

[Boundary Trails Health Center]

# Quality Improvement Project Report Out

[May 21,2015]

# Define

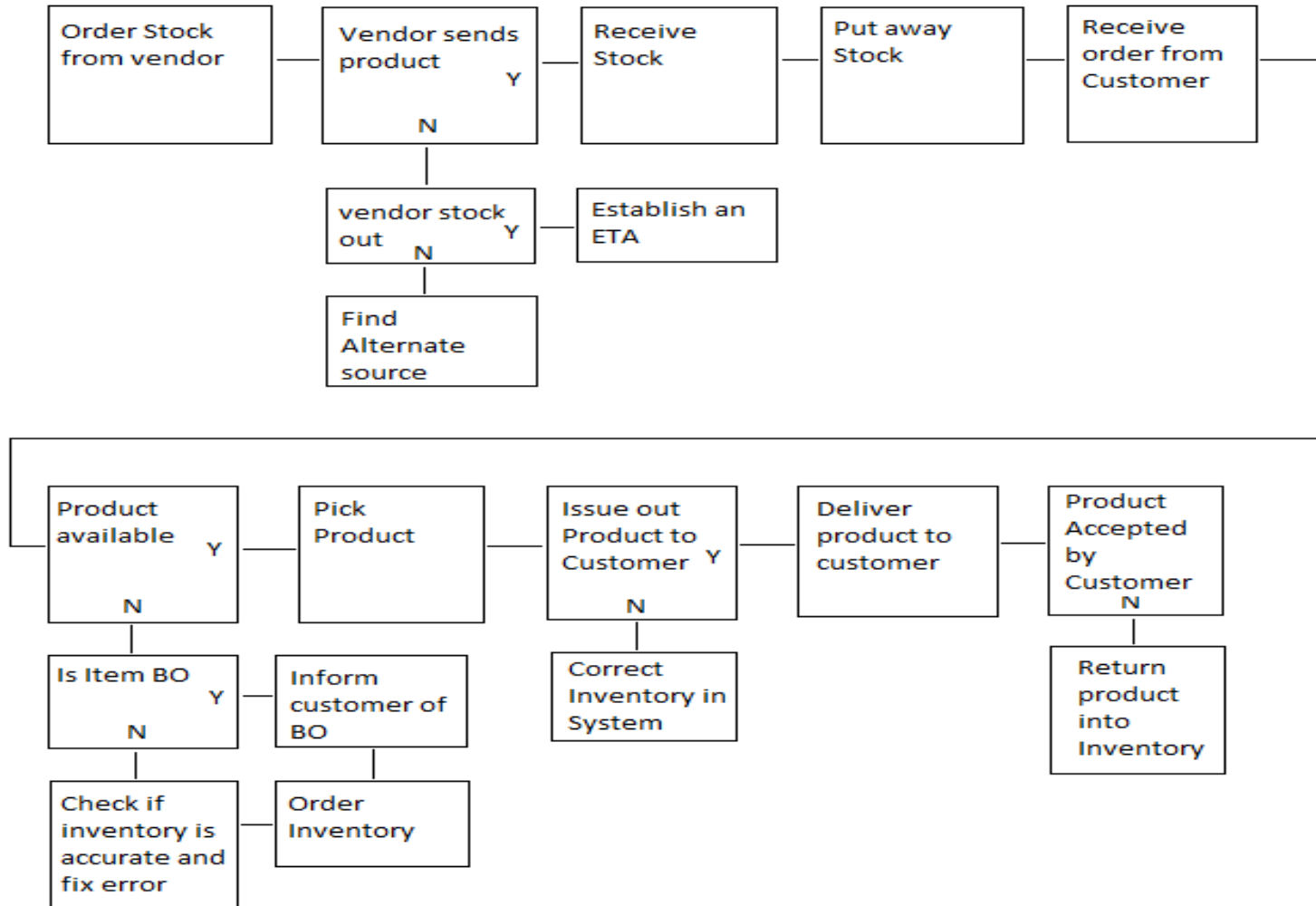
*The area we have decided to focus on is Logistics & Supply Chain Management*

- \*We plan to reduce the amount of wasted dollars sitting in idle inventory by adjusting min/max numbers*
- \*We want to identify defects within our process to reduce the amount of stock outs*
- \*We want to identify areas to improve upon to eliminate system to physical inventory discrepancies*
- \*We would like to maximize our warehouse space utilization*
- \*By having tighter control, we should be able to perform at peak efficiency with the space we have, processes implemented, and restriction of access on unnecessary off hour activity*

# Define

- ***Problem Statement : The current process of inventory management is not meeting the demands of the customer due to the inaccurate inventory control which can affect all customers ability to perform healthcare duties, as well as leaving the staff feeling like they are not performing to the best of their ability.***

# Define



# Measure

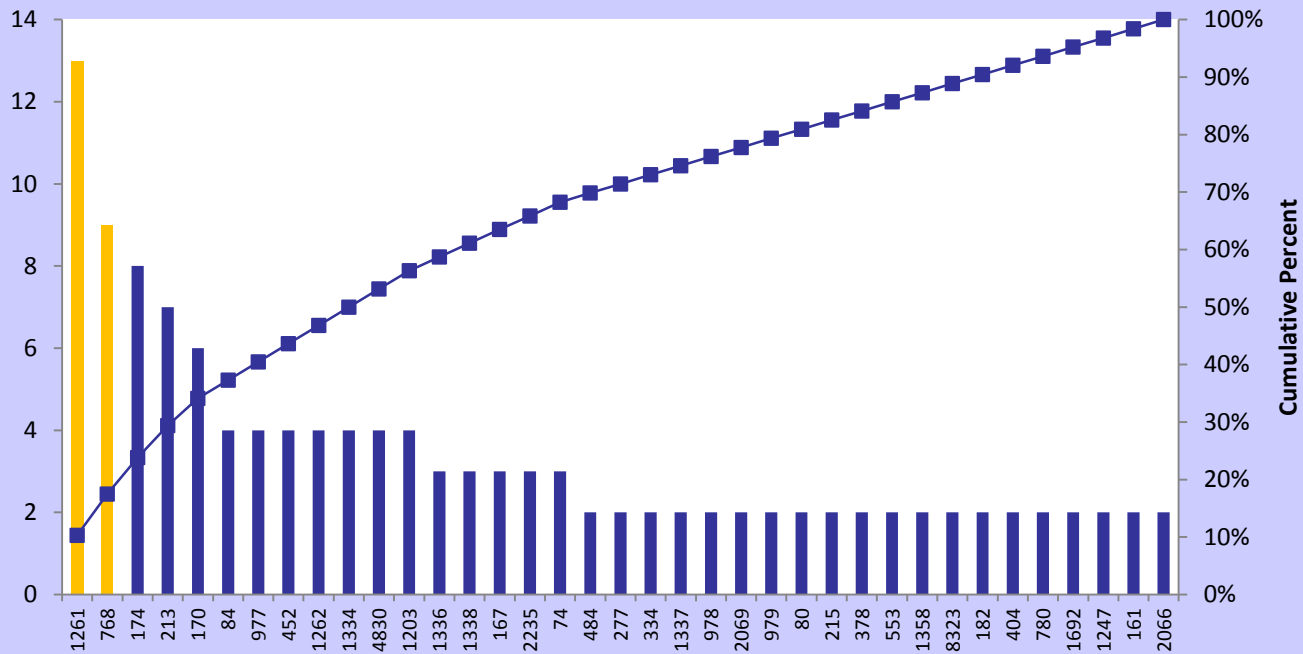
What?	How?	Where?	Who?	When?
What is being measured?	How will you track the measurement? Tracking sheets, observations, other? Do you need any items to measure? Clock, pedometer, etc.	On which unit/area will the data be collected?	Who is responsible for collecting the measures measurements?	When are the measures being collected?
Accuracy of inventory defects	Pull cycle counts and sign out sheet for rows 12 & 13	2 weeks prior to last cycle count	Kristen	October 28/14 – Nov. 11/14
Defects – picking errors	Tracking form for all wards/units	All wards - BTHC	Kristen	Oct. 28/14 – Nov. 11/14
Defect – Product availability	Retro reports – B/O dates to receipt dates	L&SCM - BTHC	Kristen	October 28/14 – Nov. 11/14
Cycle time	B/O goods – receipt dates to delivery to wards	L&SCM - BTHC	Kristen	October 28/14 – Nov. 11/14
Defect – Top up list compliance	Sign out numbers per ward Return numbers per ward Top up list usage	L&SCM - BTHC	Kristen	Nov.11/14 – Nov. 25/14
Defect – Off hour activity	Data collection	L&SCM - BTHC	Kristen	October 28/14 – Nov. 11/14

# Analyze

## Off Hour Activity - Weekdays

Boundary Health Centre

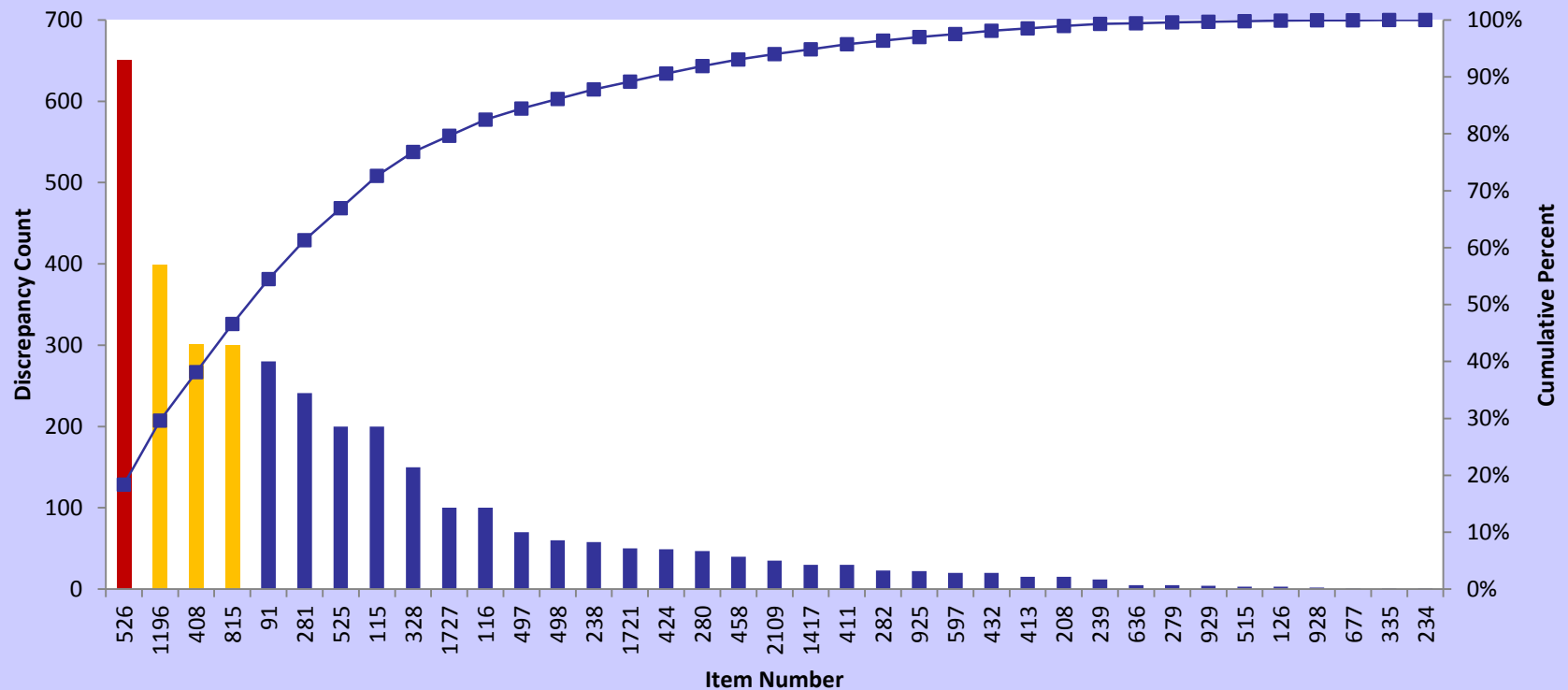
August 1 - November 6, 2014



# Analyze

## Row 13 - Inventory Inaccuracy Discrepancies by Item

Boundary Trails Health Centre  
January 2, 2013 - January 17, 2014

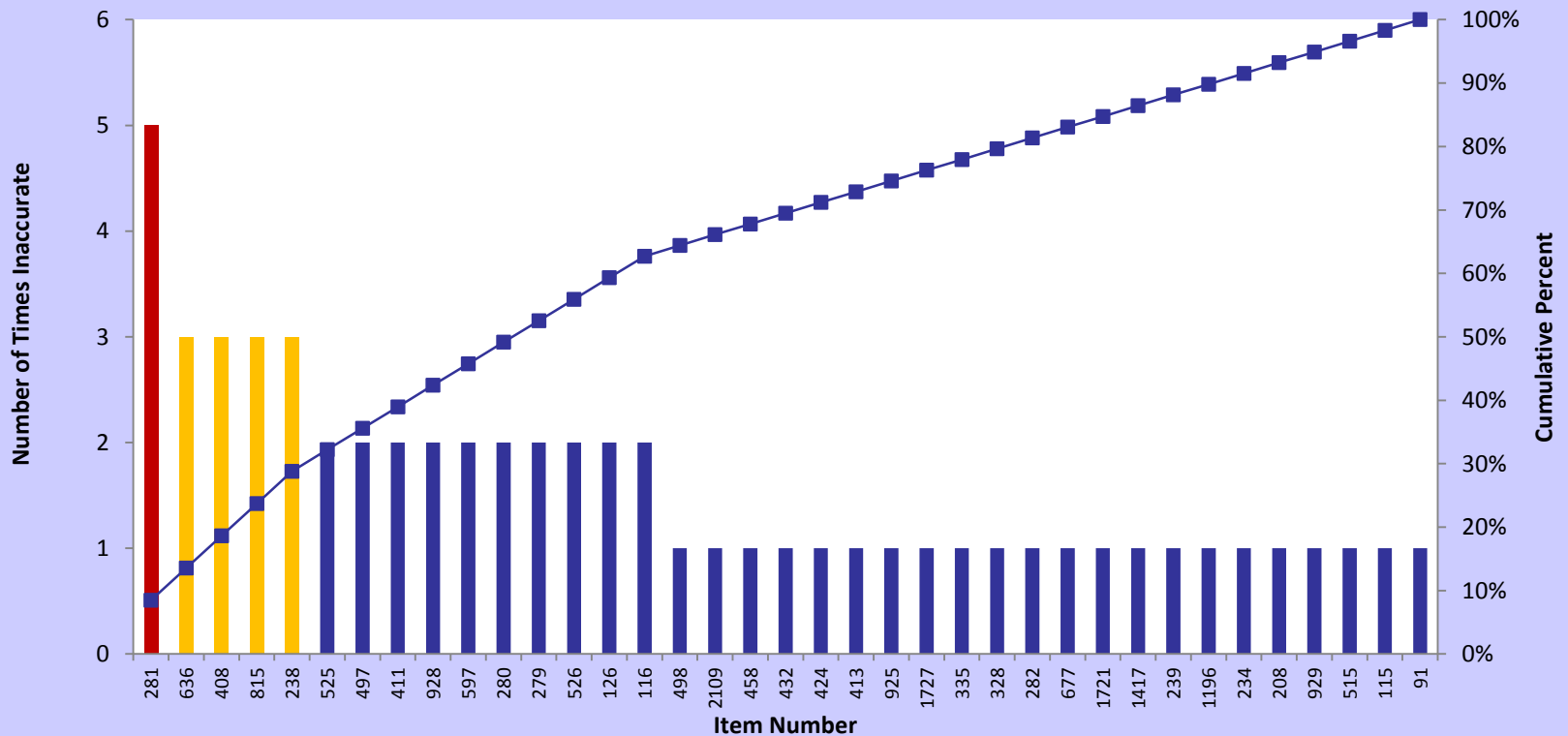


7/14/2017

# Analyze

## Row 13 - Inventory Inaccuracy by Frequency

Boundary Trails Health Centre  
January 2, 2013 - January 17, 2014

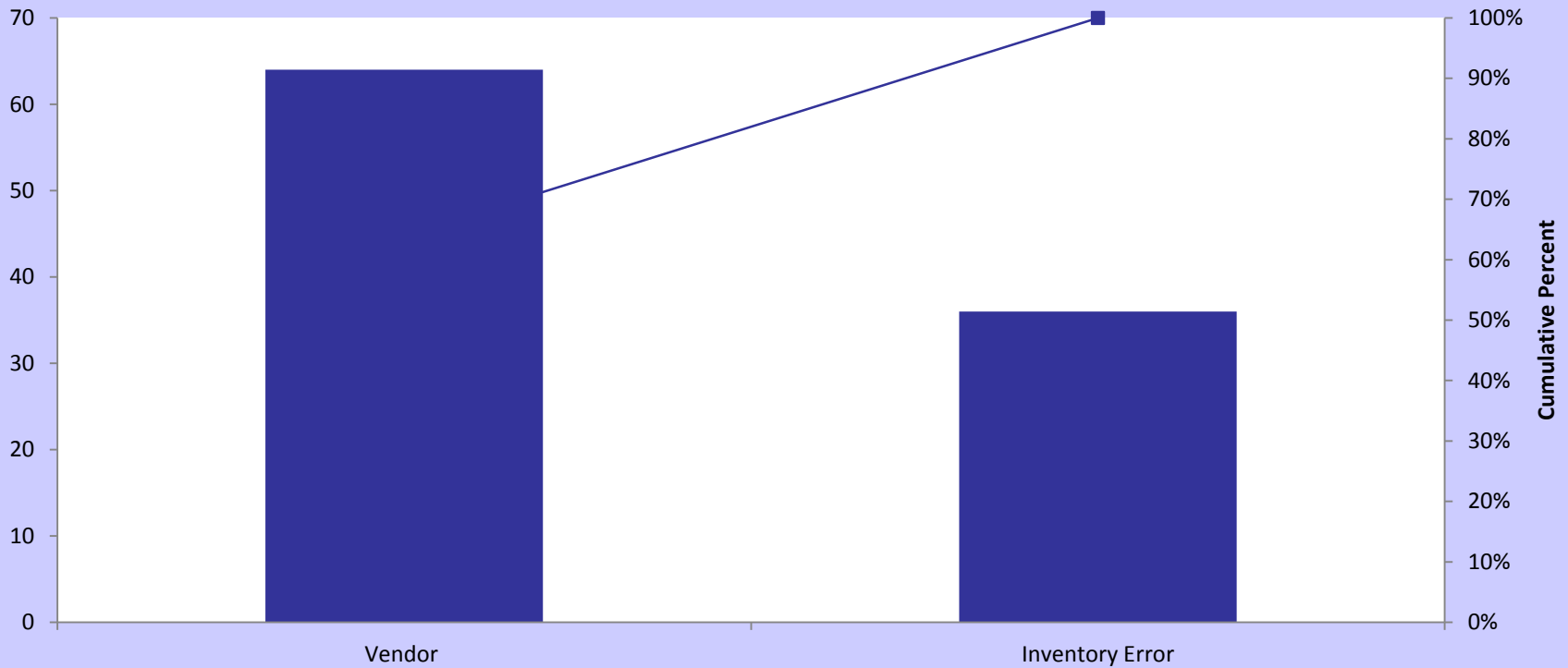


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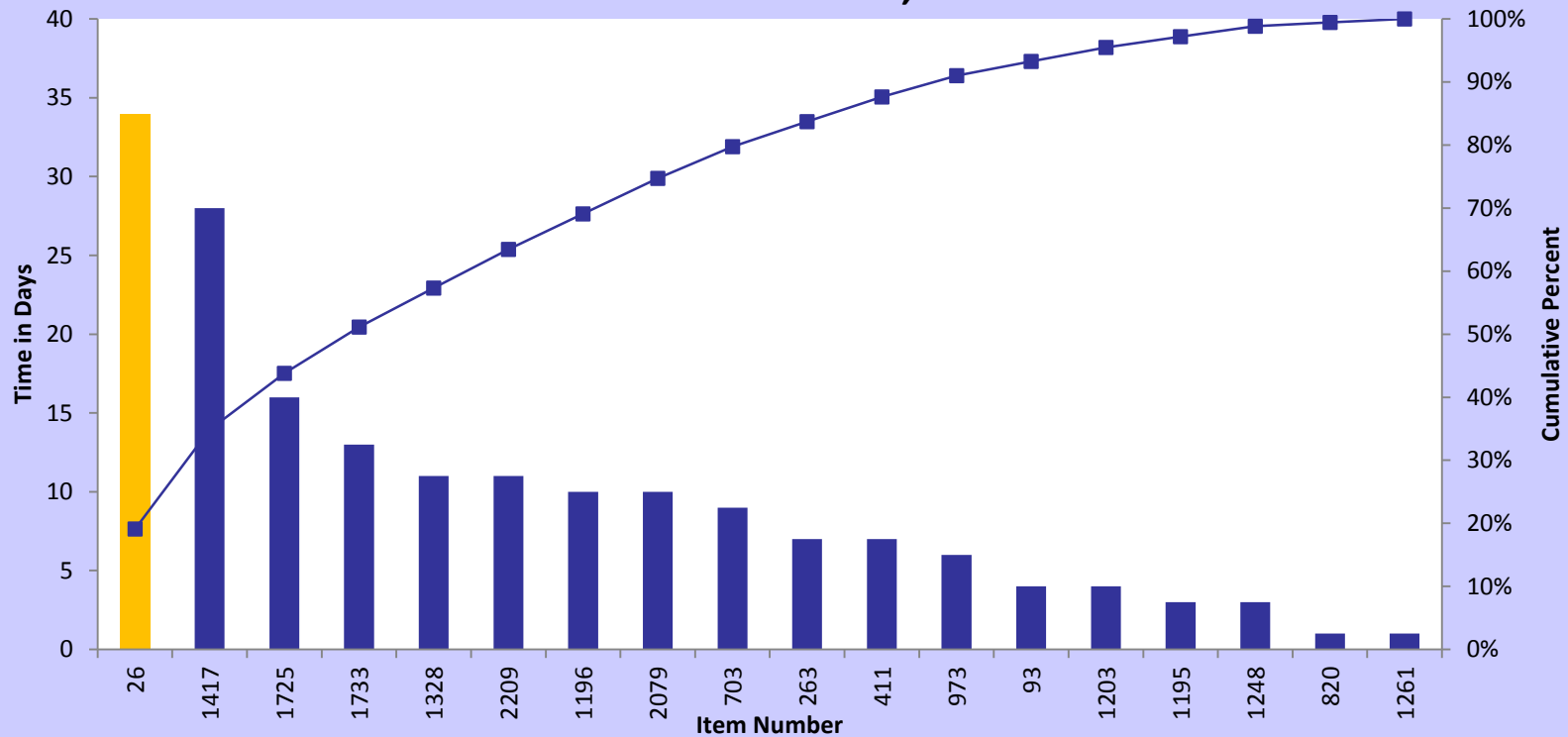
# Analyze

**Back Order Time Cycle  
Boundary Trails Health Centre  
Oct. 30 – Nov. 14 2014**



# Analyze

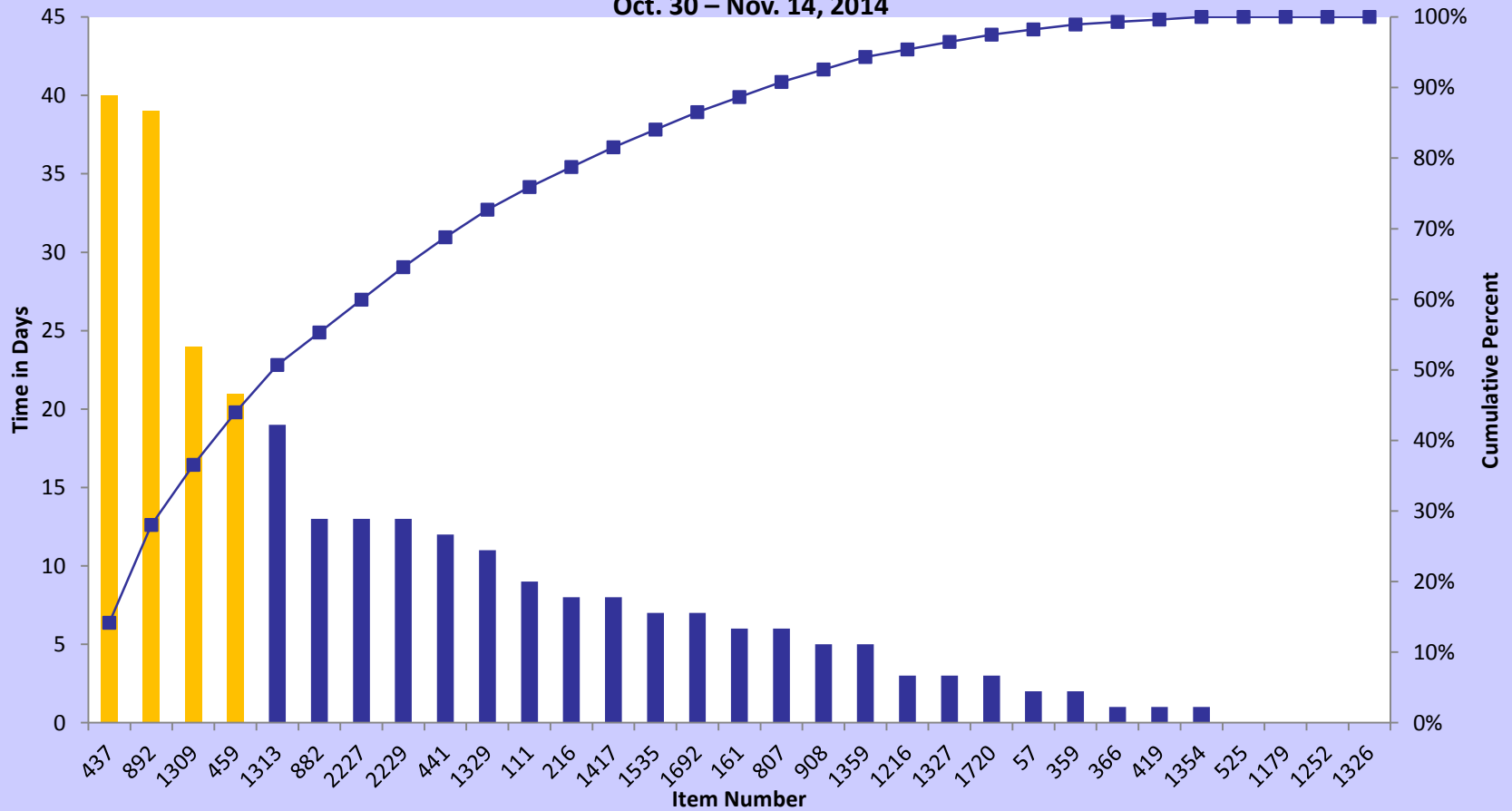
**Back Order Cycle Time - Inventory Error by Item Number**  
**Boundary Trails Health Center**  
**Oct. 30 – Nov. 14, 2014**



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# Analyze

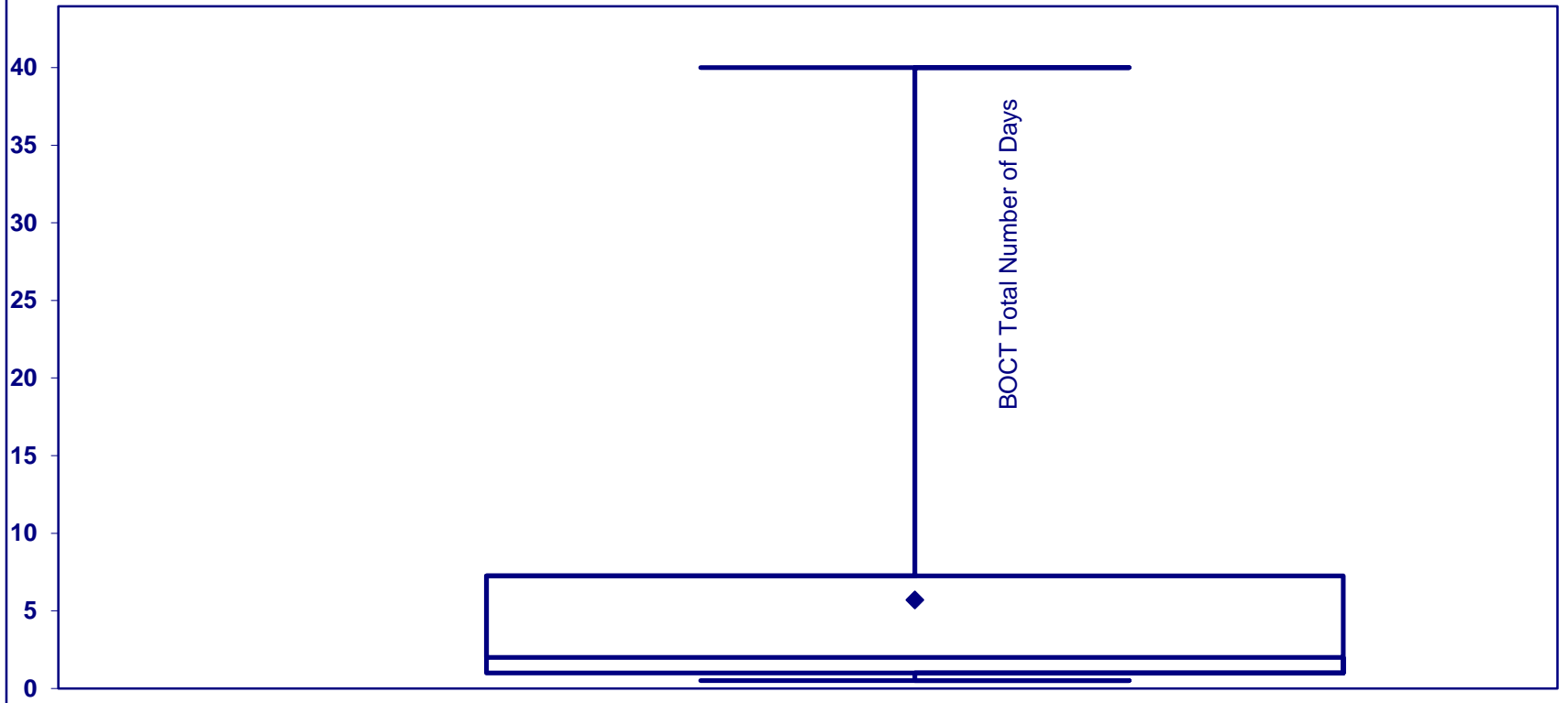
Back Order Cycle Time Vendor Error by Item Number  
 Boundary Trails Health Center  
 Oct. 30 – Nov. 14, 2014



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# Analyze

## Back Order Cycle Time Boundary Trails Health Centre October 30 – November 14, 2014



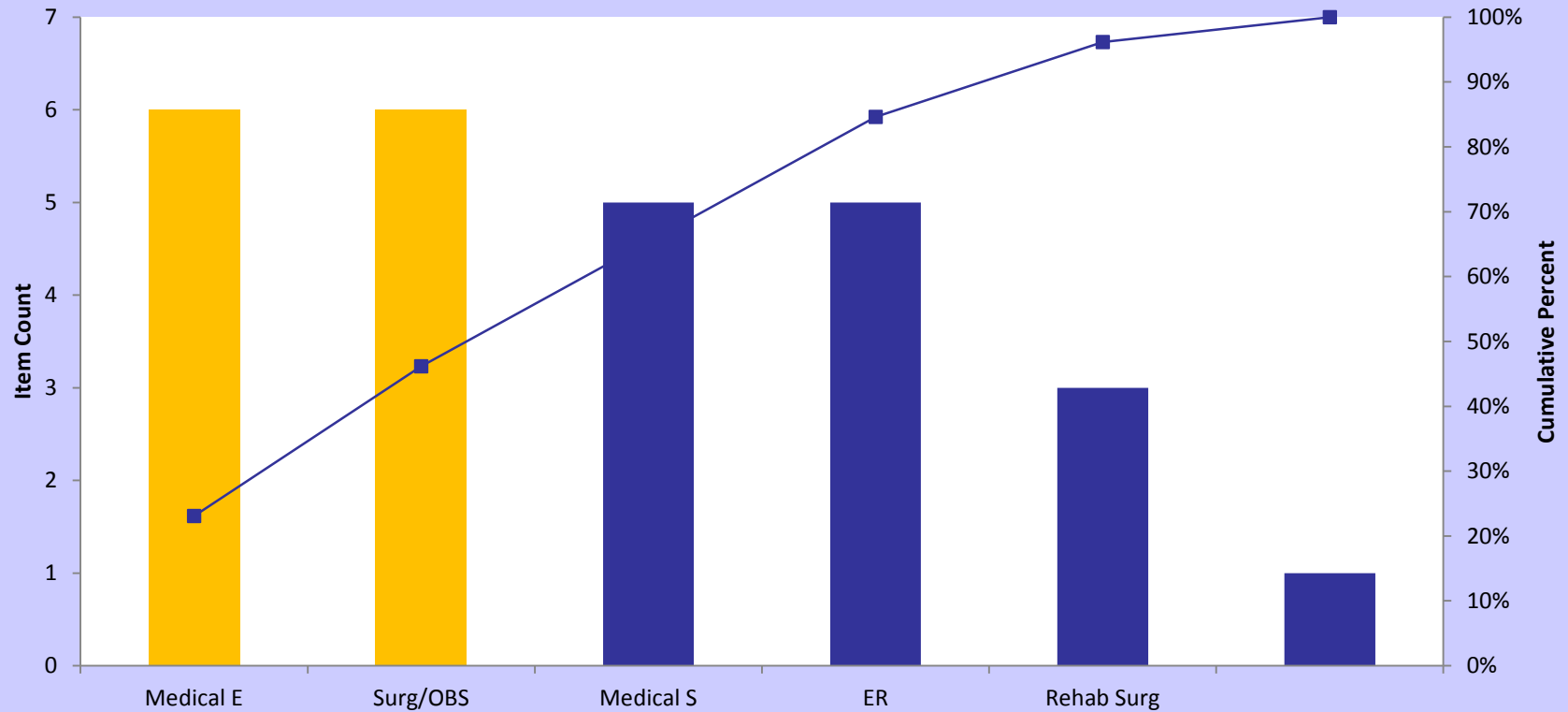
See

# Analyze

## Pick Errors by Department

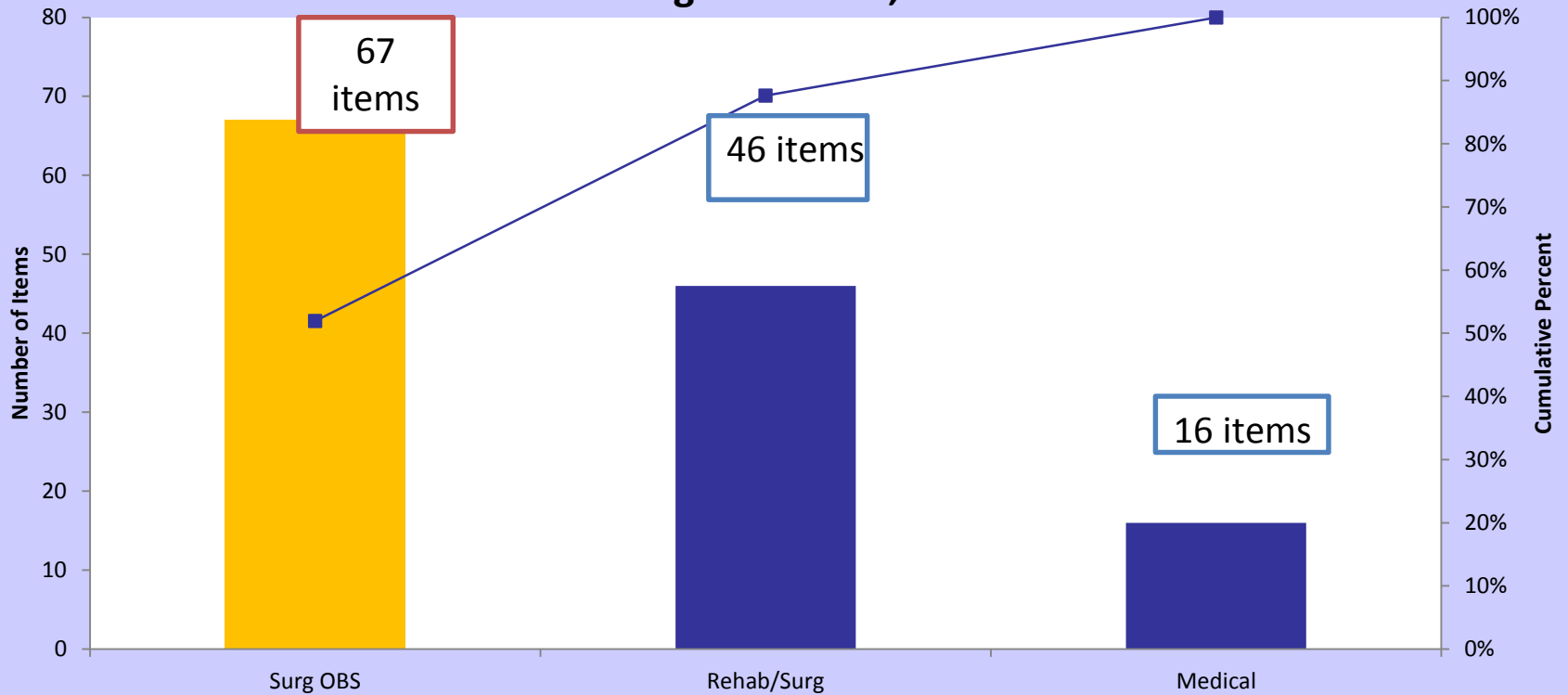
Boundary Trails Health Centre

April 1 - November 10, 2014



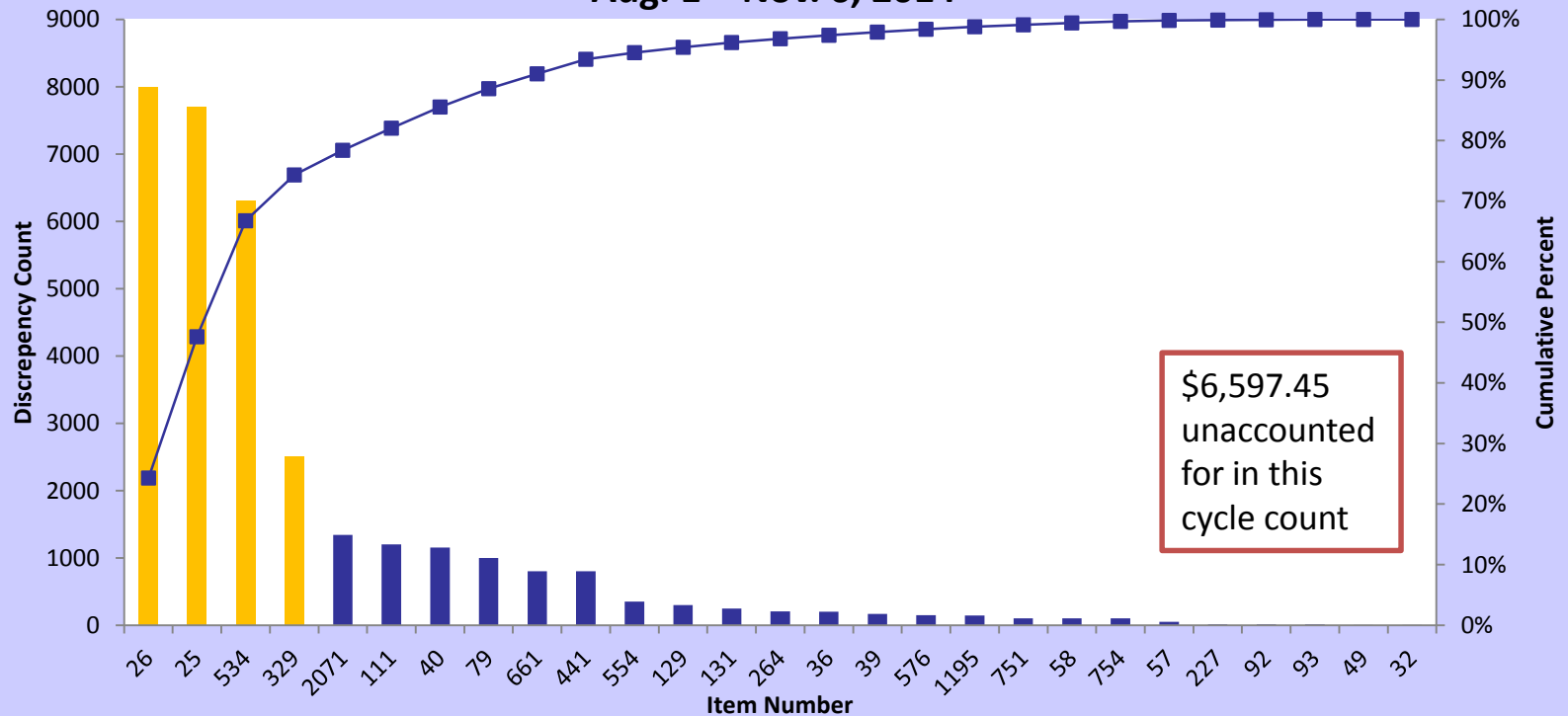
# Analyze

Off Hour Activity - Week Day by Department  
Boundary Trails Health Center  
Aug. 1 - Nov. 6, 2014



# Analyze

Row 12 Inventory Inaccuracies by Discrepancy  
Boundary Trails Health Center  
Aug. 1 – Nov. 6, 2014

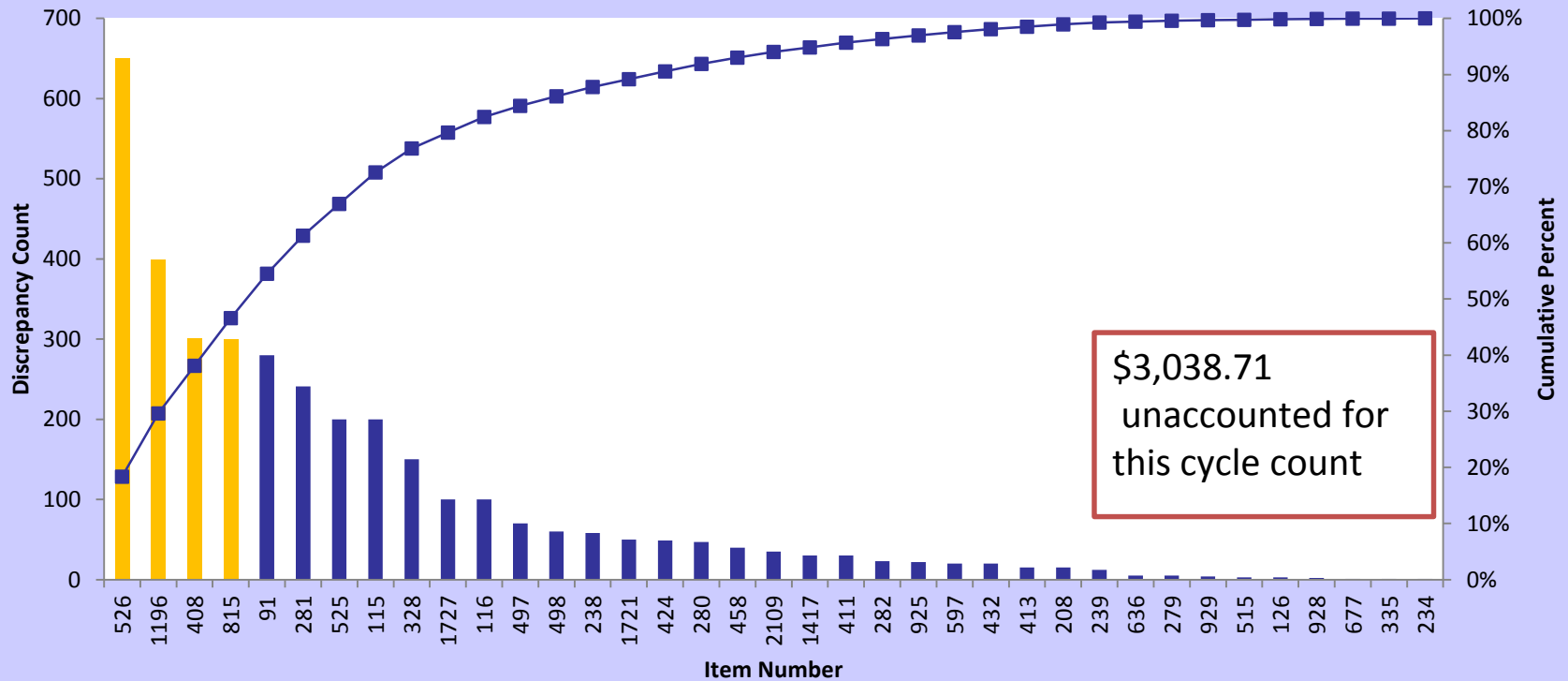


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# Analyze

## Row 13 - Inventory Inaccuracy Discrepancies by Item

Boundary Trails Health Centre  
January 2, 2013 - January 17, 2014



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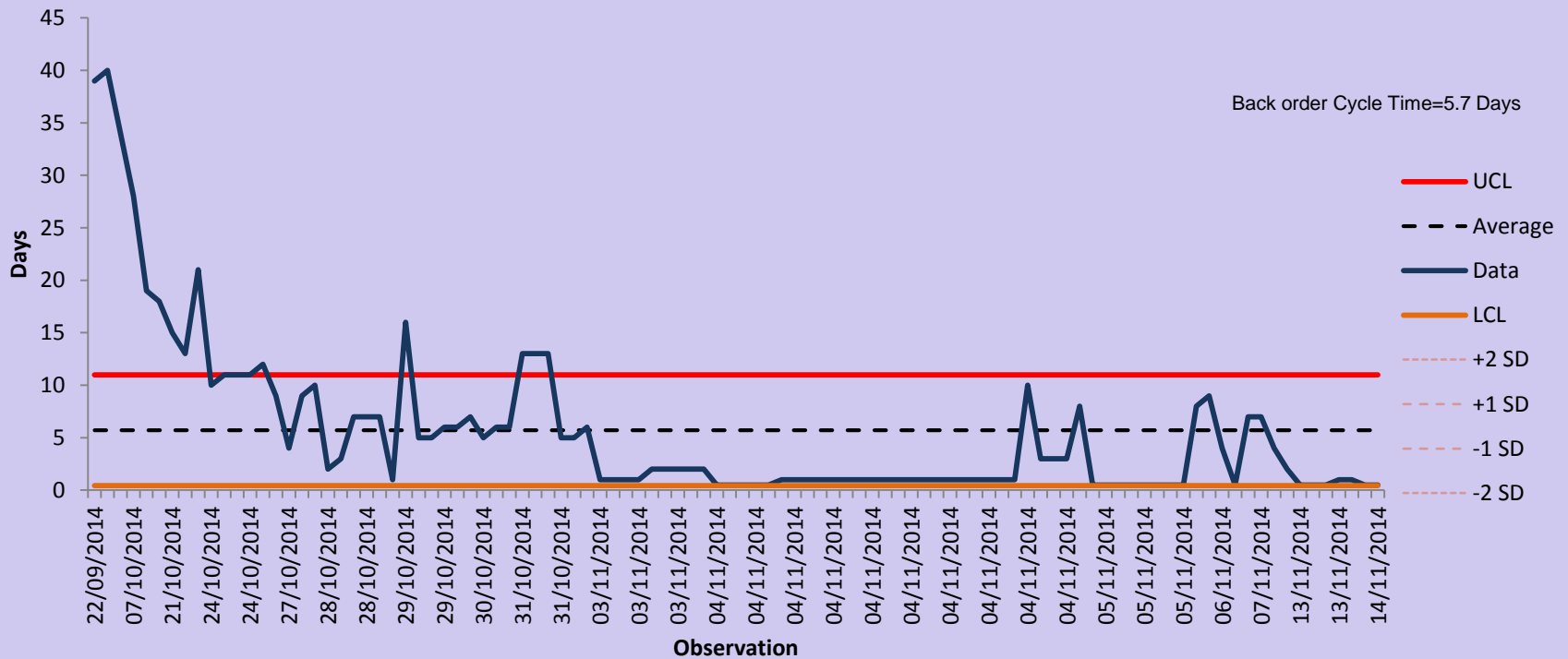


# Analyze

## Back Order Cycle Time

Boundary Trails Health Centre

Sept 22 - Nov 14, 2014



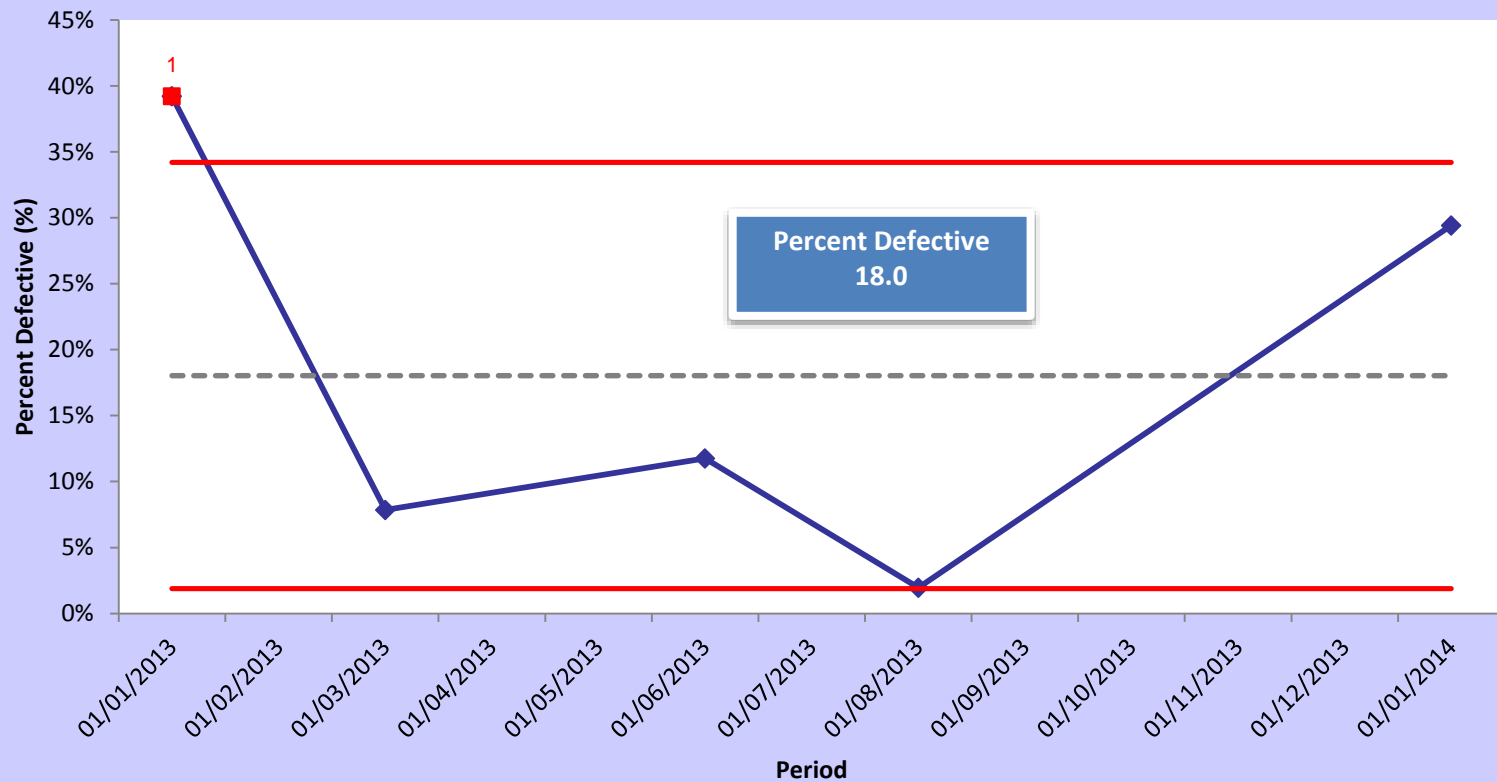
See

# Analyze

## Inventory Count Percent Defective - Row 13

Boundary Trails Health Centre

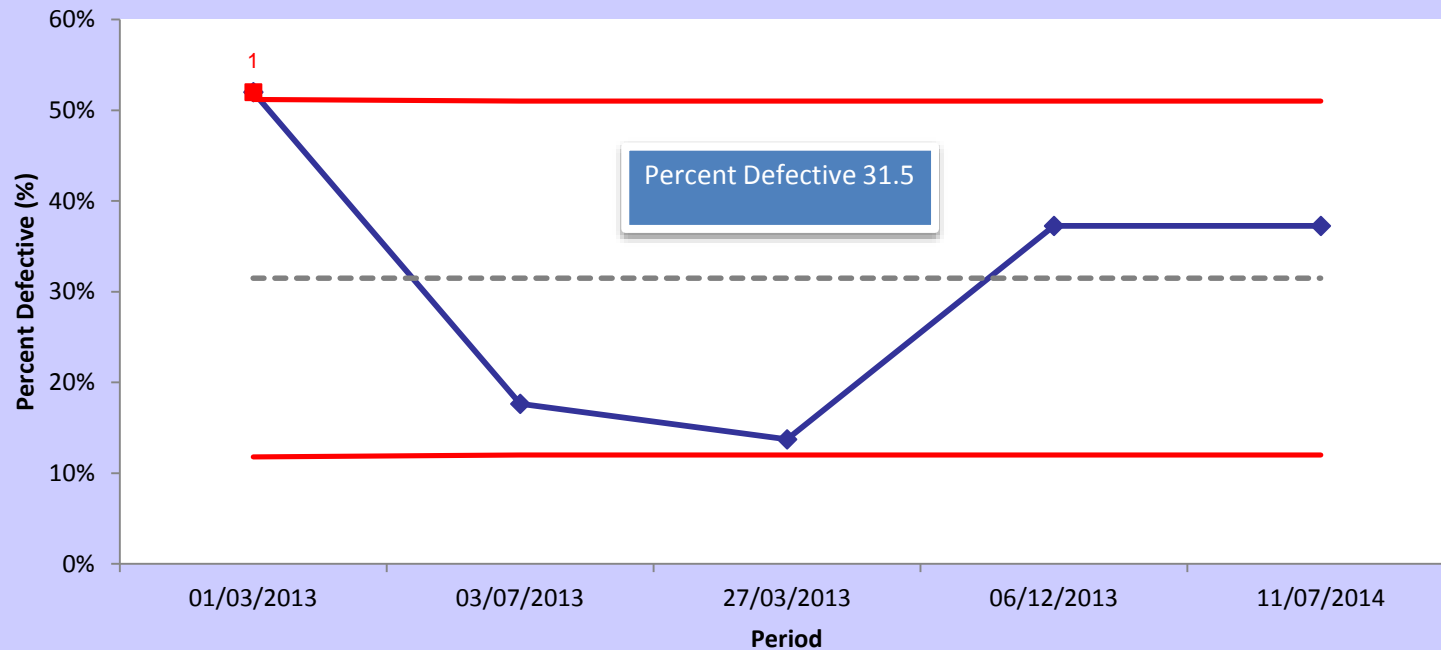
Jan 3, 2013- Jan 17, 2014



# Analyze

## Percent Defective - Row 12

Boundary Trails Health Centre  
January 3, 2013- January 17, 2014



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# Analyze

What the data is showing is:

- \*Back order cycle time has significant variation due to off hour activity and unaccounted for inventory dollars.
- \*Row 12 inventory count percent defective ranges from 14 to 51 and row 13 ranges from 2 to 40.
- \*66.6% defects come from vendor backorders.

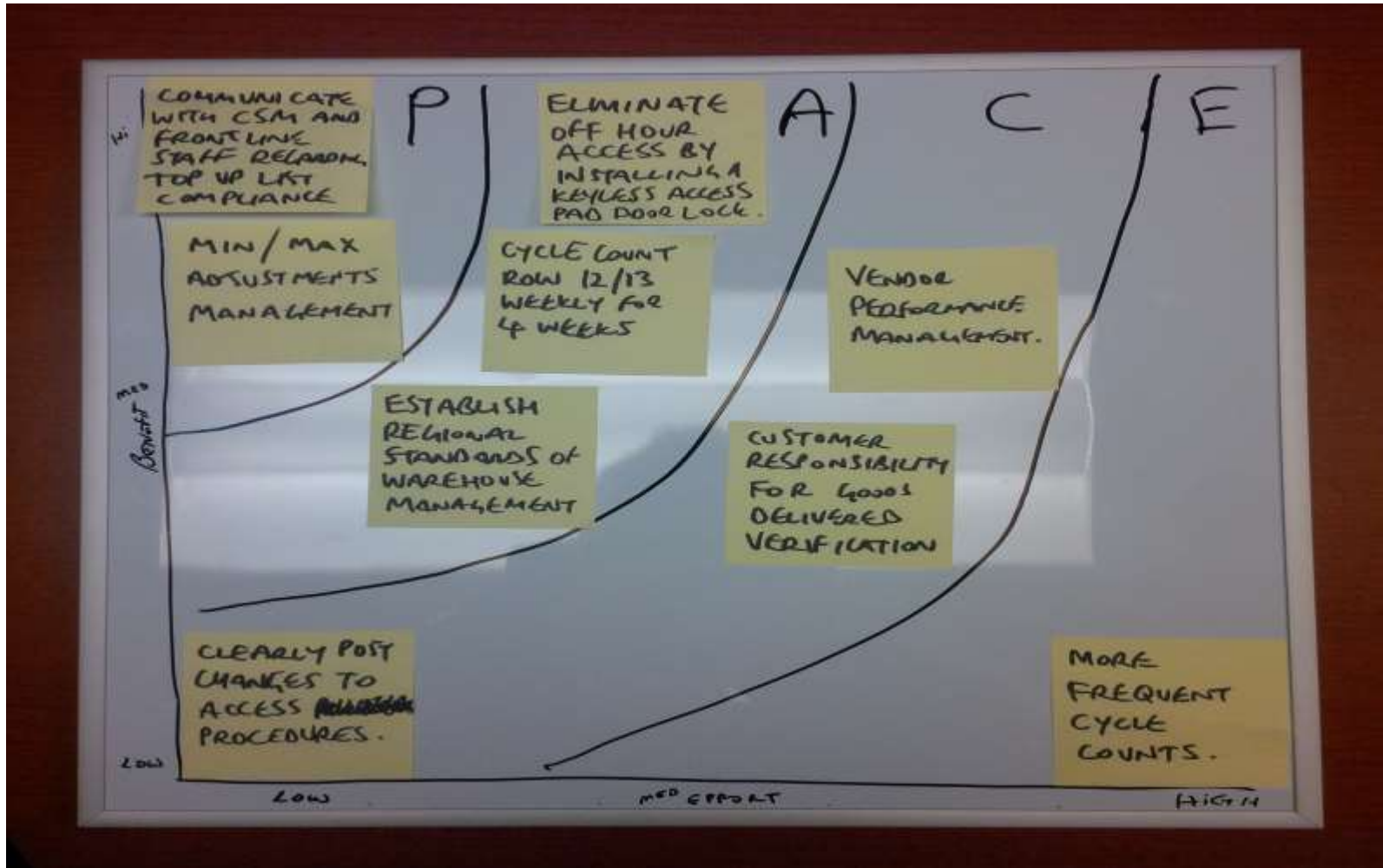
# Analyze

- **Picking error defect found most prevalent in high volume departments.**
- **Time a definite factor to some of the errors in picking**

# Improve

*\*The aim of this project is to reduce inventory inaccuracies and defect rate, to not exceed 50%.*

# PACE MATRIX



7/14/2017

# Improve

*PDSA 1*

*Description: Communicate with CSM and front line staff regarding top up list compliance*

*Date Implemented : April 13, 2015*



# Improve

*PDSA 2*

*Description: Eliminate off hour access by installing keyless pad access lock*

*Date Implemented: April 13/2015*

# Improve

*PDSA 3*

*\*Description: Cycle count for row 12 & 13 for 4 weeks*

*Date Implemented : April 13/2015*

# Improve

*PDSA 4*

*Description: Establish regional standards of warehouse management*

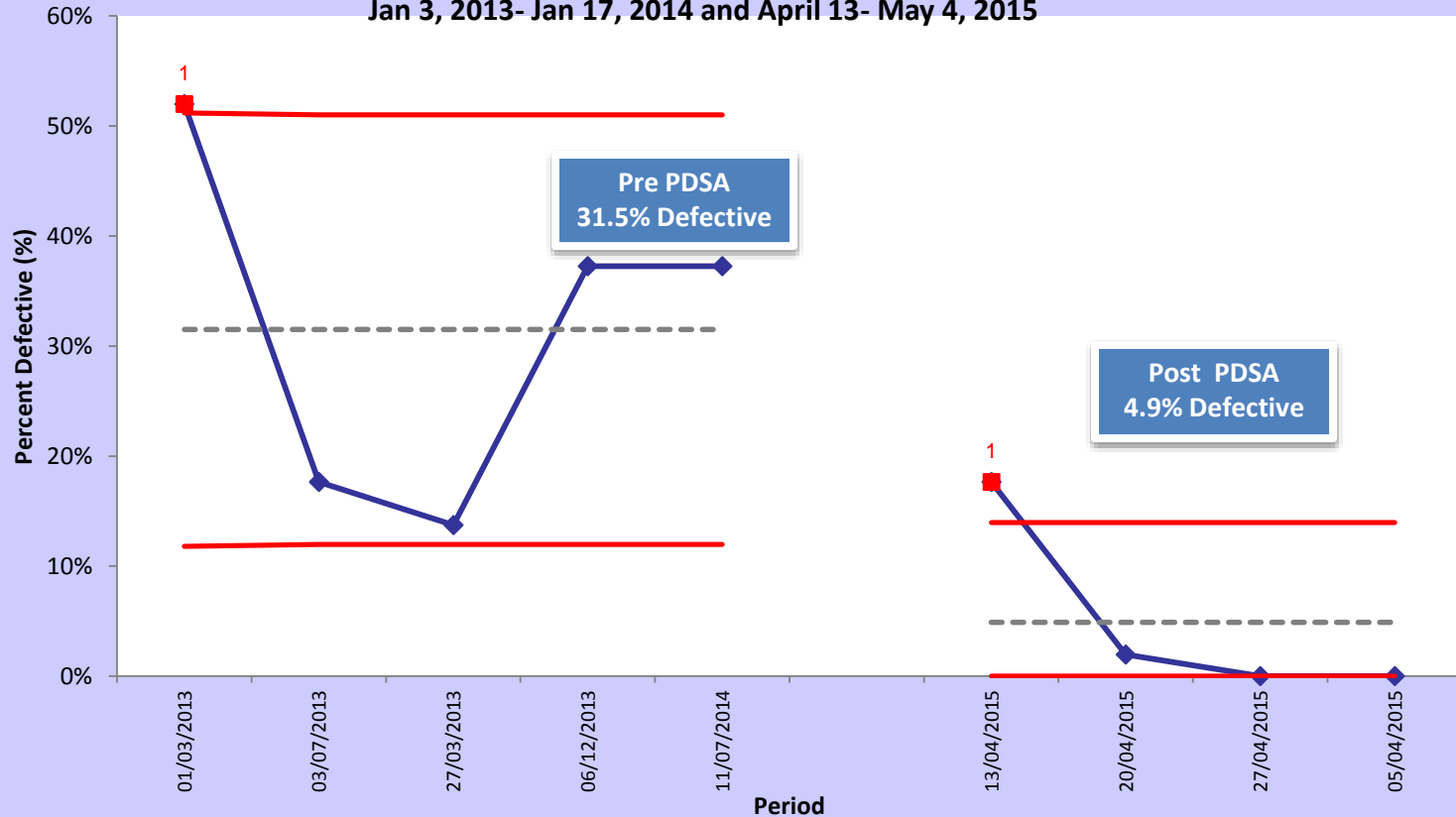
*Date Implemented: April 15/2015*

# IMPROVE

## Percent Defective - Row 12

Boundary Trails Health Centre

Jan 3, 2013- Jan 17, 2014 and April 13- May 4, 2015



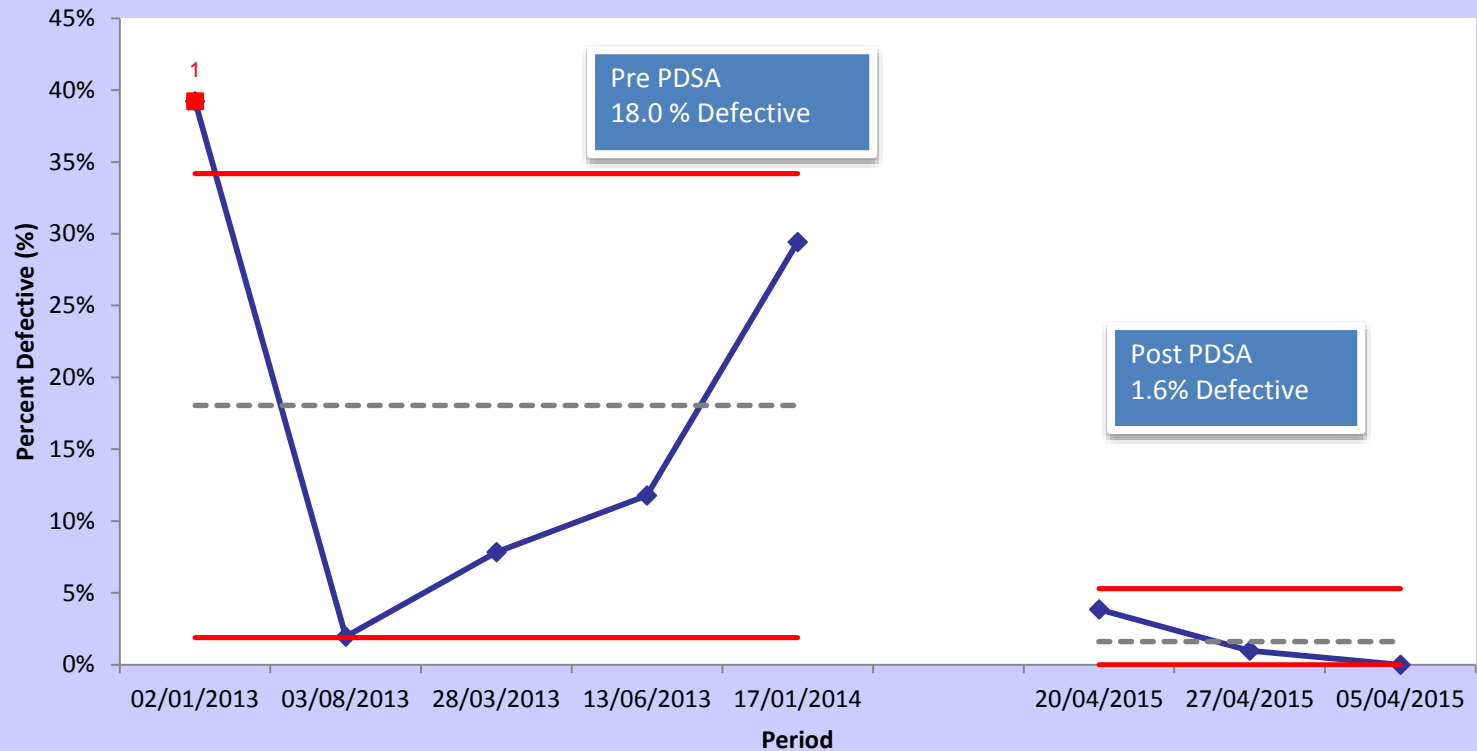
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# Improve

## Inventory Count Percent Defective - Row 13

Boundary Trails Health Centre

Jan 3, 2013-Jan 17, 2014 and April 20-May 4, 2015

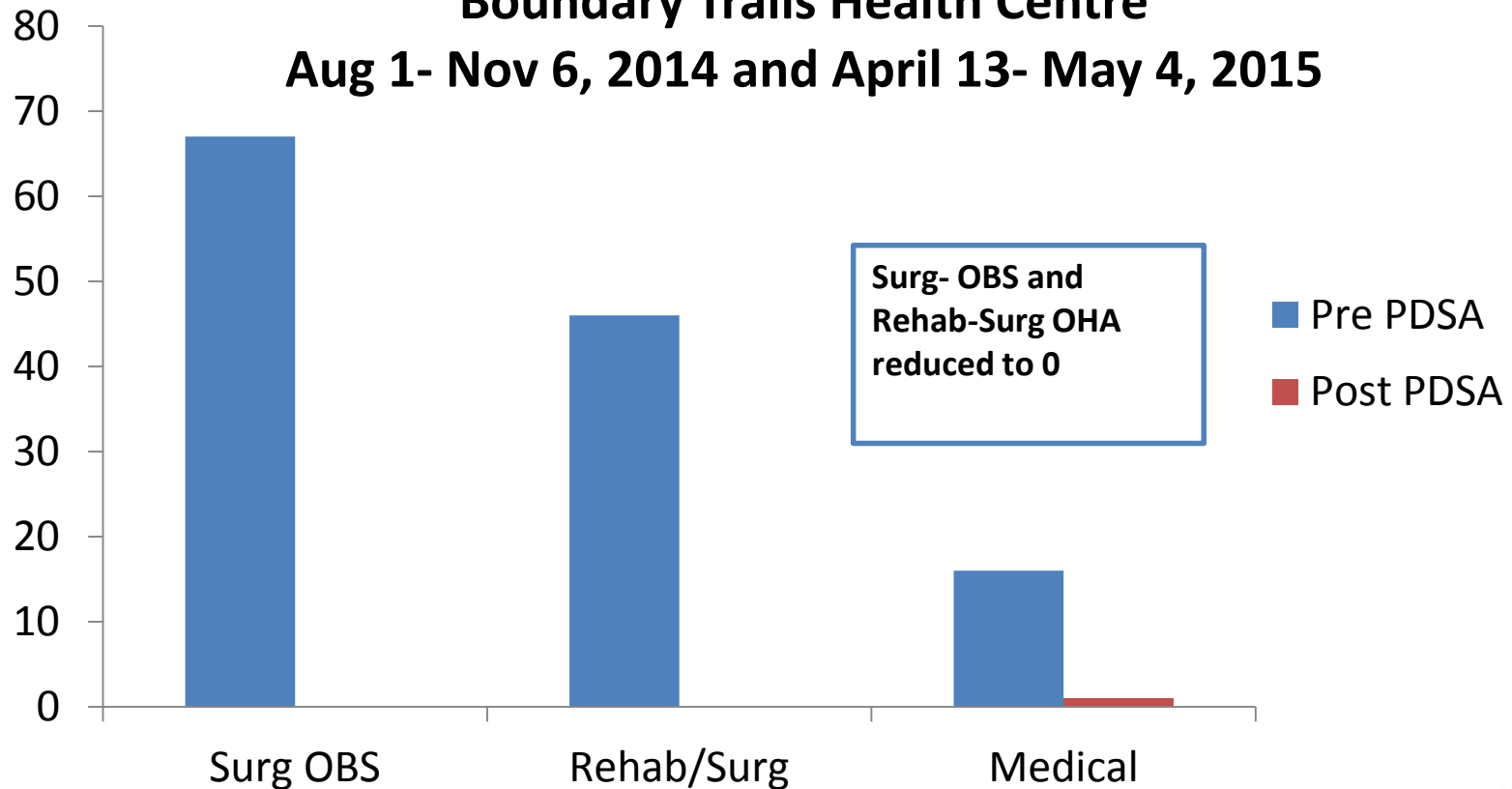


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# Improve

## Off Hours Activity - Weekdays Boundary Trails Health Centre

Aug 1- Nov 6, 2014 and April 13- May 4, 2015



# Improve

*\*The aim of this project is to reduce inventory inaccuracies and defect rate, to not exceed 50%.*

# Improve

- **Data Summary:**
  - **Row 12 Percent Defects decreased by 84.44% and Row 13 decreased 91.11%**
  - **Off Hour Activity requests decreased by 74.07%**
  - **Row 12 cycle count variation reduced by 93.3% and Row 13 cycle count variation was eliminated**



# Improve

- \*Currently the CSM's are very supportive*
- \*Frontline staff are a bit reluctant to change as they have been doing things the old way for a long time*
- \*concern raised by OR staff regarding weekend access to receiving area to deliver specimen coolers that are to be transported Monday morning with the regional courier.*
- \*Concern raised by IPAC regarding access to receiving area after hours to get Ebola supplies*
- \*Lab & Dialysis departments concerned about accessing their department supplies stored in receiving area*

# Control

*\*Working with CSM's to get top up lists accurate for weekend /weekday off hour activity*

*\*Educating frontline staff together with CSM's on their responsibility to ensure they have ordered enough stock to last them until the next L&SCM working day, thereby eliminating the need to access the warehouse*

*\*OR to contact maintenance staff to allow entrance to receiving area to drop off their specimen cooler for Monday courier*

*\*Maintenance will grant access to anyone needing Ebola supplies off hours, Lab supplies, and Dialysis supplies from our receiving area*

# Lessons Learned

*What were some of the key things we learned about quality improvement while doing this project?*

- \* Making people accountable for the designation of supplies, is everyone's duty*
- Clear Communication is the foundation of any project.*
- There are some exceptions to the "total lock out" rule as other departments need to gain access to our receiving area during off hours.*
- Management support and working together as teams is the only way to foster the identified concerns of this project*
- Any future inventory issues are caused by incidents we can track.*

# Next Steps

For the next quality assurance project, we would like to address the performance of the vendors. Contracts are in place indicating delivery times, but we have no current method of measuring their compliance or performance



