp, Replaced 0 w/Adrenalin \$13.91 vial		switched 4/9

| Prioritize Projects/Review Process

Dr Reddy's FDA woes turn spotlight on compliance standards again



Dr Reddy's Laboratories Ltd stock fell by as much as 14.7% on Friday, after it disclosed that three units have received warnings letters from the US FDA. Photo: Mint

2 min read . Updated: 23 Nov 2015, 01:50 AM IST

<https://www.livemint.com/Money/1J8yHnC7AzlFPnbtSM4CL/Dr-Reddys-FDA-woes-turn-spotlight-on-compliance-standards-a.html>

the pharma letter

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Dr Reddy's Labs fined by FTC for non-compliance

22-01-2018 

<https://www.thepharmaletter.com/article/dr-reddy-s-labs-fined-by-ftc-for-non-compliance>

Dr. Reddy's sterile plant now meets at least minimal compliance, FDA says

by Eric Palmer Feb 18, 2020 10:31am



Dr. Reddy's Laboratories' sterile formulations plant in Duvvada, an area of Visakhapatnam in India, received an eight-observation Form 483 in August, but the FDA has said it won't need to take regulatory action. (Dr. Reddy's Laboratories)

<https://www.fiercepharma.com/manufacturing/dr-reddy-s-sterile-plant-now-meets-at-least-minimal-compliance-fda-says>

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Expand the Review Process

- Buying team split into 3 teams
 - Inpatient Buyers
 - Review ALL orders for preferred items created by purchasers
 - Manage alt distribution center requests
 - Clinic Buyers
 - Created standard clinic ordering forms
 - Streamlined non-formulary request process
 - Outpatient (OP)/St Luke's Cancer Institute Buyers
 - Formalized outpatient order review, product standardization
 - 3 OP purchasing different products
 - NO GPO accounts (WAC/340B only)

Three Outpatient Pharmacies

Epic Willow Ambulatory owned perpetual inventory/order creation

- Each site could determine qty on the shelf
- Each site purchased preferred items

Mapped out which items were ideal to purchase

- Exceptions on quality MFR, Medicaid
- Over the counter items had adjustment

Feedback from each site

- Single product selection
- Preferred item flagged in Epic ordering platform

Product Description	NDC	Sum of	Sum of T	Majority Purch	NOP Preferred ABC#	BOP Preferred ABC Item #	MOP Preferred ABC Item #	Date Flag Added/Updated
ACETAMINOPHEN-COD 300-30 MG TAB 100	93015001	23	268.48	WAC		10042529	10042529	0 4/25/2018
ACETAMINOPHEN-COD 300-30 MG TAB 100	406048401			GPO	10013264			0 4/25/2018
ACYCLOVIR 400 MG TAB 100	93894301	83	702.86	WAC		10003404	10003404	0 4/25/2018
ACYCLOVIR 400 MG TAB 100	61442011201			GPO	10003404			0 4/25/2018
ACYCLOVIR 800 MG TAB 100	61442011301	27	318.61	WAC	10003457	10003457		10003457 3/30/2018
ACYCLOVIR 800 MG TAB 500	61442011305	0	0	WAC			10118491	-10118491 3/30/2018
ALLOPURINOL 300 MG TAB 100	591554401	54	1255.79	WAC	10046804	10170632		10170632 3/30/2018
ALLOPURINOL 300 MG TAB 500	50742013605	0	0	WAC			10161695	-10161695 3/30/2018
ALPRAZOLAM 0.25 MG TAB 100	59762371901	16	25.42	340B		10003444	10003444	0 4/25/2018
ALPRAZOLAM 0.25 MG TAB 500	67253090050	12	84.5	WAC		10025518	10025518	0 4/25/2018
ALPRAZOLAM 0.5 MG TAB 1000	781107710	3	89.46	WAC		10000161	10000161	0 4/3/2018
ALPRAZOLAM 0.5 MG TAB 500	67253090150	1	9.97	GPO	10060817	10038669		10038669 4/3/2018
ALPRAZOLAM 0.5 MG XR TAB 60	59762005701	1	19.8	WAC		10023246		10023246 4/3/2018
ALPRAZOLAM 1 MG ODT TAB 100	228402411	2	328.18	WAC		10005412		10005412 4/3/2018
ALPRAZOLAM 1 MG TAB 1000				GPO	10003445			0 4/25/2018
ALPRAZOLAM 1 MG TAB 500	67253090250	0	0	WAC		10024095	10024095	0 4/25/2018
ALPRAZOLAM 1 MG XR TAB 60	59762005901	3	73.35	WAC			10023248	-10023248 4/25/2018
AMITRIPTYLINE HCL 25 MG TAB 1000	603221332	4	733.76	340B		10028599	10028599	0 4/25/2018
AMITRIPTYLINE HCL 25 MG TAB 1000	781148710	4	626	GPO	10028599			0 4/25/2018
AMLODIPINE 10 MG TAB 500	68382012305	19	247.35	WAC		10141255		10141255 4/25/2018

Outpatient Nuances

Every day evaluation of the “formula” for ordering evaluated

- The ability to set manually
- Adjust the formula
- Eventually created an additional formula, inputs included
 - ✓ Look back (dispense history)
 - ✓ Frequency of deliveries
 - ✓ Days dispensing/operations

Item Balance: ATORVASTATIN 20 MG TABLET, Meridian Outpatient Pharmacy

Summary	General Details			
General	Location:	Meridian Outpatient Pharmacy		
NDC Settings	Sub location:	APFS Restock		
	Inventory item:	ATORVASTATIN 20 MG TABLET		
	Inventory class:	Prescription		
	Active from:		Active to:	
Inventory				
<input type="checkbox"/> Display balances by package				
Maximum:		each	Current balance:	1,065 each
Optimum:	1200	each	Calculated optimum:	730 each
Par:	1200	each	Calculated par:	574 each
Critical:	1000	each	Calculated date:	11/05/2019 2:02:17 AM
Minimum number of packages to reorder:			Last updated action:	Set manually
			Last updated date:	07/12/2019 2:27:38 PM
			<input type="button" value="Use Calculated"/>	
Cost				
Average cost:	0.04 per each			
Latest cost:	0.03 per each			

Outpatient Nuances

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Item Balance: ATORVASTATIN 20 MG TABLET, Meridian Outpatient Pharmacy

Summary	
General	
NDC Settings	

General Details	
Location:	Meridian Outpatient Pharmacy
Sub location:	APFS Restock
Inventory item:	ATORVASTATIN 20 MG TABLET
Inventory class:	Prescription
Active from:	<input type="text"/>
Active to:	<input type="text"/>

Inventory	
<input type="checkbox"/> Display balances by package	
Maximum:	<input type="text"/> each
Optimum:	1200 each
Par:	1200 each
Critical:	1000 each
Minimum number of packages to reorder:	<input type="text"/>

Current balance:	1,065 each
Calculated optimum:	730 each
Calculated par:	574 each
Calculated date:	11/05/2019 2:02:17 AM
Last updated action:	Set manually
Last updated date:	07/12/2019 2:27:38 PM
<input type="button" value="Use Calculated"/>	

Cost	
Average cost:	0.04 per each
Latest cost:	0.03 per each

OP Outcomes—Daily Spend

Retail Spend

Date	Boise Outpatient			Meridian Outpatient			Nampa Outpatient			System Total	
	Starting WAC price	Ending WAC price	Difference	Starting WAC price	Ending WAC price	Difference	Starting WAC price	Ending WAC price	Difference		
11/5/2019											
11/6/2019	\$ 19,921.11	\$ 18,551.77	\$ 1,369.34	\$ 48,662.60	\$ 46,139.95	\$ 2,522.65	\$ 6,480.85	\$ 6,549.48	\$ (68.63)	\$ 3,823.36	
11/7/2019	\$ 35,275.12	\$ 29,971.61	\$ 5,303.51	\$ 23,448.98	\$ 19,049.33	\$ 4,399.65	\$ 7,643.18	\$ 7,292.34	\$ 350.84	\$ 10,054.00	
11/8/2019	\$ 21,585.79	\$ 21,474.83	\$ 110.96	\$ 27,633.91	\$ 15,393.20	\$ 12,240.71	\$ -	\$ -	\$ -	\$ 12,351.67	Friday no Nampa order
11/11/2019	\$ 26,029.71	\$ 25,126.50	\$ 903.21	\$ 41,992.09	\$ 40,730.69	\$ 1,261.40	\$ 6,699.38	\$ 6,329.74	\$ 369.64	\$ 2,534.25	
11/12/2019	\$ 14,827.53	\$ 11,392.20	\$ 3,435.33	\$ 31,020.83	\$ 26,342.65	\$ 4,678.18	\$ 4,733.98	\$ 4,319.34	\$ 414.64	\$ 8,528.15	
11/13/2019	\$ 11,807.21	\$ 11,184.78	\$ 622.43	\$ 23,841.95	\$ 15,341.56	\$ 8,500.39	\$ 9,366.54	\$ 9,300.86	\$ 65.68	\$ 9,188.50	
11/14/2019	\$ 20,186.42	\$ 19,366.44	\$ 819.98	\$ 13,538.42	\$ 12,734.42	\$ 804.00	\$ 5,236.78	\$ 5,158.33	\$ 78.45	\$ 1,702.43	
11/15/2019	\$ 13,488.22	\$ 12,530.37	\$ 957.85	\$ 7,784.93	\$ 7,654.01	\$ 130.92				\$ 1,088.77	Friday no Nampa order
11/18/2019	\$ 23,910.02	\$ 20,537.56	\$ 3,372.46	\$ 33,177.34	\$ 32,687.08	\$ 490.26	\$ 11,930.89	\$ 9,136.74	\$ 2,794.15	\$ 6,656.87	
11/19/2019	\$ 21,775.60	\$ 17,023.81	\$ 4,751.79	\$ 24,869.17	\$ 23,759.85	\$ 1,109.32	\$ 4,886.55	\$ 4,805.09	\$ 81.46	\$ 5,942.57	
11/20/2019	\$ 29,588.07	\$ 21,538.71	\$ 8,049.36	\$ 20,435.70	\$ 19,974.05	\$ 461.65	\$ 7,904.10	\$ 7,728.81	\$ 175.29	\$ 8,686.30	
11/21/2019	\$ 17,289.97	\$ 10,065.78	\$ 7,224.19	\$ 18,699.48	\$ 17,301.26	\$ 1,398.22	\$ 3,139.61	\$ 3,139.62	\$ (0.01)	\$ 8,622.40	
11/22/2019	\$ 12,048.15	\$ 4,734.36	\$ 7,313.79	\$ 12,975.63	\$ 9,482.68	\$ 3,492.95	\$ -	\$ -	\$ -	\$ 10,806.74	Friday no Nampa order
11/25/2019	\$ 15,191.56	\$ 10,342.78	\$ 4,848.78	\$ 20,904.83	\$ 19,189.57	\$ 1,715.26	\$ 12,985.76	\$ 12,129.45	\$ 856.31	\$ 7,420.35	
11/26/2019	\$ 33,226.15	\$ 28,570.81	\$ 4,655.34	\$ 18,367.62	\$ 15,430.10	\$ 2,937.52	\$ 4,498.80	\$ 4,401.89	\$ 96.91	\$ 7,689.77	
11/27/2019	\$ 14,054.82	\$ 9,787.03	\$ 4,267.79	\$ 20,605.28	\$ 14,731.53	\$ 5,873.75	\$ 4,215.62	\$ 3,943.06	\$ 272.56	\$ 10,414.10	
11/28/2019	\$ -	\$ -	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	Thanksgiving
11/29/2019	\$ 12,592.62	\$ 8,178.66	\$ 4,413.96	\$ 16,477.63	\$ 14,161.79	\$ 2,315.84	\$ -	\$ -	\$ -	\$ 6,729.80	Friday no Nampa order
12/2/2019	\$ 34,333.43	\$ 24,365.77	\$ 9,967.66	\$ 39,962.56	\$ 34,826.30	\$ 5,136.26	\$ 17,117.38	\$ 16,851.44	\$ 265.94	\$ 15,369.86	
12/3/2019	\$ 28,010.57	\$ 19,494.93	\$ 8,515.64	\$ 27,396.02	\$ 25,409.03	\$ 1,986.99	\$ 4,148.81	\$ 3,516.30	\$ 632.51	\$ 11,135.14	
12/4/2019	\$ 12,202.59	\$ 7,966.13	\$ 4,236.46	\$ 21,566.04	\$ 19,654.03	\$ 1,912.01	\$ 4,222.91	\$ 4,186.47	\$ 36.44	\$ 6,184.91	
12/5/2019	\$ 34,421.20	\$ 20,950.55	\$ 13,470.65	\$ 23,143.38	\$ 22,352.35	\$ 791.03	\$ 8,032.04	\$ 7,830.25	\$ 201.79	\$ 14,463.47	
12/6/2019	\$ 20,397.62	\$ 11,468.44	\$ 8,929.18	\$ 15,045.84	\$ 14,084.43	\$ 961.41	\$ -	\$ -	\$ -	\$ 9,890.59	

Outcomes—Inventory

Overall reduction

Meridian OP				
Row Labels	Sum of 2019 Meridian Outpa	Sum of 2020 Meridian Outpa	Sum of Total Cost Difference	Cost variance %
Grand Total	\$ 725,644	\$ 346,236	\$ (379,408)	-52%

Boise OP				
Row Labels	Sum of 2019 Boise Outpatient Cos	Sum of 2020 Boise Outpatient Cos	Sum of Total Cost Difference	Cost Variance %
Grand Total	\$ 3,975,037	\$ 2,880,594	\$ (1,094,443)	-28%

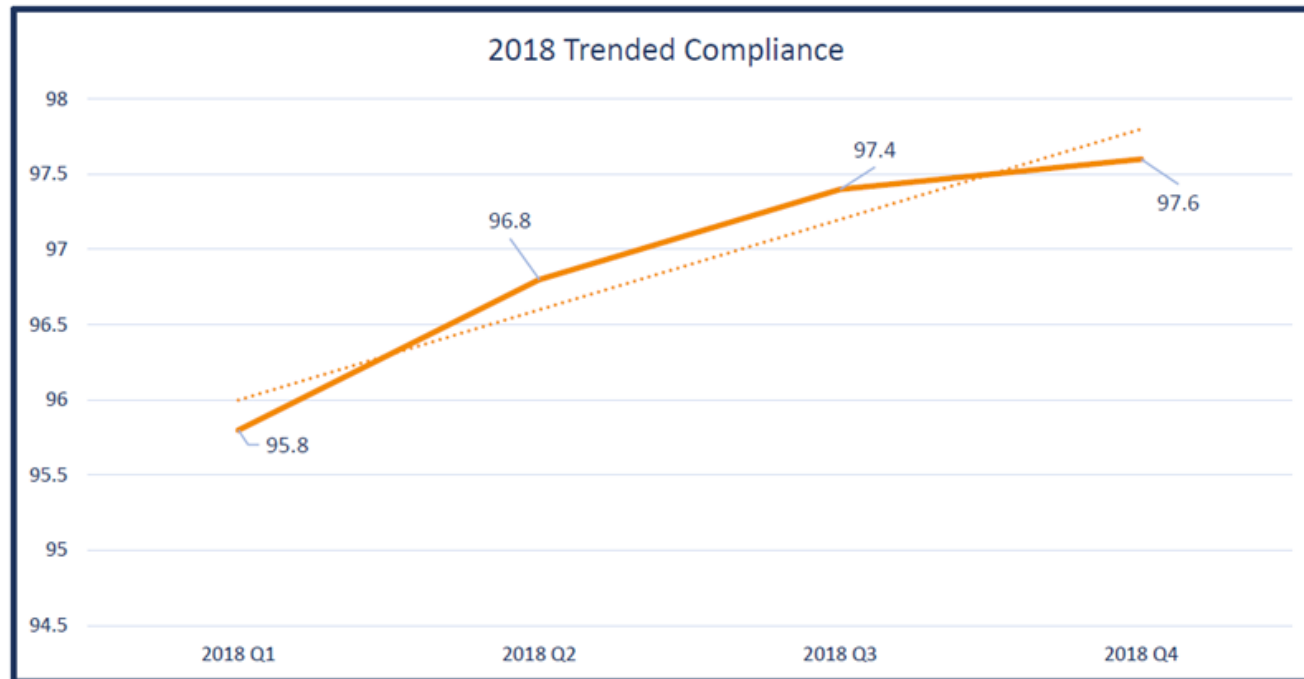
Nampa OP				
Row Labels	Sum of 2019 Nampa OP Inventory Cost	Sum of 2020 Nampa OP Inventory Cost	Sum of Total Cost Difference	Cost Variance %
Grand Total	\$ 213,661	\$ 274,128	\$ 60,466	28%

This department is new, growing

Outcomes—Compliance

Pharmacy Trending Summary – 2018

Company	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Total
St. Luke's Health System	\$22,928,888	\$22,862,070	\$23,263,285	\$26,233,667	\$95,287,910



| Created Next Projects

- Direct Purchases Account Creation
 - Direct 503A Compounding Relationships
 - Pharmedium/Cantrell/JCB and more
 - Items being purchased by which vendor
 - Stand down accounts with vendors having quality concerns
- Bulk Buy-Dispersed Distribution
 - IUD purchases in 2018 savings exceeded \$400k
 - IVIG management during shortages (never ran out)
- Standardized Account Payable (AP) approval
 - All medication purchases routed for approval via central buying team
 - Turn around/confirmation of PO within 48 hours
 - Single (group) point of contact for vendor appeals

Shortage Management—Maintenance

Needing Updated On Hand Count		Non-Formulary		Watching for Directors		Days B4 we run out = 0-7.5 / 7.6-14.5 / 14.6+		W = watching, L = Current BO, B = BO but Available, M = MSTI Only, ? = Remove From Formulary?, D - Discontinued											
Date Updated		New Orders		Half Court		Backorder Item													
Dated Added to BO Sheet	Date On-Hands Updated (also date added to sheet)	New	Orders	Drug Code - ERX	NDC	Description	Class	Next Release	BIP Total Qty	MIP Total Qty	Nampa Total Qty	MV Total Qty	WR Total Qty	Jerome Total Qty	Elmore Total Qty	McCall Total Qty	Total Days On Hand	Expected Run Out Date	Notes
2/17/2021	6/17/2021	x	b	11368	00270-0556-15	KINEVAC VIAL 5MCG x 10	6	Late June	0	0	3	0	2	0	0	0	1	6/17/2021	Notify revenue cycle team @ revenuecyclehelp@silhs.org, and Katie Vuong if product is in shortage and unavailable 1/18/21, Direct orders being taken but product on Allocation @ Revenue Cycle has product will
11/15/2018	3/5/2020	X	B	5037	00264-3105-11	CEFAZOL DUPLEX INJ 2GM BRAU x 24	6	Early March On allocation some in stock	0	0	0	0	100	36	0	0	1	3/5/2020	Stop ordering as of 2/7/19 as long as Cefaz 10gm available.
10/25/2017	3/5/2020	x	b	2028	17478-0937-25	DILTIAZEM 125 MG/25 ML VIAL x 25	6	Late March	20	0	13	37	0	0	25	0	1	3/6/2020	Sub avail @ ABC 03-05-2020 New Athenex product loaded but not currently avail @ McK
2/13/2020	3/5/2020	X	B	2484	55150-0121-50	ZOSYN (PIPERACIL-TAZOBACT) VL 4.5GM AUR x 10 <i>BIP on hands shelf & OMNI</i>	6	Mid March #100+ @ ABC 03-05-20	50	18	120	20	30	11	30	0	2	3/6/2020	3.375 will be most used strength starting 1/15/19, Subs avail 03-05-20

Maintenance

Account #	Description (Multiple Items)					
Purchased NDC	Purchased Description	Optimal NDC	Optimal Description	Sum of Lost Savings	Notes	
00264987210	HEPARIN 1,000 UNIT/500 ML-NS	00338955620	HEPARIN 1,000 UNIT/500 ML-NS	\$ 2,371.90	Optimal NDC not loaded at ABC	
00409955805	ROCURONIUM 50 MG/5 ML VIAL	63323042605	ROCURONIUM 50 MG/5 ML VIAL	\$ 2,249.42	Purchased NDC is best WAC price, majority is purchased at WAC.	
63323097210	FOSAPREPITANT 150 MG VIAL	71839010401	FOSAPREPITANT 150 MG VIAL	\$ 1,765.42	Updated to Optimal NDC	
00781325594	CYCLOPHOSPHAMIDE 2 GM VIAL	10019095701	CYCLOPHOSPHAMIDE 2 GM VIAL	\$ 1,377.25	Updated to Optimal NDC	
00121168000	POTASSIUM CL 10% (20 MEQ/15ML)	00121168040	POTASSIUM CL 10% (20 MEQ/15ML)	\$ 1,015.65	Optimal NDC not loaded at ABC	
69918089910	DESMOPRESSIN AC 4 MCG/ML AMPUL	43598093109	DESMOPRESSIN AC 4 MCG/ML AMPUL	\$ 960.59	Purchased NDC is best WAC price, majority is purchased at WAC. Optimal NDC is Dr. Reddy's - SLHS tries to avoid injectable Dr. Reddy's when possible.	
11523116706	AFRIN 0.05% NASAL SPRAY	00904700635	NASAL DECONGESTANT 0.05% SPRAY	\$ 779.53	Optimal NDC does not have same ingredients as Afrin.	
52565005310	CEFOTAN 2 GM VIAL	63323038620	CEFOTETAN 2 GM VIAL	\$ 765.04	Purchased NDC due to BO. Optimal is flagged.	
00013111421	CYKLOKAPRON 1,000 MG/10 ML VL	61990061102	TRANEXAMIC ACID 1,000 MG/10 ML	\$ 747.44	Purchased NDC due to BO. Optimal is flagged.	
25021024110	BUSULFAN 60 MG/10 ML VIAL	00517092008	BUSUI FAN 60 MG/10 ML VIAL	\$ 681.45	Updated to cheaper contracted NDC. Optimal NDC is not cheapest.	
00781323394	CYCLOPHOSPHAMIDE 5				DC	
59310057922	PROAIR HFA 90 MCG IN				es	
63323049507	XYLOCAINE-MPF 2% VIA				decide what's needed.	
14789001002	DICYCLOMINE 20 MG/2				der often enough for	
17478054420	ADENOSINE 90 MCG/20 M					

Hello,
 Below are the latest Default NDC changes. Please print a new shelf label or update your order forms if needed. Once you've ordered/received in the below NDC send a SmartPhrase to EPIC through POC. Please ask if you have any questions.

- New Default NDC: - Send Default SmartPhrase to EPIC - Update Shelf / Order Label**
- 10046982 METHYLPREDNISOLONE SOD SUCC 125MG SDV 25 NDC 63323-0258-03
 - 10058500 METHYLPREDNISOLONE SOD SUCC 40 MG SDV 25 NDC 63323-0255-03
 - 10231524 METHYLPREDNISOLONE 500 MG MDV NDC 00143-9850-01



Matt Stahlke
 Pharmacy Buyer 3
 St. Luke's Health System
 208-706-6172
pharmacybuyer@slhs.org

So....COVID

- Hearing of medication shortages coming with COVID to end Feb 2020
 - Senior leaders met to outline a strategy to ensure we had urgent needs covered (Idaho was NOT impacted at this time, full procedures being done)
 - Identified a list of medications we needed to have 60 days on hand (red), others 90 days (yellow) on hand
 - Built the purchases by site, by our standard ABC items and created order for hospital leaders to ensure they had the storage (controlled substances, refrigerator etc..)
 - Purchased the first week of March
 - Sites were allowed to roll into stock (decreased orders)
 - As COVID therapies were being reported, we purchased and created a central inventory (inhalers etc..)

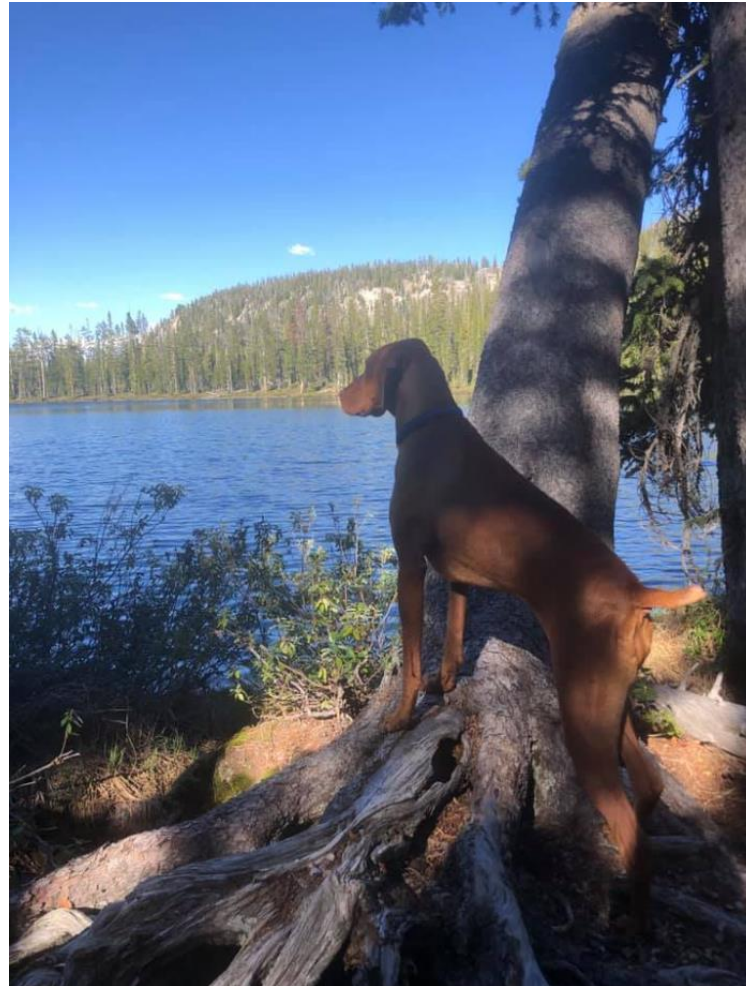
Needing Updated On Hand Count		Non-Formulary	Watching for Directors	Days B4 we run out = 0-7.5 / 7.6-14.5 / 14.6+		W = watching, L = Long Term BO, X = New or Current BO, B = BO but Available, M = Formulary?, D - Discontinued																			
Date Updated		Backorder Items												On Hands / Eaches											
Dated Added to BO Sheet	Date On-Hands Updated (also date added to sheet)	New	Orders	Drug Code - ERX	NDC	Description	BIP Total Qty	MIP Total Qty	Nampa Total Qty	MV Total Qty	WR Total Qty	Jerome Total Qty	Elmore Total Qty	McCall Total Qty	BIP OP	MIP OP	NIP OP	Central Supply	Total System On Hands						
3/16/2020	3/16/2020				66993-0019-68	ALBUTEROL SULF HFA 90 MCG INH 18 GM	0	0	18	0	0	0	0	0	32	137	45	0	232						
3/16/2020	3/16/2020				00093-3174-31	ALBUTEROL SULFATE HFA 90 MCG INH 8.5 GM	194	15	15	0	0	0	0	0	0	51	2	43	126						
3/16/2020	3/16/2020				63323066401	DIPHENHYDRAMINE HCL 50 MG-ML VL 25X1 ML	0	0	0	0	0	0	0	0	0	0	0	125	125						
3/16/2020	3/16/2020				63323026201	HEPARIN SOD 5000 UN-ML MDV 25X1 ML	0	0	0	0	0	0	0	0	0	0	0	100	100						
3/16/2020	3/16/2020				63323026201	HEPARIN SOD 5000 UN-ML MDV 25X1 ML	0	0	0	0	0	0	0	0	0	0	0	100	100						
3/16/2020	3/16/2020				55150016330	LIDOCAINE HCL 1% SDV 30 ML	0	0	0	0	0	0	0	0	0	0	0	100	100						
3/16/2020	3/16/2020				55150016330	LIDOCAINE HCL 1% SDV 30 ML	0	0	0	0	0	0	0	0	0	0	0	100	100						
3/16/2020	3/16/2020				45802-0088-01	ALBUTEROL SUL HFA 90 MCG INH SOL 8.5 GM	0	6	12	14	15	4	0	0	0	0	0	0	51						
3/16/2020	3/16/2020				00173-0719-20	FLOVENT HFA 110 MCG INH 12 GM	2	0	0	3	0	0	0	0	5	13	3	20	44						
3/16/2020	3/16/2020				00173-0696-04	ADVAIR DISKUS INST 250/50 PWD 14	0	0	0	0	0	0	0	0	0	0	0	35	35						
3/16/2020	3/16/2020				55150017030	BUPIVACAINE HCL PF 0.5% SDV 25X30 ML	0	0	0	0	0	0	0	0	0	0	0	35	35						
3/16/2020	3/16/2020				00186037028	SYMBICORT INS 160/ 4.5MCG INH 6 GM	0	0	0	0	0	0	0	0	0	0	0	30	30						
3/16/2020	3/16/2020				00597-0075-47	SPIRIVA 18 MCG HH CAP 90	0	0	12	0	0	0	14	0	0	0	0	0	26						
3/16/2020	3/16/2020				59310057922	PROAIR HFA 90 MCG INH 8.5 GM	0	0	0	0	0	0	0	0	0	0	0	24	24						
3/16/2020	3/16/2020				00254-1007-52	ALBUTEROL SUL HFA 90 MCG INH AER 6.7 GM	0	0	0	20	0	2	0	0	0	0	0	0	22						
3/16/2020	3/16/2020				00409427902	LIDOCAINE HCL PF 1% VL 25X30 ML	0	0	0	0	0	0	0	0	0	0	0	20	20						
3/16/2020	3/16/2020				00378-9322-32	WIXELA-INHUB 500-50 MCG INH PWD	0	0	0	11	0	0	0	0	2	3	4	0	20						
3/16/2020	3/16/2020				00173-0718-20	FLOVENT HFA 44 MCG INH 10.6 GM	0	0	0	1	1	0	0	0	4	0	3	10	19						
3/16/2020	3/16/2020				00378-9321-32	WIXELA-INHUB 250-50 MCG INH PWD 60 UD	0	0	0	12	0	0	0	0	0	2	3	0	17						
3/16/2020	3/16/2020				00378-9320-32	WIXELA-INHUB 100-50 MCG INH PWD	0	0	0	12	0	0	0	0	3	0	1	0	16						
3/16/2020	3/16/2020				00173-0720-20	FLOVENT HFA 220 MCG INH 12 GM	3	0	0	2	0	0	0	0	0	0	1	10	13						
3/16/2020	3/16/2020				00597-0075-41	SPIRIVA 18 MCG HH CAP 30	0	0	0	6	0	1	0	0	0	0	4	0	11						
3/16/2020	3/16/2020				00597-0024-02	COMBIVENT RESPIM INH 4 GM	0	0	0	0	1	0	0	0	3	3	1	0	8						
3/16/2020	3/16/2020				00591-2927-54	LEVALBUTEROL TARTRATE 45MCG INH 15GM	1	1	0	0	0	0	0	0	1	2	4	0	8						
3/16/2020	3/16/2020				00597-0087-17	ATROVENT HFA 17 MCG INH 12.90 GM	0	2	1	0	3	0	0	0	0	0	1	0	7						

Row Labels	Sum of Yellow QTY
BOISE INPATIENT	2,563
ELMORE INPATIENT	95
JEROME INPATIENT	55
MCCALL INPATIENT	64
MERIDIAN INPATIENT	1,187
MERIDIAN INPATIENT FOR TV CLINICS	289
MV INPATIENT	1,140
MV INPATIENT FOR CLINICS	137
NAMPA INPATIENT	574
NAMPA INPATIENT FOR NMC CLINICS	3
WR INPATIENT	122
WR INPATIENT FOR CLINICS	1
Grand Total	6,228

Row Labels	Sum of Red QTY
BOISE INPATIENT	3,209
EASTERN OREGON MED ASSOC	5
ELMORE INPATIENT	152
JEROME INPATIENT	58
MCCALL INPATIENT	112
MERIDIAN INPATIENT	1,489
MERIDIAN INPATIENT FOR TV CLINICS	172
MV INPATIENT	1,450
MV INPATIENT FOR CLINICS	65
NAMPA INPATIENT	728
NAMPA INPATIENT FOR NMC CLINICS	4
WR INPATIENT	269
WR INPATIENT FOR CLINICS	7
Grand Total	7,719

| Next Projects

- Perpetual inventory across the system (EHR based, standardized automation software)
- Direct return medications for items with no value through reverse distributor
- Centralized purchases for bulk opportunities
- TBD...



Audience Assessment Question #1 of 3:

What disruptions require pharmacy sourcing to be nimble while updating standardized products?

- a. Pharmacy preference
- b. Provider preference
- c. Drug shortages
- d. Hurricanes/natural disasters
- e. All of the above

Audience Assessment Question #2 of 3:

Standardizing pharmacy purchases, which items are taken into account:

- a. Contract compliance
- b. Bottom line best price
- c. Rebate implications
- d. Quality/reliability of MFR
- e. All of the above

Audience Assessment Question #3 of 3:

Once a pharmacy product is standardized, how often will teams need to review:

- a. Every 3 years/per contract
- b. Annually
- c. Quarterly
- d. At least monthly

References

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- Gamble M, Ellison A. 10 things keeping health system CEOs up at night (August 18, 2016). www.beckershospitalreview.com/hospitalmanagement-administration/10-things-keeping-health-system-ceosup-at-night-081816.html (accessed 2021 June 15)
- McKone-Sweet KE, Hamilton P, Willis SB (2005) The ailing healthcare supply chain: a prescription for change. *J Supply Chain Manag* 41:4–17
- Rosales CR (2011) Technology enabled new inventory control policies in hospitals. Dissertation, University of Cincinnati
- Internal SLHS documents/reports built by many excellent folks

Thank you...

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