THE UNIVERSITY OF KANSAS HEALTH SYSTEM

Concentrating on the ‘5 Rights’ of Clinical Supply Management

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Learning Objectives:

- ❑ Describe clinical integration strategies that can be used to bridge the gap between supply chain and end users.
- ❑ Identify select strategies that can be used to improve product approval lead time and realize additional savings.

Background/Introduction:

It is 4:45 p.m. on a Friday and the team is ready for the weekend when an all too familiar call comes in that there is another evening supply and quality report that has been escalated. We will be working late again. That is when we decided we needed to become a clinically integrated supply chain. Let us share our story. The customer's voice is important to understand in any industry, especially in healthcare, where a patient's health and safety rely on the products used to treat them. We knew there was a clear gap between supply chain and our end-users, from the products approved for use, the results they provided, and safety concerns they may have created.

Problem: The University of Kansas Health System did not have a clinically integrated supply chain.

Goals/Strategies:

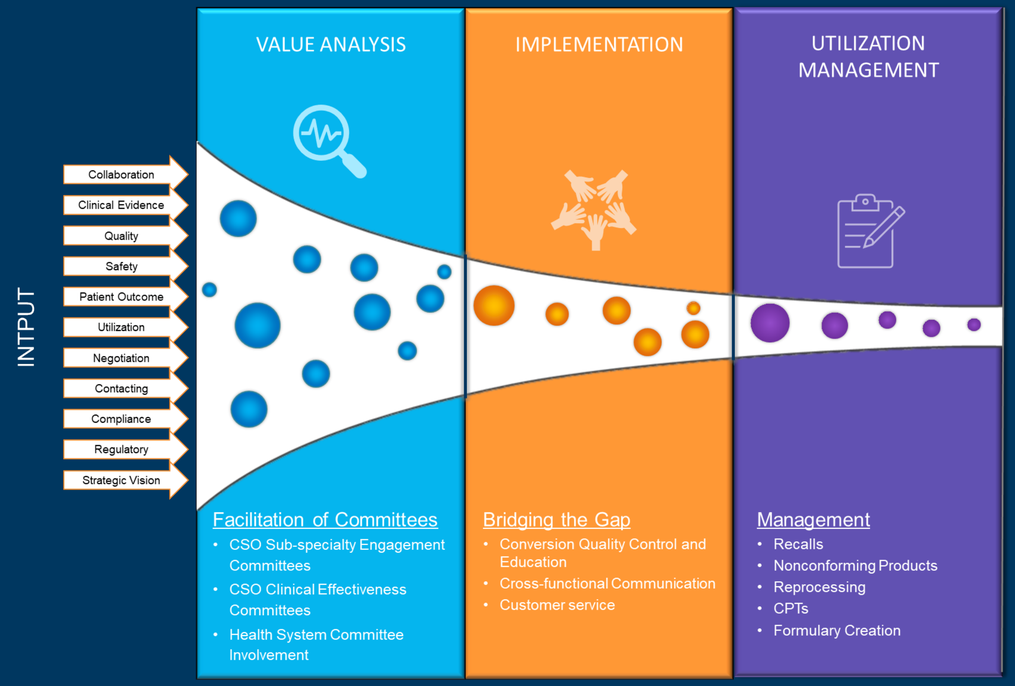
1. Establish a clinically integrated supply chain to bridge the gap between Supply Chain and end-users
2. Foster relationships with our clinicians to support clinical, operational, and economical decisions for our patients and health system
3. Create a committee structure with supports down through the sub-specialty level
4. Increase committee structure to provide transparency at mid-management and executive levels
5. Establish buy-in from our clinicians on our CSO program
6. Added Utilization Management and Implementation teams to drive clinical conversations on achieving high quality clinical outcomes based upon product utilization

Lessons Learned:

1. Build relationships.
2. The voice of the customer is pivotal in establishing clinical integration.
3. Even if you have failed in your VA program previously, try again. Keep trying until you find the right fit for your organization.
4. Advocate for your clinicians with your suppliers.
5. Transition your conversations to beyond just the price.
6. Understand how important achieving the 5 ‘Rights’ to Supply Chain Management are to clinical integration.
7. Being a clinically integrated supply chain is not easy but is it rewarding and impactful.

Overview:

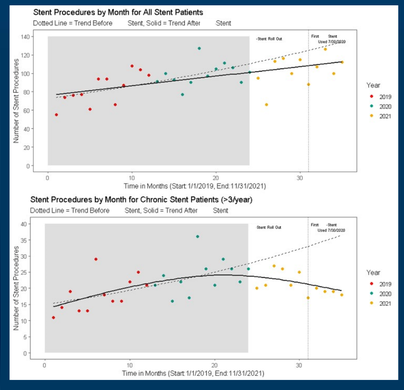
Taking a cue from our nursing colleagues, our academic medical center moved from a legacy focus on cost control to a comprehensive, interdisciplinary methodology focused on the “5 Rights” of clinical supply management. Purchasing the right products at the right price at the right time in partnership with the right clinical team and the right supplier became our ideal approach. We created the Clinical Supply Optimization program to effectively engage clinicians while incorporating clinical evidence, economic performance, and operational data to consistently support our decision-making framework.



Key Takeaway’s:

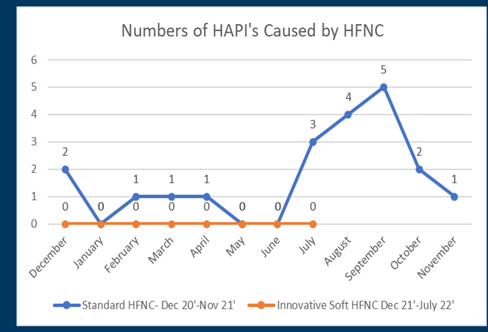
1. Executive leadership support for a Clinical Supply Optimization (CSO) Program is vital.
2. The customer's voice is important, especially in healthcare, where a patient's health and safety rely on the products used to treat them.
3. The CSO team provides end-users specific information vital for making the best decisions on supplies and medical devices we use while also sustaining healthy business practices that keep our organization viable.
4. CSO bridged the gap by creating open and trusting professional relationships with our clinicians. By partnering with our supply chain functional teams, we have seen significant cost savings and a reduction in the variation of products used.

Outcomes:



Current state patients experience 2.7 stent placement procedures per year. Utilizing the clinical data & physician expertise we projected future chronic patients would experience 1.3 stent placement procedures per year based on the claimed indwelling times. Factoring in the two placement rates and the cost per stent we projected an annual savings of $4,595 by reducing the number of stents required per patient per year.

After trending usage and HAPI events for 1 year, Utilization management analyst was able to confirm our projected impact aligned with our intended outcomes. Our annual cost increase was $5,005 & 100% of HFNC HAPI events were avoided.



HFNC (High flow nasal cannula) , HAPI (Healthcare Associated Pressure Injury)

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The authors have no relevant financial relationships to disclose.

Data and Outcomes

Stents

Request: Add a higher cost innovative ureteral stent for the chronic patient populations.

Clinical reasoning: Bacterial colonization and encrustation causes infections and obstruction resulting in functional failure of the urethral stent. The new innovative ureteral stent will reduce repeat procedures and increase the patient's quality of life.

Data: VA, Data analyst & requesting physician collaborated on how to identify the impact of this new product. Once the team had a better understanding of the product request it was identified that we would pull usage & cases on the affected patient population. Utilizing the data, we could determine the annual utilization of stents each chronic patient experiences with our current product. Current state patients experience 2.7 stent placement procedures per year. Utilizing the clinical data & physician expertise we projected future chronic patients would experience 1.3 stent placement procedures per year based on the claimed indwelling times. Factoring in the two placement rates and the cost per stent we projected an annual savings of $4,595 by reducing the number of stents required per patient per year.

Proposal: The value analyst was able to create a proposal that could be utilized as a voting visual for the appropriate voting committee. The affected service line was able to vote on adding this new product because it was projected that no additional cost would be incurred it the product reduced the number of stents/procedures needed per patient

Outcome: Approved

Implementation/CEC Participants

- Data Analyst
- D&L
- Urology Team Lead RN
- Physician
- Utilization Management
- Implementation Team
- Billing & Compliance

Outcome: After the product was added Utilization managements works to prove the product's intended outcomes are captured to validate the need for the new product. Utilization management tracked the product cost and utilization of patients who received the new innovative ureteral stent for one year. After 1 year we were able to identify the number of stents utilized per patient had decreased confirming the product provided improved clinical outcomes for the chronic patient population.

Nasal Cannula

During a multi-disciplinary zero-harm meeting it was shared a significant amount of our cannula related HAPIs have come from a HFNC. That includes HAPIs from stage 1 – stage 4, DTI and unstageable events. Clinical nurse specialists and respiratory have explored additional education and prevention methods. After further investigation with our wound team colleagues, they believe the gray pads on the HFNC may be contributing. The wound team was able to identify the gray pads will retain moisture, which when it comes to HAPIs, moisture is bad. Respiratory then shared they thought the optimal product would follow the following requirements. A HFNC option that is soft, 14ft in length, no universal adaptor and without the gray pads.

Since CSO sits in on these committees VA was able to immediately give guidance that this would be good opportunity to review new product options. Respiratory was directed to submit a request through our value analysis workflow platform. This allowed us to have all the information in one location and pull data of all possible products used throughout the system. This ensures we include all affected users in the new product review and allow us to standardize the product throughout the system.

VA & respiratory worked together to identify possible product alternatives. Once items were identified we were able to identify which items were preferred based on GPO commitments, pricing, and clinical outcomes. This information was shared with all affected users in a clinical effectiveness committee to ensure they could make a well-informed decision on an alternative product. Samples were provided to each location and feedback was collected.

Once the best product was identified we completed final analytics to determine the actual projected impact of the requested conversion. Adding the Innovative soft high flow nasal cannula would cause a product cost increase of $4,469 but in return would prevent the average of 2 HAPIS a month. Therefore, annually we would avoid the $233,640 that would have previously been spent on treatment of those HAPI events.

Utilizing the identified impact, the new product request was sent to vote at the department level. It was immediately approved by all voting stakeholders. VA initiated implementation. We were able to identify stakeholders from multiple departments to ensure accurate implementation system wide. Utilizing this teams feedback a timeline and plan was collaboratively created, and the new product was able to be immediately converted and was readily available to all clinicians throughout the health system.

VA communicated the products goal to the utilization management analyst to track and trend the desired outcomes. After trending usage and HAPI events for 1 year, Utilization management analyst was able to confirm our projected impact aligned with our intended outcomes. Our annual cost increase was $5,005 & 100% of HFNC HAPI events were avoided.

Lessons Learned

Relationships are vital

Partner with end-users

Communication is key

Clinical Supply Optimization Team:
Value Analysis, Utilization Management, Implementation

Multidisciplinary expertise

Data tells the story

- ✓ Clinical evidence
- ✓ Operational sustainment
- ✓ Financial stewardship