Inventory Control

How to Nourish Your Financial Success





- **♦ Systems and Processes**
 - **♦ Teaming up for Success**
 - Controlling Supply Costs



Systems and Processes

- Efficiency
- Accuracy
- Accountability
- Cost Reduction



Efficiency

















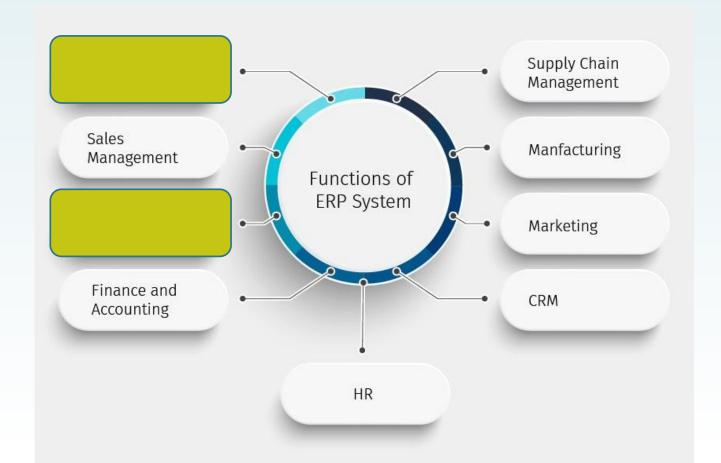






Enterprise Resource Planning (ERP) System

Software application for integrating, managing and auditing business processes





ERP (continued)

Inventory Management

- Scheduled Routines at facility
 - Order Cycle
 - Weekly, Biweekly, Monthly
 - Receiving
 - Schedule & Process
- Inventory Count Cycle
 - Frequency (i.e. Monthly, Quarterly, Annually)
 - Focus on Accuracy (UOM and Receipt Timing)
- Warehouse Management
 - Zoning (Organization)
 - Ergonomic Placement of Supplies



ERP (continued)

Purchase Management / Formulary Maintenance

- Product Types
 - Medications, Supplies, Repair & Maintenance
 - Bins / Zoning
- Par Levels
 - Determines quantity ordered (factoring lead times)
 - Modify as patient census or processes change
 - Monitor Prescriptions
 - access type, dialyzer ratio's, concentrate formulations, pharmaceuticals
- Backorder Management
- Transfers
- Returns



Inventory Placement (Zoning)

Area	Bin	Zone Desc.
Medic	ation	Refrigerator
	01	Refrigerated Meds
Medic	ation	
	02	IV Meds
	03	Crash Cart
	04	Antibiotics
	05	Sterile Water
	06	Heparin
	07	Oral/Topical
Store	Room	- Pallets
	08	Bloodlines
	09	Saline
	10	Acid Concentrate - GL
	11	Acid Concentrate - DR
	12	Acid Concentrate - Dri
	13	Bicarb Concentrate
	14	Dialyzers

Area	Bin	Zone Desc.
Rack	Shelvi	ng System
1	15	Gloves
	16	Fistula Needles
	17	Needles
	18	Syringe
	19	Syringe/Needle
	20	IV Tubing
	21	Transducer Protectors
	22	Thermometers
	23	Disposable Plastics
	24	Catheter Care
	25	Dressings (Bandaids, Tape, Gauze)
	26	General Dialysis Supplies
	27	Test Strips
	28	Suction
	29	Oxygen
	30	AED/EKG/Blood Monitor Supplies
	31	Personal Protection
	32	Bio-Hazardous Waste

Area	Bin	Zone Desc.
Water	Tx Ro	oom
	33 34 35	Equipment Maintenance Standard Solutions Water Treatment Filters
Janito	rial CI	oset
	36	Janitorial
Lab A	rea	
	37	Lab
Home	Traini	ing Dept.
	38	Home PD Supplies
	39	HomeHemo Medical Supplies
	40	Home NxStage Supplies
Acute	Storag	ge
	41	CVVH Supplies
	42	Plasmapheresis



Determining Par Levels

- Total number of patients
- Calculate adequate supply (example)
 - Pharmaceuticals = 9 days par
 - Routine supplies = 21 days par
 - (1 week usage, 1 week buffer stock, 1 week in transit)
- Items used in most every treatment
 - Dialyzer prescriptions (ratio of each type)
 - highest single item treatment cost
 - Concentrate (acidified prescriptions from Medical Records)
 - Bloodlines
 - Saline
 - Fistula Needles
 - Medical Supplies
 - Review prescription ratios (catheter percentage vs. fistula/graft)



Maintain Par Levels

- Review Electronic Medical Records (EMR)
 - Dialyzer/Concentrate/Pharmaceutical prescriptions
 - Access Type (Patients using a Fistula or Catheter)
 - Modalities (Hemo, Home PD, Home Hemo, Acute)
- Order Cycle Schedule
 - Accommodate vendor delivery frequency
 - Shipping & Handling
 - Possible minimum order volume
- Develop electronic or online systems



Hemodialysis Supply Cost Per Treatment Goal

- Patient prescription information
- Teaching Aide for staff
- Compare to Clinical P&P's
- Review results with staff



Fistula/Graft 20%
Catheter 20%
Patients 100
Delivery 7 days

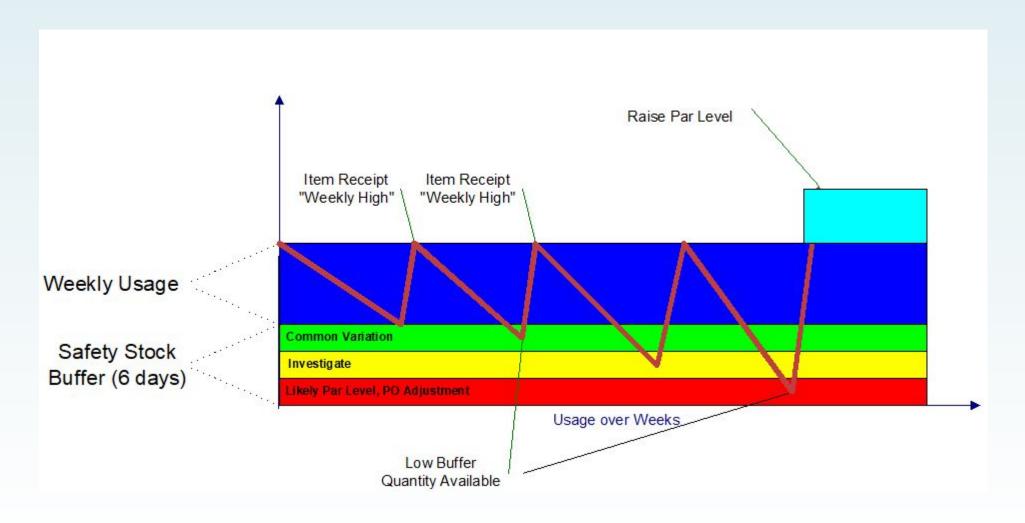
Ideal Usage
1.6 6.00 60%
1.8 7.00 32%
2.0 8.00 8%

Dialyzers	Price	Usage	Cost		Par
All and a second second			1	JOE	100
Model 1.6	6.00	60%			30
Model 1.8	7.00	32%			16
Model 2.0	8.00	8%			4
		100%	\$	6.48	
DI					
Bloodlines CombiSet	2.20	1			25
CombiSet	2.20	1	\$	2.20	25
Saline			4	2.20	
Saline 1000 ml	1.00	1.25	\$	1.25	63
Concentrate (4 Hrs @ 800qD)					
Granuflo	1.50	1.1			40
Bicarb RX-12 (25.4gl/bg)	0.35	1.9	_	0.00	51
			\$	2.29	
Fistula Needles					
Fistula Needles	0.35	2			6
			\$	0.56	2507
			785 -		
Misc. Medical Supplies					
Syringe, 3cc 20g x1	0.08	2	\$	0.16	26
Syringe, 10cc 20g x1	0.08	3	\$	0.24	38
Bandage Strip, Sheer 1x3	0.02	2	\$	0.03	15
Tape, Micropore Plus 1 in	0.04	0.2	\$	0.01	2
Gauze, 2x2 Non-Sterile 12-ply	0.01	6	\$	0.05	22
Pad, Alcohol Prep Medium	0.01	8	\$	0.08	42
Pad, Iodine	0.03	2	\$	0.06	18
Underpad, 12x17, 3-ply	0.06	2	\$	0.09	2
Washcloth 10x13 Disp	0.03	3	\$	0.09	5
Nitrile Gloves	0.04	28	\$	1.12	252
Impervious Gown	1.25	0.1	\$	0.13	3
22732 ROVEN DE LE COMPTE DE LE					
Catheter Supplies	0.07			0.05	
Syringe, 3cc 20g x1	0.07		5	0.05	8
Syringe, 10cc 20g x1	0.08		\$	0.10	11
End Cap, Dialysis Catheter	0.11		\$	0.05	4
Sterile Dressing	0.52		\$	0.10	4
Sponge, 3x3 Sterile 4-ply	0.03		\$	0.01	8
Alcavis 50 250ml	0.02		\$	0.01	1
Swabstick, Chloraprep	0.43	1	\$	0.09	4
Pad, Alcohol Prep Medium	0.01	6	\$	0.01	6
Mask, Isolation (Patient & Staff)	0.05	3	\$	0.03	11
			\$	2.50	

CPT Goal \$15.27



Par Level Optimization





Accuracy

Monitor for reporting consistency, identify exceptions

- End of month Inventory Count Timing
 - Must be completed after all supplies have been allocated for the day
 - Typically 12 treatments per month
 - One shift of supplies can throw off monthly usage (cost) by 8%
- Inventory Count Accuracy
 - Pay attention to Quantity and Inventory UOM (may differ from ordering UOM)
 - Inventory organized on shelves with minimal packaging (ready to use)
- Receiving
 - Record incoming shipments timely
- No borrowing
 - Minimize transfers between locations



Disorganization Makes for Difficult, Inaccurate Counts







Chrome Wire Shelving

- 6' x 12'
 228 ft² storage



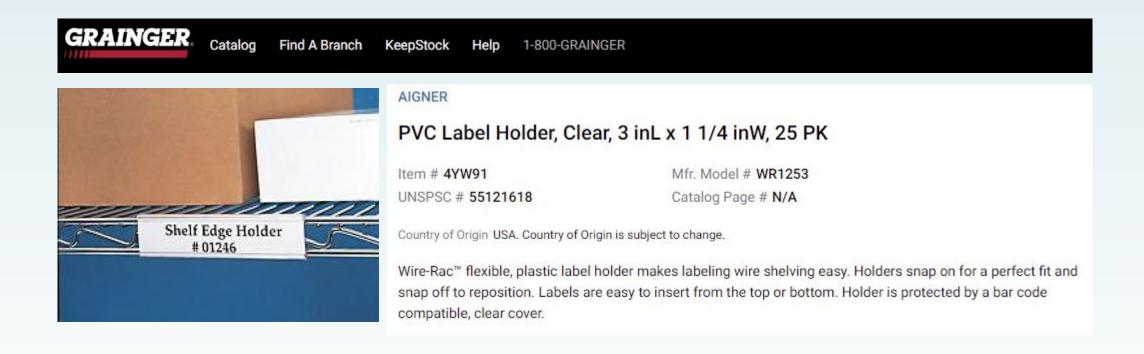


Chrome Wire Shelving

- 6' x 18'
 372 ft² storage



Label Shelving (allocate space for full par qty)





Single Shelving Options







Accountability

Ownership of process

- Assign primary responsibility for each task
 - Ordering
 - Inventory counting
 - Store room maintenance
 - Receiving
 - Clinical floor stocking



Analyze Monthly Supply Cost

Identify Opportunities

- Look for consistency month over month
 - Determines process accuracy
 - Keep cost fluctuation below 5%
- Monitor each item usage
 - Usage = (beginning qty) + (received) +/- (transfers) (ending qty)
- Review each item
 - understand cost impact
 - evaluate effectiveness
 - compare to other standard products
 - review policies to ensure process efficiency and product appropriateness



Graph Supply Cost Results



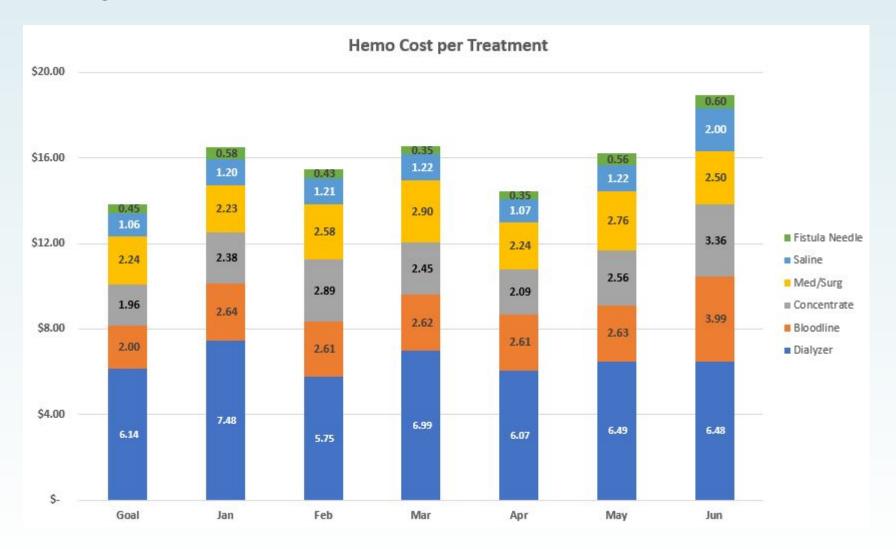


Out of Period Receipt





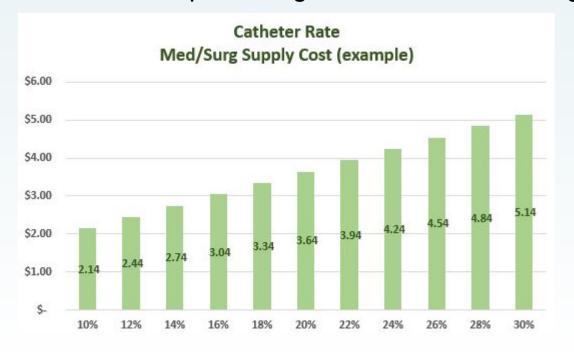
Inventory Control Issues





High Cost Drivers

- Dialyzer Type
 - Leverage volume for best contract price
- Review Catheter Rate
 - Slight increases in catheter percentage rate increase cost significantly





Cost Reduction

- Review P&P's
 - Specific products identified
 - Are all staff properly trained?
 - Procedure
 - Product selection
 - New employees may require educational reinforcement
- Set cost per treatment goal based on par levels
 - 5% over goal = High cost per treatment
 - 10% over goal = Very high cost per treatment



Teaming Up for Success

Communication



Teaming up for Success

Collaboration

- Medical Director
- Facility Administrator
- Biomed/Technical
- Purchasing
- Clinical Staff

Product Selection

- Quality
- Clinical or Technical outcomes
- CMS ESRD Interpretive Guidance compliance
- Ease of use
- Financial stewardship balance of cost and quality

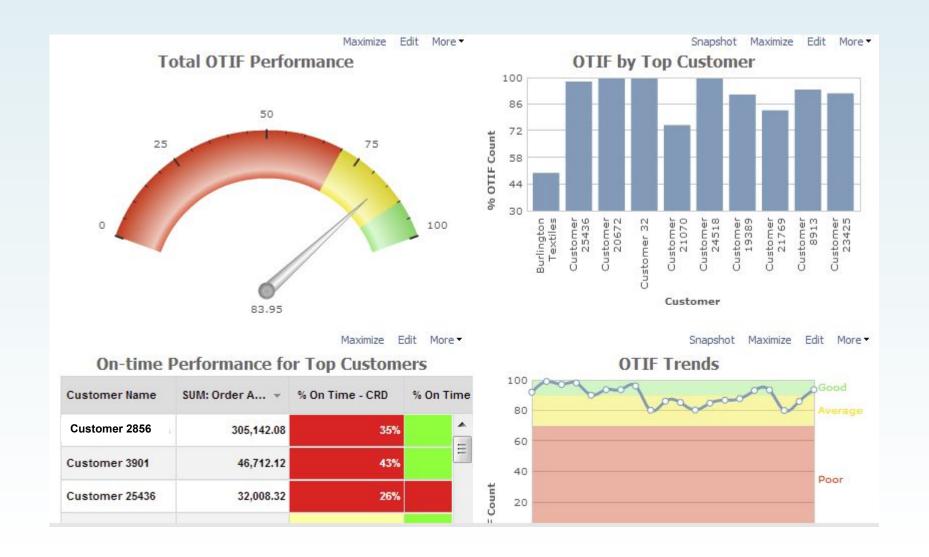


Vendor Selection

- Product Quality
- Product Cost
- Alignment with dialysis industry
- On Time In Full (OTIF) performance
- Screen companies for:
 - Customer Service accessibility
 - Focus on Quality Assurance & Regulatory Affairs
 - What programs are offered to assist with troubleshooting



OTIF - On Time In Full





Anticipate Deliveries

- Know delivery cycles
- Plan for holidays and vacations
- Understand order cycle and lead times
- Logistics (freight and shipping)
- Monitor Open PO reports



Opportunities

Ensure Success

- Manage Supply Cost
- Minimize Waste
- Identify Opportunities
- Share Best Practices



First Steps



Where do I Start?

- How much time and effort should I spend
 - Look for easy changes to achieve success
 - Little changes can have a big impact
 - Influenced by environment
 - people, space, current organization opportunities
- Take advantage of Corporate contracts (if available)
 - Product pricing depends on volume purchases throughout the company
 - Try to use preferred items (i.e. Corporate initiative)
 - Based on clinical or financial outcomes
 - Set expectations
 - Store room appearance
 - Professionalism within your facility

Once these have been addressed, constant monitoring may decrease



Plant new seeds...watch them grow



