Yale NewHaven Health Bridgeport Hospital

Laboratory Medicine – March 2023

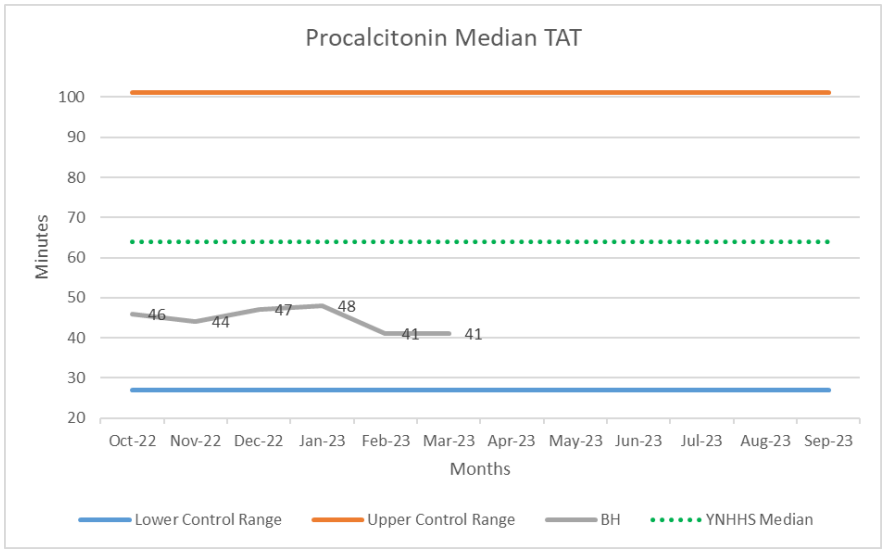
April 25, 2023

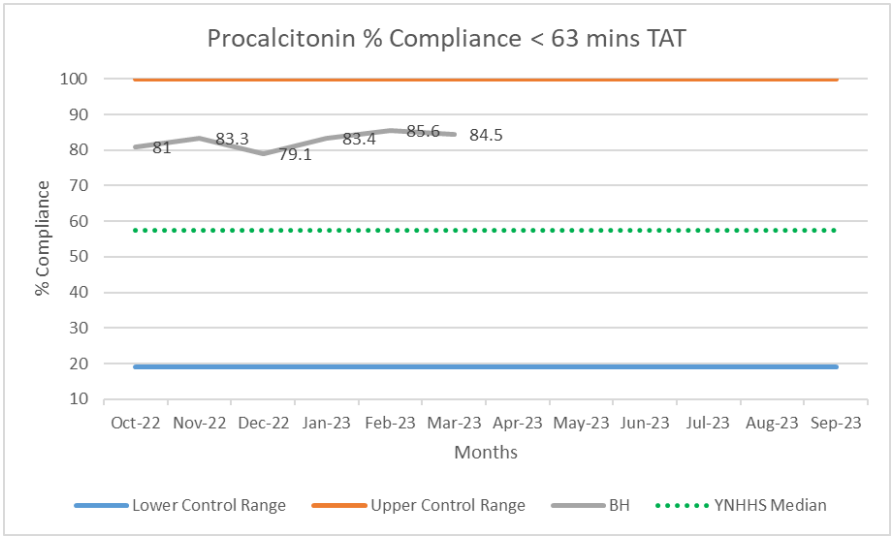
Bridgeport and Milford Campuses Turnaround Time Goals

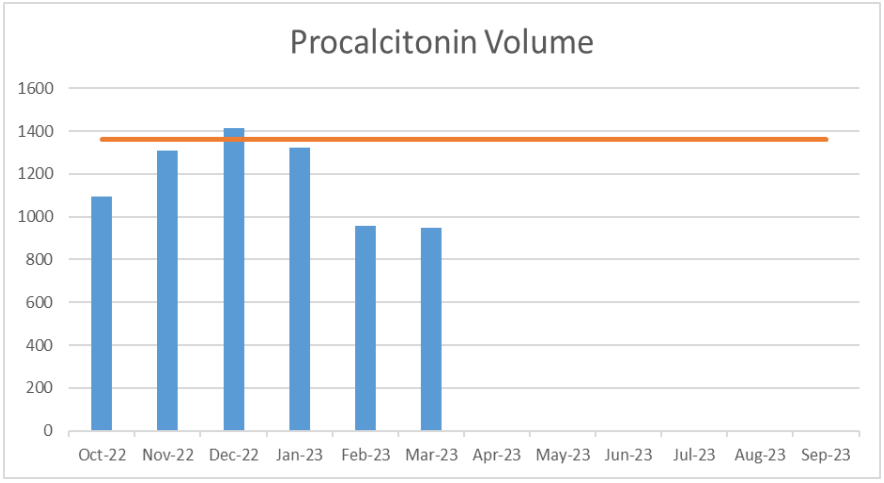
- Mean determined from median TAT across the Yale New Haven Health System delivery networks
  - Bridgeport and Milford Campuses – Bridgeport Hospital, Greenwich Hospital, Lawrence Memorial Hospital, Westerly Hospital, St. Raphael and York Street Campus – Yale New Haven Hospital and Shoreline Medical Center
- Standard Deviation calculated
- 2 SD Range established and represents the upper and lower limits
  - If data set within control range, no corrective actions are necessary

Yale NewHaven Health Bridgeport Hospital

Bridgeport Campus – Procalcitonin

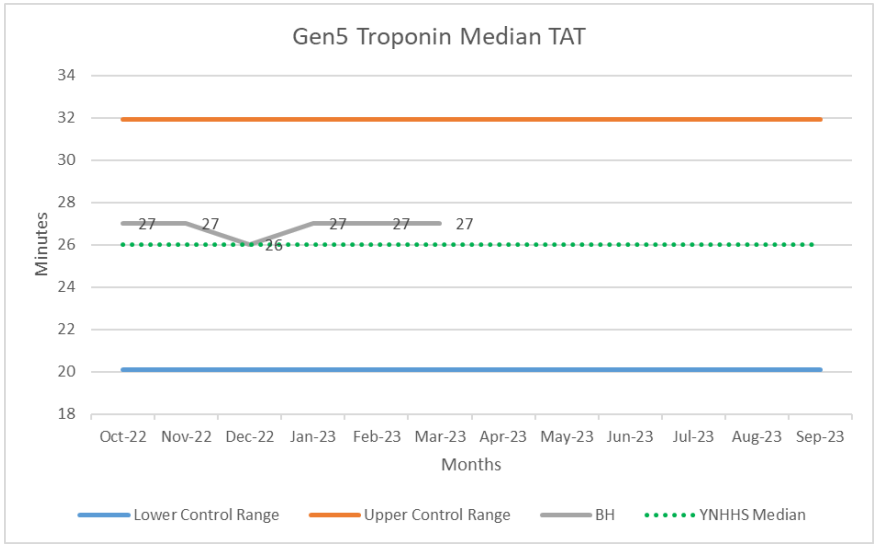


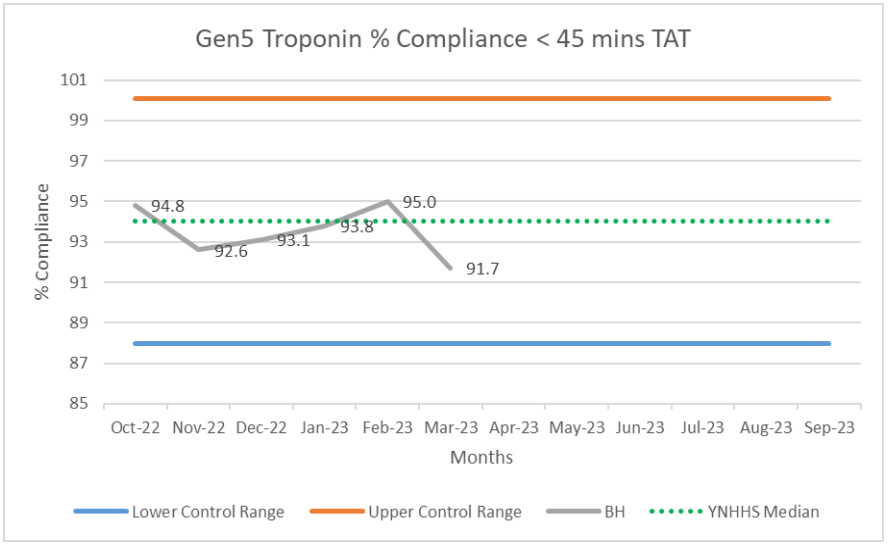


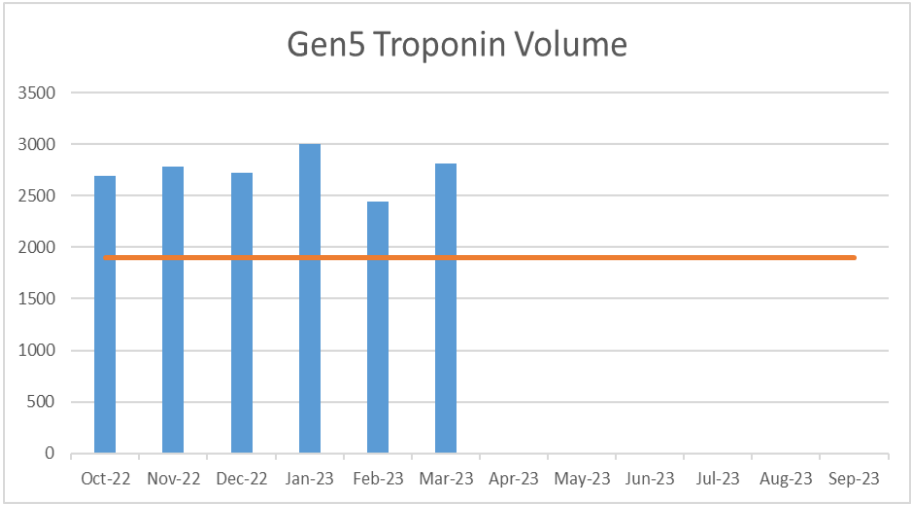


Yale NewHaven Health
Bridgeport Hospital

Bridgeport Campus – Gen 5 Troponin TAT

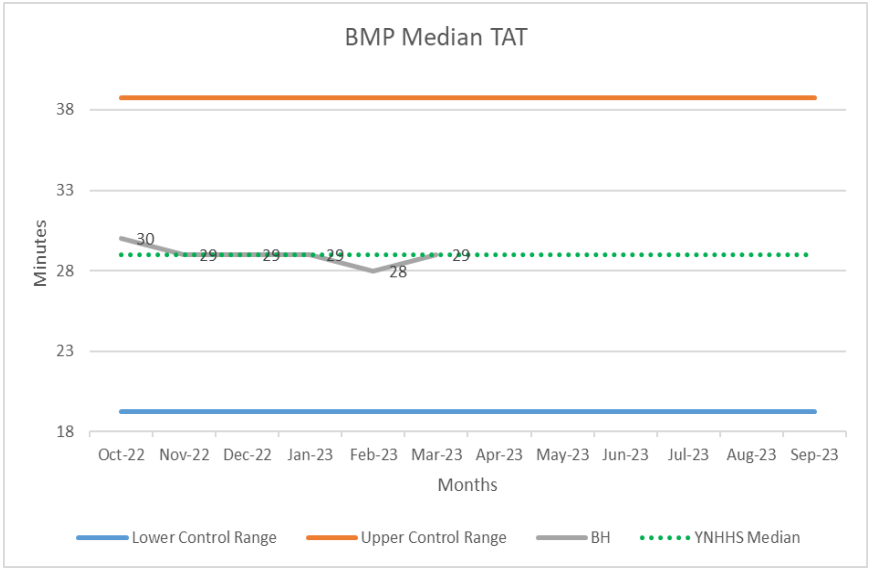


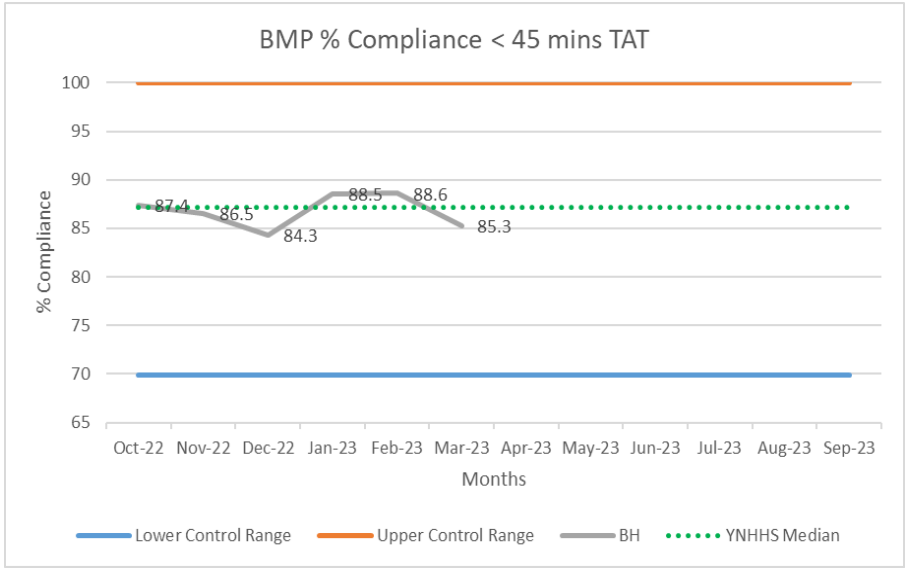


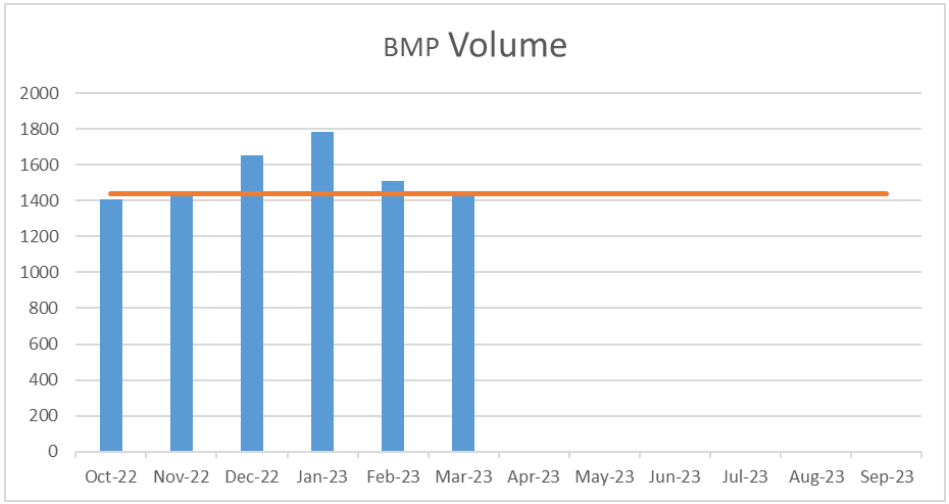


Yale NewHaven Health
Bridgeport Hospital

Bridgeport Campus – Basic Metabolic Panel (BMP) ED TAT

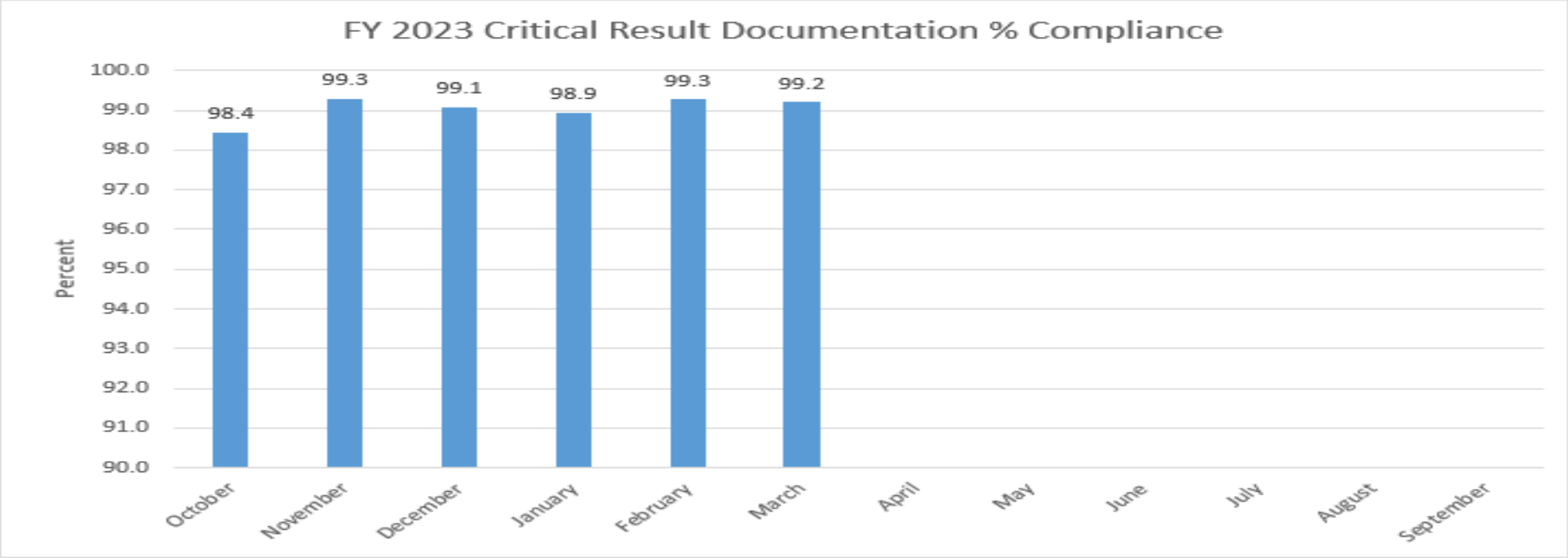






Yale NewHaven Health
Bridgeport Hospital

Chemistry & Immunology

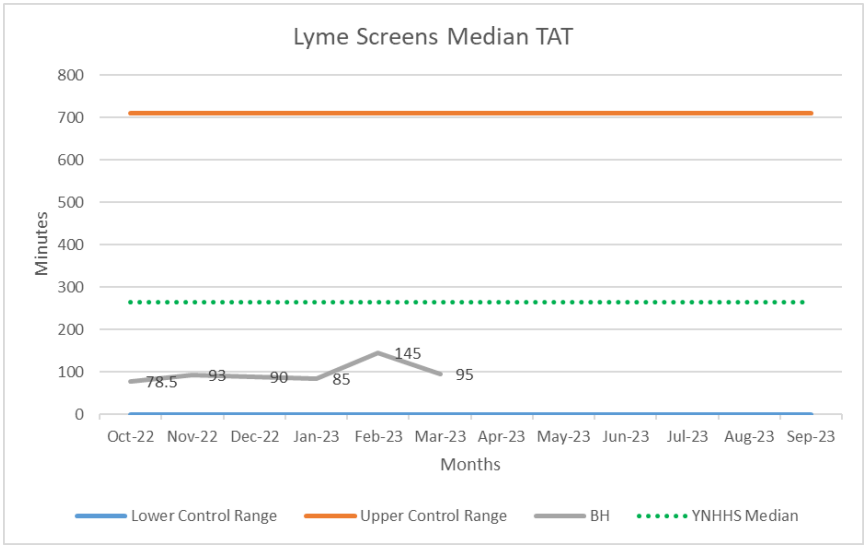


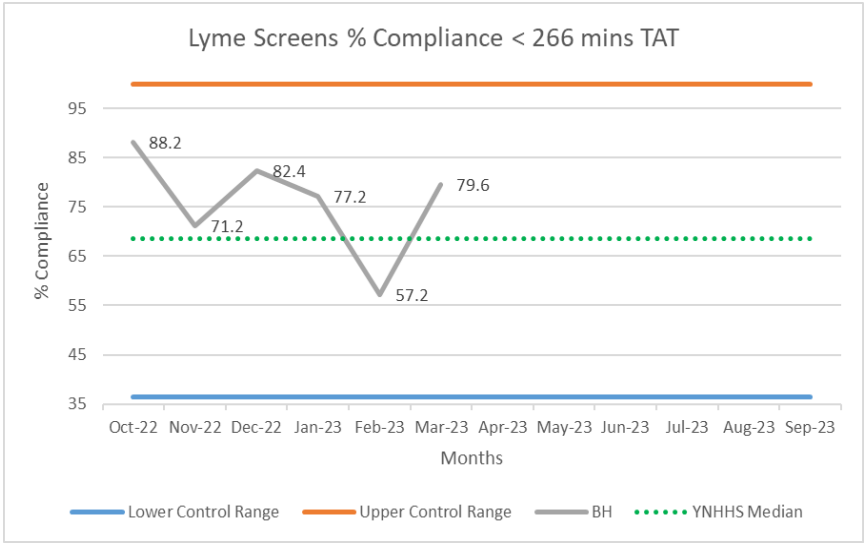
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
n	1415	1425	1418	1509	1241	1391						
#compliant	1393	1415	1405	1493	1232	1380						
#noncompliant	22	10	13	16	9	11						

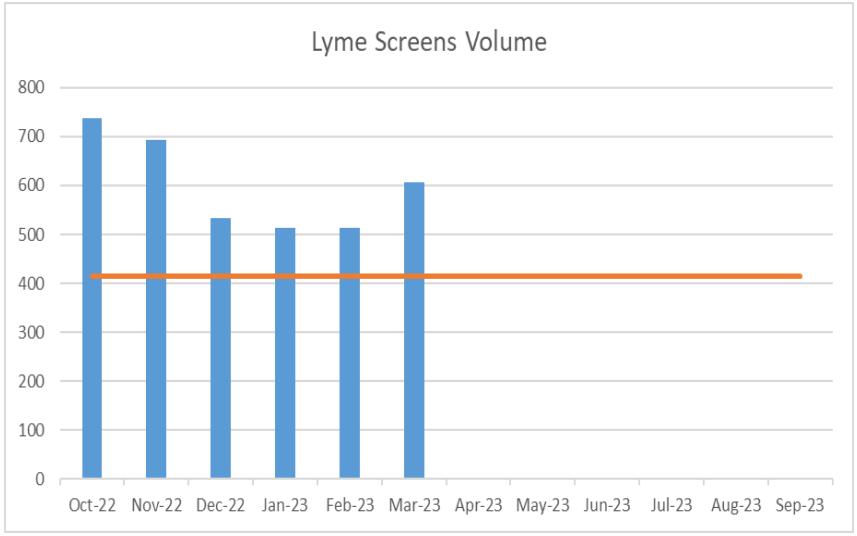
no name	7	1	1	6	4	5						
no full name	8	4	1		1	2						
no title	4	4	1	7	2	1						
incorrect doc	1	1	10	2	2	1						
incorrect person	2			1								
not called						2						

no name: tech must backspace the field and enter correct name
Each outlier was addressed with individual tech.

Bridgeport Campus – Lyme Screens TAT

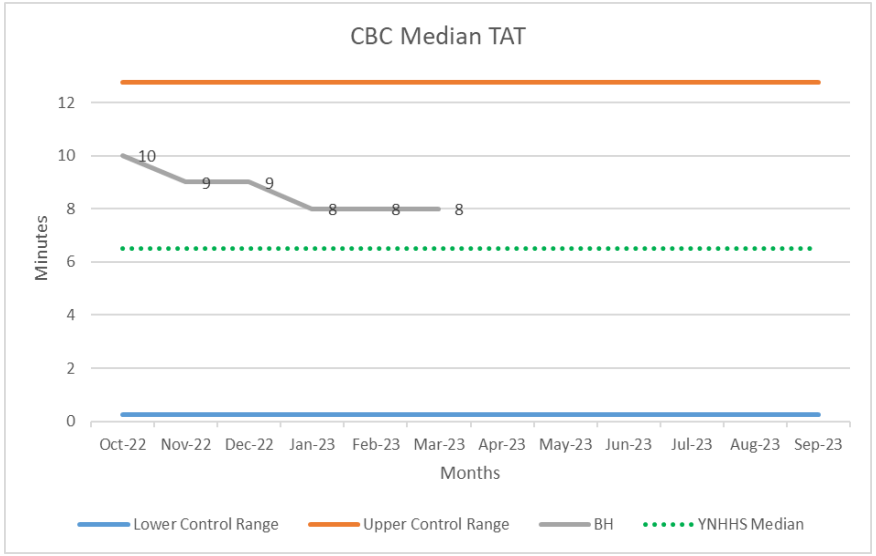


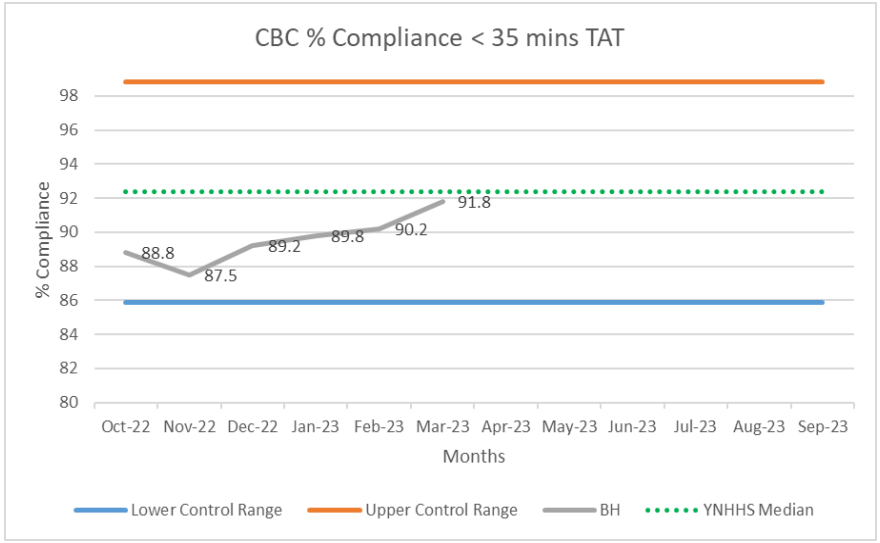


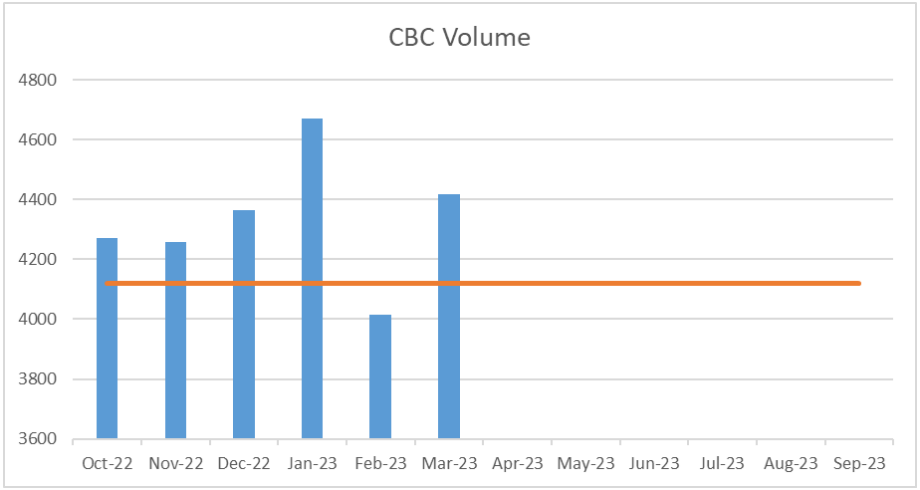


Yale NewHaven Health
Bridgeport Hospital

Bridgeport Campus – Complete Blood Count (CBC) ED TAT

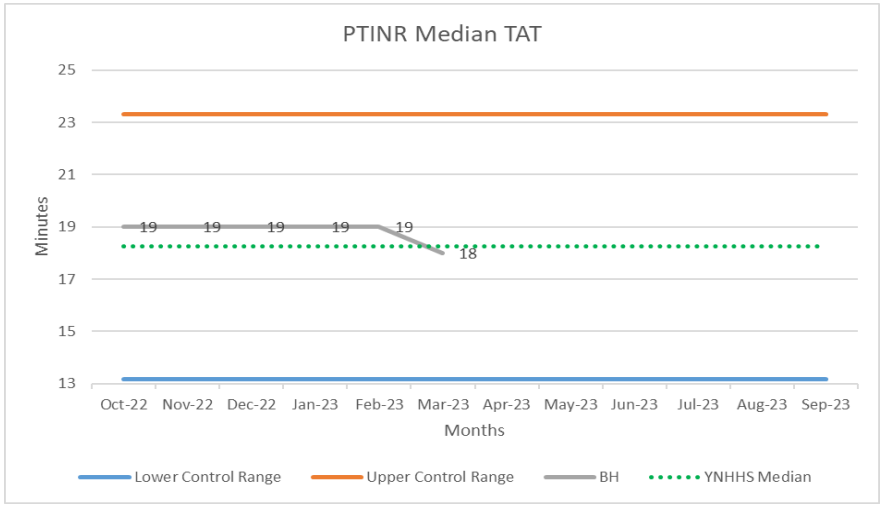


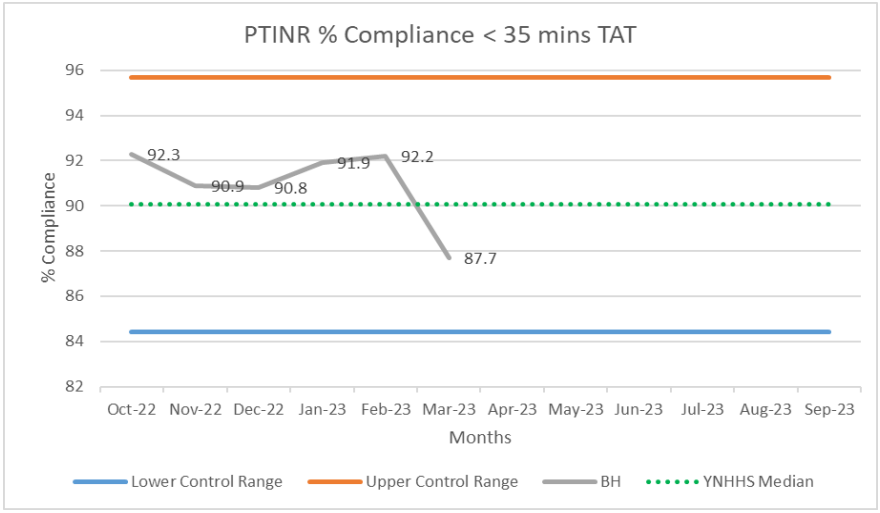


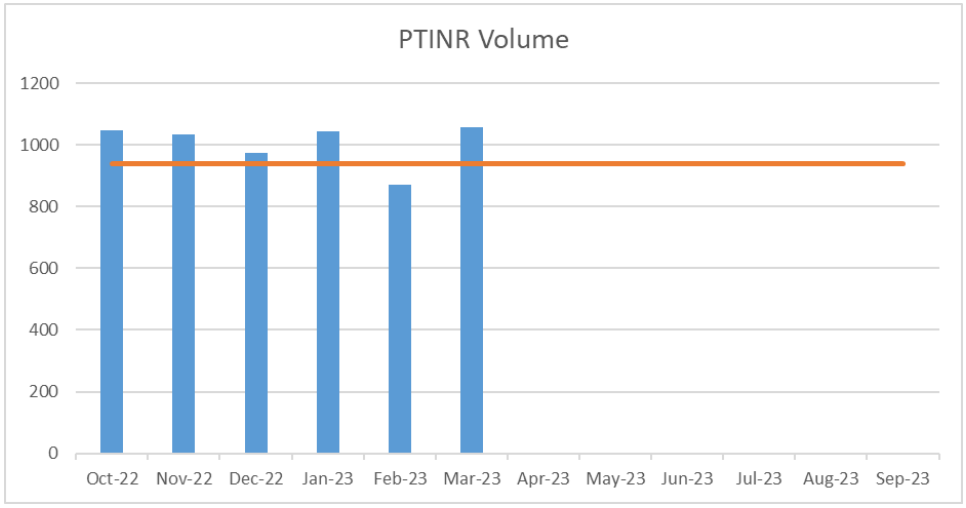


Yale NewHaven Health
Bridgeport Hospital

Bridgeport Campus – PTINR ED TAT

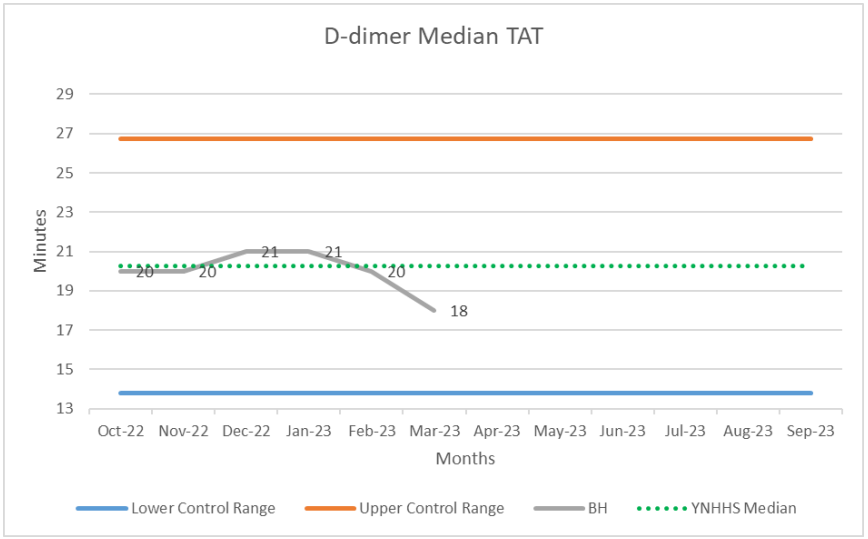


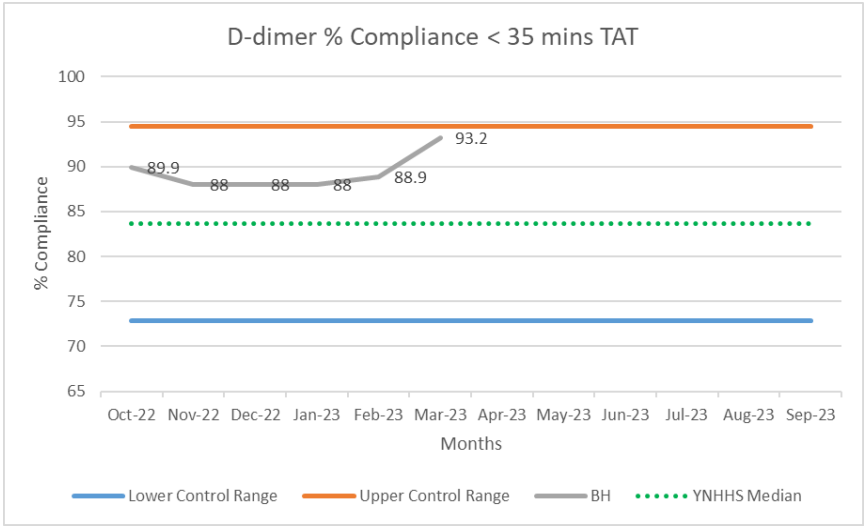


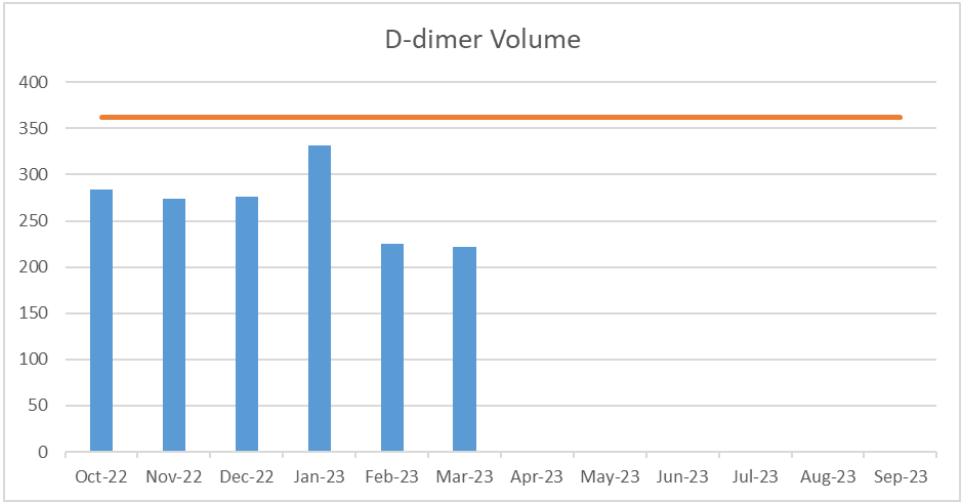


Yale NewHaven Health Bridgeport Hospital

Bridgeport Campus – D-dimer ED TAT

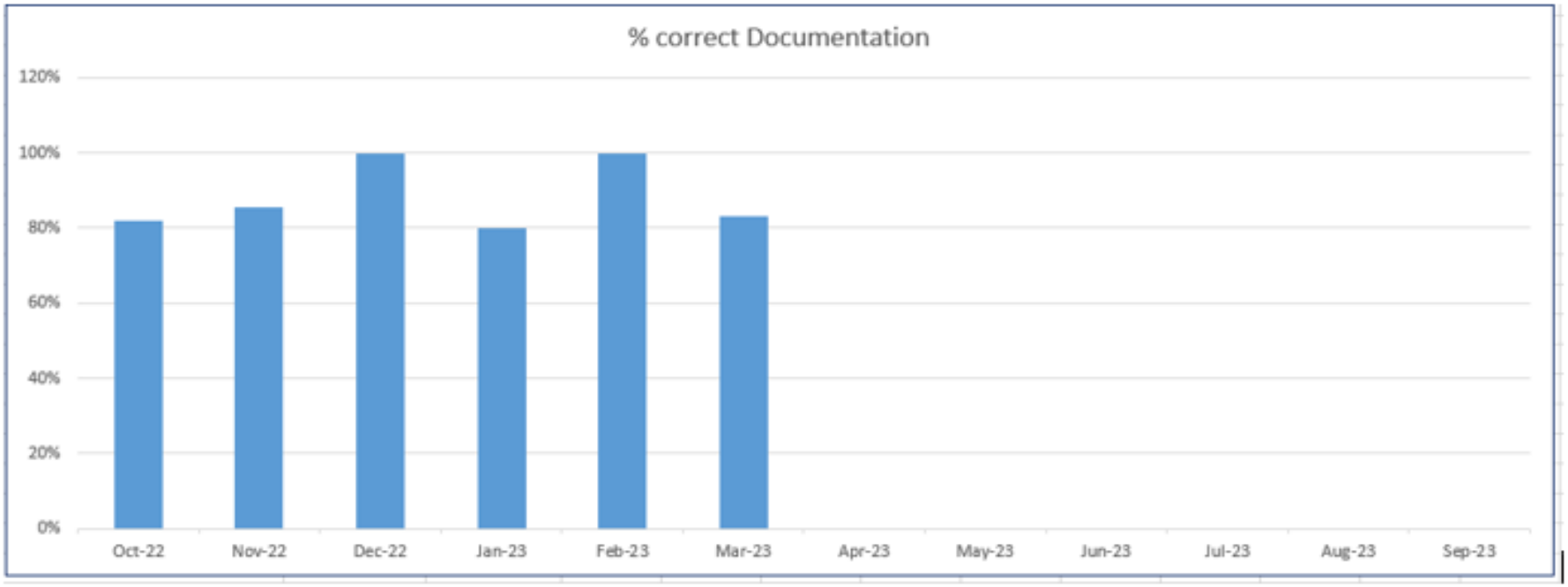






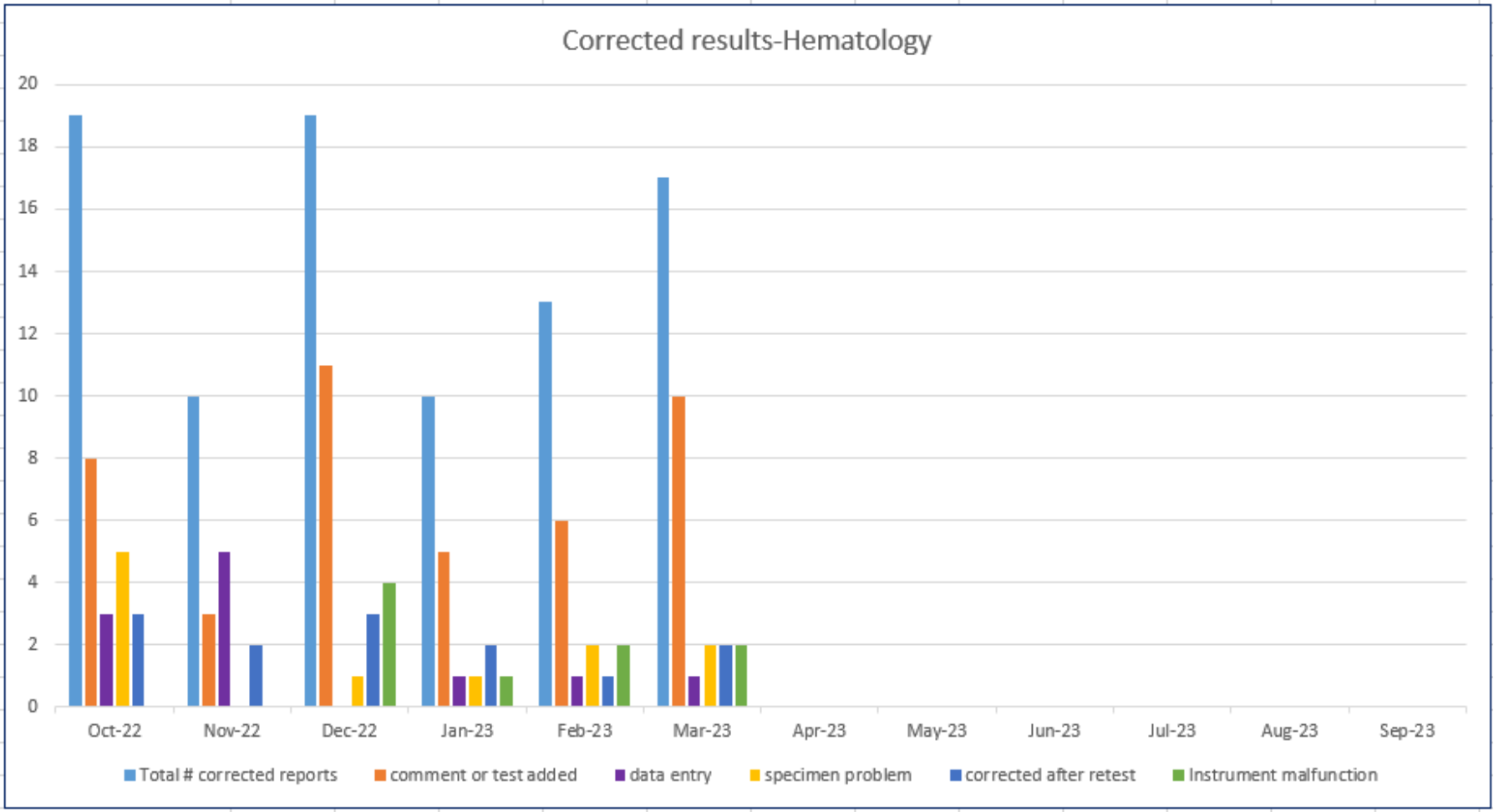
Yale NewHaven Health
Bridgeport Hospital

Aspect of Care



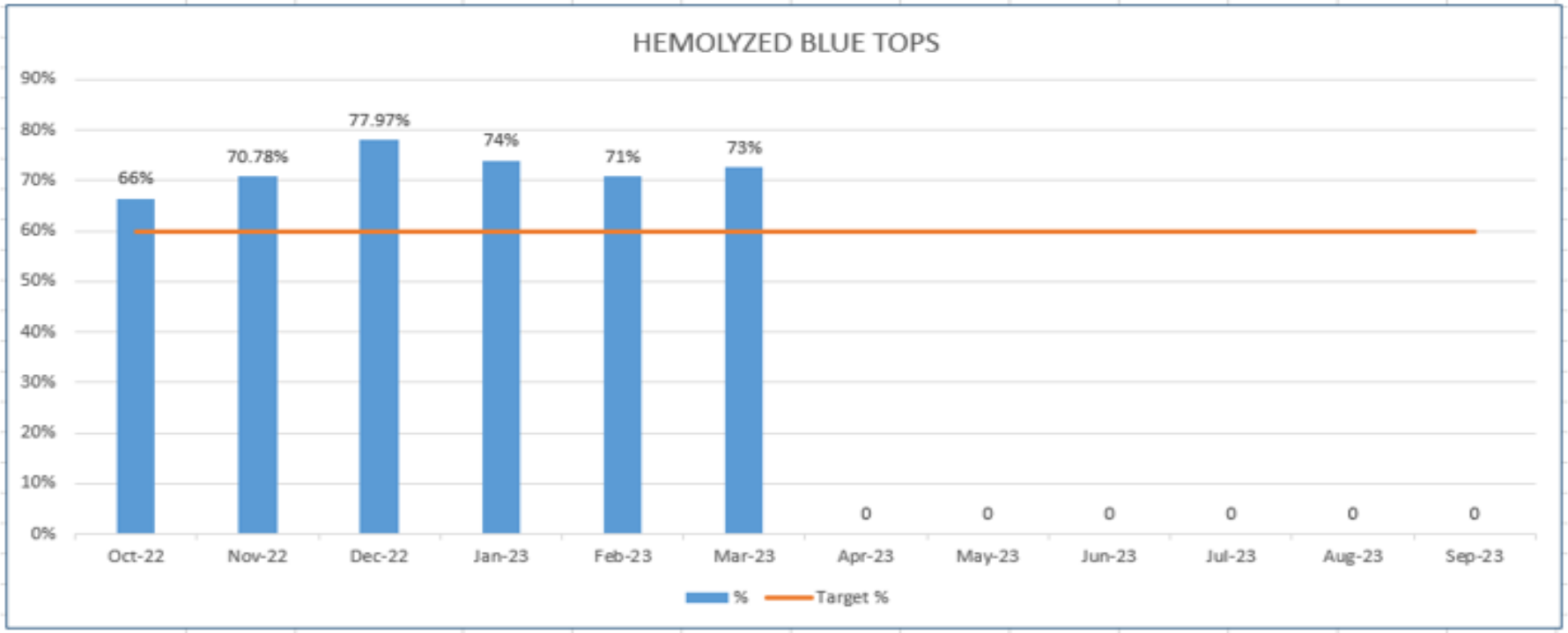
	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
corrected appended results	11	7	8	5	6	6						
incorrect documentation	2	1	0	1	0	1						
correct documetation	9	6	8	4	6	5						
% correct	82%	86%	100%	80%	100%	83%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Target	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Action/outcome:	Both were called but improperly documented. New employee- retrained on policy	Talked to the technologist. Was not called because tech thought that by adding comment he did not need to call.		Spoke to tech. First time occurrence.		after hours. Forgot to leave info for day shift to call.						

Aspect of Care



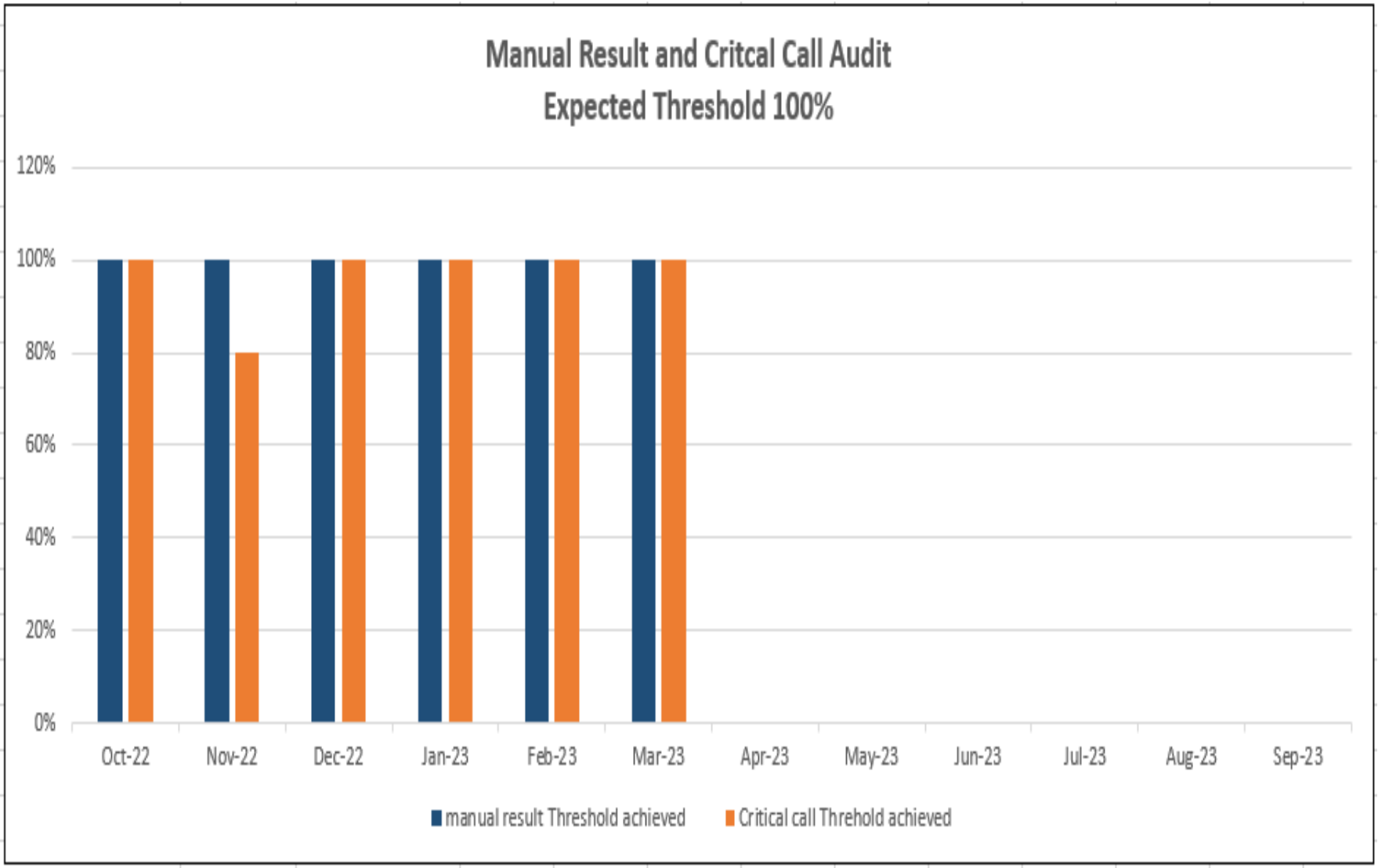
Yale NewHaven Health Bridgeport Hospital

Aspect of Care

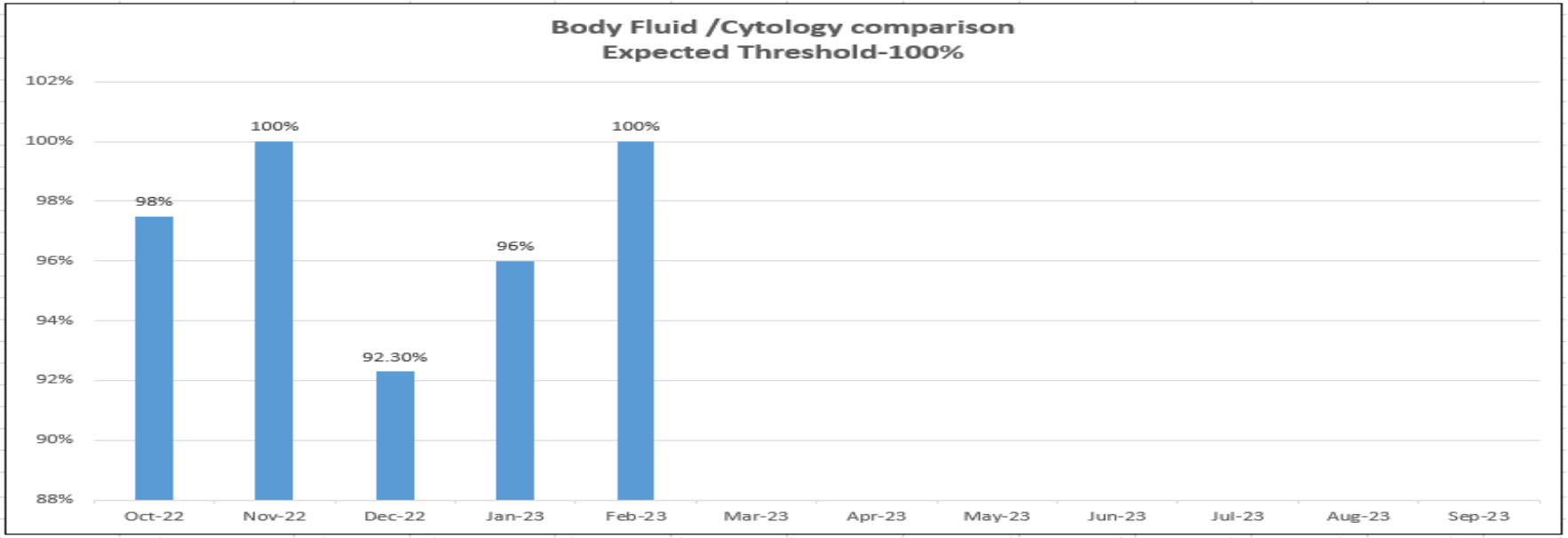


Month	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
%	66%	70.78%	77.97%	74%	71%	73%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Target %	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
Total Hemolyzed	309	308	286	333	359	401						
Blue tops	205	218	223	246	254	291						
Action/Outcome		Study on the effect of hemolysis on results in-progress				in process of standarizing criteria across YNHHS						

Aspect of Care

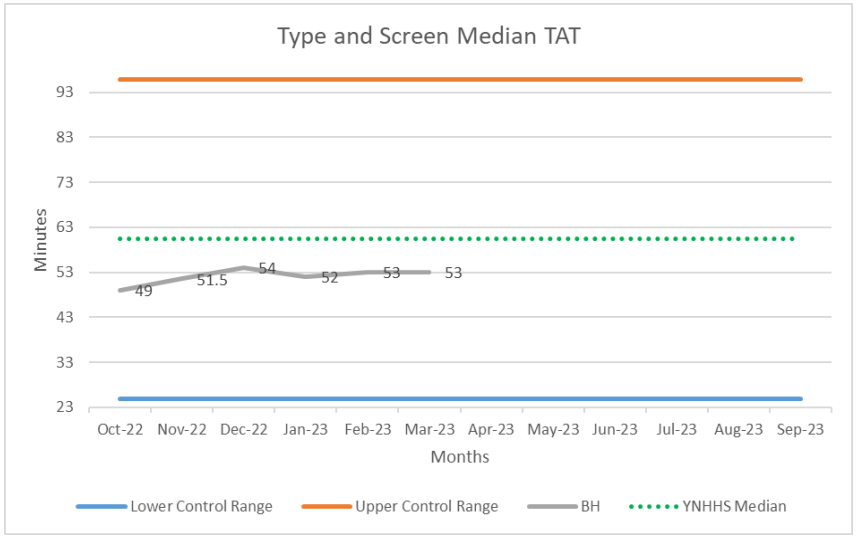


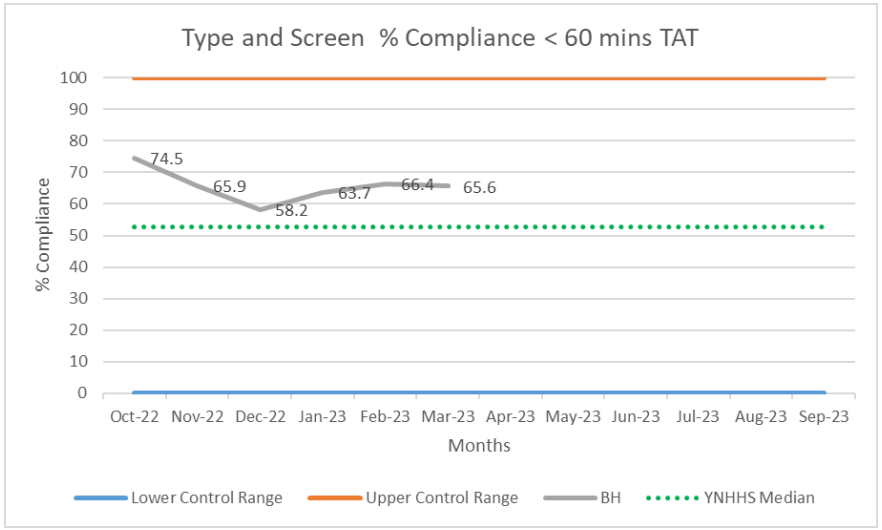
Aspect of Care

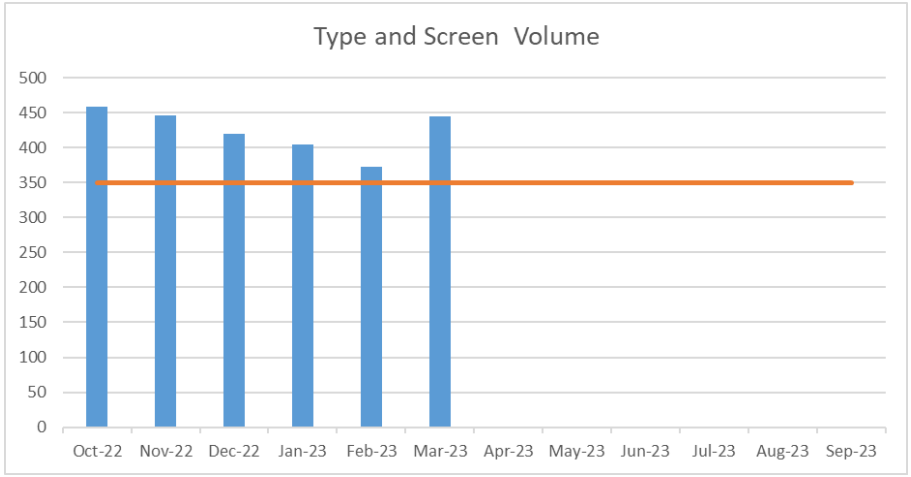


	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
Total # of Fluids	142	155	128	157	142	175						
cytology ordered	67	65	65	71	62	85						
# of fluid diffs that did not correlate	2	0	6	3	0	0						
Threshold achieved	98%	100%	92.30%	96%	100%	100%						
Expected	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Action/ Outcome	Dr Chen not available to look at slides.3 experienced Techs looked at smears and did not see anything suspicious		6 slides -no correlation. Reviewed by Dr. Chen. No malignant cells seen on 5 of the slides. 1 slide positive. Reviewed with tech.	3 slides being reviewed by Dr. Minerowicz 1 of 3 had malignant cells. Reveiwed slide with tech.								

Bridgeport Campus – Type and Screen ED TAT







Yale NewHaven Health Bridgeport Hospital

Bridgeport and Milford Hospital Transfusion Reactions FY23

Bridgeport and Milford Hospital Transfusion Reactions FY23																		
Months	Total Per Site		Allergic		Febrile		Anaphy		TACO		TRALI		Hemolytic		Septic		Other	
	BH	MC	BH	MC	BH	MC	BH	MC	BH	MC	BH	MC	BH	MC	BH	MC	BH	MC
Oct	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Mar	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr																		
May																		
Jun																		
Jul																		
Aug																		
Sep																		
Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bridgeport Hospital Blood Bank
RBC

	Oct	Nov	Dec	Jan	Feb	Mar	Total Amount
Transfusion	449	440	410	394	380	417	$541,885.50
Wasted	4	5	7	8	5	0	$6,637.50
Total	453	445	417	402	385	417	$548,523.00

Yale NewHaven Health Bridgeport Hospital

Bridgeport Hospital
Blood Bank
Cryo

	Oct	Nov	Dec	Jan	Feb	Mar	Total Amount
Transfusion	8	11	16	21	20	8	$27,846.00
Wasted	2	2	0	1	0	1	$1,989.00
Total	8	13	16	22	20	9	$29,172.00

Yale NewHaven Health Bridgeport Hospital

Bridgeport Campus
FFP

	Oct	Nov	Dec	Jan	Feb	Mar	Total Amount
Transfusion	52	50	35	36	36	27	$62,658.00
Wasted*	22	11	27	24	18	31	$35,311.50
Total	74	61	62	60	54	58	$97,969.50

*Due to ACS Trauma Requirements

Yale NewHaven Health Bridgeport Hospital

Platelet Utilization

	Oct	Nov	Dec	Jan	Feb	Mar	Total Amount
Transfusion	48	39	61	65	68	24	$205,365.65
Wasted	27	36	19	32	12	39	$111,099.45
Total	75	75	80	97	80	63	$316,465.10
% wasted	36%	48%	24%	33%	15%	62%	
Wasted/Day	0.87	1.2	0.63	1.07	0.43	1.39	$752.98
Number of Extended Plts	38	44	53	48	26	41	$168,332.50
Number Transfused	16	20	27	18	19	5	$70,699.65
Number Discarded	22	24	26	30	7	36	$97,632.85

Yale NewHaven Health

CRSQ Report Out

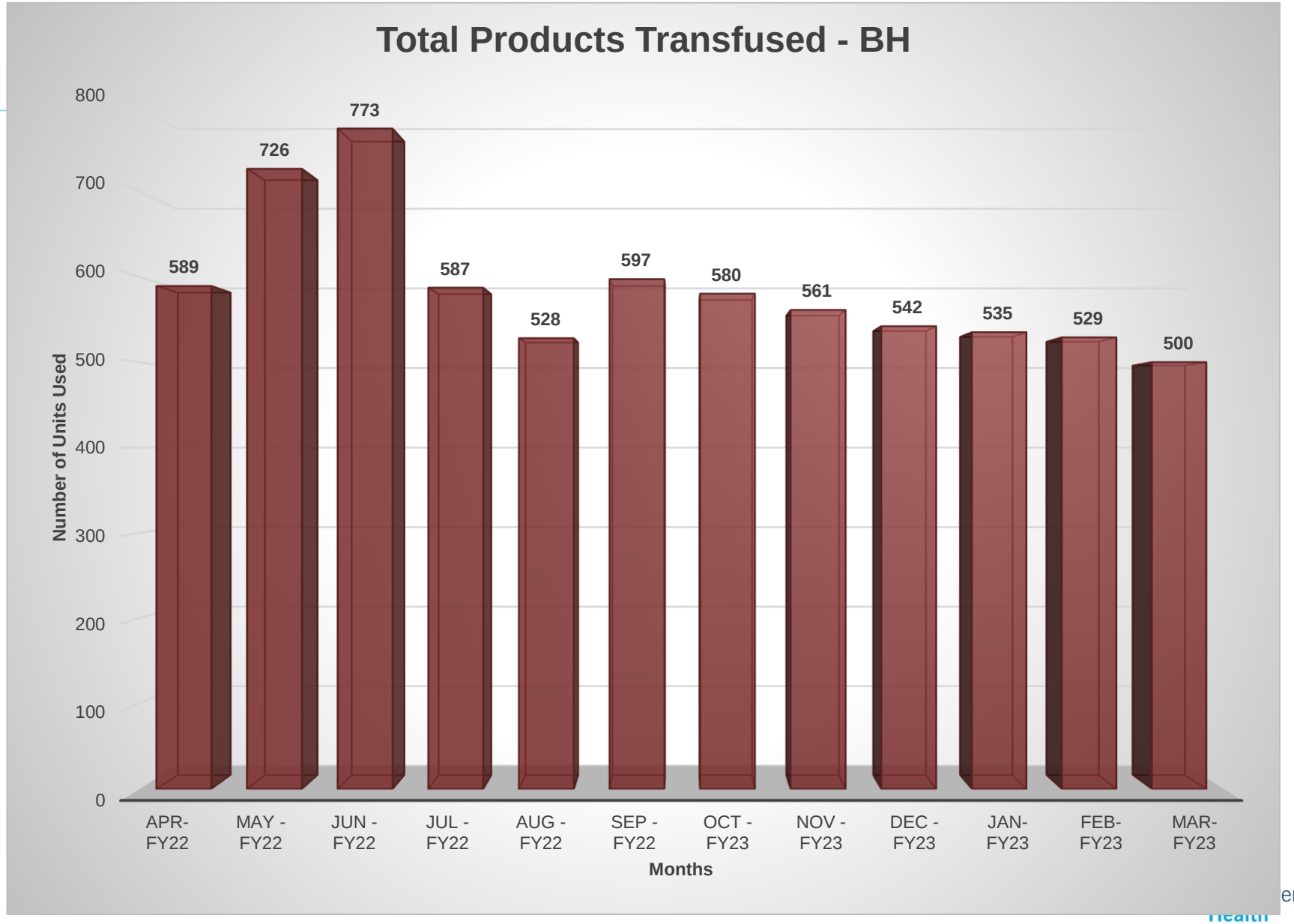
Committee of Regulatory, Safety, & Quality

3/22/2023

Bridgeport Hospital

Laboratory Blood Bank

Edward Snyder MD, Christine Minerowicz MD, Lisa Krause, Melissa Morales, Teodorico Lee, Laura Buhlmann



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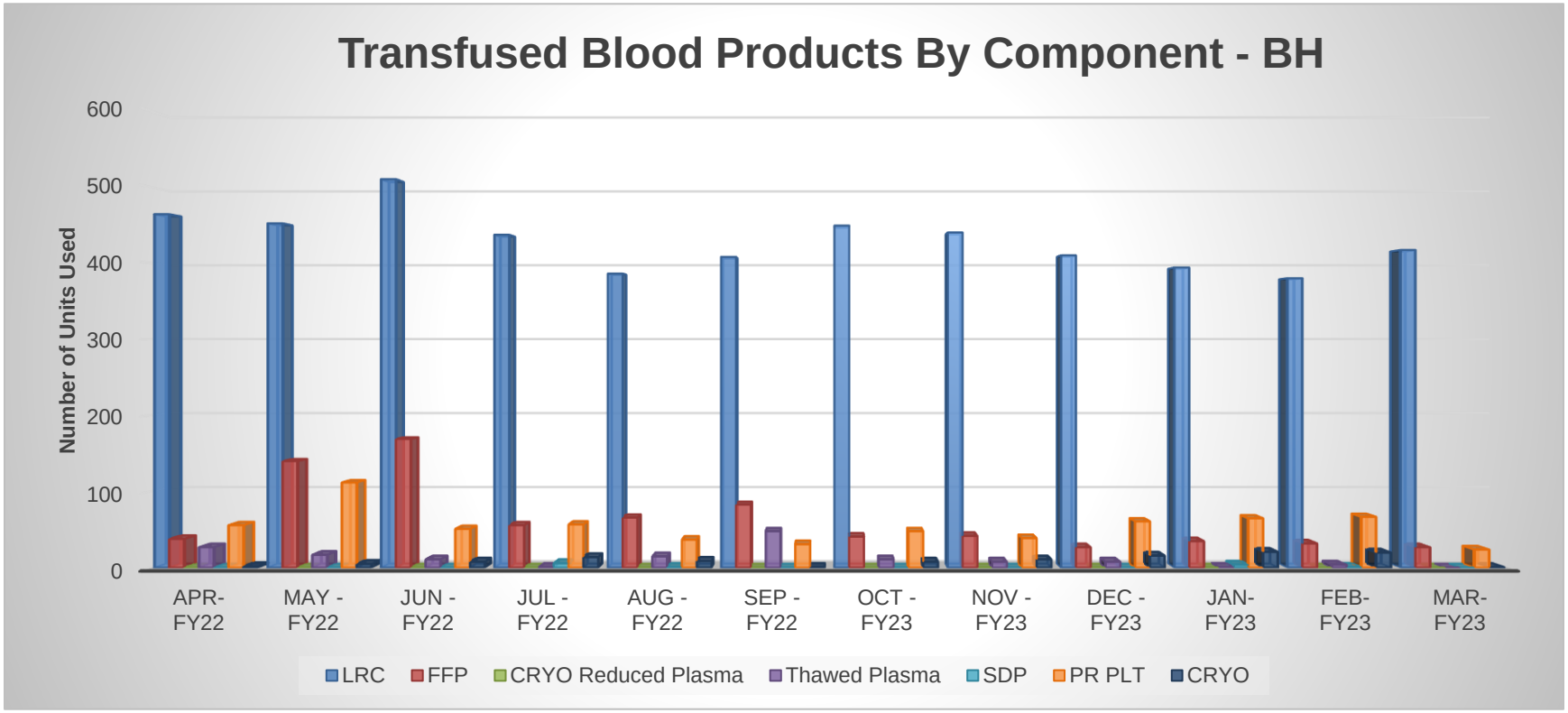
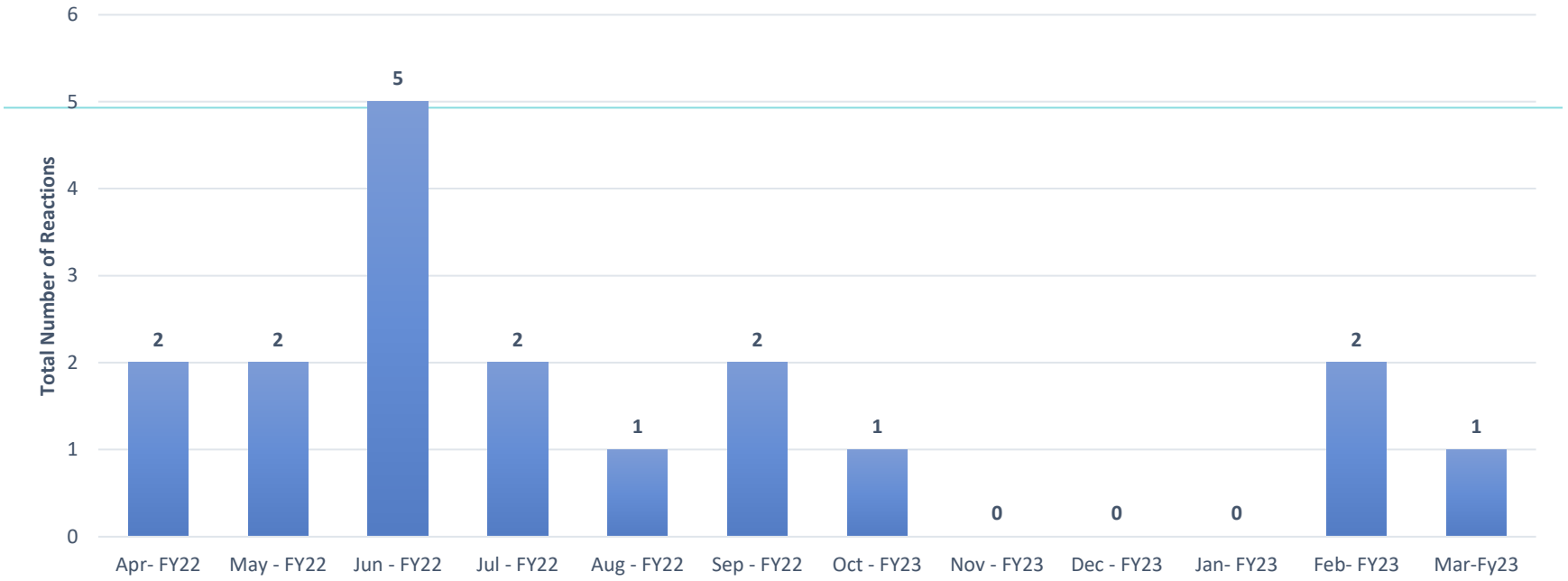


	LRC	FFP	CRYO Reduced Plasma	Thawed Plasma	SDP	PR PLT	CRYO
Apr- FY22	464	38	0	27	0	56	2
May - FY22	452	140	0	17	0	112	5
Jun - FY22	510	169	0	11	0	51	8
Jul - FY22	437	56	0	1	6	57	14
Aug - FY22	386	66	0	15	1	37	9
Sep - FY22	408	83	0	48	0	31	1
Oct - FY23	449	41	0	11	0	48	8
Nov - FY23	440	42	0	8	0	39	11
Dec - FY23	410	27	0	8	0	61	16
Jan- FY23	394	35	0	1	4	65	21
feb- FY23	380	32	0	4	1	67	20
Mar-FY23	417	27	0	0	0	24	1

PI.01.01.01 EP6

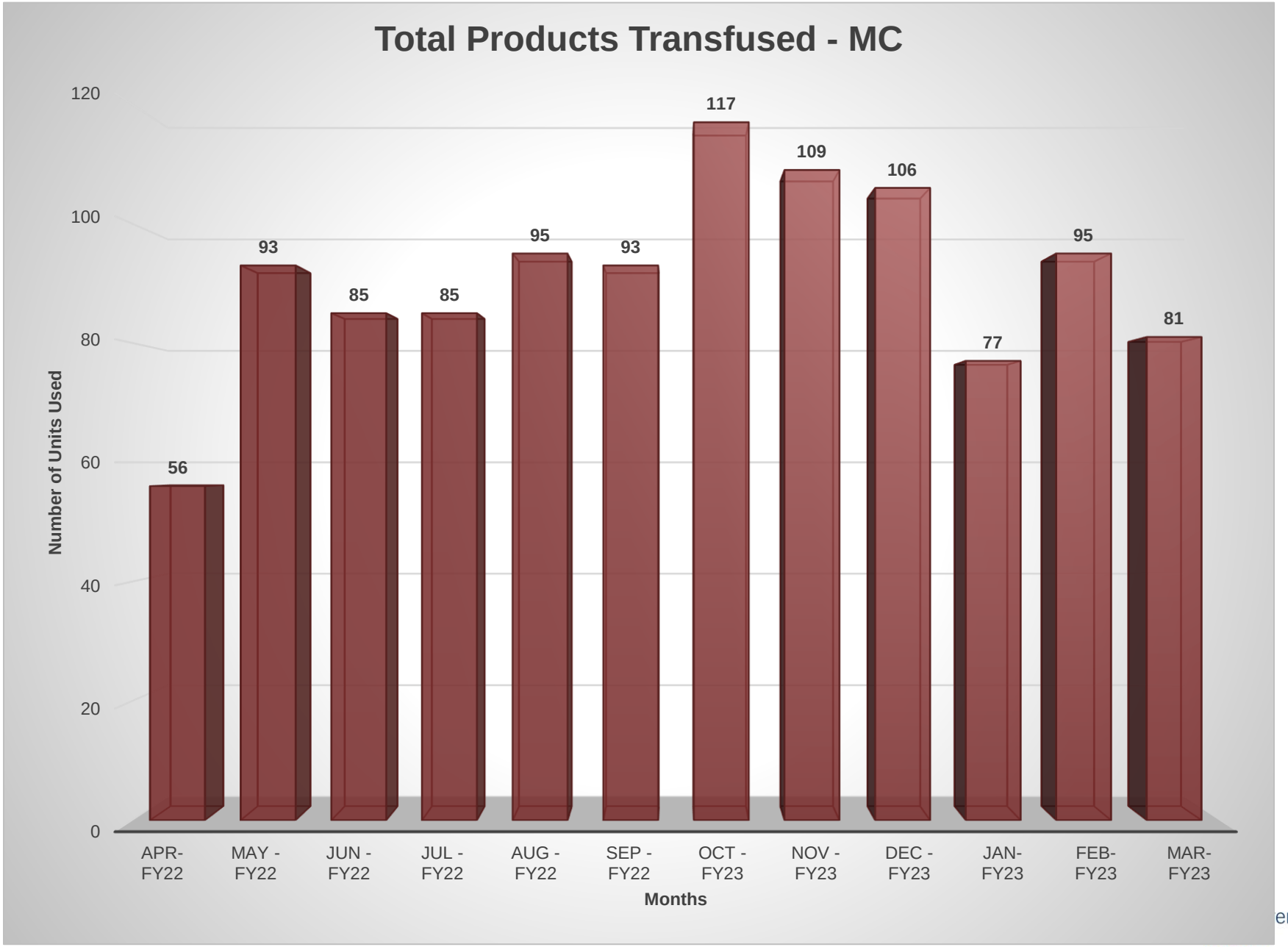
Yale NewHaven Health Bridgeport Hospital



	Allergic	Febrile	Anaphylactic	Taco	Trali	Hemolytic	Other	Total
Apr- FY22	0.00	(2) 0.33	0.00	0.00	0.00	0.00	0.00	2
May - FY22	(1) 0.13	0.00	0.00	0.00	0.00	0.00	(1) 0.13	2
Jun - FY22	(2) 0.22	(3) 0.33	0.00	0.00	0.00	0.00	0.00	5
Jul - FY22	(1) 0.2	(1) 0.2	0.00	0.00	0.00	0.00	0.00	2
Aug - FY22	(1) .19	0.00	0.00	0.00	0.00	0.00	0.00	1
Sep - FY22	0.00	(1) .17	0.00	0.00	0.00	0.00	(1) .17	2
Oct - FY23	(1) .17	0.00	0.00	0.00	0.00	0.00	0.00	1
Nov - FY23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Dec - FY23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Jan- FY23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Feb- FY23	0.00	0.00	0.00	0.00	0.00	(1) .13	(1) .13	2
Mar-Fy23	0.00	(1) 0.17	0.00	0.00	0.00	0.00	0.00	1

PI.01.01.01 EP7

Yale NewHaven Health Bridgeport Hospital



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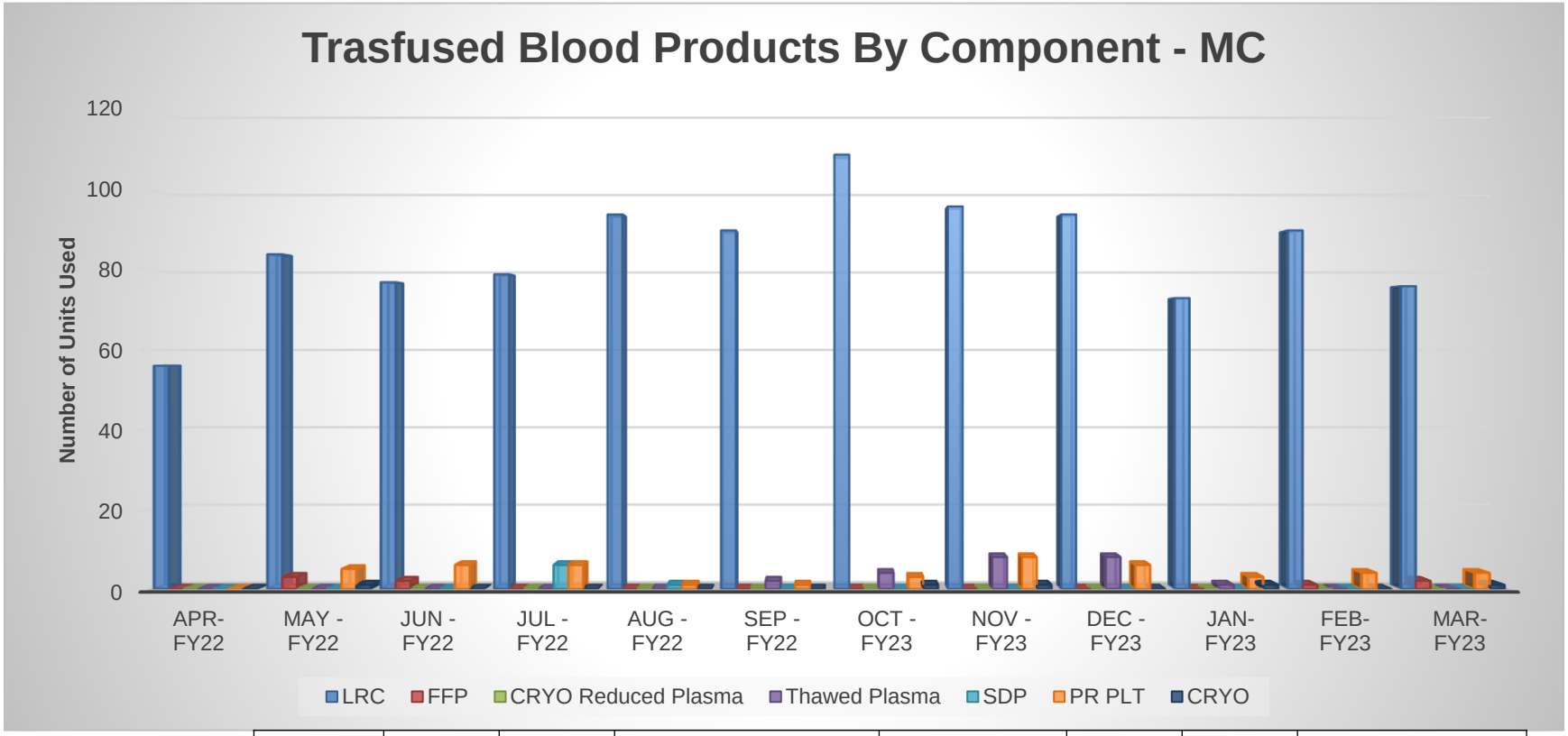
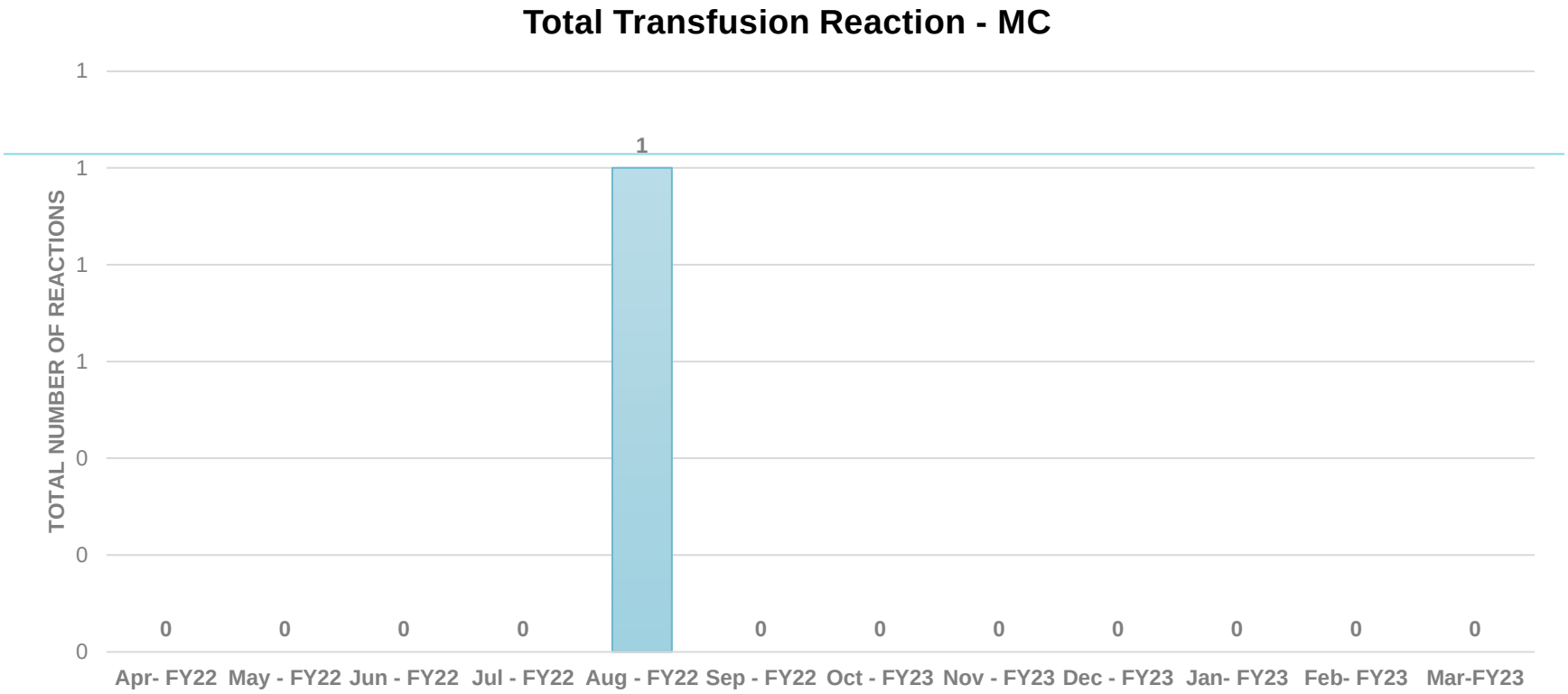
Bridgeport Hospital



	LRC	FFP	CRYO Reduced Plasma	Thawed Plasma	SDP	PR PLT	CRYO
Apr- FY22	56	0	0	0	0	0	0
May - FY22	84	3	0	0	0	5	1
Jun - FY22	77	2	0	0	0	6	0
Jul - FY22	79	0	0	0	6	6	0
Aug - FY22	94	0	0	0	1	1	0
Sep - FY22	90	0	0	2	0	1	0
Oct - FY23	109	0	0	4	0	3	1
Nov - FY23	96	0	0	8	0	8	1
Dec - FY23	94	0	0	8	0	6	0
Jan- FY23	73	0	0	1	0	3	1
Feb- FY23	90	1	0	0	0	4	0
Mar-FY23	76	2	0	0	0	4	1

PI.01.01.01 EP6



	Allergic	Febrile	Anaphylactic	Taco	Trali	Hemolytic	Other
Apr- FY22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May - FY22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jun - FY22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jul - FY22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug - FY22	0.00	(1) 1.05	0.00	0.00	0.00	0.00	0.00
Sep - FY22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct - FY23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nov - FY23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec - FY23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jan- FY23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb- FY23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar-FY23	0.00	0.00	0.00	0.00	0.00	0.00	0.00

PI.01.01.01 EP7

Yale NewHaven Health Bridgeport Hospital

Bridgeport Campus – 2023 Point of Care Performance Report Summary

MONTH	Threshold	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Incorrectly documented Urine POC Pregnancy Internal QC	0 errors	13 Volume = 1260	9 Volume = 1117	15 Volume = 1136	19 Volume = 1284	24 Volume = 1189	13 Volume = 1428							2 were lot number errors, 1 had a missing patient result, and 10 had invalid internal QC. There was only 1 staff that had done this previously so a detailed email was sent to all reminding them to review results before verifying. The fields were reviewed with the one repeat staff member.
# of i-STAT codes / # of cartridges run		28/333	17/323	18/221	18/325	12/418	10/315							MeetsThreshold - There were 3 instrument errors - 2 istats conditioned There were no operator issues identified
i-STAT Quality Check Codes	<5.0%	8.4%	5.3%	8.1%	5.5%	2.9%	3.2%							

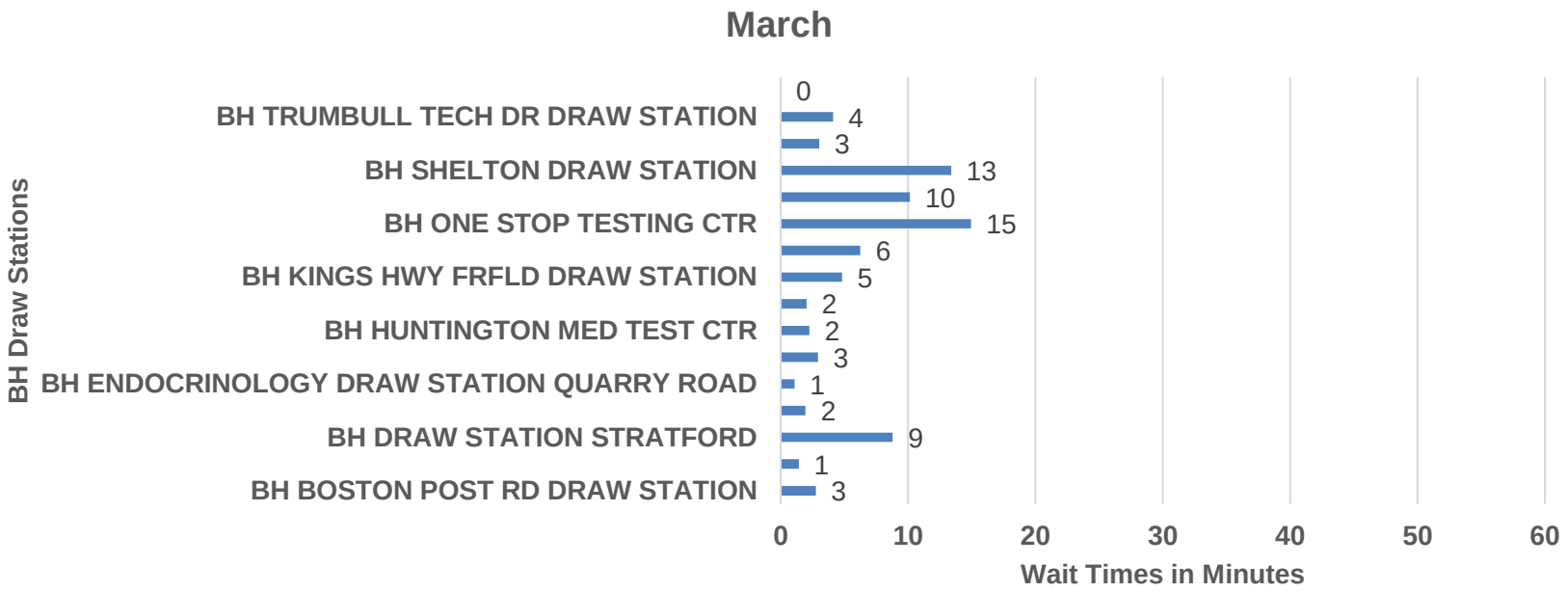
Performance Improvement Plan

Lab Outreach Pre-Analytical Quality Indicator Monthly Review

March 2023

Average Wait Times

Section	**Lab Outreach/Phlebotomy**
Phase	**Pre-Analytical**
Title	**Average Wait Times**
Objective	**Calculate the average times from patient check-in/registration to the point of specimen collection for each DN. This metric ensures patient satisfaction and monitors phlebotomists' productivity in each draw station location.**
Method	**Report from Helix – YNHHS Lab Blood Draw Wait Times report**
Definitions	**The YNHHS Lab Blood Draw Wait Times report will be pulled monthly across all draw stations.**
Expected Actions	**To assess each draw station patient, wait-times vs the total number. A summary report will be prepared for the Director. Feedback will be provided to the draw stations.**
Benchmarks	**Overall rate for patient wait time goal for 15 minutes.**



Summary:

January: Overall goal reached for the month. January metrics are BH draw station average 5 minutes overall. One Stop location wait-time was the only location outside of the 15-minute wait time goal.

February: Overall goal met for the month. February metrics are BH draw stations average 4 minutes overall. One Stop Testing Center was able to meet the patient wait-time of 15 minutes this month.

March: Overall goal met for the month. March metrics are BH stations average 5 minutes overall. Despite One Stop Testing high volume it was able to meet the patient wait-time of 15 minutes this month.

Butterfly Needle Usage Rate

Section	**Lab Outreach/Phlebotomy**
Phase	**Pre-Analytical**
Title	**Butterfly Needle Usage Rate**
Objective	**Monitors the butterfly needle usage in the outpatient draw stations. Studies have shown that decreased butterfly needle usage results in less sample hemolysis, decreased costs, and less needlestick exposures.**
Method	**McKesson Supply Report or Infor Supply Report and Helix Reports – Collection Metrics monthly.**
Definitions	**We will be measuring the rate of butterfly needle usage vs total encounters.**
Expected Actions	**To assess each draw station butterfly usage rate. A summary report will be prepared for the Director. Feedback will be provided to the draw stations regarding butterfly usage rates.**
Benchmarks	**Overall rate for 20% butterfly needle usage rate.**

Summary

<u>January:</u> Overall goal reached for the month. Across all the BH locations 20 boxes of butterfly needles were ordered over the course of the month.

<u>February:</u> Overall goal met for the month. Across all the BH locations 16 boxes of butterfly needles were ordered.

<u>March:</u> Overall goal met for the month. Across all the BH locations 16 boxes of butterfly needles were ordered.

	Jan	Feb	Mar
Number of Butterfly Needles	1019	800	800
Total Number of Patient Draws	9302	9223	10958
ALL DRAW STATIONS	11%	9%	7%

Cancel/Redraw Rates

Section	**Lab Outreach/Phlebotomy**
Phase	**Pre-Analytical**
Title	**Cancel/Redraw Rates**
Objective	**Monitors the cancel/redraw rates in the draw stations by measuring the number of cancel/redraws to overall samples collected as a percentage rate.**
Method	**Report on Helix – Redraw Rejection Cancellation and Lab Outreach Collection Metrics reports monthly.**
Definitions	**This metric will identify any collection procedure noncompliance and identify any areas that phlebotomists need retraining in. The redraw rates will be pulled monthly and compared to the 2022 metrics.**
Expected Actions	**To assess draw station locations, cancel/redraw rates. A summary report will be prepared for the Director to be discussed monthly. Feedback will be provided to the draw stations for improvements.**
Benchmarks	**Overall redraw rate goal of 5%.**

Summary:

January: Overall goal reached for the month. Majority of locations had a cancellation rate of 4% or less.

February: Overall goal met for the month. There has been an increase in redraw and cancellations across all the locations.

March: Overall goal met for the month. There has been an increase in redraw/cancellations at the same locations from February.

	Jan	Feb	Mar
BH BOSTON POST RD DRAW STATION	1.3%	2.5%	8.3%
BH DRAW STATION SILVER LANE TRUMBULL	3.1%	2.6%	2.6%
BH DRAW STATION STRATFORD	1.9%	1.7%	1.2%
BH DRAW STATION WHITE PLAINS TRUMBULL	1.0%	4.7%	2.0%
BH ENDOCRINOLOGY DRAW STATION QUARRY ROAD	2.6%	4.1%	3.9%
BH FAM MED DRAW STATION QUARRY ROAD	2.5%	4.3%	2.7%
BH HUNTINGTON MED TEST CTR	2.9%	4.9%	3.8%
BH INT MED DRAW STATION QUARRY ROAD	4.4%	6.8%	6.7%
BH KINGS HWY FRFLD DRAW STATION	2.1%	4.9%	7.3%
BH MILFORD DRAW STATION	3.4%	3.8%	4.3%
BH ONE STOP TESTING CTR	7.2%	7.1%	6.8%
BH PK AVE DRAW STATION	4.6%	7.2%	9.4%
BH SHELTON DRAW STATION	1.8%	2.4%	2.2%
BH SOUTHPORT TESTING CENTER	3.0%	4.4%	3.6%
BH TRUMBULL TECH DR DRAW STATION	2.3%	3.3%	3.1%
BH WESTPORT RIVERSIDE DRAW STATION	4.6%	0.0%	0.0%
ALL DRAW STATION AVERAGE	3.0%	4.1%	4.2%

Notes:

Rejection reasons by location

<u>BOSTON POST RD</u> – 1 collection issue: clotted, 1 collection issue: exceeded clinical time requirements, 1 collection issue: incorrect specimen type, 1 collection issue: incorrect temperature, 2 collection issue: incorrect tube type, 2 collection issue: quantity not sufficient, 27 other (please specify) rejections

<u>INT MED DRAW STATION QUARRY RD</u> – 1 collection issue: incorrect tube type, 17 collection issue: other, 4 collection issue: quantity not sufficient, 2 mislabeled" correct patient; wrong container/source, 38 other (please specify), 25 unlabeled specimens

<u>BH KINGS HWY FRFLD – 1</u> collection issue: not protected from light, 44 collection issue: other, 14 other (please specify) *with 28 patient related rejections "unable to void" or "refused to draw"

<u>BH ONE STOP TESTING CTR</u> – 1 collection issue: clotted, 1 collection issue: exceeded clinical time requirements, 2 collection issue: hemolyzed, 1 collection issue: incorrect specimen type, 1 collection issue: incorrect tube type, 30 collection issue: other, 3 collection issue: quantity not sufficient, 49 other (please specify) rejections.

<u>BH PK AVE DRAW STATION</u> – 1 broken in transit, 3 collection issue: clotted, 1 collection issue: hemolyzed, 3 collection issue: incorrect specimen type, 5 collection issue: incorrect tube type, 1 collection issue: not on ice, 1 collection issue: not protected from light, 29 collection issue: other, 5 collection issue: quantity not sufficient, 1 collection issue: specimen leaking, 1 mislabeled: correct patient; wrong container/source, 112 other (please specify) rejections *with 78 of the cancellation reasons are patient related comments (patient unable to void, hard stick, patient does not need tests)

Centrifuge Compliance

Section	**Lab Outreach/Phlebotomy**
Phase	**Pre-Analytical**
Title	**Centrifuge Compliance**
Objective	**Ensures centrifuges in the draw station are functioning as intended which will result in better quality samples and decrease processing errors and specimen rejections.**
Method	**Auditing centrifuges and record service reports. BioMed (TriMedx) service reports will save in DN specific folders.**
Definitions	**Every month each DN will be audited on the number of compliant centrifuges and be given a compliance percentage. For example, if all 32 centrifuges in the YNH area are serviced before the due date then they will be at 100% compliance every month.**
Expected Actions	**The team will also be keeping centrifuge records up-to-date for compliance across all Delivery Networks. A summary report will be prepared for the Director.**
Benchmarks	**Overall centrifuge compliance goal of 100%.**

Summary

January: Overall goal for the month was met. All centrifuges are update with inspections.

February: Overall goal for the month was met. All centrifuges are up to date.

March: Overall goal for the month was met. All centrifuges are up to date.

	Jan	Feb	Mar
Number of Compliant Centrifuges	19	19	19
Total Number of Centrifuges	19	19	19
ALL DRAW STATIONS	100%	100%	100%

Patient Satisfactory Survey

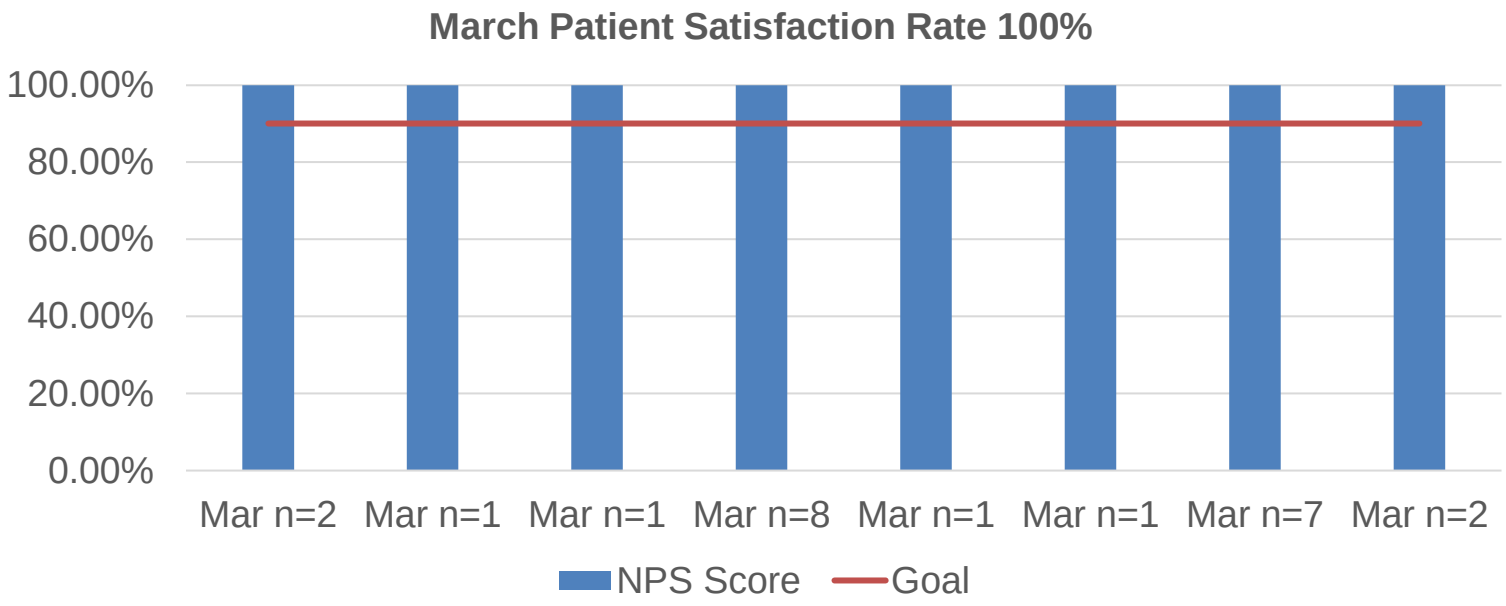
Section	**Lab Outreach/Phlebotomy**
Phase	**Pre-Analytical**
Title	**Patient Satisfactory Survey**
Objective	**Achieving high levels of satisfaction is directly dependent on the high-quality patient care provided by phlebotomists in draw stations. In order to find out the pain-points of patients, whether there's any room for improvement, and what measures can be implemented to enhance services.**
Method	**Key Survey Reports and Press Ganey surveys scores**
Definitions	**The Key Survey report will be pulled monthly.**
Expected Actions	**To assess each draw station the patient experience surveys or scores. A summary report will be prepared for the Director. Feedback will be provided to the draw stations to make improvements to help increase patient satisfaction.**
Benchmarks	**Overall patient satisfaction rate 90%.**

Summary

January: Overall goal not for the month. January patient satisfaction rate was 60%. Across a portion of the draw station locations 70% of patients were likely to recommend our facilities to a friend, 100% of patients felt our facilities were neat and clean, and 100% of patients felt they were treated with respect during their visit.

February: Overall goal for the month was met. Across the BH draw station locations 96% of patients were likely to recommend our facilities to a friend, 99% of patients felt our facilities were neat and clean, and 97% of patients felt they were treated with respect during their visit.

March: Overall goal for the month was met. Across the BH draw station locations 100% of patients were likely to recommend our facilities to a friend, 100% of patients felt our facilities were neat and clean, and 100% of patients felt they were treated with respect during their visit.


March Patient Satisfaction Rate 100%
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
Mar n=2
Mar n=1
Mar n=1
Mar n=8
Mar n=1
Mar n=1
Mar n=7
Mar n=2
NPS Score
Goal

Transcription Accuracy Rate

Section	**Lab Outreach/Phlebotomy**
Phase	**Pre-Analytical**
Title	**Transcription accuracy rate**
Objective	**Monitors the accuracy of the phlebotomist's transcriptions into EPIC from paper requisitions.**
Method	**Report run by Lab Billing department daily.**
Definitions	**Report is run by Lab Billing, and they randomly select up to 5 transcribed requisitions from each DN daily. The areas evaluated for accuracy will be the provider's name, tests ordered, scanning of req into EPIC and charges. Lab Billing will track the requisitions selected and errors in a separate spreadsheet on the YNH :/L shared drive.**
Expected Actions	**To assess each draw station transcription accuracy. A summary report will be prepared for the Director. Feedback will be provided to the draw stations.**
Benchmarks	**Overall rate for 90% transcription accuracy.**

Summary

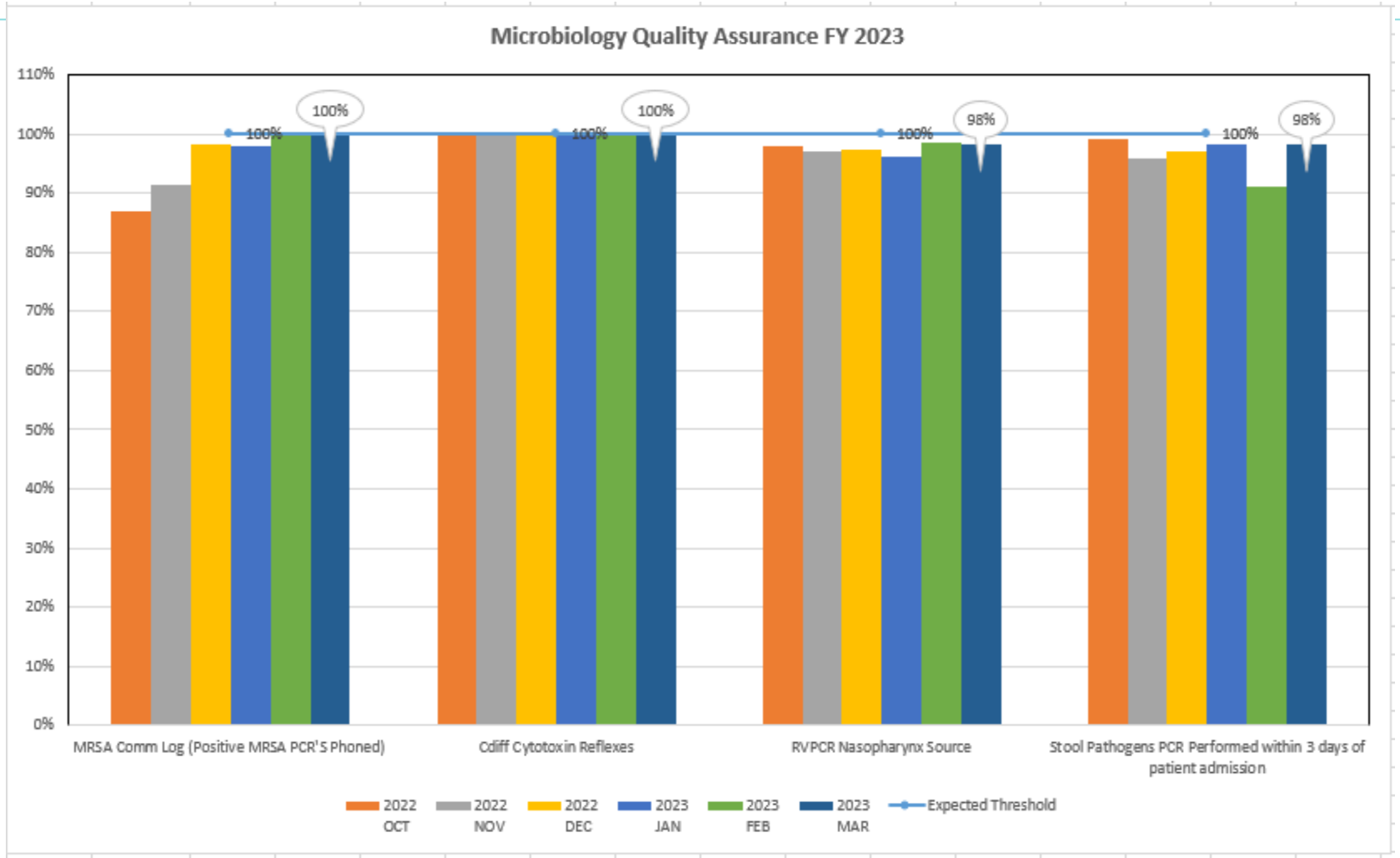
<u>January:</u> Overall goal reached for the month. For the month of January, the # of providers transcribed correctly 102/103, sum of tests transcribed correctly 392/396 and # of requisitions scanned in EPIC 51/65.

<u>February:</u> Overall goal for the month has been met. For the month of February, the # of providers transcribed correctly 60/60, sum of tests transcribed correctly 204/206 and # of requisitions scanned in EPIC 14/24.

<u>March:</u> Overall goal for the month has been met. For the month of March, the # of providers transcribed correctly 116/116, sum of tests transcribed correctly 329/329 and # of requisitions scanned in EPIC 35/45.

	Jan	Feb	Mar
ALL DRAW STATION AVERAGE	97%	96%	98%

Microbiology Quality Measures for FY 2023



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Microbiology test volumes

2023 Total V	Expected Threshol	October	November	December	January	February	March
MRSA		459	447	492	441	396	460
MRSA +	100%	39	47	58	46	46	65
Cdiff		155	130	148	168	161	156
Cdiff +	100%	28	22	29	24	25	18
RVP	100%	312	297	272	231	229	118
Stool		144	128	136	146	161	181
Stool Admitted	100%	49	49	67	56	56	57
Errors	< 5	4	0	1	0	2	0

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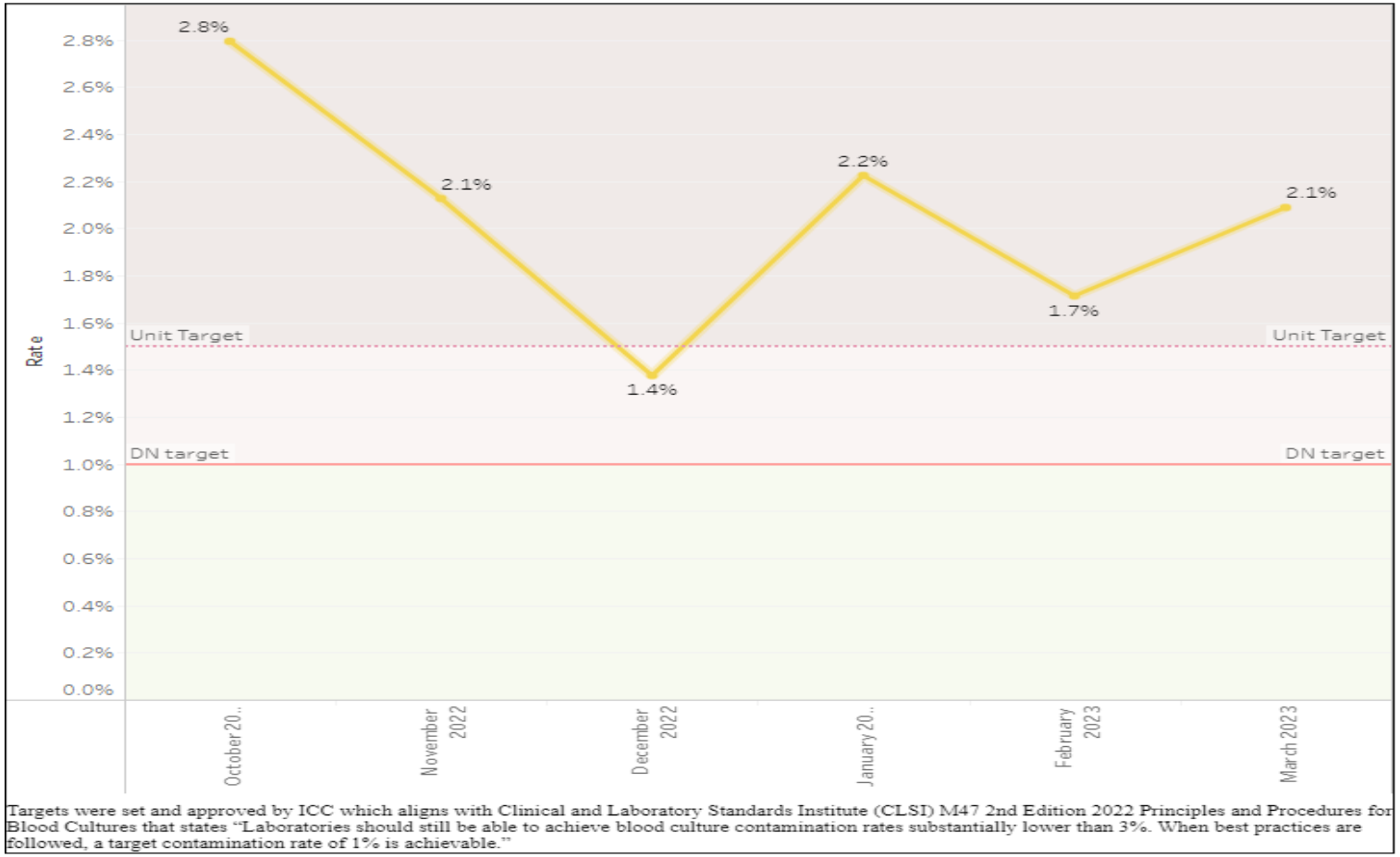
BH Blood Culture Contamination Rate



Targets were set and approved by ICC which aligns with Clinical and Laboratory Standards Institute (CLSI) M47 2nd Edition 2022 Principles and Procedures for Blood Cultures that states "Laboratories should still be able to achieve blood culture contamination rates substantially lower than 3%. When best practices are followed, a target contamination rate of 1% is achievable."

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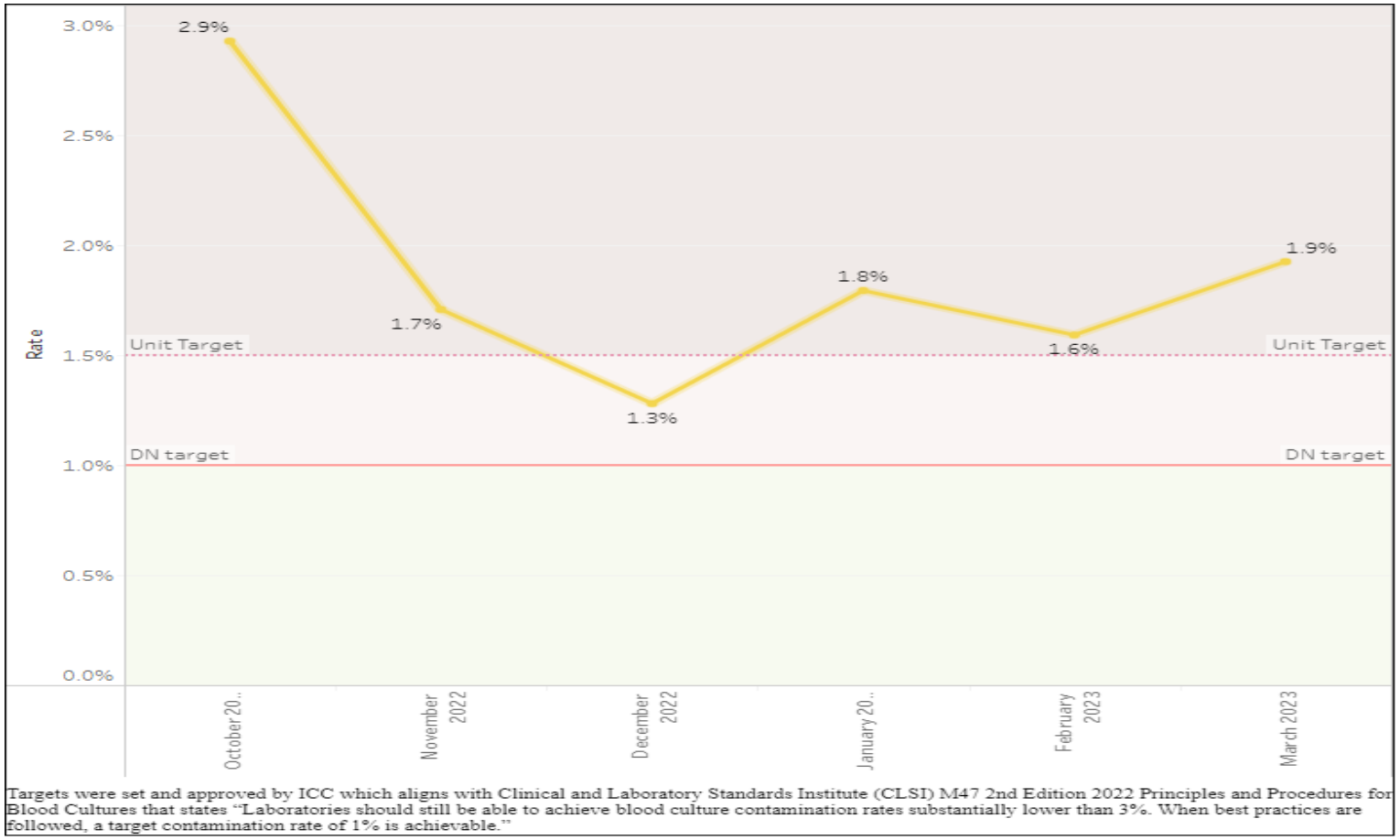
BH Blood Culture Contamination Rate(ED only)



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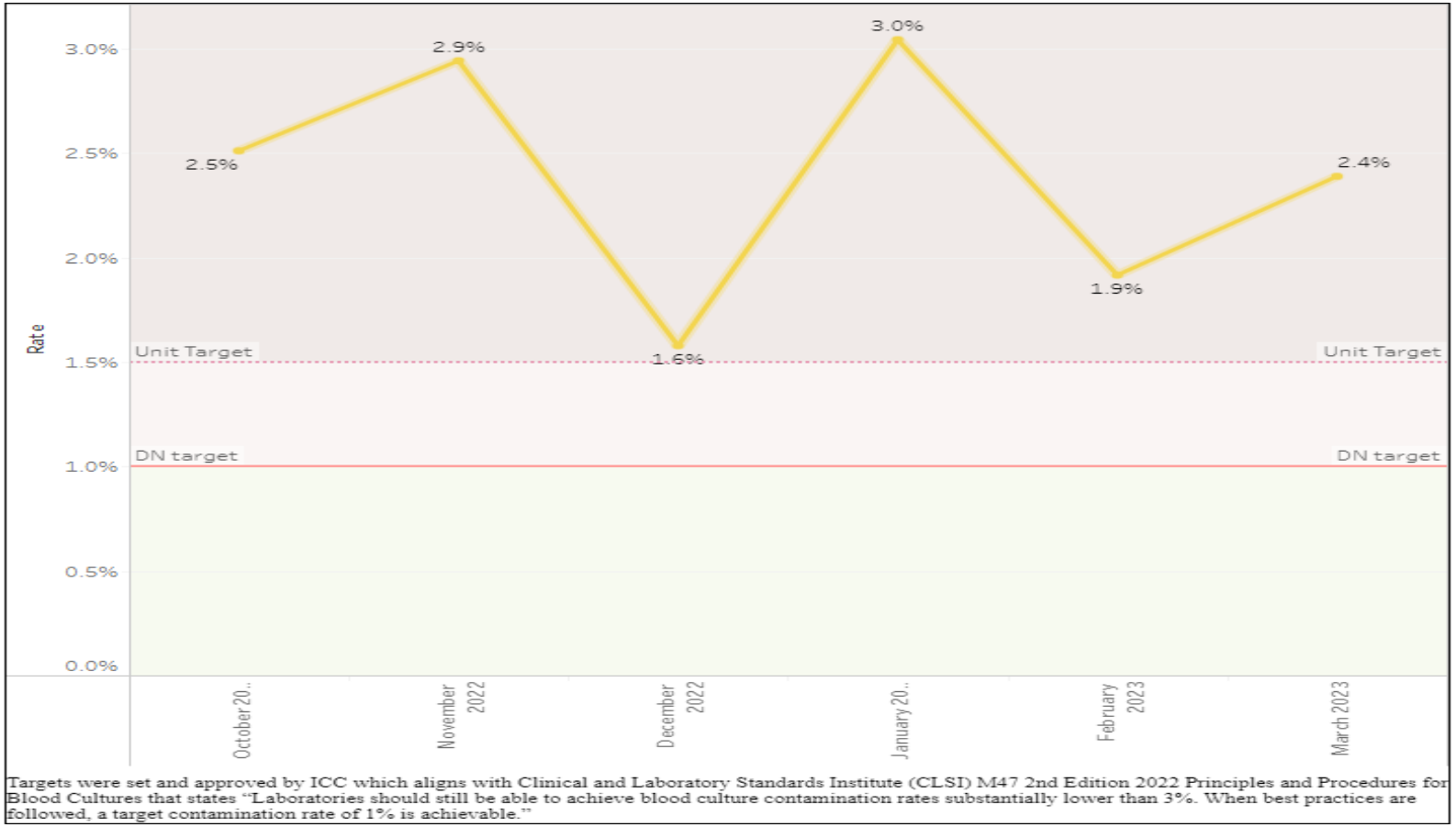
BH Blood Culture Contamination Rate (excluding ED)



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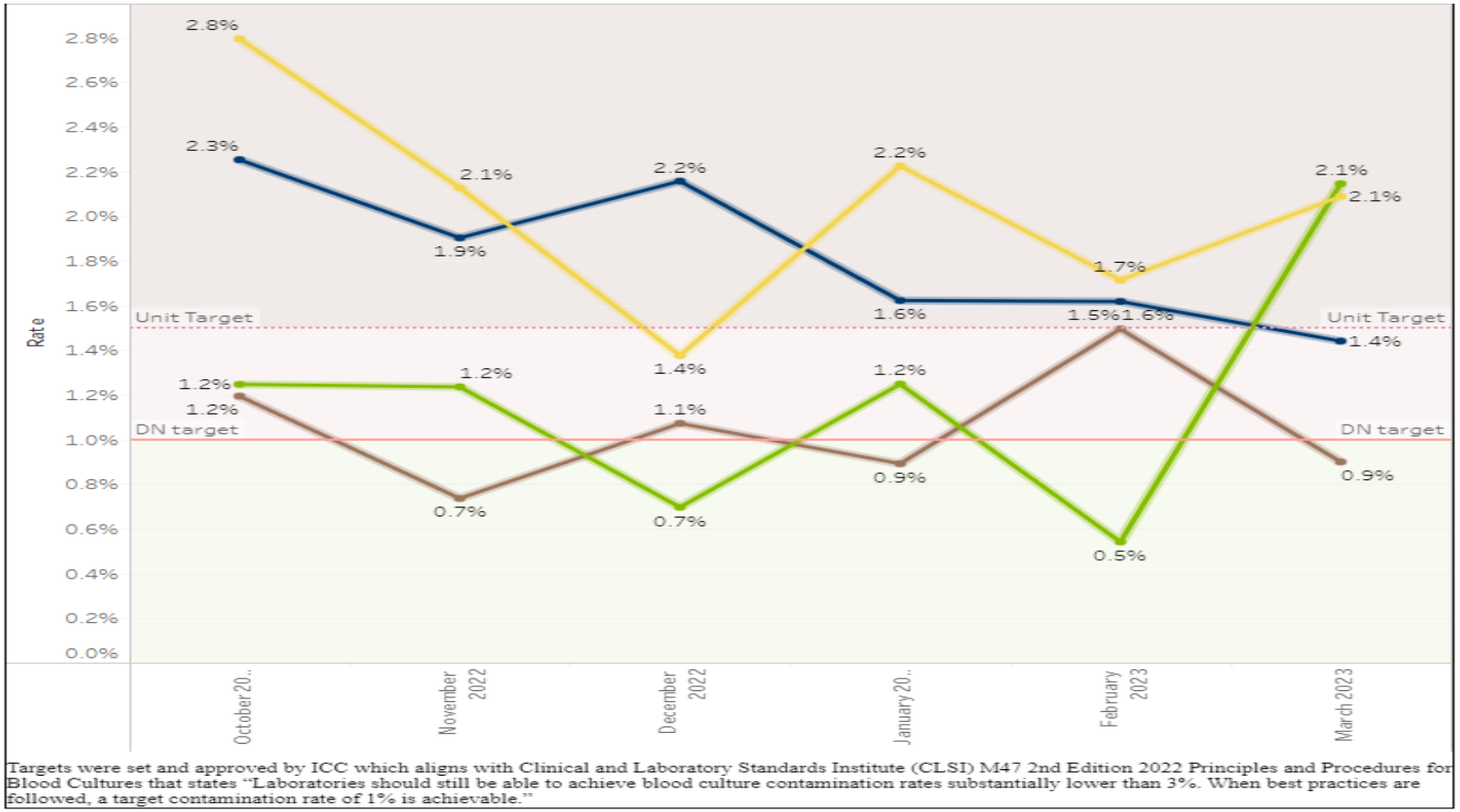
Blood culture Contamination Rate DNs Comparison



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DN

- BH/MC
- YNHH
- GH
- LMH/WH

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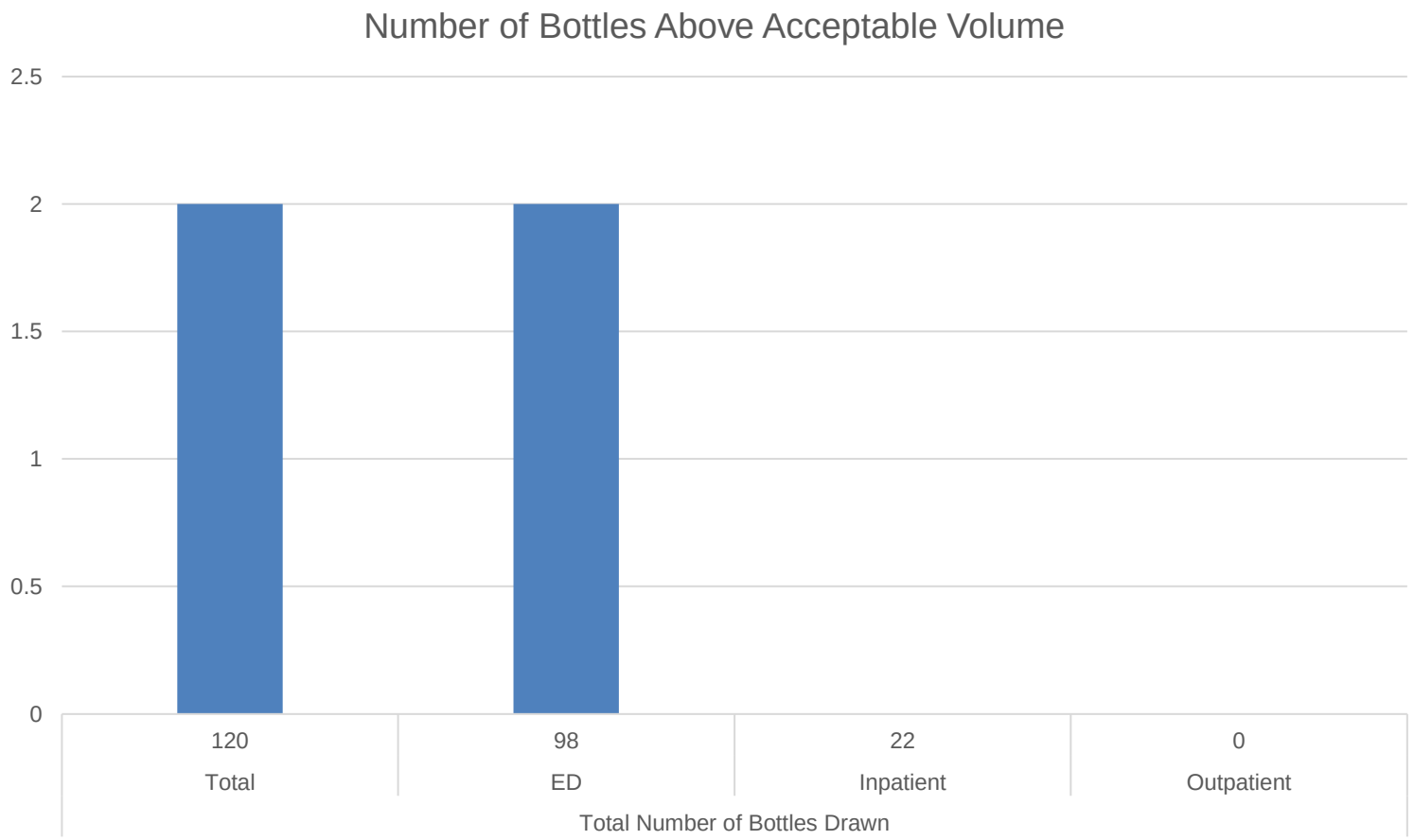
Blood Culture Bottle Volumes – Above Optimal



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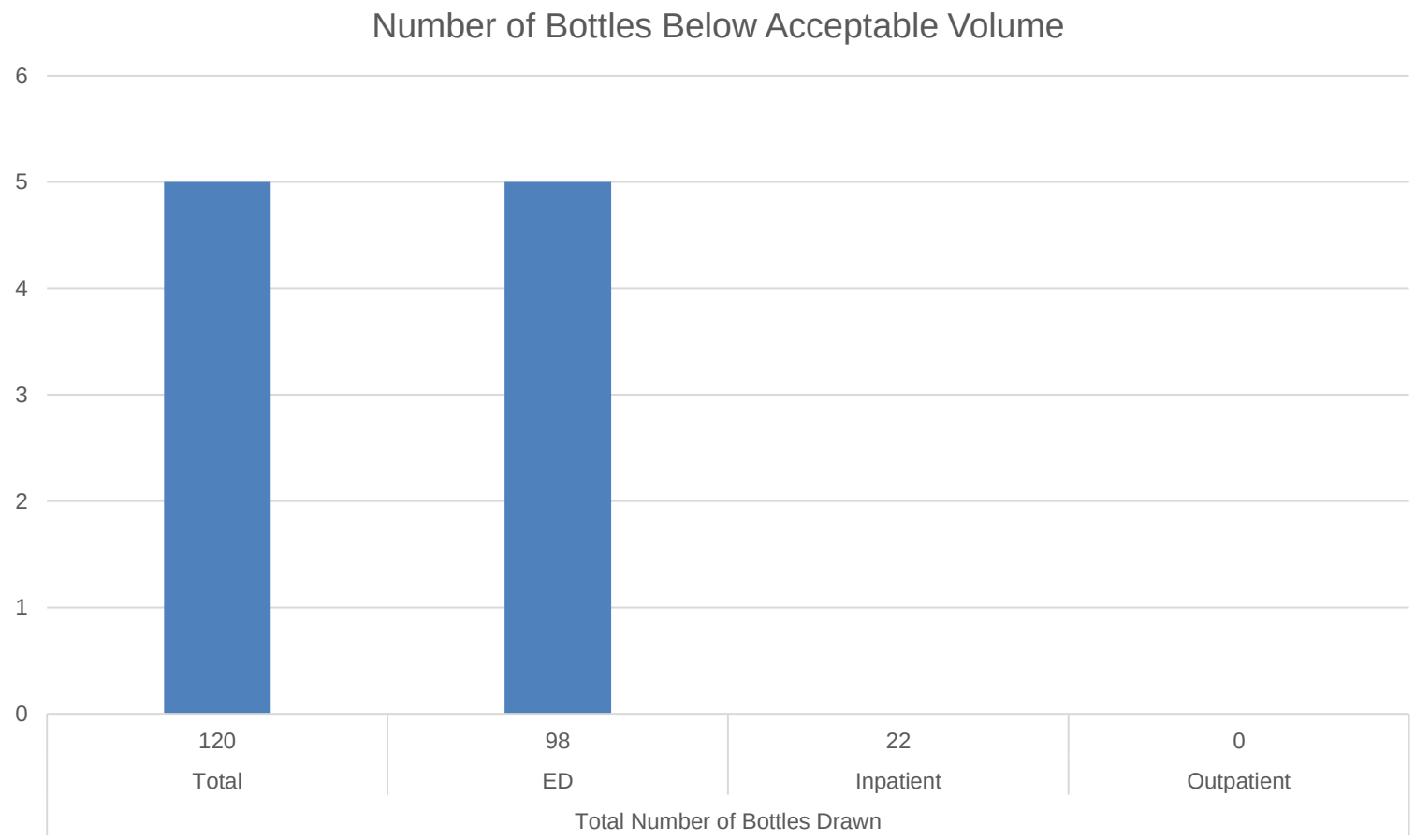
Blood Culture Bottle Volumes – Below Optimal



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Molecular Statistics

Date	Tests	Sample size	Positive Count	% Positivity	Lower Limit	Upper Limit	Environment Monitoring	Epidemiological Trends	Evaluation Notes
Mar-23	Chlamydia trachomatis, NAAT	735	34	4.60%	2%	7%	Negative	None	None
Mar-23	GBS PCR Pen Allergic	19	6	31.60%	1%	49%	Negative	None	None
Mar-23	GBS PCR Pen NonAllergic	80	16	20.00%	16%	33%	Negative	None	None
Mar-23	Group A Strep PCR	527	129	24.50%	1%	25%	Negative	None	Respiratory Seasom
Mar-23	HSV 1 AND 2 DIRECT PCR,	26	6	23.10%	1%	54%	Negative	None	None
Mar-23	Influenza A/B RNA, NAAT	750	13	1.70%	0%	21%	Negative	None	None
Mar-23	Influenza/RSV by RT-PCR	3,076	33	1.10%	0%	18%	Negative	None	None
Mar-23	MRSA Colonization Status	404	65	16.10%	5%	19%	Negative	None	None
Mar-23	MRSA/SAUR Blood PCR	30	11	36.70%	14%	53%	Negative	None	None
Mar-23	MTB w/rflx Rifampin PCR	5	0	0.00%	0%	87%	Negative	None	None
Mar-23	N. gonorrhoeae, NAAT	735	13	1.80%	1%	3%	Negative	None	None
Mar-23	Resp Virus PCR Panel	91	37	40.70%	4%	54%	Negative	None	None
Mar-23	SARS CoV-2 (COVID-19) RNA	6,901	240	3.50%	0%	21%	Negative	None	None
Mar-23	Stool Pathogens PCR	144	25	17.40%	0%	21%	Negative	None	None
Mar-23	Varicella-Zoster Direct PCR	2	1	50.00%	39%	55%	Negative	None	None

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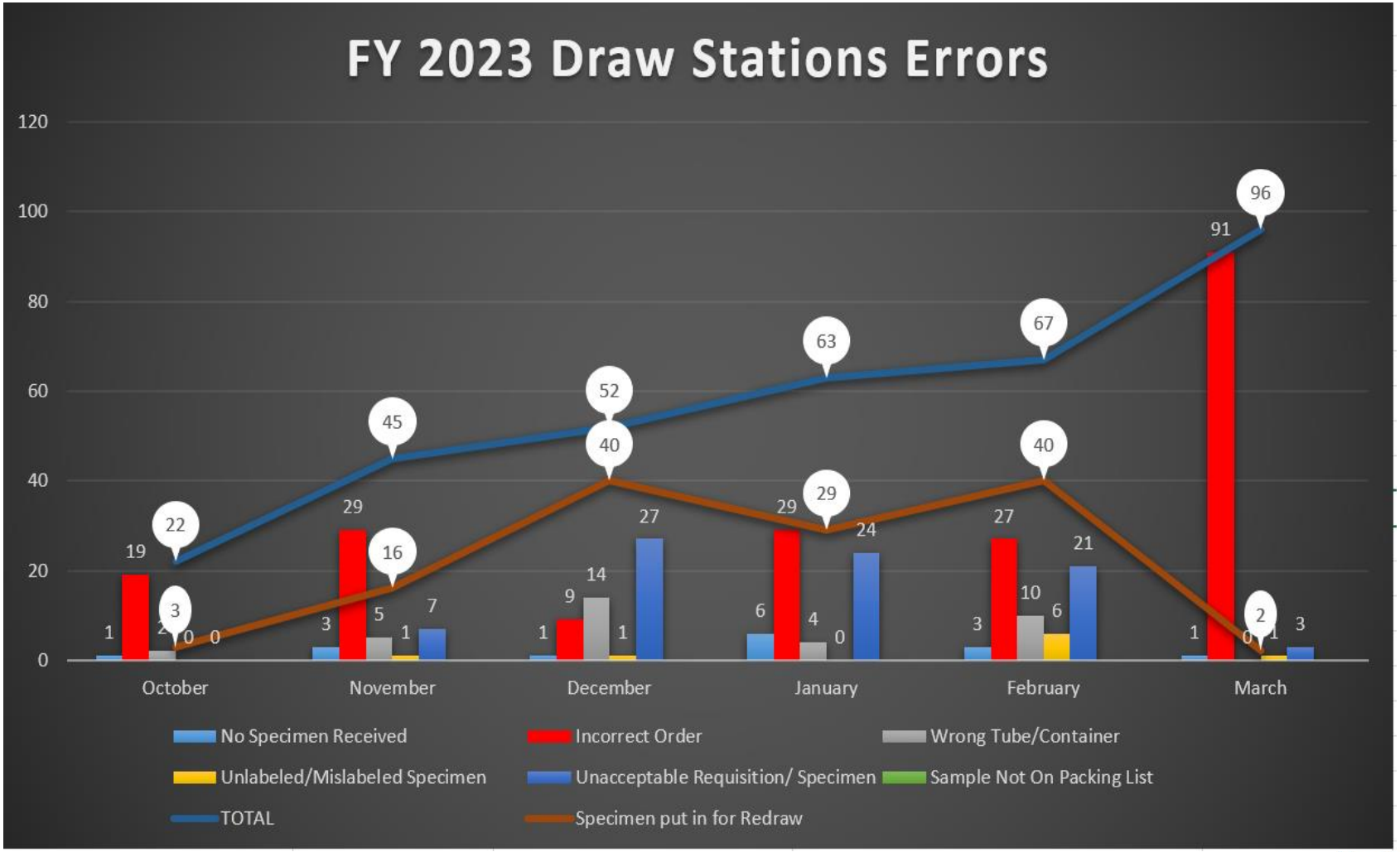
FY2023 Draw Station Errors



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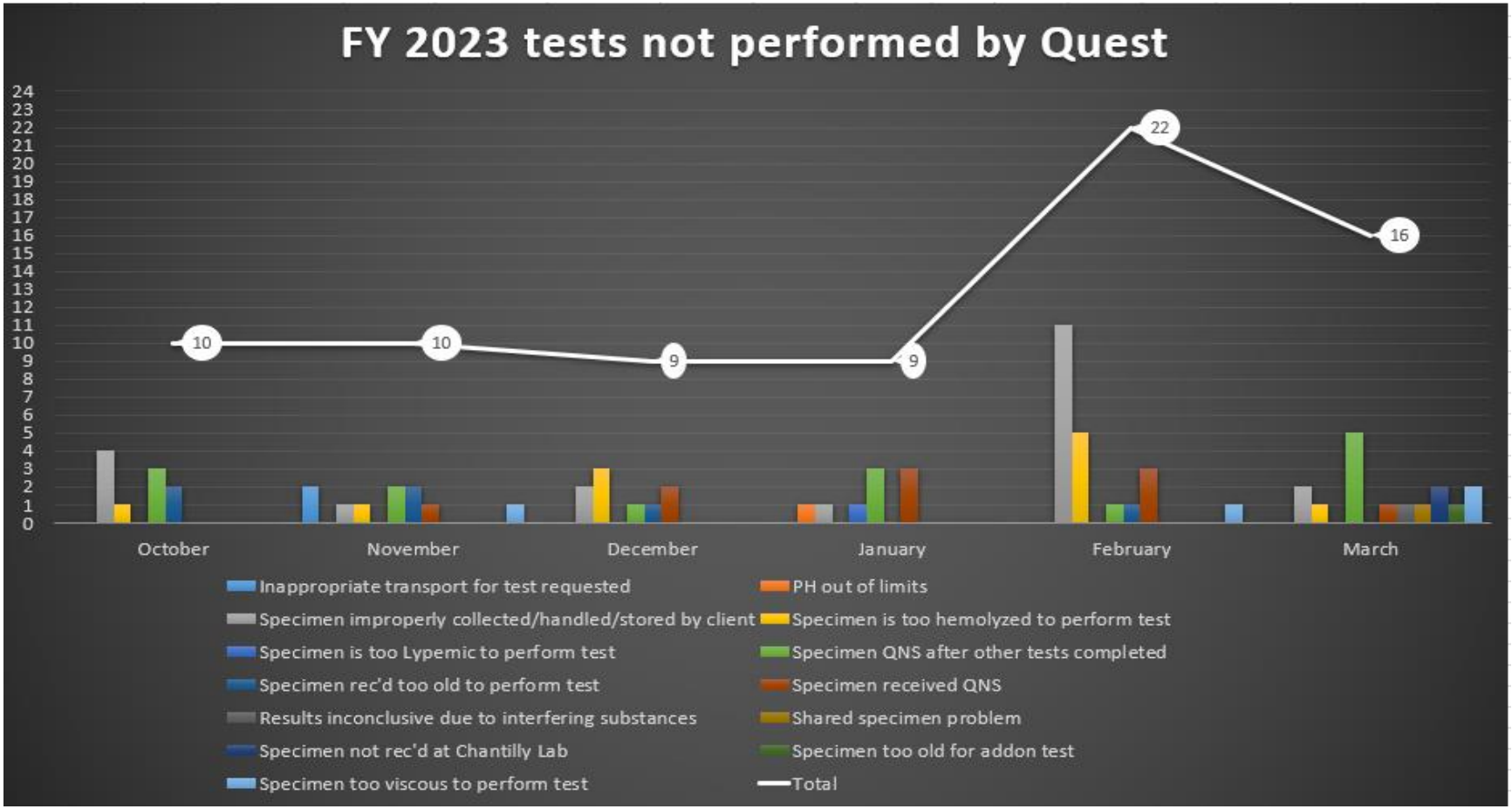
Quest Rejected Tests



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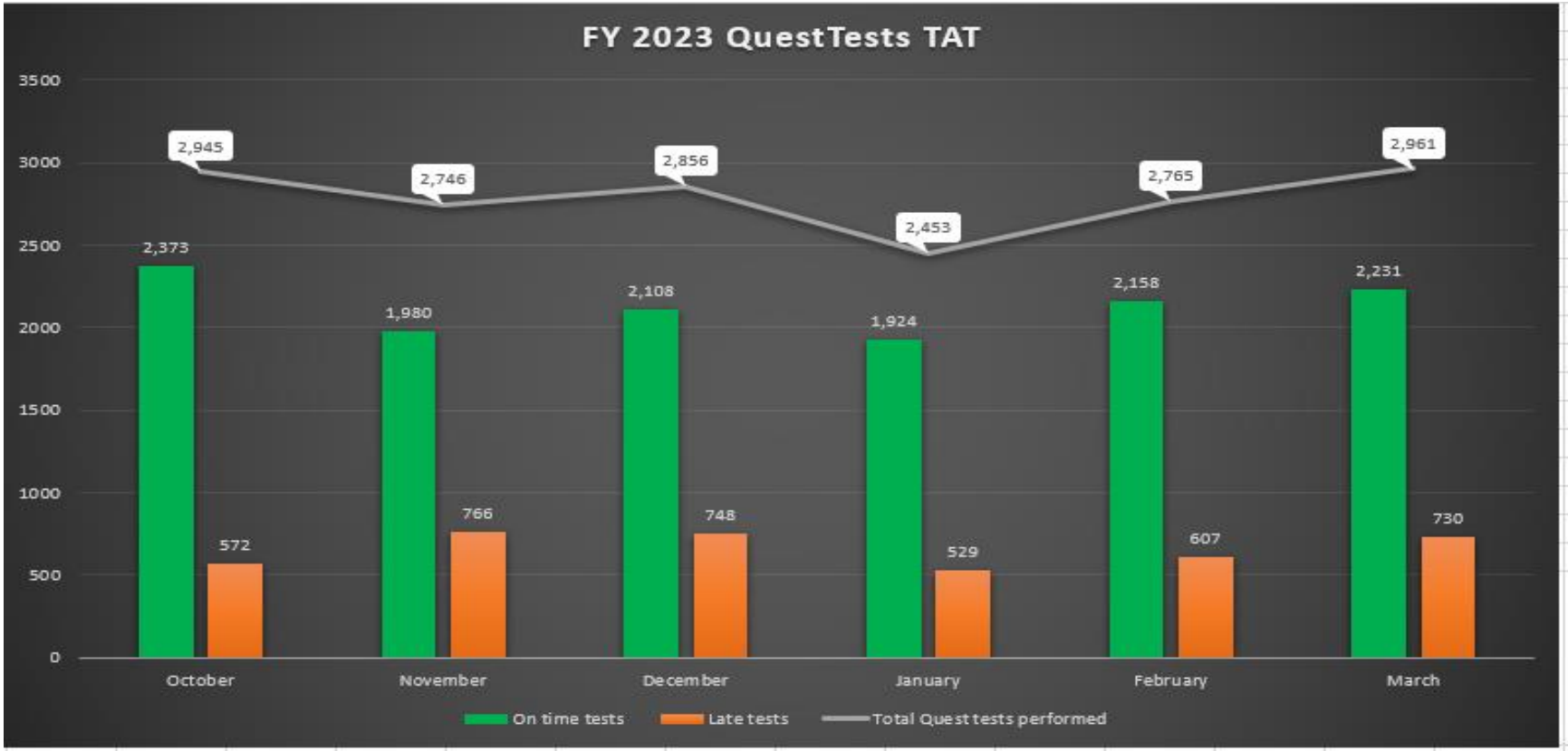
Quest TAT



The TAT calculations include
accessions that have been through the "test in question" process, or tests that have been corrected, repeated, reflexed, confirmed, or added on after the original order.

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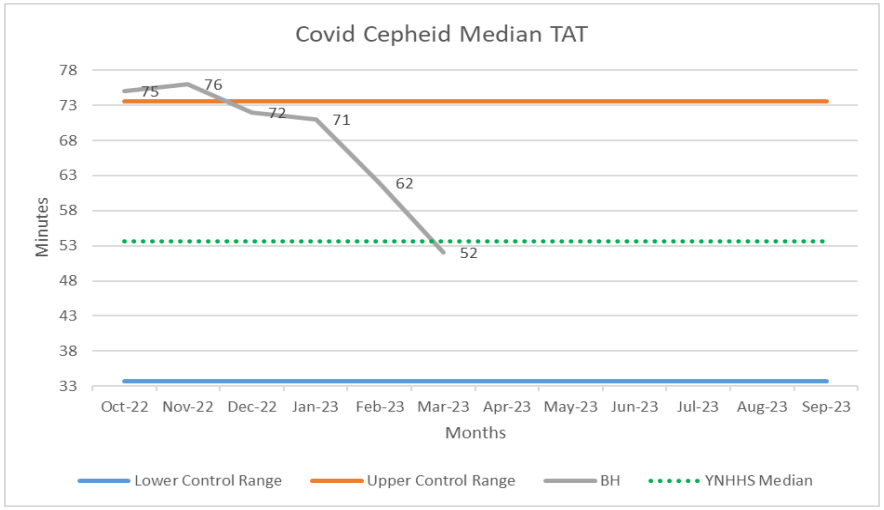
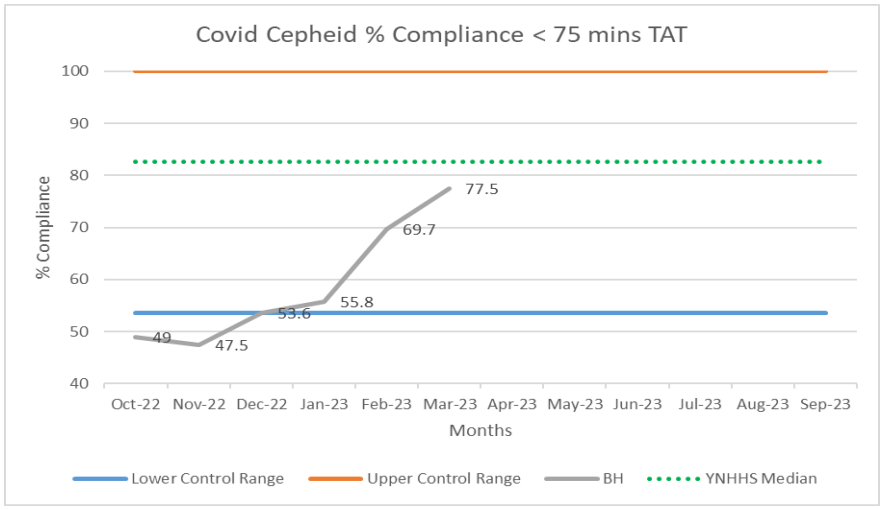
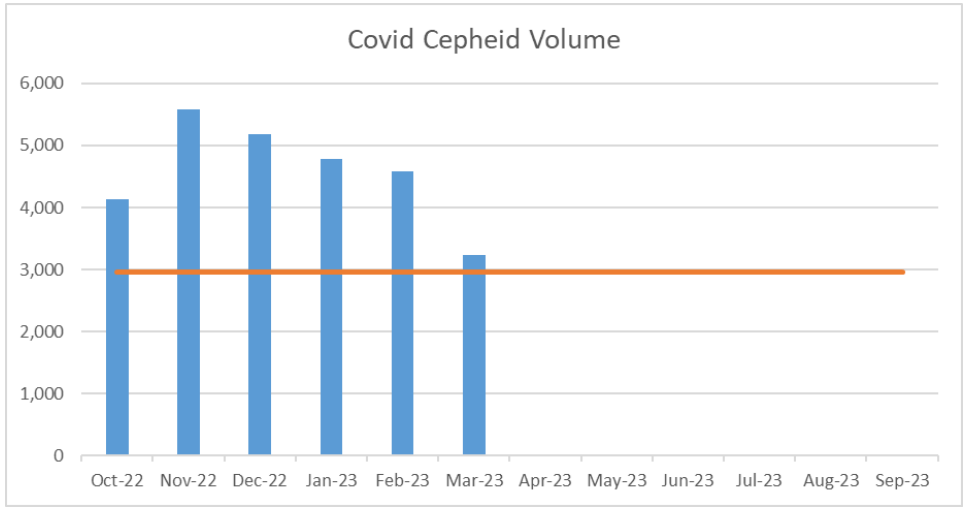
Bridgeport Campus – COVID-19 Cepheid







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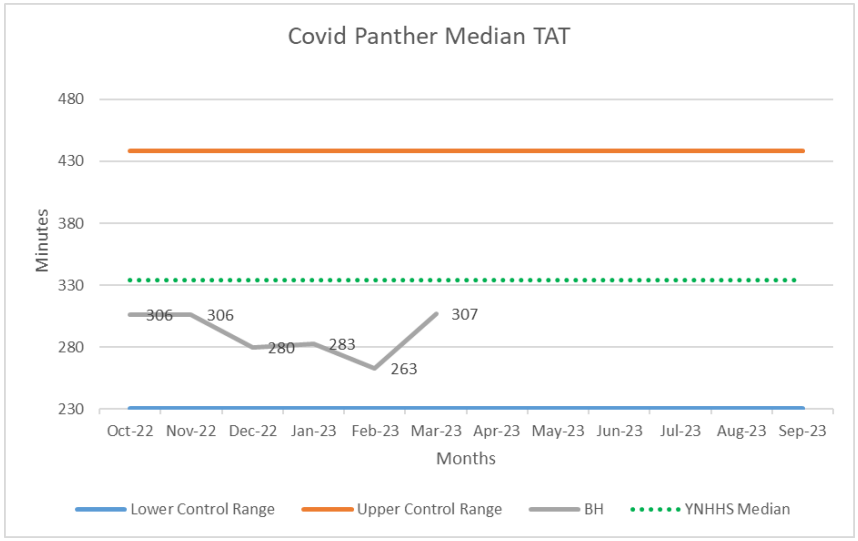
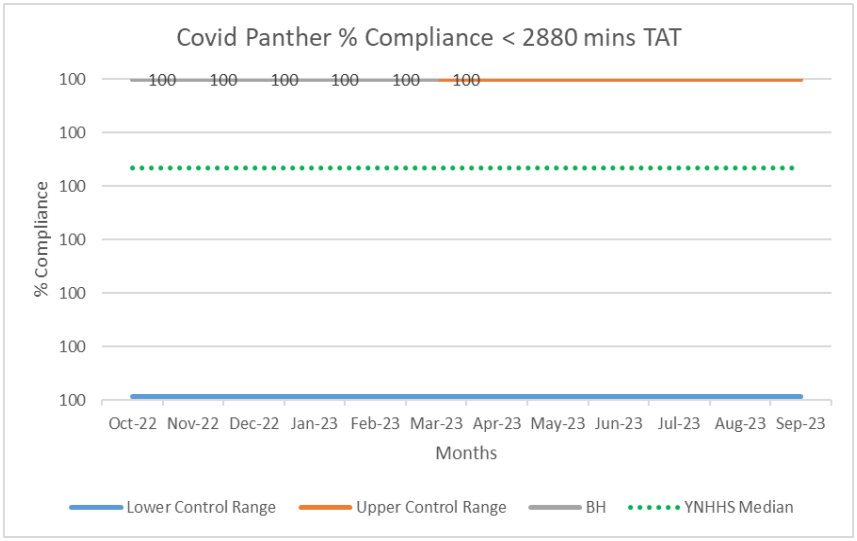
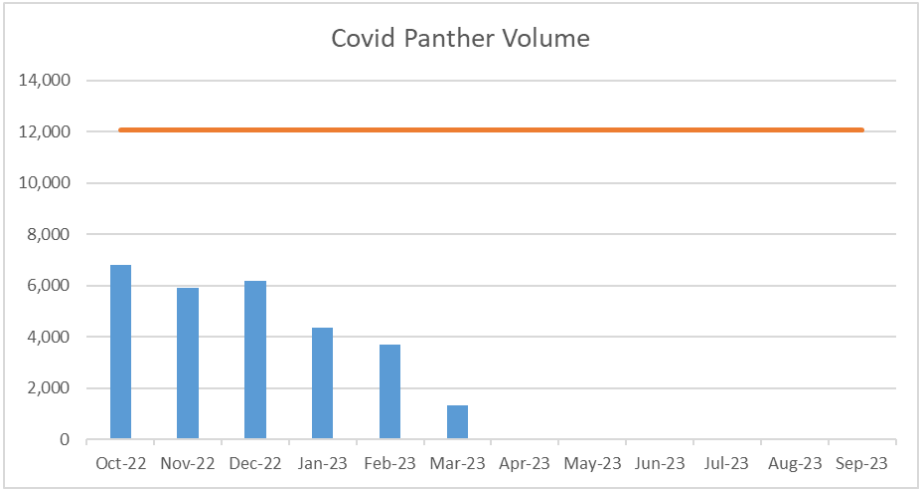
Bridgeport Campus – COVID-19 Panther







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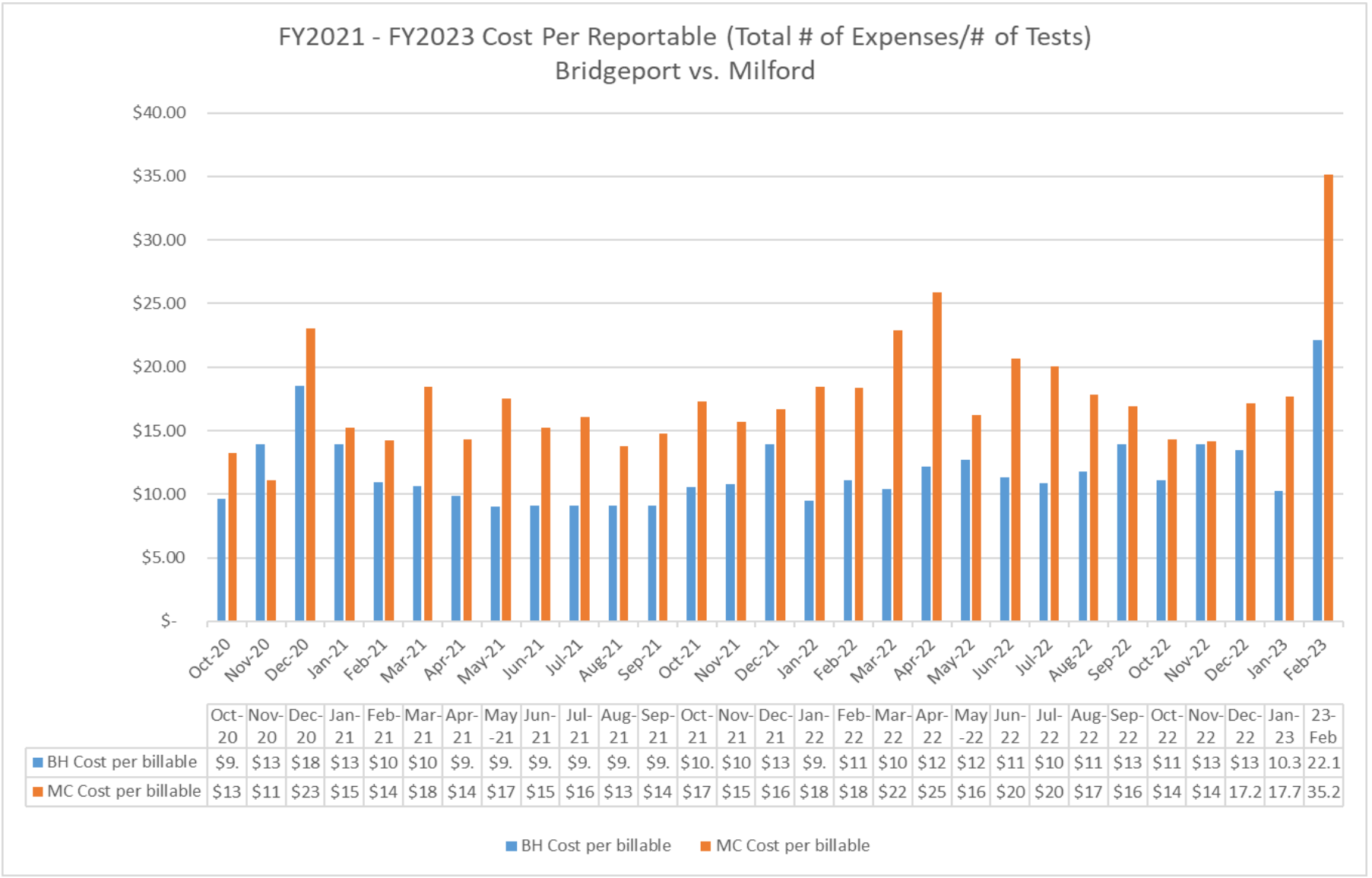
Bridgeport Hospital

Cost Per Billable

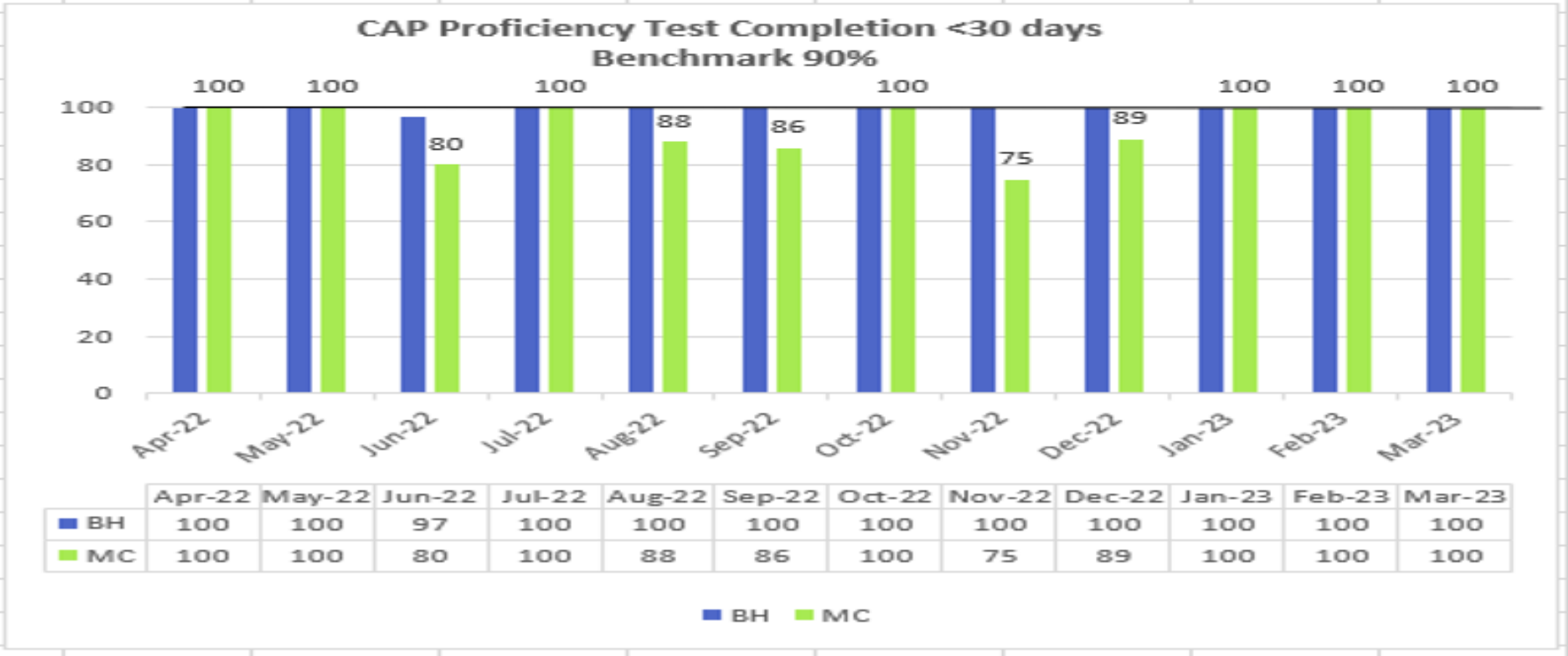


	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	23-Feb
BH Cost per billable	$9.	$13	$18	$13	$10	$10	$9.	$9.	$9.	$9.	$9.	$9.	$10.	$10	$13	$9.	$11	$10	$12	$12	$11	$10	$11	$13	$11	$13	$13	10.3	22.1
MC Cost per billable	$13	$11	$23	$15	$14	$18	$14	$17	$15	$16	$13	$14	$17	$15	$16	$18	$18	$22	$25	$16	$20	$20	$17	$16	$14	$14	17.2	17.7	35.2

Lab General

BH CL07D0099572/CAP1191901
MCBH CL07D0097265/CAP 1189901

Quality Metric	Target	Sample size	Current performance	Previous month	Patient Impact	Corrective action and follow-up	Responsible
CAP PT Turnaround within 30 days	90%	BC MC	100% (6/6 surveys) 100% (3/3 surveys)	100% 100%	None	None needed.	Lab management and administration



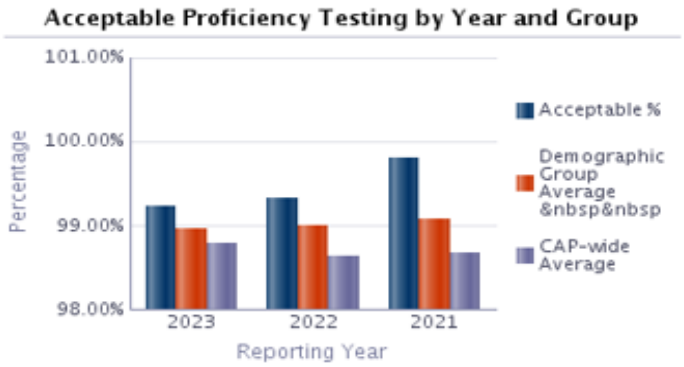
	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
BH	100	100	97	100	100	100	100	100	100	100	100	100
MC	100	100	80	100	88	86	100	75	89	100	100	100

Lab General - Bridgeport

BH Proficiency Testing Performance Target 98%

Campus	Analytes	Performance	Previous Month	Patient impact	Corrective actions
BH	390/392	99.5%	99%	None	None required for benchmark-all surveys satisfactory. Each section investigates failed/unsatisfactory performances.

Select View: Graph



22	1	0	0	0
Mailings with New Evaluations	Mailings with Revised Evaluations	Analytes with Unsatisfactory PT	Analytes with Unsuccessful PT	Analytes with Repeat Unsuccessful PT

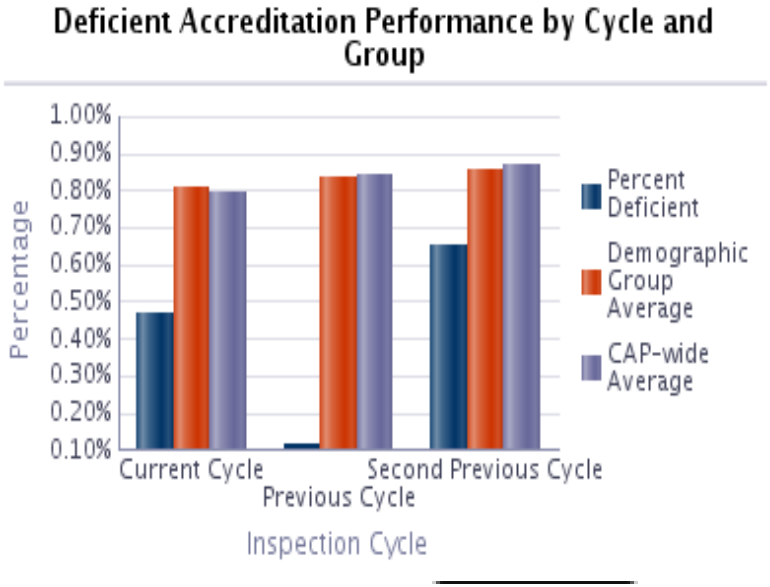
Reporting Year	Acceptable %	Demographic Group Average	CAP-wide Average
2023	99.24%	98.97%	98.78%
2022	99.32%	99.00%	98.63%
2021	99.81%	99.07%	98.67%

Lab General

Accreditation Performance Overview

Accreditation Performance Overview

Select View: Graph



Last Accreditation Decision	Date
Accredited	5/9/2022

Current Cycle Inspection(s)			
Date	Inspection Type	% Deficient	Recurring Deficiencies
3/29/2022	Routine	0.47	1

Period Name	Percent Deficient	Demographic Group Average	CAP-wide Average
Current Cycle	0.47%	0.81%	0.79%
Previous Cycle	0.11%	0.83%	0.84%
Second Previous Cycle	0.65%	0.85%	0.86%

Yale NewHaven Health Bridgeport Hospital

Lab General

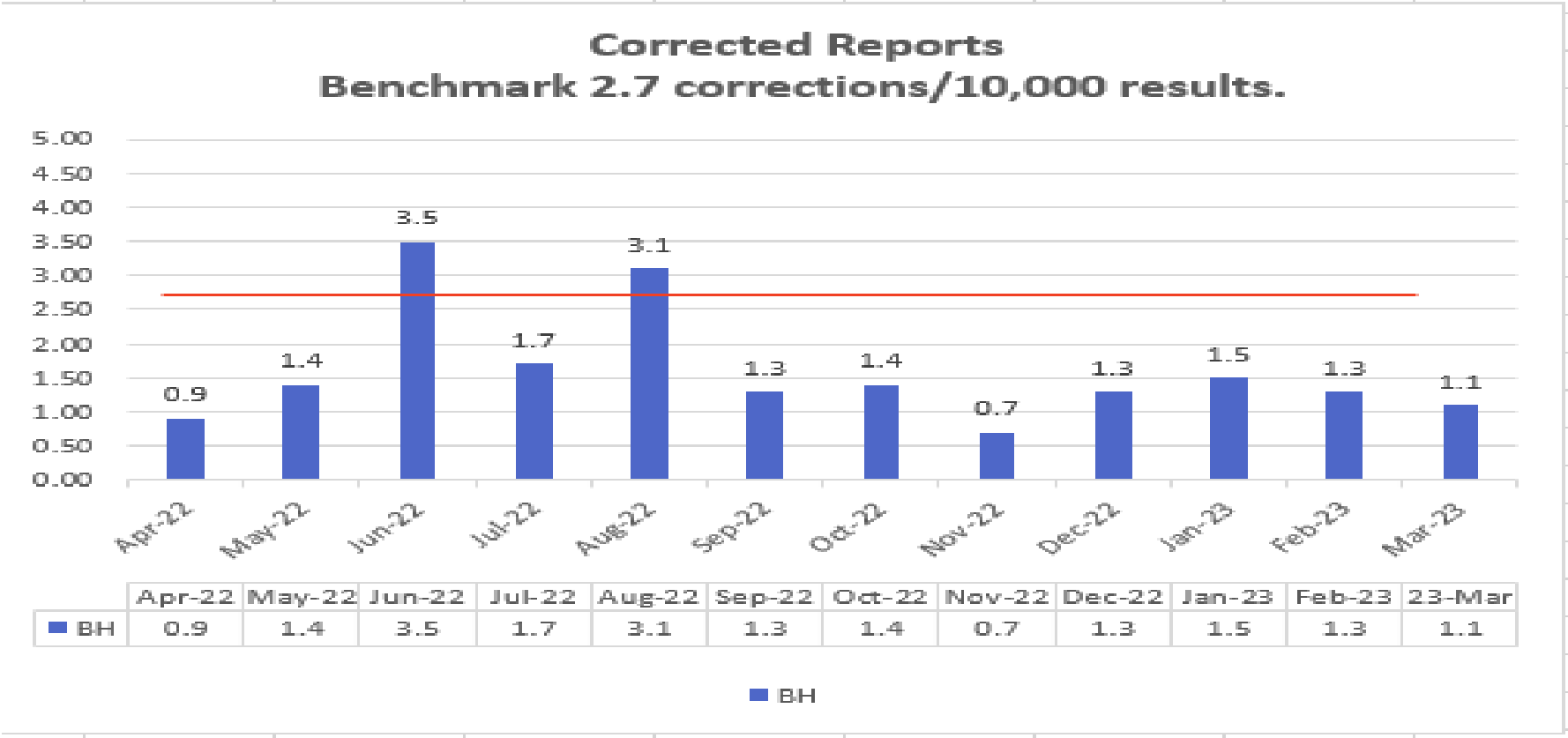
BH Corrected Reports

Target <2.7/10,000 results

Quality Metric Corrected Reports	Sample size (tests)	Current performance	Previous month	Patient Impact	Corrective action and follow-up	Responsible
BC Lab Corrected reports	214,553 tests	1.1 (0.011%)	1.3 (0. 0.13%)	Corrected reports can lead to adverse patient outcomes	None needed benchmark met	Laboratory administration

Yale NewHaven Health Bridgeport Hospital

Lab General

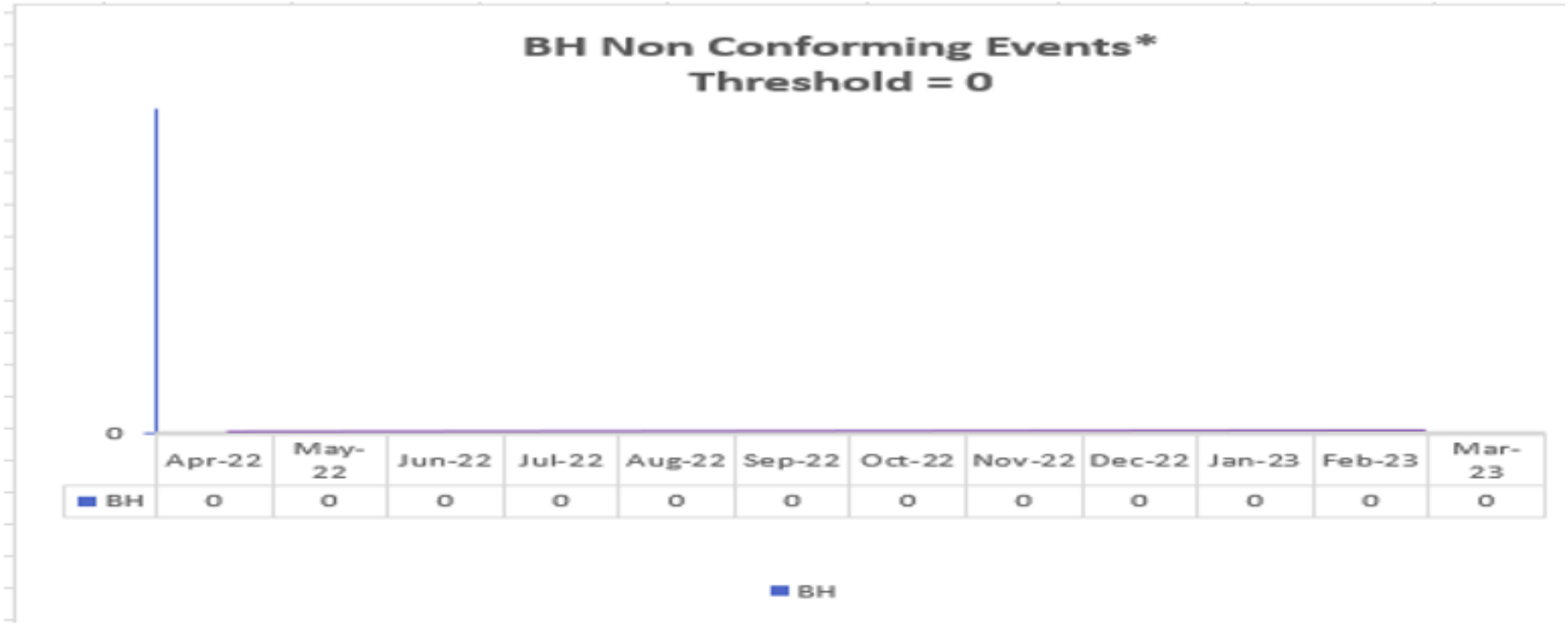


June 2022 above threshold due to courier transport issue identified late which resulted in specimens needing recollection after verification of results.

August 2022 above threshold due to electrode ISE malfunction requiring patients to be re-run with 38 corrected results

BH Non-Conforming Events
(Department of Clinical Pathology only)

Quality Metric	Target	Sample size	Current performance	Previous month	Patient Impact	Corrective action and 593follow-up	Responsible Staff
Nonconforming events BH	**0**	214,533 Tests	0	0	None	None needed	Lab administration and management



* Definition of Non Conforming events for this Quality Measure includes irreplaceable samples only

MCBH Proficiency Testing
Performance Target 98%

Campus	Analytes	Performance	Previous Month	Patient impact	Corrective actions
MCBH	139/141	99%	100%	None	1 failed survey with PTCN Corrective actions were initiated, documented and signed off by Dr. Minerowicz

Proficiency Testing Performance Overview

Select View: Graph

7	0	2	0	0
Mailings with New Evaluations	Mailings with Revised Evaluations	Analytes with Unsatisfactory PT	Analytes with Unsuccessful PT	Analytes with Repeat Unsuccessful PT

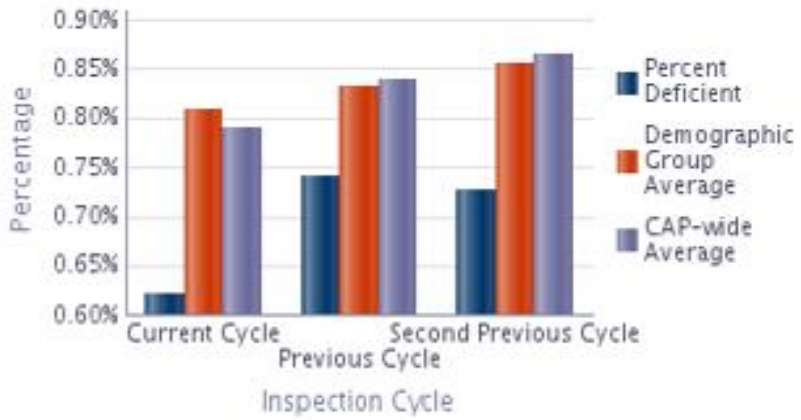
Reporting Year	Acceptable %	Demographic Group Average	CAP-wide Average
2023	99.25%	98.97%	98.78%
2022	99.94%	99.00%	98.63%
2021	99.30%	99.07%	98.67%

MCBH Accreditation Performance Overview

Accreditation Performance Overview

Select View: Graph

Deficient Accreditation Performance by Cycle and Group



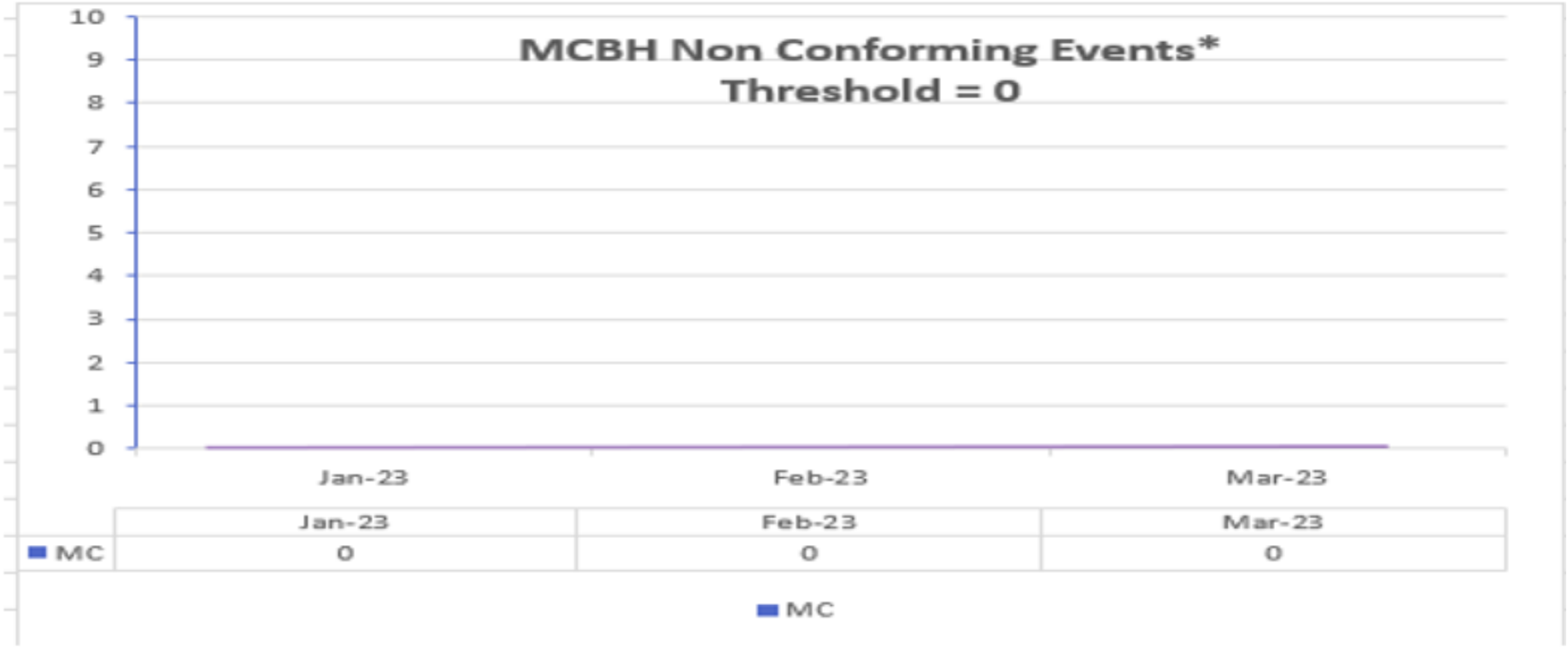
Last Accreditation Decision	Date
Accredited	5/9/2022

Current Cycle Inspection(s)			
Date	Inspection Type	% Deficient	Recurring Deficiencies
3/28/2022	Routine	0.62	0

Period Name	Percent Deficient	Demographic Group Average	CAP-wide Average
Current Cycle	0.62%	0.81%	0.79%
Previous Cycle	0.74%	0.83%	0.84%
Second Previous Cycle	0.73%	0.85%	0.86%

MCBH Non-Conforming Events (Department of Clinical Pathology)

Quality Metric	Target	Sample size	Current performance	Previous month	Patient Impact	Corrective action and 593follow-up	Responsible Staff
Nonconforming events MCBH	**0**	24,385 Tests	0	0	None	None needed	Lab administration and management

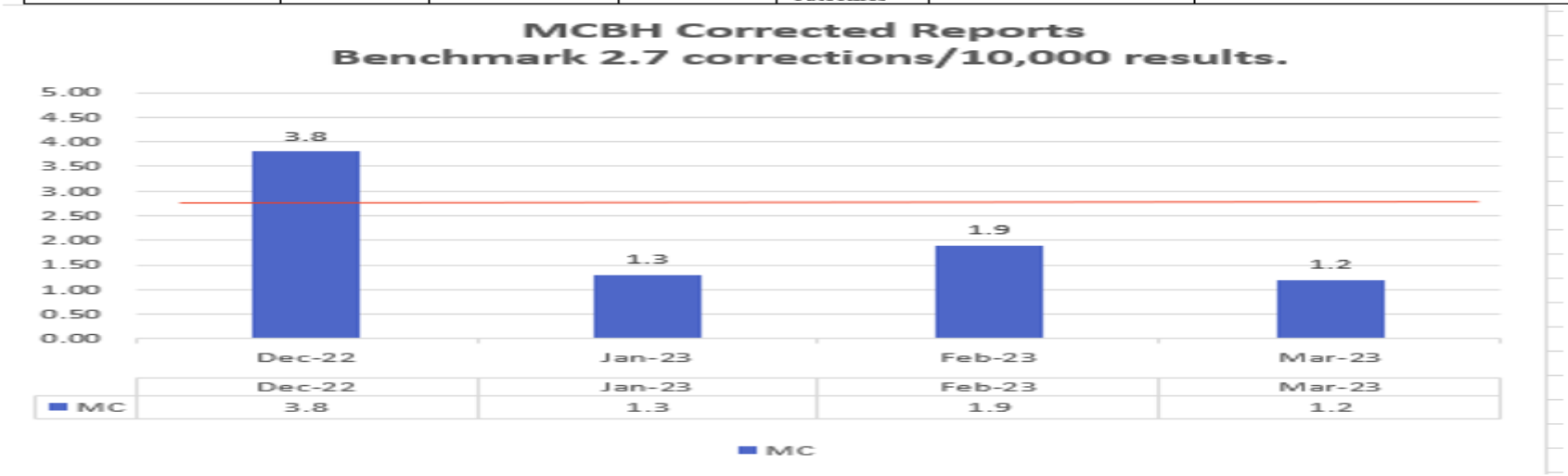


* Definition of Non Conforming events for this Quality Measure includes irreplaceable samples only.

MCBH Corrected Reports
Target <2.7/10,000 results

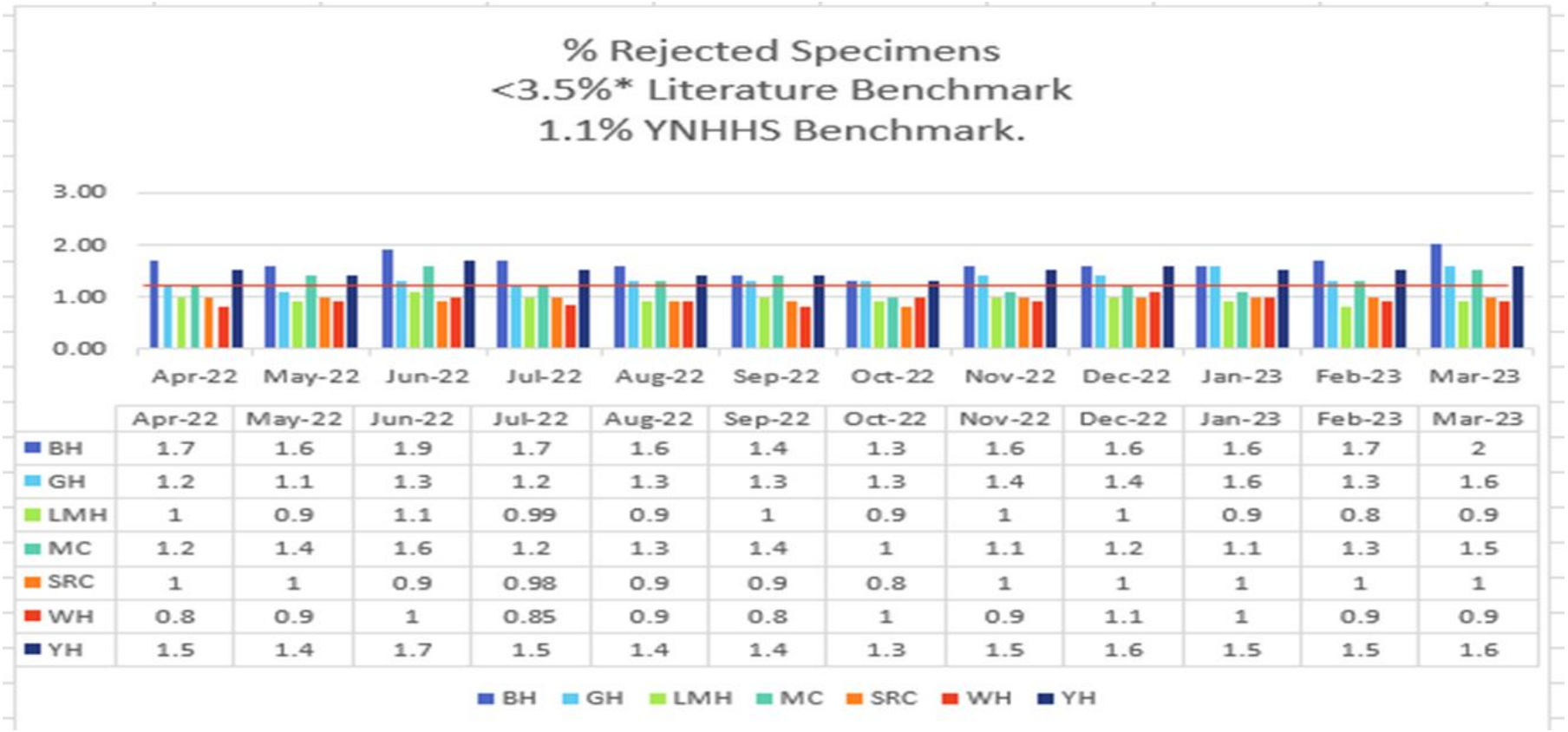
MCBH Corrected reports
Target <2.7/10,000 results

Quality Metric Corrected Reports	Sample size (tests)	Current performance	Previous month	Patient Impact	Corrective action and follow-up	Responsible
MCBC Lab Corrected reports	24,385	1.2 (0.012%)	1.9 (0.19%)	Corrected reports can lead to adverse patient outcomes	None needed benchmark met	Laboratory administration



Yale NewHaven Health Bridgeport Hospital

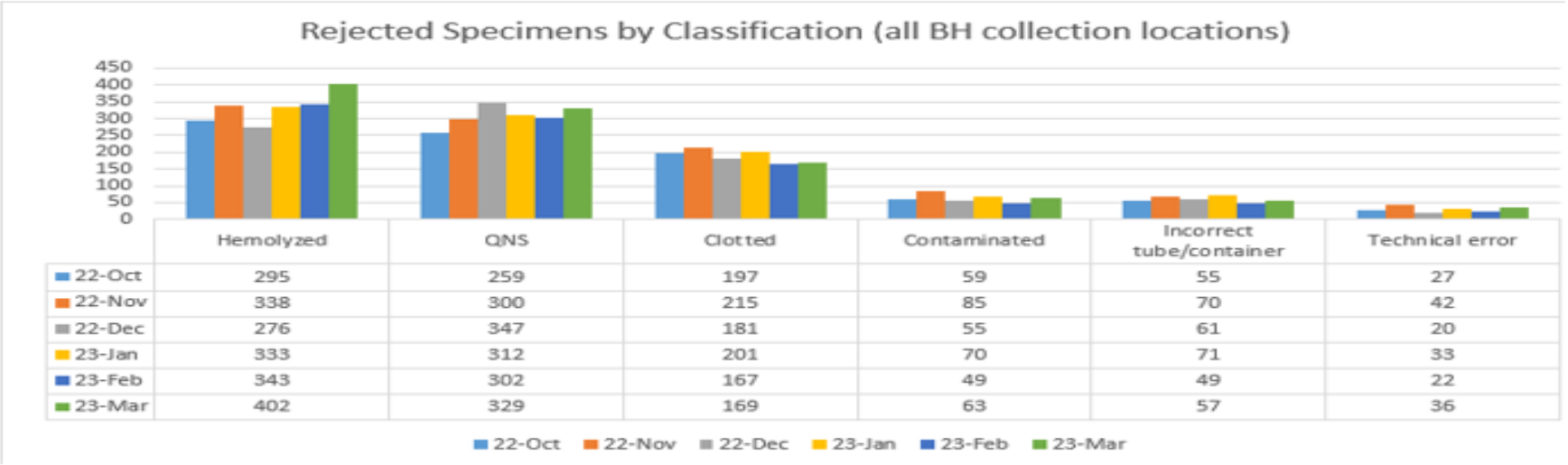
Lab General



	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
BH	1.7	1.6	1.9	1.7	1.6	1.4	1.3	1.6	1.6	1.6	1.7	2
GH	1.2	1.1	1.3	1.2	1.3	1.3	1.3	1.4	1.4	1.6	1.3	1.6
LMH	1	0.9	1.1	0.99	0.9	1	0.9	1	1	0.9	0.8	0.9
MC	1.2	1.4	1.6	1.2	1.3	1.4	1	1.1	1.2	1.1	1.3	1.5
SRC	1	1	0.9	0.98	0.9	0.9	0.8	1	1	1	1	1
WH	0.8	0.9	1	0.85	0.9	0.8	1	0.9	1.1	1	0.9	0.9
YH	1.5	1.4	1.7	1.5	1.4	1.4	1.3	1.5	1.6	1.5	1.5	1.6

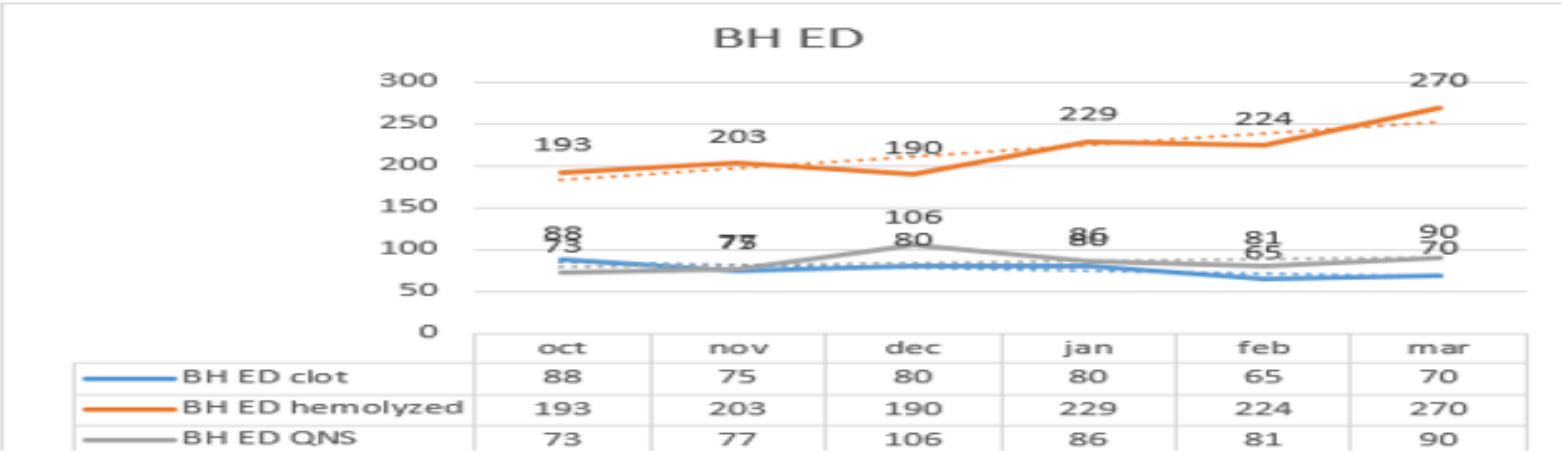
*Rooper L. Carter, J., Hargrove, J., Hoffman, S & Riedel,S.(2017). Targeting rejections: analysis of specimen acceptability and rejection. *Journal of Clinical Laboratory Analysis* .volume 31, issue 3

Lab General



	Hemolyzed	QNS	Clotted	Contaminated	Incorrect tube/container	Technical error
22-Oct	295	259	197	59	55	27
22-Nov	338	300	215	85	70	42
22-Dec	276	347	181	55	61	20
23-Jan	333	312	201	70	71	33
23-Feb	343	302	167	49	49	22
23-Mar	402	329	169	63	57	36

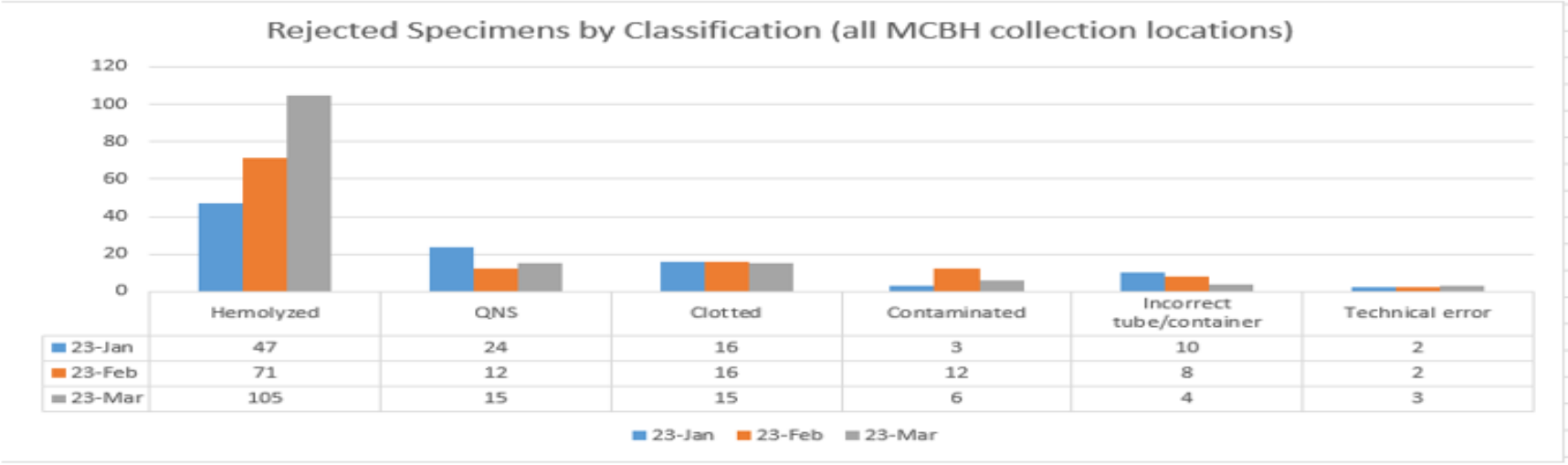
Top 3 Rejections-BH ED totals



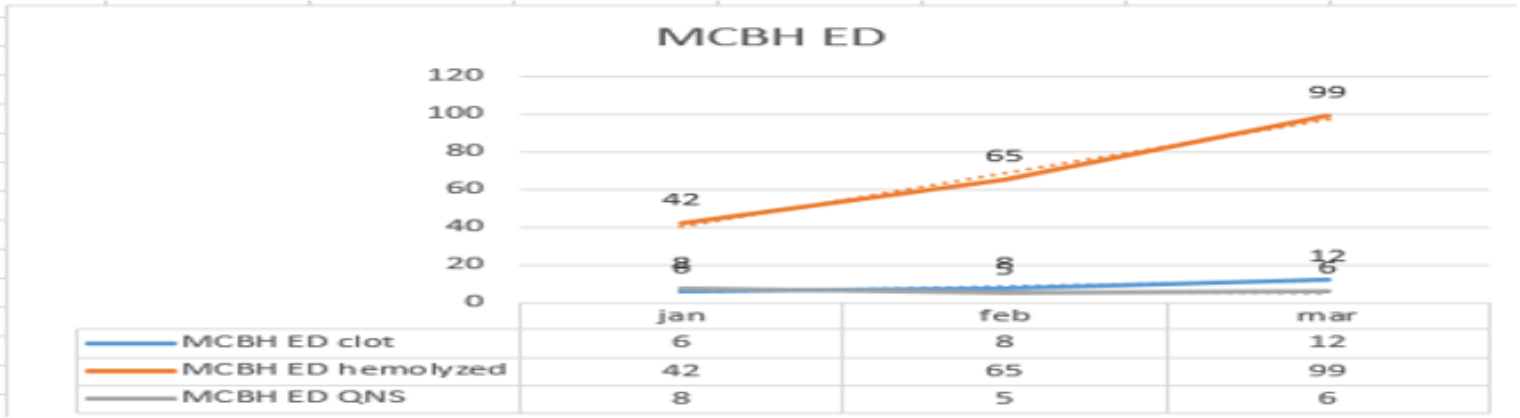
	oct	nov	dec	jan	feb	mar
BH ED clot	88	75	80	80	65	70
BH ED hemolyzed	193	203	190	229	224	270
BH ED QNS	73	77	106	86	81	90

Note 183/270 Hemolyzed rejected samples from ED were Hematology tests

Lab General



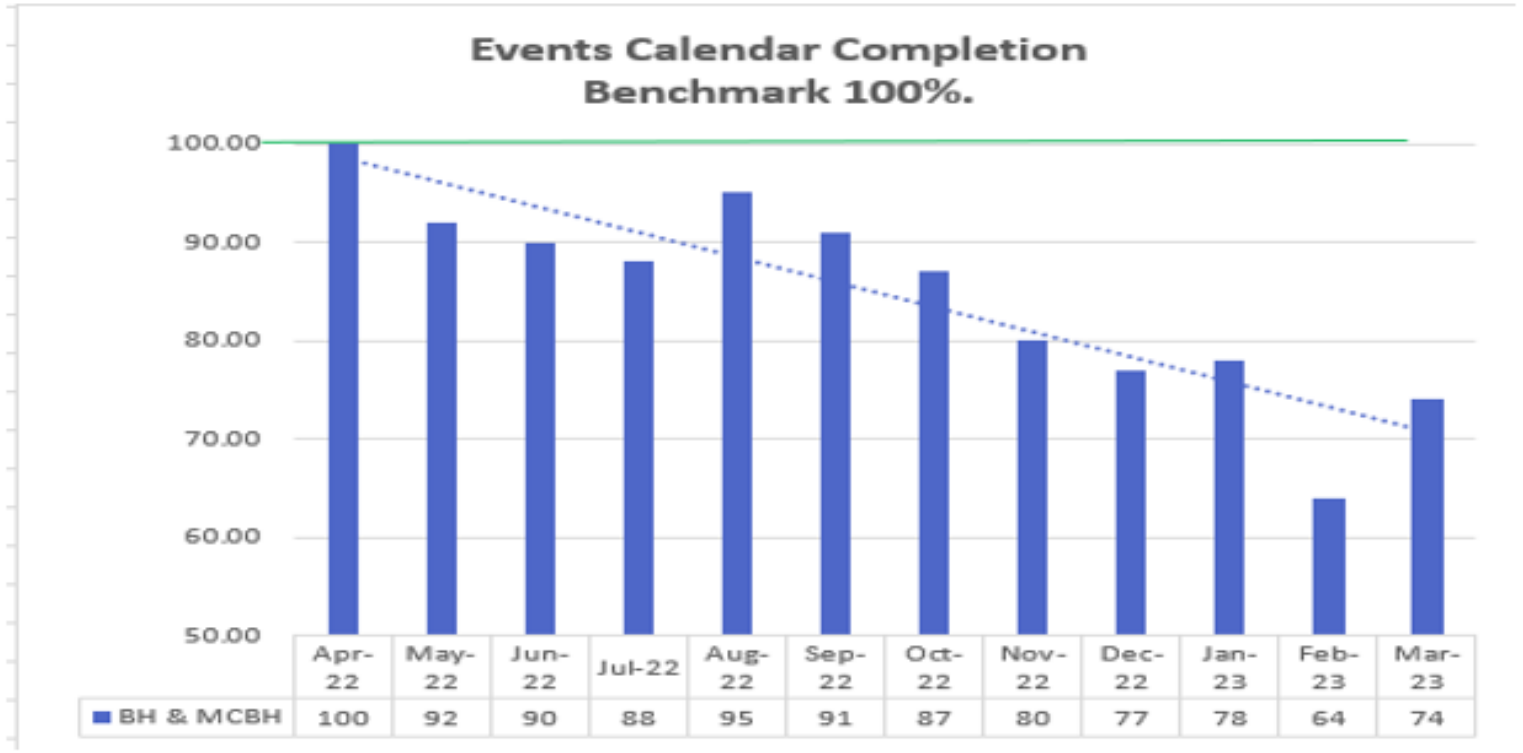
Top 3 Rejections-MCBH ED totals



Note-In March only 1/99 ED hemolyzed samples were Hematology tests-98 were Chemistry samples.

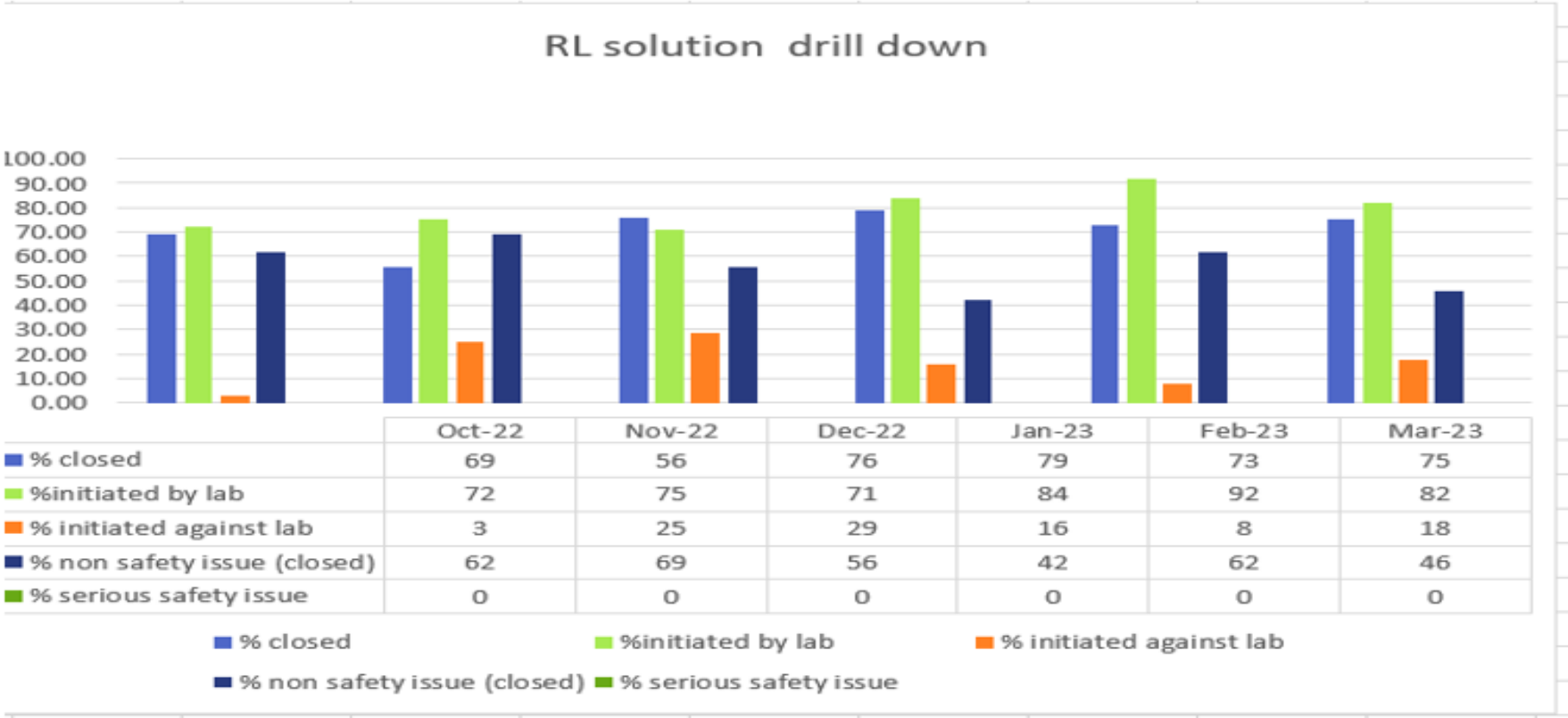
Lab General

BH & MCBH Events Calendar Completion 74% **March 2023**
Benchmark 100%
17/23 Events completed



Lab General

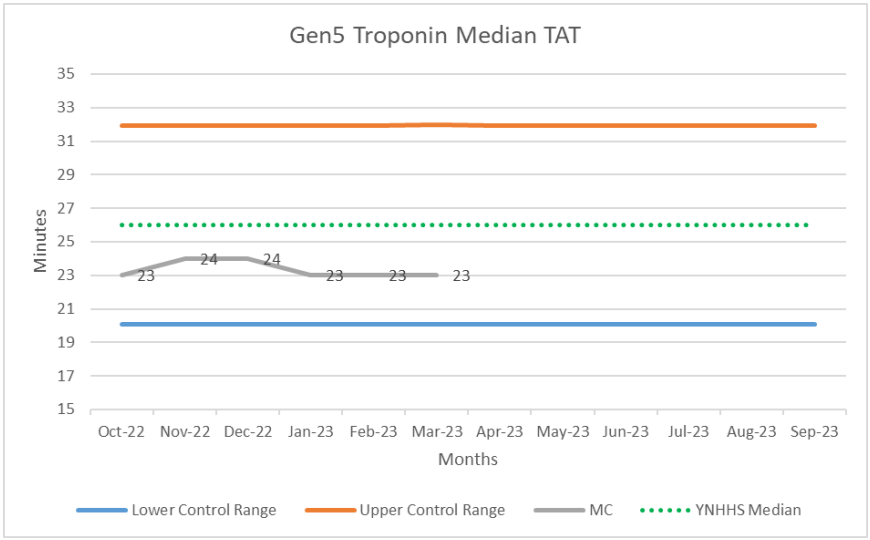
BH RL SOLUTIONS MONITOR
March 2023

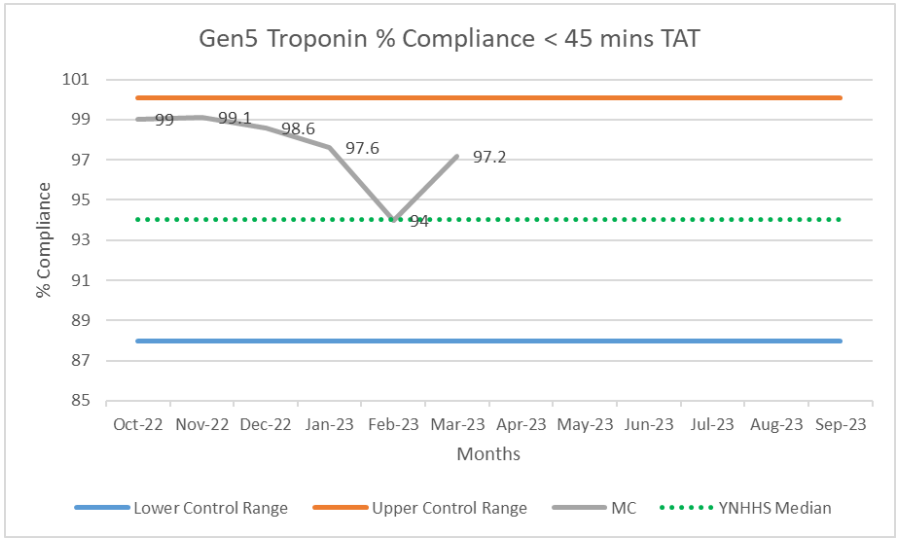


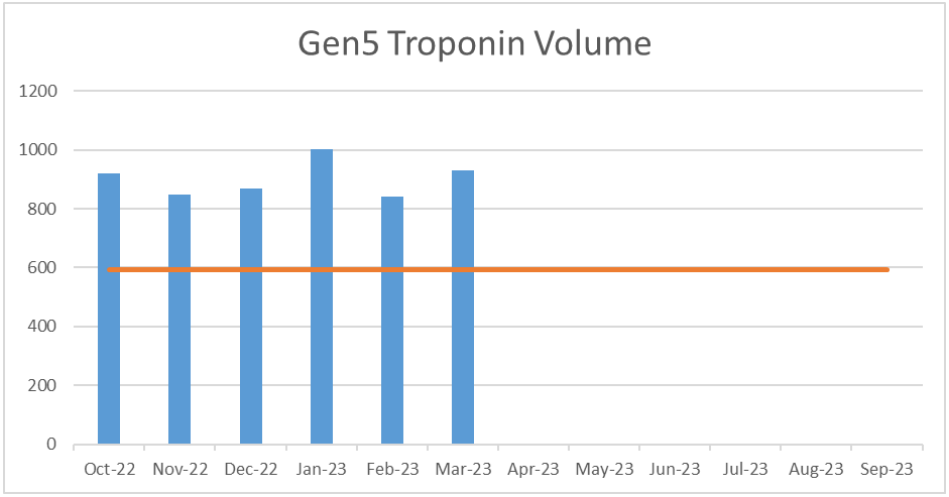
	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
% closed	69	56	76	79	73	75
%initiated by lab	72	75	71	84	92	82
% initiated against lab	3	25	29	16	8	18
% non safety issue (closed)	62	69	56	42	62	46
% serious safety issue	0	0	0	0	0	0

21/28 events closed, 2 new, 5 in progress
23 lab initiated
0 Serious Safety Events, rest barrier catches & PSE 2,3,4.

Milford Campus – Gen 5 Troponin TAT

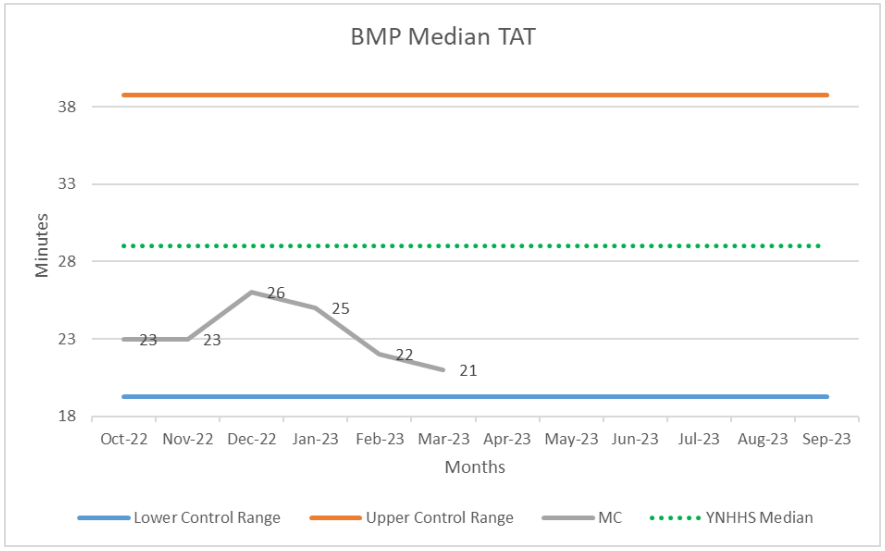


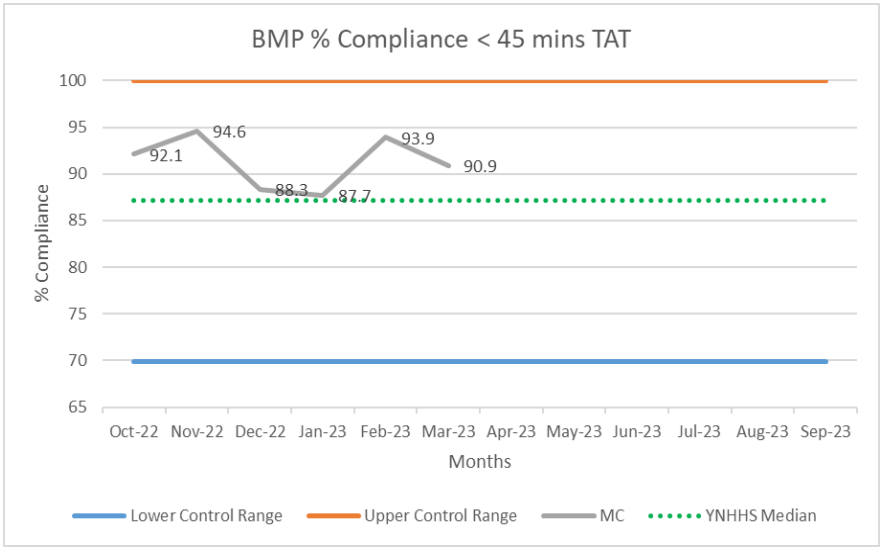


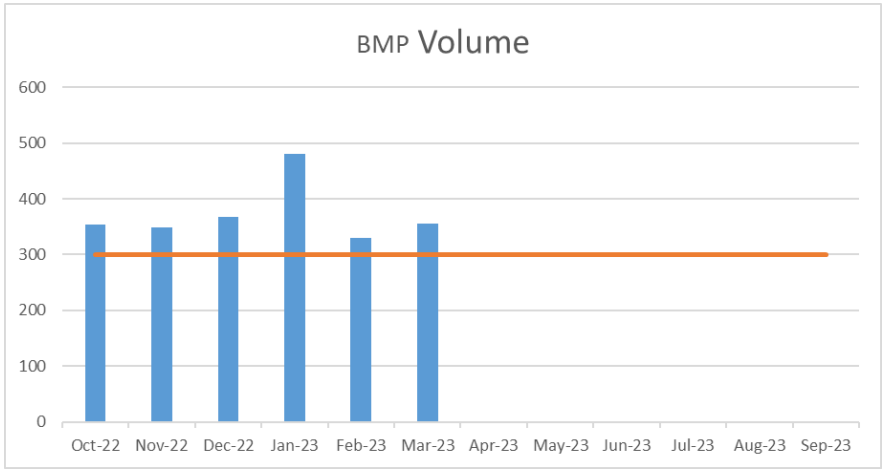


Yale NewHaven Health Bridgeport Hospital

Milford Campus – Basic Metabolic Panel (BMP) ED TAT

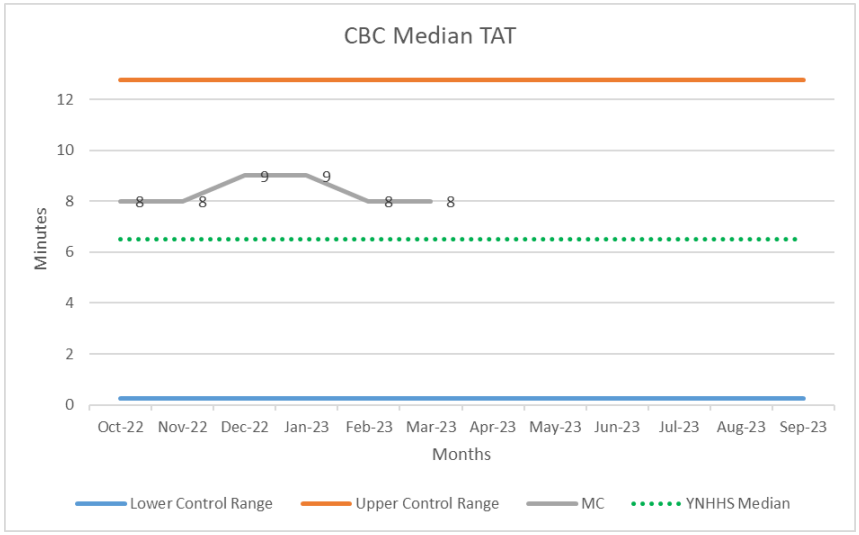


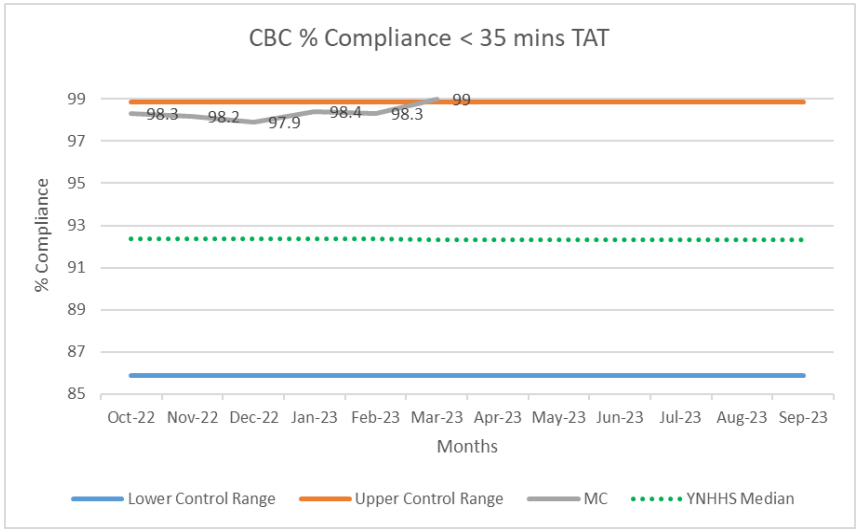


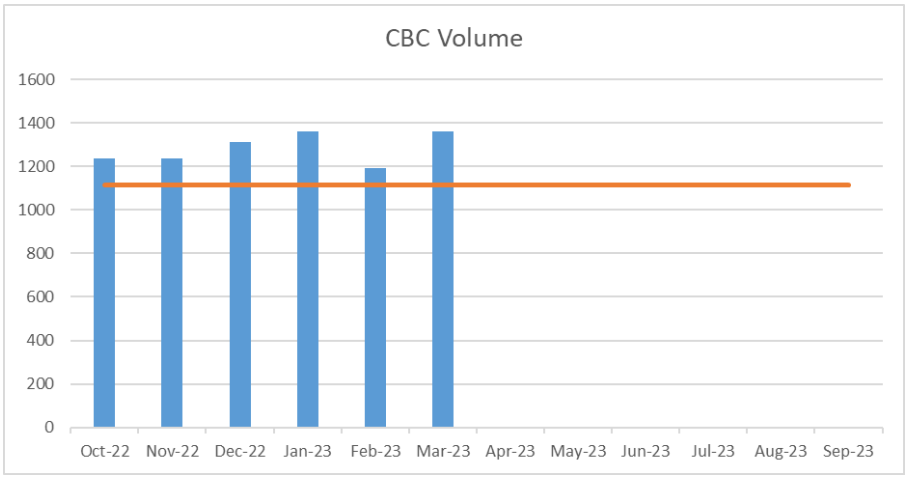


Yale NewHaven Health Bridgeport Hospital

Milford Campus – Complete Blood Count (CBC) ED TAT

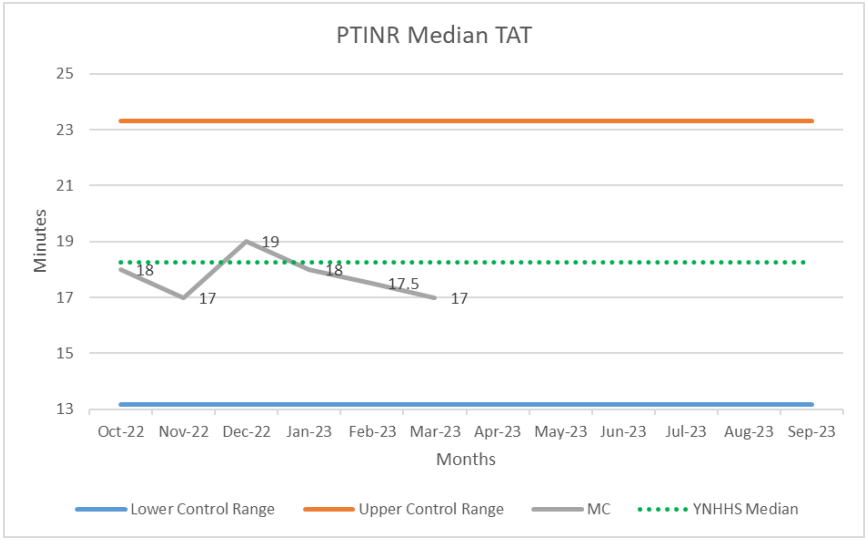


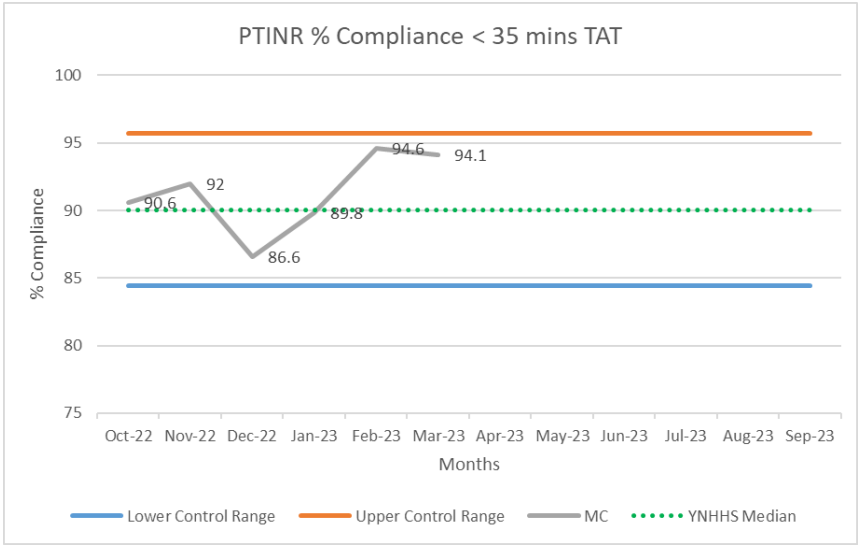


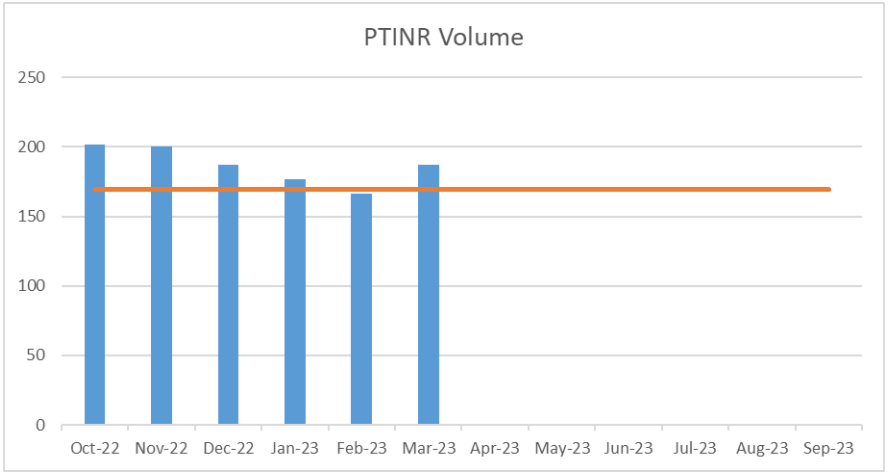


Yale NewHaven Health
Bridgeport Hospital

Milford Campus – PTINR ED TAT

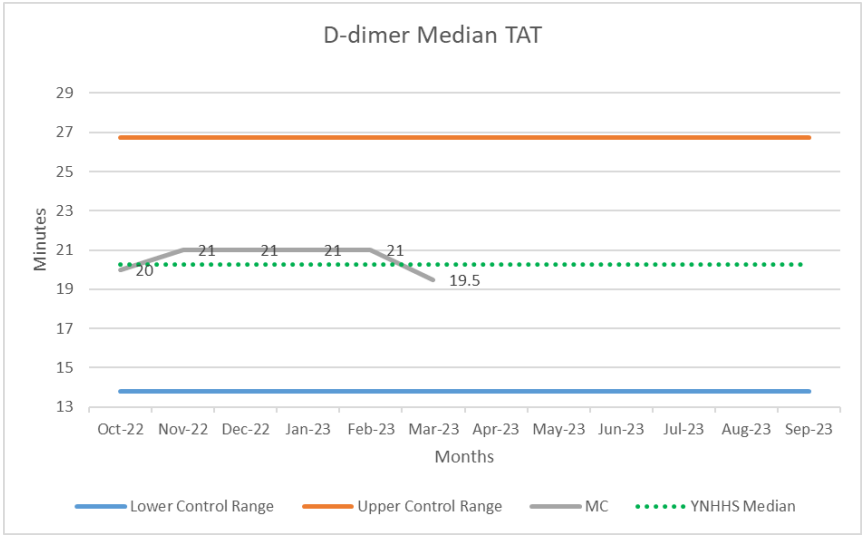


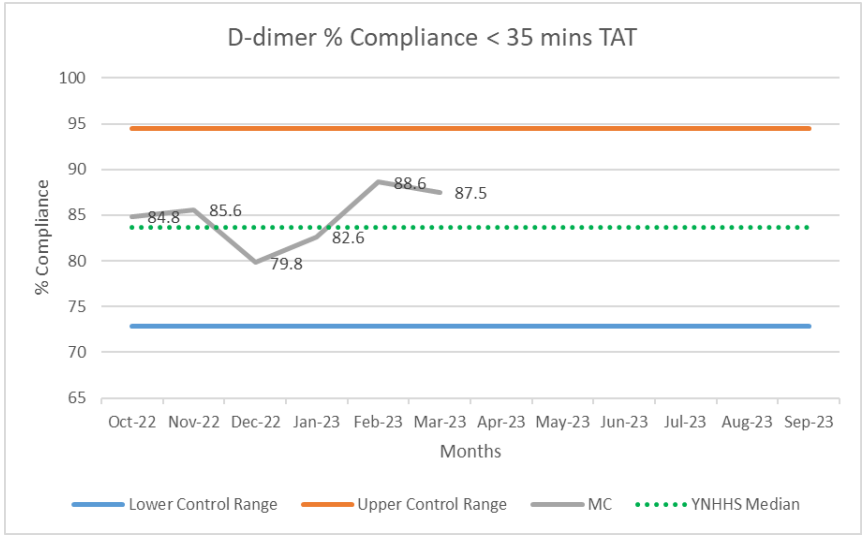


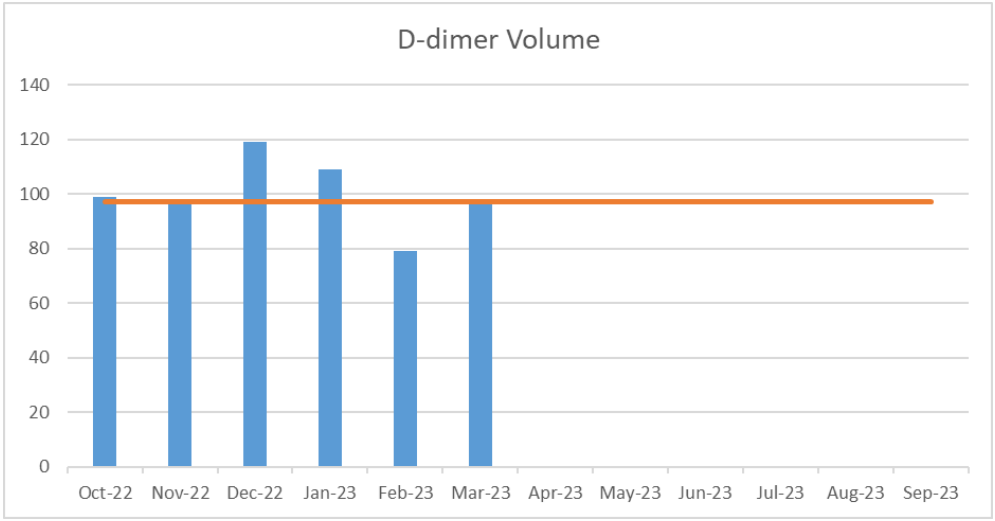


Yale NewHaven Health Bridgeport Hospital

Milford Campus – D-dimer ED TAT

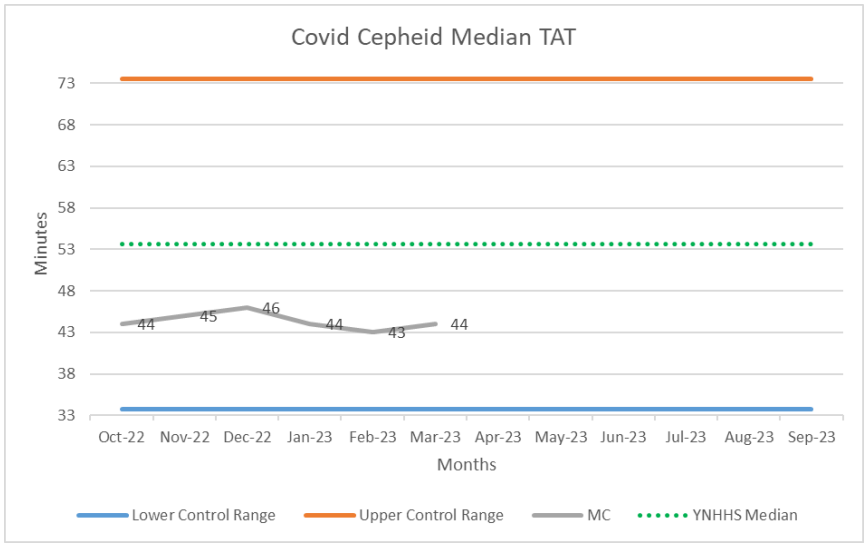


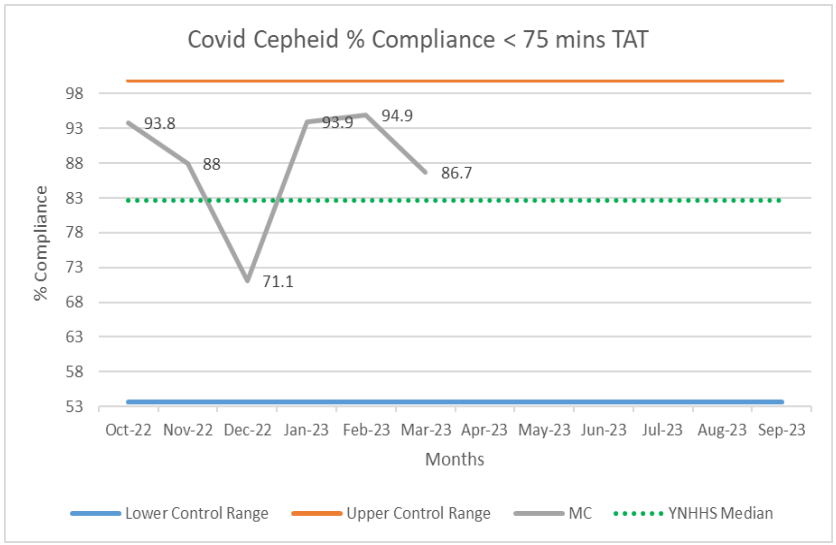


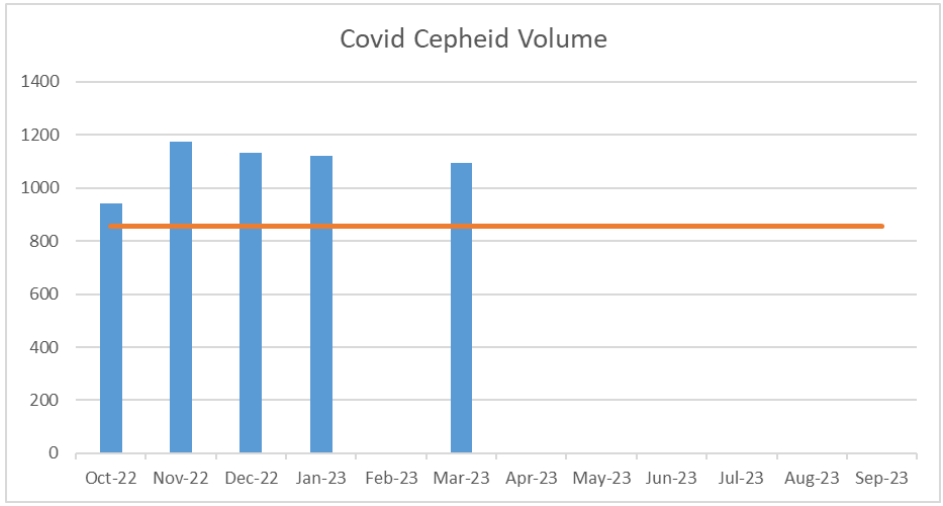


Yale NewHaven Health
Bridgeport Hospital

Milford Campus – COVID Cepheid PCR ED TAT

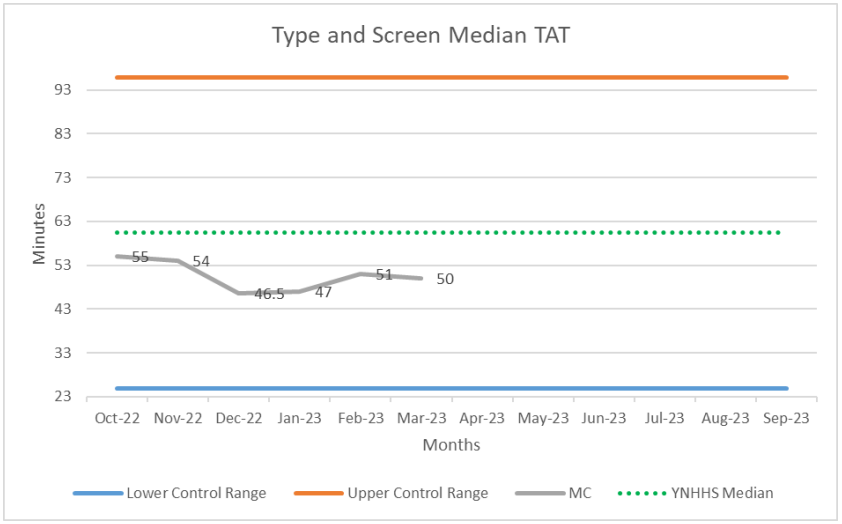


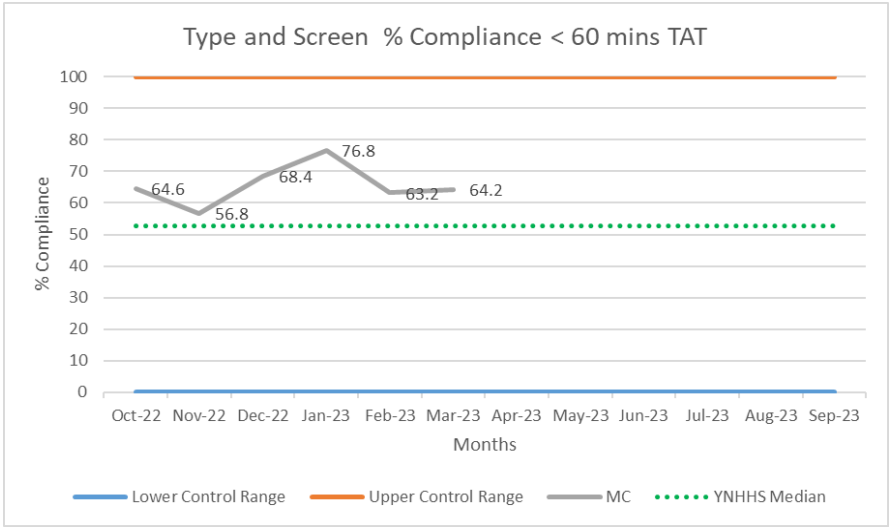


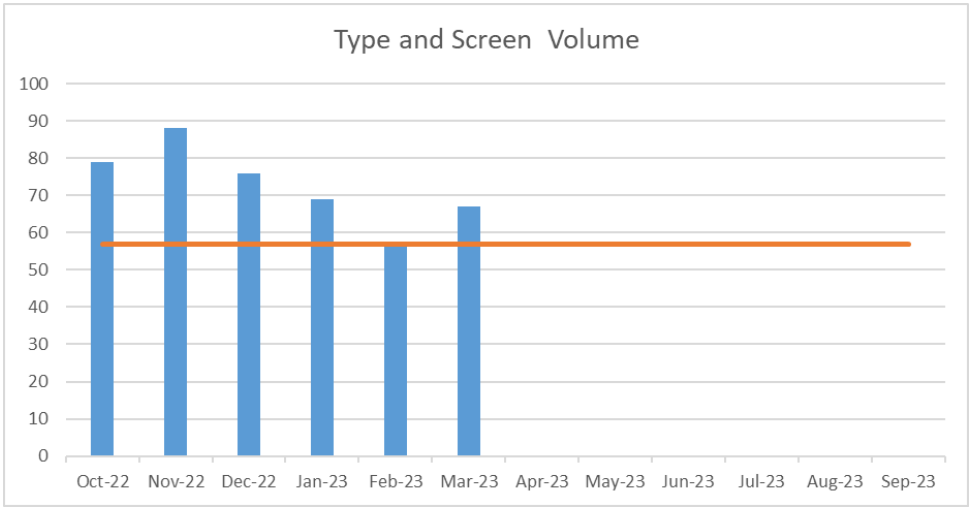


Yale NewHaven Health Bridgeport Hospital

Milford Campus – Type and Screen ED TAT







Yale NewHaven Health Bridgeport Hospital

Milford Campus
RBC

	Oct	Nov	Dec	Jan	Feb	Mar	Total Amount
Transfusion	109	96	94	73	90	76	$121,749.40
Wasted	0	0	0	0	0	1	$226.30
Total	109	96	94	73	90	77	$121,975.70

Yale NewHaven Health Bridgeport Hospital

Milford Campus
Cryo

	Oct	Nov	Dec	Jan	Feb	Mar	Total Amount
Transfusion	1	1	0	1	0	1	$1,326.00
Wasted	1	0	0	0	0	0	$331.50
Total	2	1	0	1	0	1	$1,657.50

Yale NewHaven Health Bridgeport Hospital

Milford Campus
FFP

	Oct	Nov	Dec	Jan	Feb	Mar	Total Amount
Transfusion	4	4	6	0	1	2	$787.27
Wasted	0	0	0	2	6	10	$833.58
Total	4	4	6	2	7	12	$1,620.85

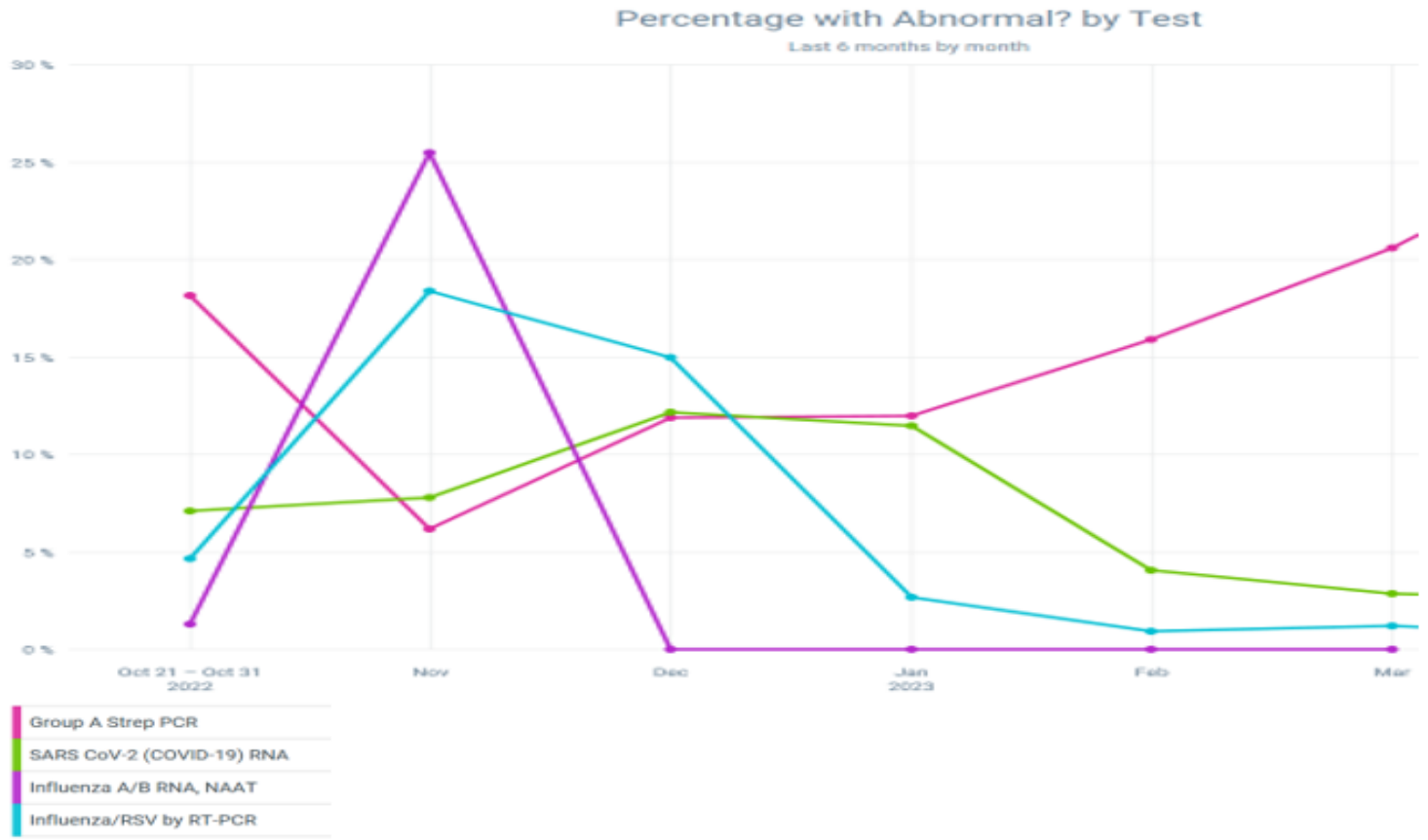
Yale NewHaven Health Bridgeport Hospital

Milford Campus
Platelet Discarded

	Oct	Nov	Dec	Jan	Feb	Mar	Total Amount
Transfusion	3	8	6	3	4	4	$18,844.00
Discarded	11	7	9	17	23	15	$55,186.00
Total	14	15	15	20	27	19	$74,030.00
% Discarded	78.57%	46.67%	60.00%	80%	85%	78.95%	
Discarded/Day	0.3548	0.2258	0.2903	0.5667	0.8214	0.5357	$1,880.89

Yale NewHaven Health Bridgeport Hospital

Milford Campus Molecular Dashboard



Date	Tests	% Positivity	Derived Baseline	Environment Monitoring	Physician Feedback	Epidemiological Trends	Evaluation Notes	Corrective Action (if needed)
23-Mar	SARS-CoV-2	2.9	0-22%	Negative	None	None	None	None
23-Mar	Group A Strep	20.6	0-19%	Negative	None	None	None	None
23-Mar	Flu A/B	0	0-7%	Negative	None	None	None	None
23-Mar	Flu/RSV	1.2	0-14%	Negative	None	None	None	None

Yale NewHaven Health Bridgeport Hospital

CRSQ Report Out

Committee of Regulatory, Safety, & Quality

March 2023

Bridgeport Hospital

Department of Laboratory Medicine

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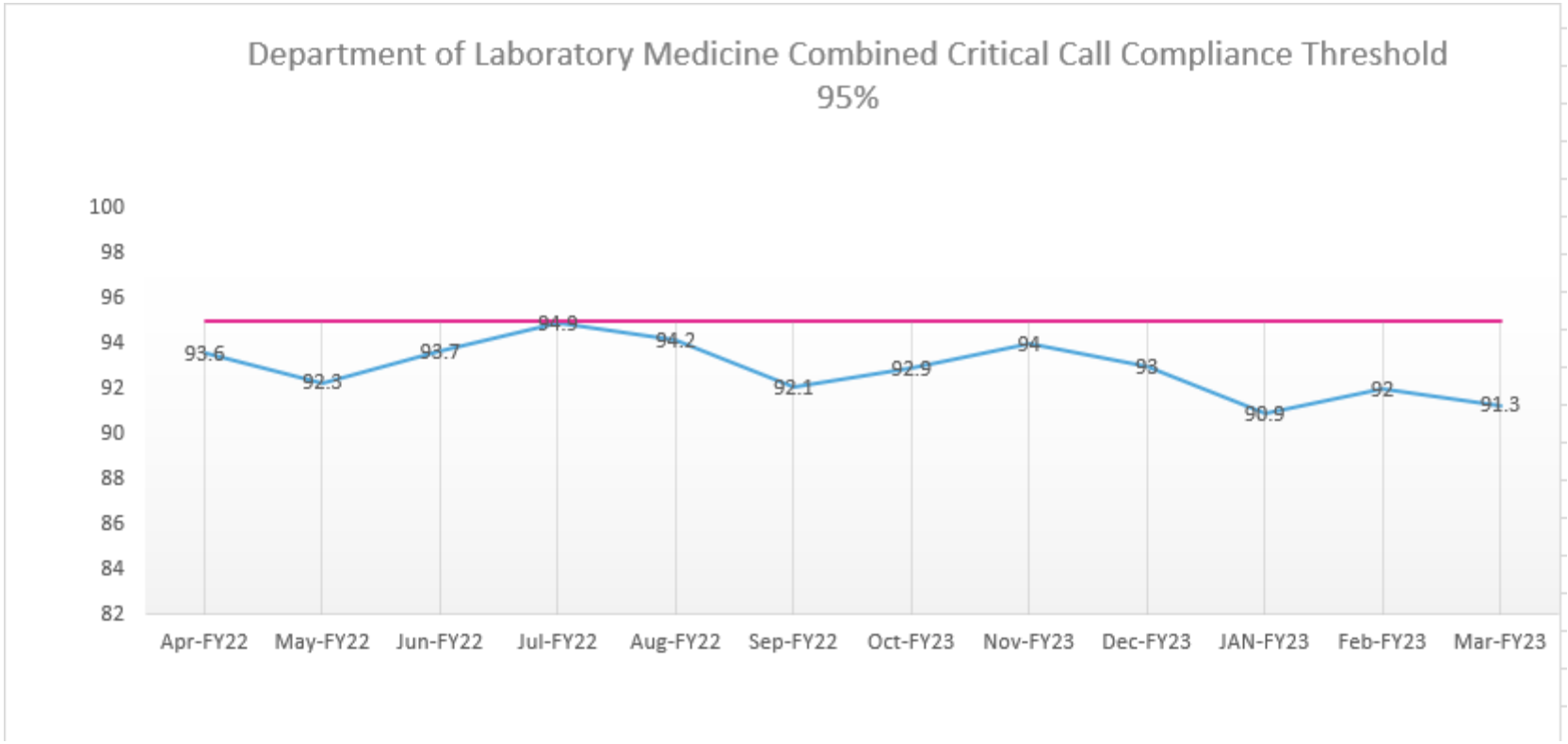
Laura Buhlmann M.S., Melissa Morales B.A.

SMART Aim *Specific-Measureable-Actionable-Relevant-Timely*	Increase the critical result notification compliance with our 30-minute goal to 95% at Bridgeport Hospital The 30-minute time period is from the moment the critical value is final verified to the moment the communication log in Epic is completed. • We are currently at **91.3%** compliance as a department.
Key drivers *measureable processes impacting the outcome*	Decrease the time from result verification to communication log completion. • Increase performance of correct workflow (verify result first and then notify provider). • Timely communication of outpatient critical values
Interventions *actions/changes necessary to impact key drivers*	Standardize critical call list workflow • Provided re-education and tips and tricks for the correct workflow. • Identified a process to streamline outpatient critical calls (work with specific practices with known notification issues).
Results* *accomplishments, modifications, barriers*	Accomplishments • July 2022 had a 94.9% compliance (highest in the12 month period of April 2022-Mar 2023). • Department of Laboratory Medicine averages approximately 1500 critical calls per month.

Note: There is an additional system project to standardize critical result notification workflow.
- Will allow reports and metrics to be standardized as well

Yale NewHaven Health Bridgeport Hospital

Bridgeport Hospital Department of Laboratory Medicine Critical Call Percent Compliance 91.6% (cumulatively) 4/1/2022-3/31/2023



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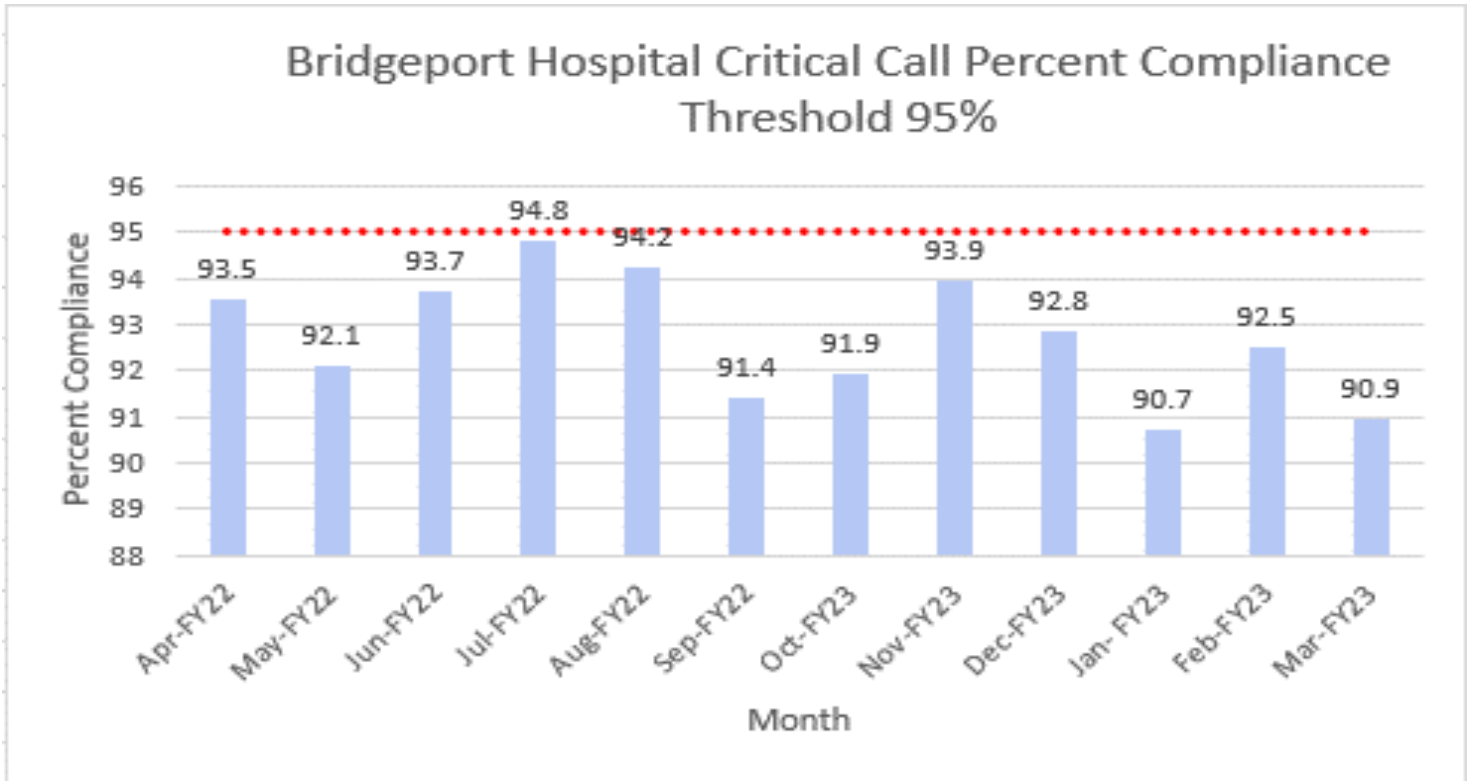
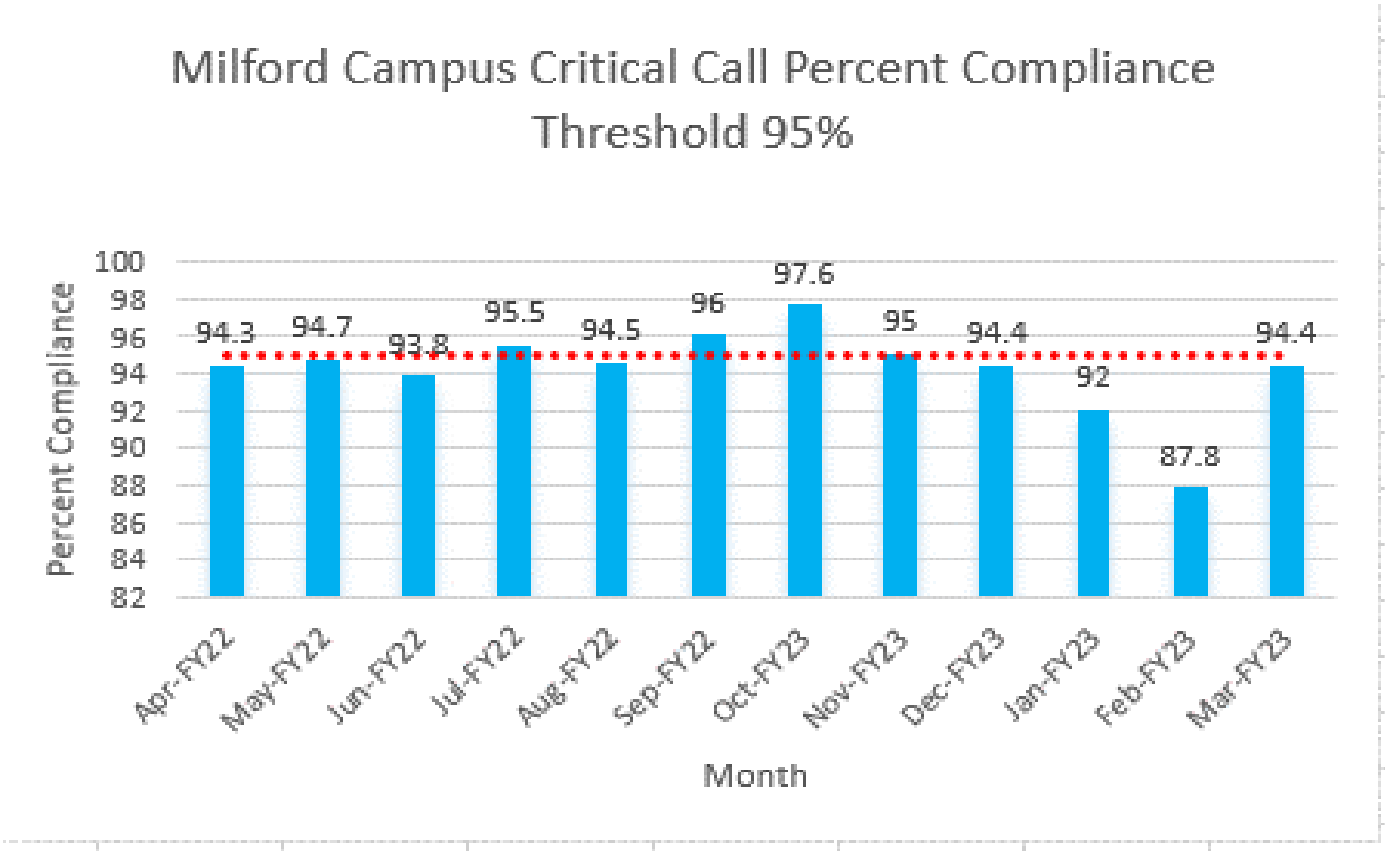
Bridgeport Campus Critical Call Percent Compliance 91.5%

4/1/2022-3/31/2023



Yale NewHaven Health Bridgeport Hospital

Milford Campus Critical Call Percent Compliance 92.3% 4/1/2022-3/31/2023



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