

Laboratory Medicine – Aug 2022

October 26, 2022

Attendance

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

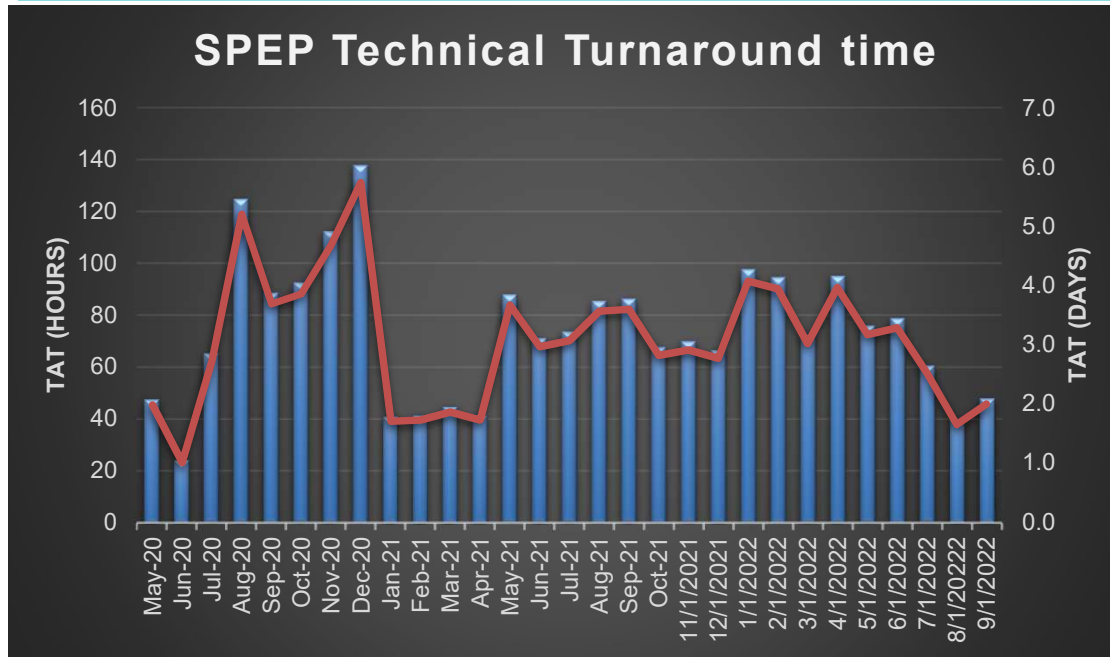
FY21 vs. FY22 Baseline Comparison

Test Name	TAT			% Compliance		
	FY21	FY22	Change	FY21	FY22	Change
Procalcitonin	63	62	-1	53.5	57.1	3.6
Troponin	31	32	1	84.7	83.6	-1.1
BMP	29	29	0	88.4	87	-1.4
CBC	7	7	0	92.7	92.3	-0.4
PTINR	19	18	-1	87.8	89	1.2
D-dimer	23	21	-2	79.9	82.1	2.2
Type and screen	56	58	2	53.9	55.6	1.7
COVID Panther	317	298	-19	98	99.6	1.6
COVID Cepheid/Liat	63	57	-6	46.9	85.8	38.9
Legend						
Good						
Neutral						
Bad						

Changed from 60 to 90 minutes due to assay reformulation

SPEP Outcome Metrics: Technical

Establish Target & Stretch Goals



Threshold (FY22)	Target	Stretch
Baseline Median	25%	50%
4 days	3 days	2 days

Post Intervention

% Improvement	TAT (days)
Oct 2021	2.8
Nov 2021	2.9
Dec 2021	2.77
Jan 2022	4.08
Feb 2022	3.94
Mar 2022	3.02
April 2022	3.96
May 2022	3.17
Jun 2022	3.29
Jul 2022	2.52
Aug 2022	1.65
Sept 2022	2.00
FYTD	2.9

Original Baseline:
May 2020 – Dec 2020



FY21

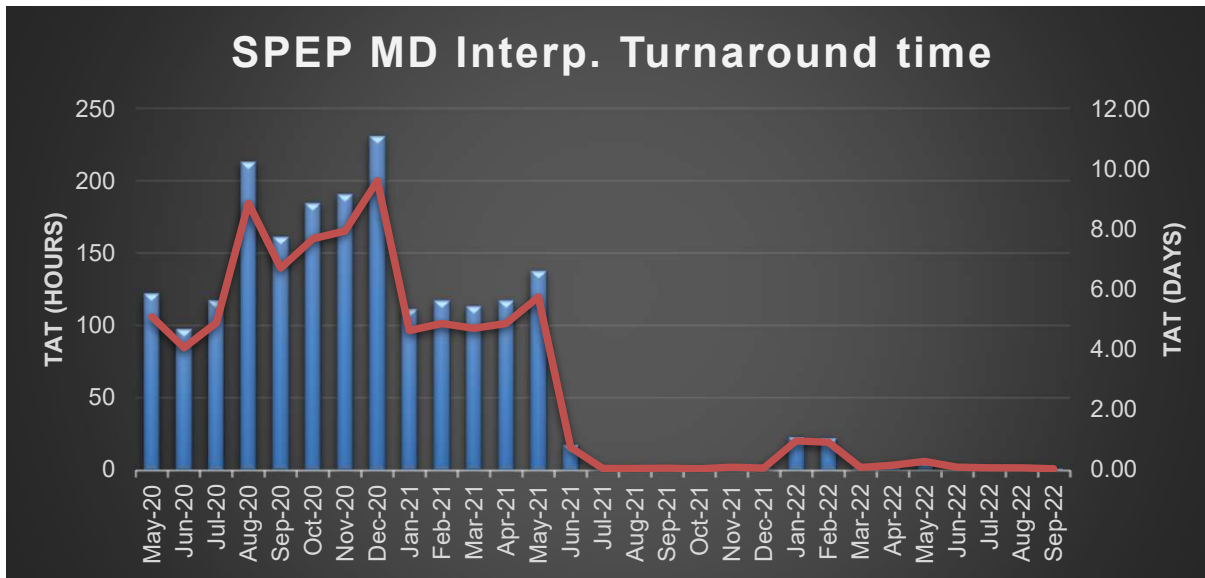


FYTD22



SPEP Outcome Metrics: MD Interp.

Establish Target & Stretch Goals



Threshold (FY22)	Target	Stretch
Baseline Median	25%	50%
3 days	2.3 days	1.5 days

Post Intervention

% Improvement	TAT (days)
Oct 2021	0.04
Nov 2021	0.09
Dec 2021	0.06
Jan 2022	0.96
Feb 2022	0.93
Mar 2022	0.08
Apr 2022	0.15
May 2022	0.28
Jun 2022	0.09
Jul 2022	0.07
Aug 2022	0.07
Sept 2022	0.04
FYTD	0.21

Original Baseline:
May 2020 – Dec 2020



FY21

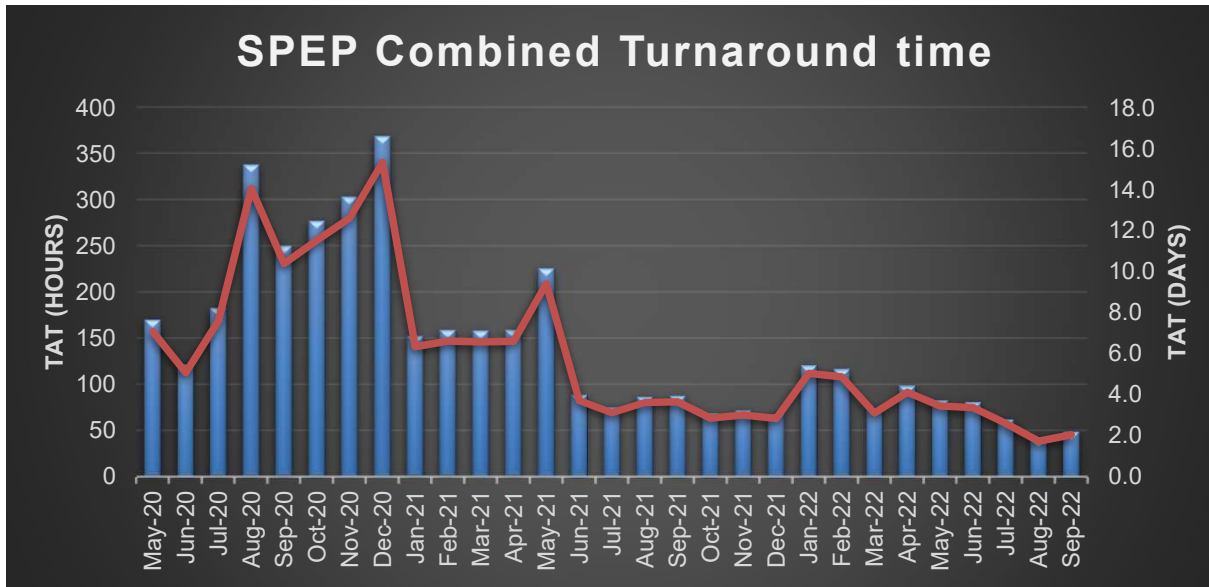


FYTD22



SPEP Outcome Metrics: Tech + MD Total

Establish Target & Stretch Goals



Threshold (FY 19)	Target	Stretch
Current Median	25%	50%
7 days	5.3 days	3.5 days

Post Intervention

% Improvement	TAT (days)
Oct 2021	2.86
Nov 2021	3.00
Dec 2021	2.83
Jan 2022	5.04
Feb 2022	4.87
Mar 2022	3.10
Apr 2022	4.12
May 2022	3.45
Jun 2022	3.37
Jul 2022	2.60
Aug 2022	1.72
Sept 2022	2.04
FYTD	3.16

Yale
NewHaven
Health
Bridgeport
Hospital

Baseline:
May 2020 – Dec 2020



FY21

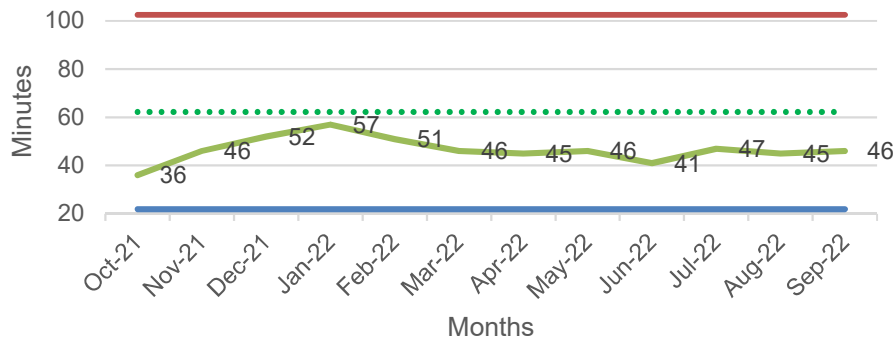


FYTD22



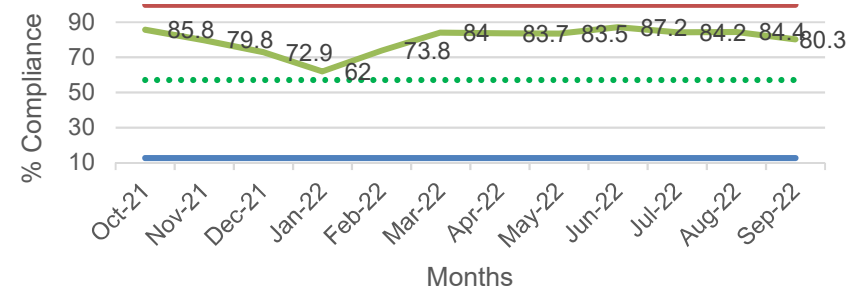
Bridgeport Campus – Procalcitonin

Procalcitonin Median TAT



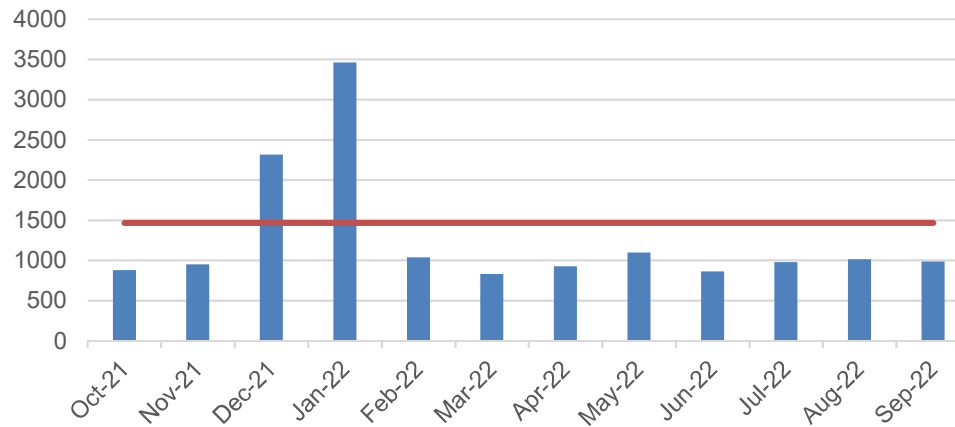
— Lower Control Range — Upper Control Range
— BH ⋯ YNHHS Median

Procalcitonin % Compliance < 63 mins TAT



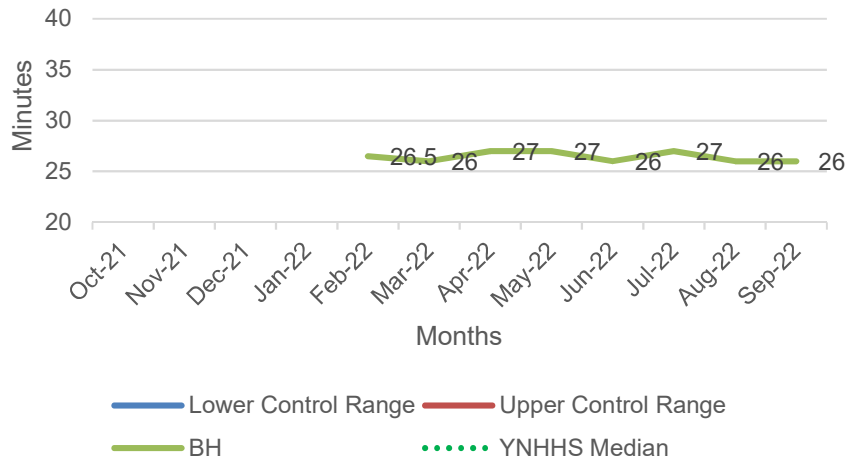
— Lower Control Range — Upper Control Range
— BH ⋯ YNHHS Median

Procalcitonin Volume

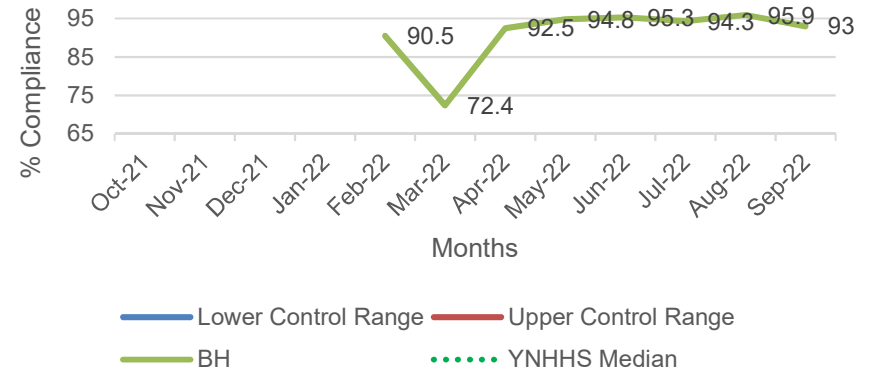


Bridgeport Campus – Gen 5 Troponin TAT

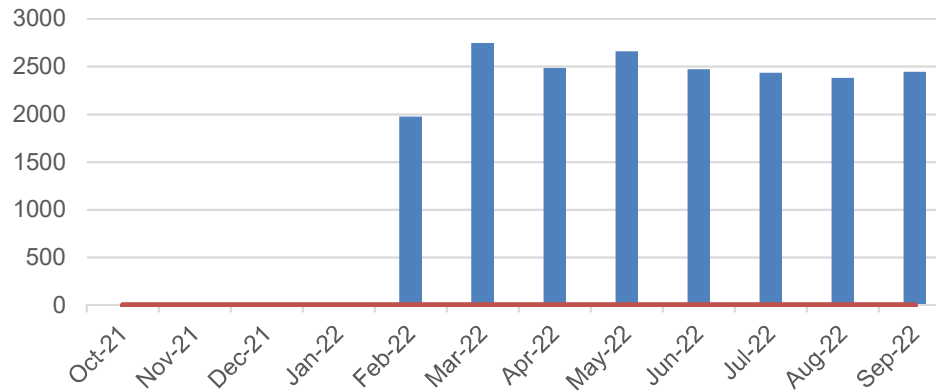
Gen5 Troponin Median TAT



Gen5 Troponin % Compliance < 45 mins TAT

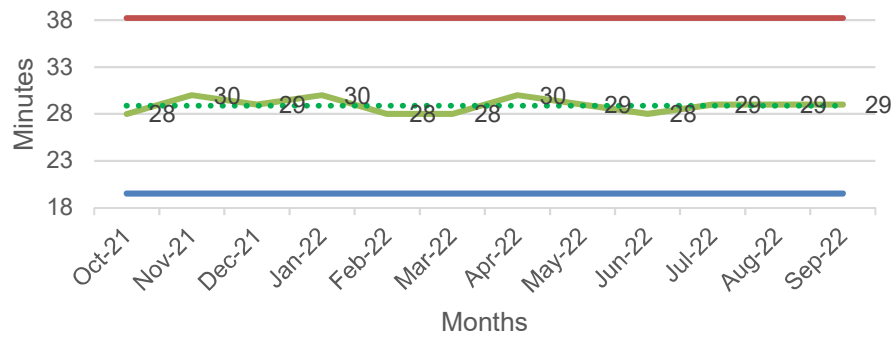


Gen5 Troponin Volume



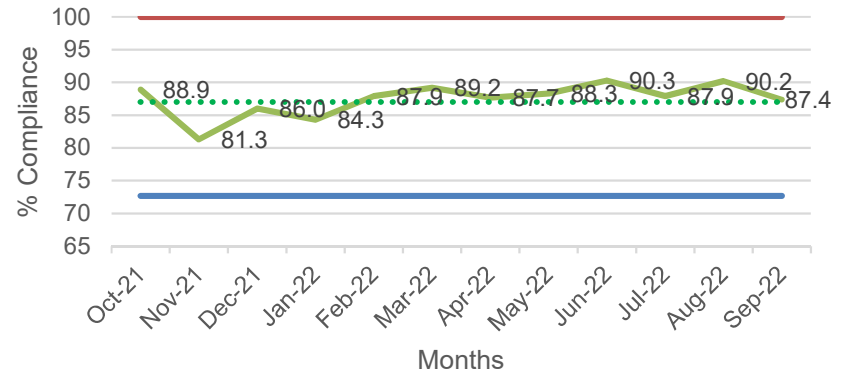
Bridgeport Campus – Basic Metabolic Panel (BMP) ED TAT

BMP Median TAT



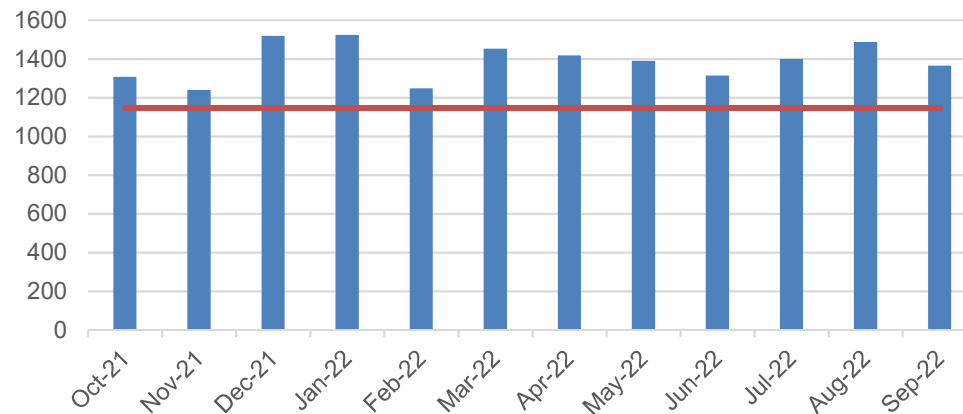
— Lower Control Range — Upper Control Range
—●— BH ●●●● YNHHS Median

BMP % Compliance < 45 mins TAT



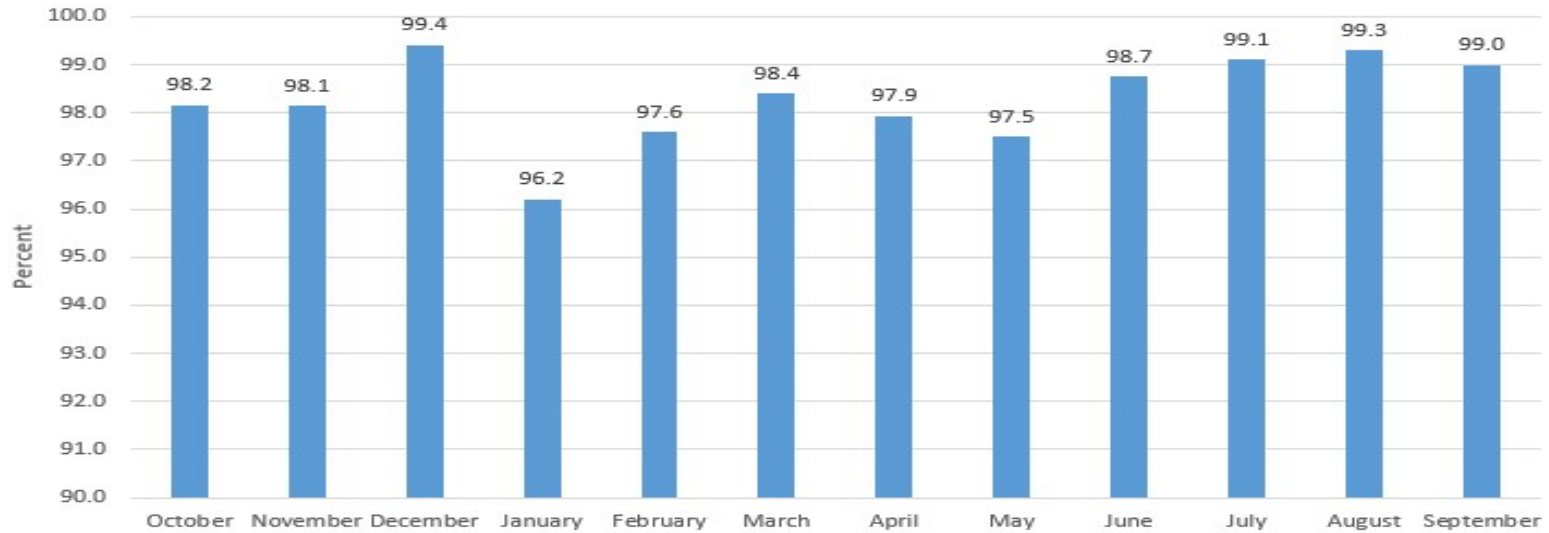
— Lower Control Range — Upper Control Range
—●— BH ●●●● YNHHS Median

BMP Volume



Chemistry & Immunology

FY 2022 Critical Result Communication Documentation % Compliance



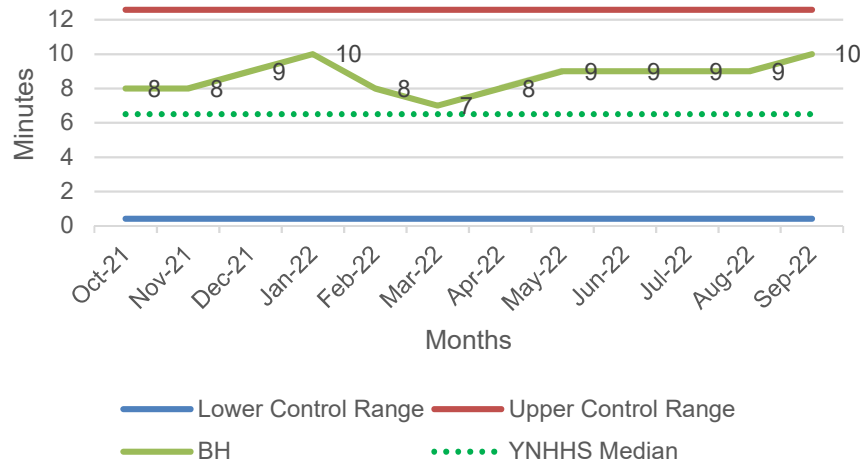
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
n	975	914	1350	1248	1332	1306	1355	1320	1279	1224	1428	1194
#compliant	957	897	1342	1201	1300	1285	1327	1287	1263	1213	1418	1182
#noncompliant	18	17	8	47	32	21	28	33	16	11	10	12
not called	4	5	5	11	9	1	5	5	0	1	0	0
no full name	8	8	2	32	5	19	21	18	10	3	5	2
no title	6	4	1	4	18	1	1	7	3	2	2	7
other							1	3	3	5*	3*	3*

*2 = Tech completed the Comm Log with no update to defaults making it look like it was was called to an inappropriate receiver.

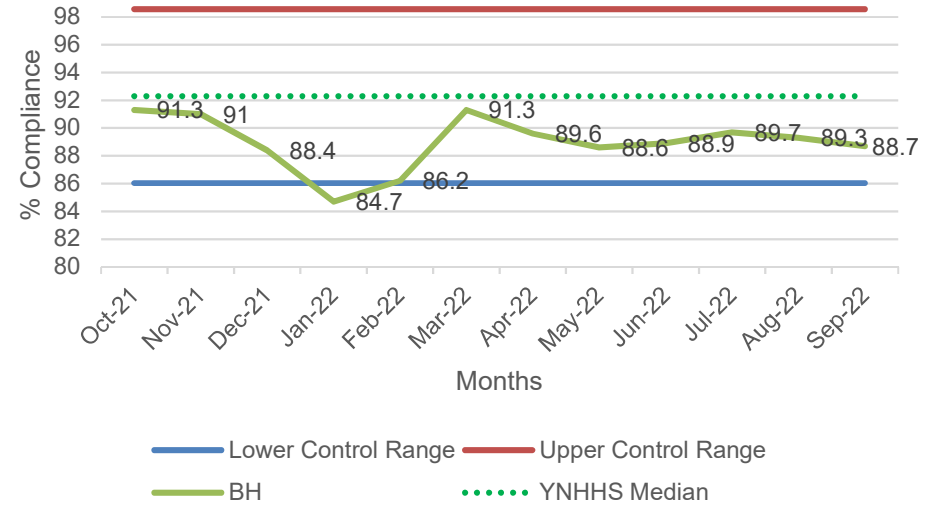
1 = Tech didn't document any follow-up after not being able to report critical value

Bridgeport Campus – Complete Blood Count (CBC) ED TAT

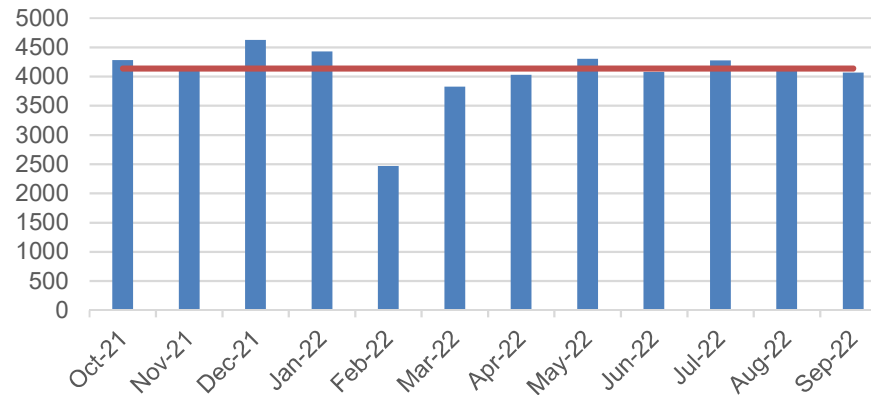
CBC Median TAT



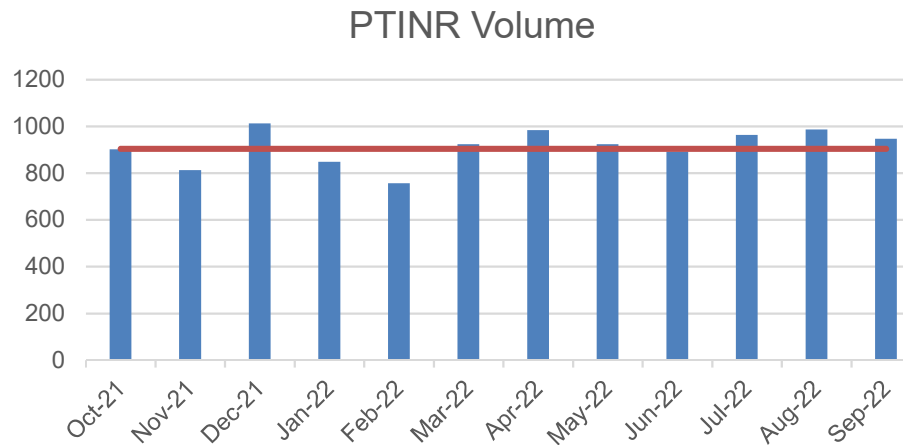
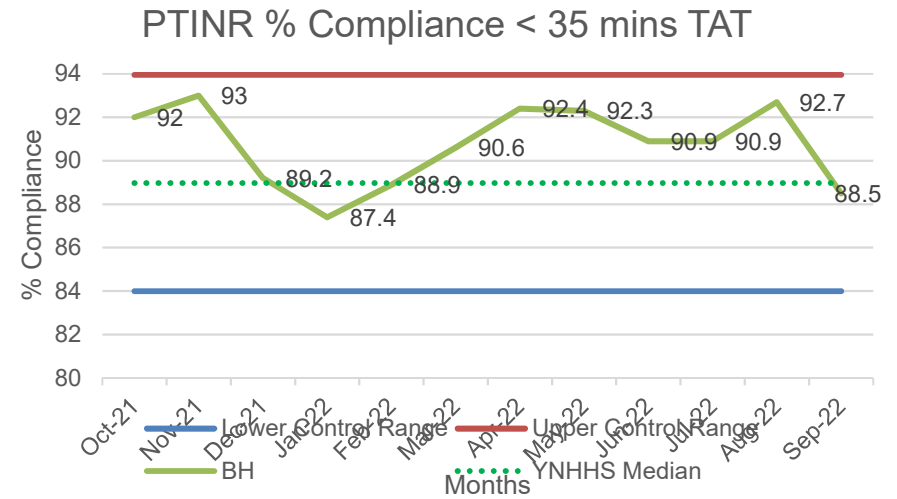
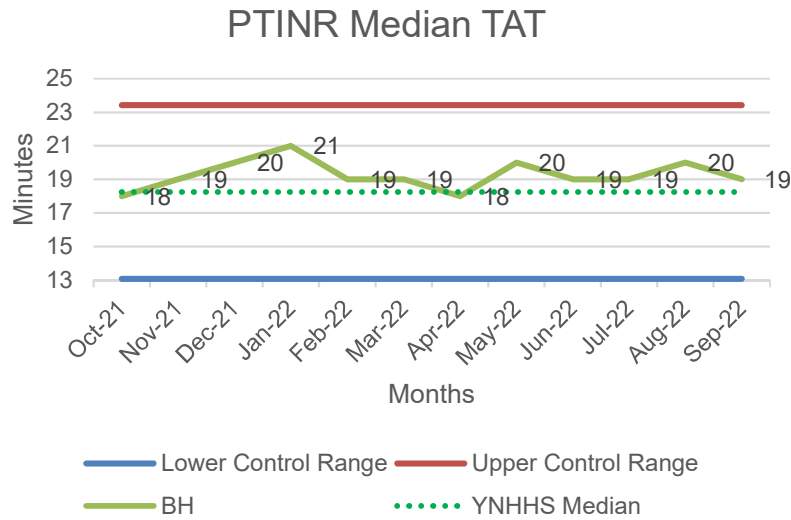
CBC % Compliance < 35 mins TAT



CBC Volume

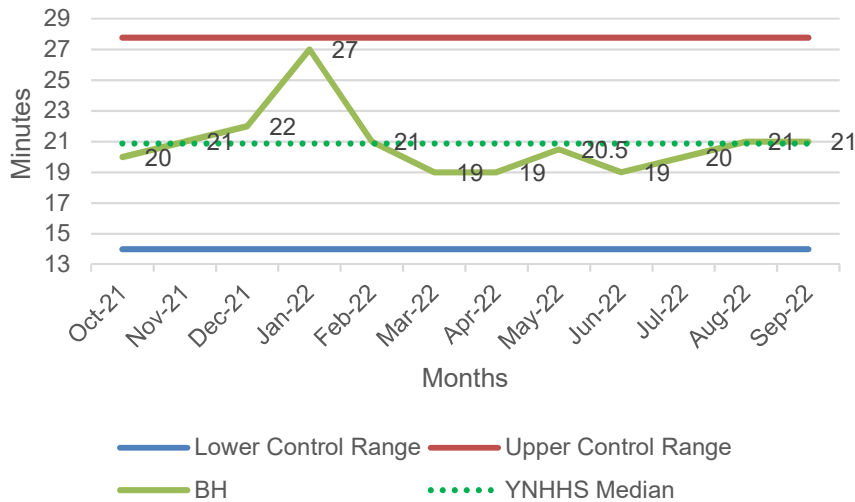


Bridgeport Campus – PTINR ED TAT

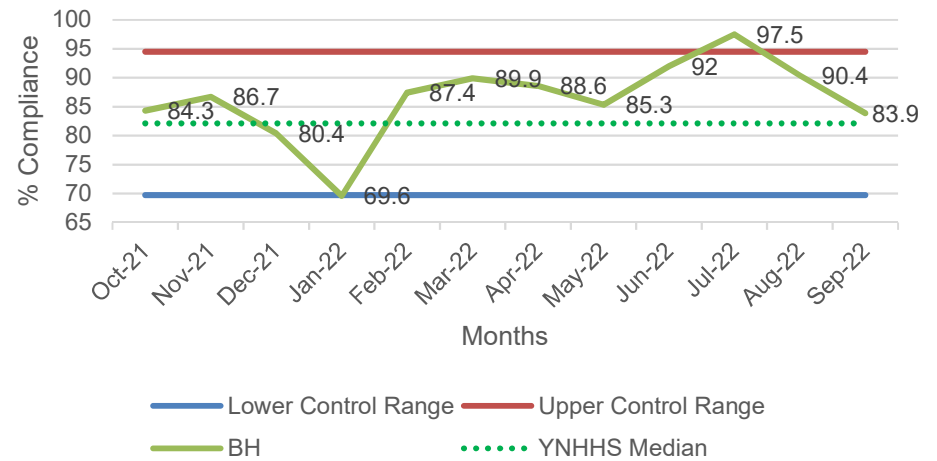


Bridgeport Campus – D-dimer ED TAT

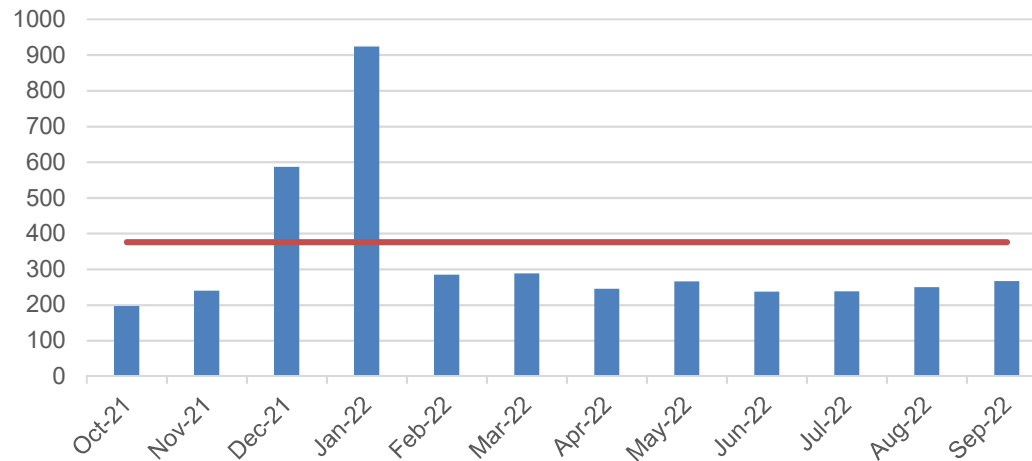
D-dimer Median TAT



D-dimer % Compliance < 35 mins TAT



D-dimer Volume



Aspect of Care

PERFORMANCE IMPROVEMENT PROGRAM 2022

SECTION: Hematology,

MONTH: September 2022

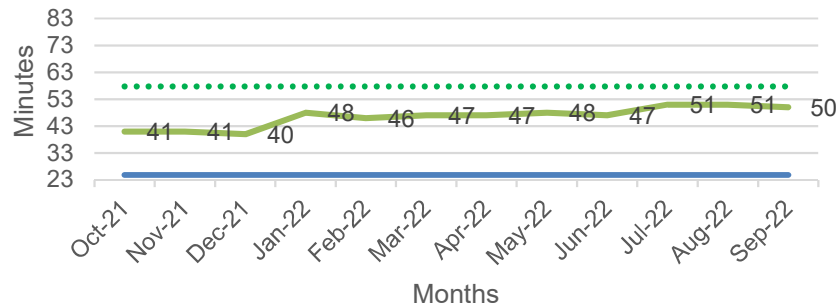
SUPERVISOR: K. Castillo

Aspect of Care	Threshold Expected / Target	Sample Size	Data Source	Threshold Achieved	Prior Month's Data	Remedial Action Taken	Responsible Party	Outcome
Comparison of body fluid results with cytology	100% compliance	Total# of fluids =122 #with cytology ordered =45	EPIC	100%	95%		K. Castillo	
Critical values called to pedi within 15 min	100% compliance	0	EPIC	100%	100%		K. Castillo	
Manually entered results match worksheets	100% compliance	30	EPIC	100%	100%		K. Castillo	
Corrected results are phoned to care giver	100% compliance	10	EPIC	80%	80%	Techs to print out patient reports Remedial Action Taken No notification to the caregiver. Same tech- no longer here	K. Castillo	
Critical Values are called to care giver and documented properly	100% compliance	10	EPIC	90%	100%	technologist was reminded to give criticals to a licensed caregiver and document credentials	K. Castillo	

Corrected reports: Total corrected Reports = 16
 Corrected results with result change – 10: 2 clotted specimens, 1 corrected for Lipemia, 1 interface error, 1 instrument error, 2 corrected after re-test, 1 verified in error, 1 contaminated, 1 additional testing
 Comment added – 6

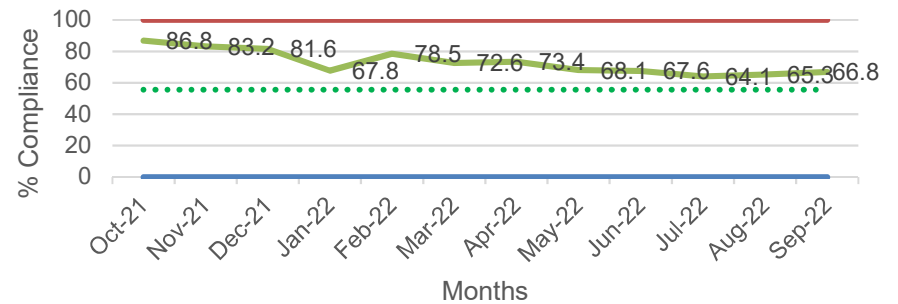
Bridgeport Campus – Type and Screen ED TAT

Type and Screen Median TAT



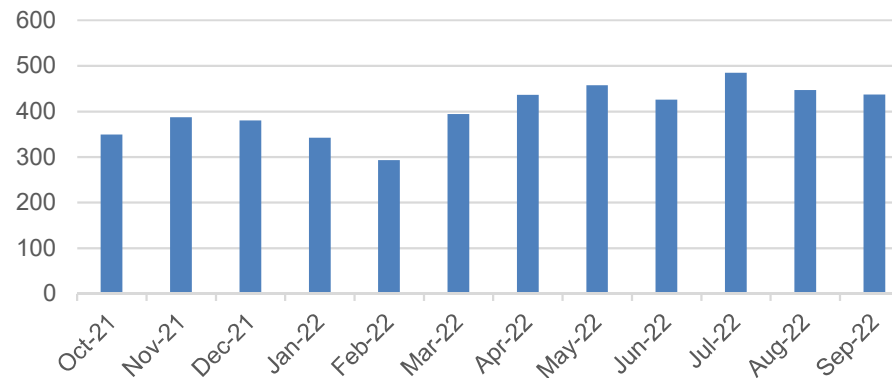
— Lower Control Range — Upper Control Range
— BH ⋯ YNHHS Median

Type and Screen % Compliance < 60 mins TAT

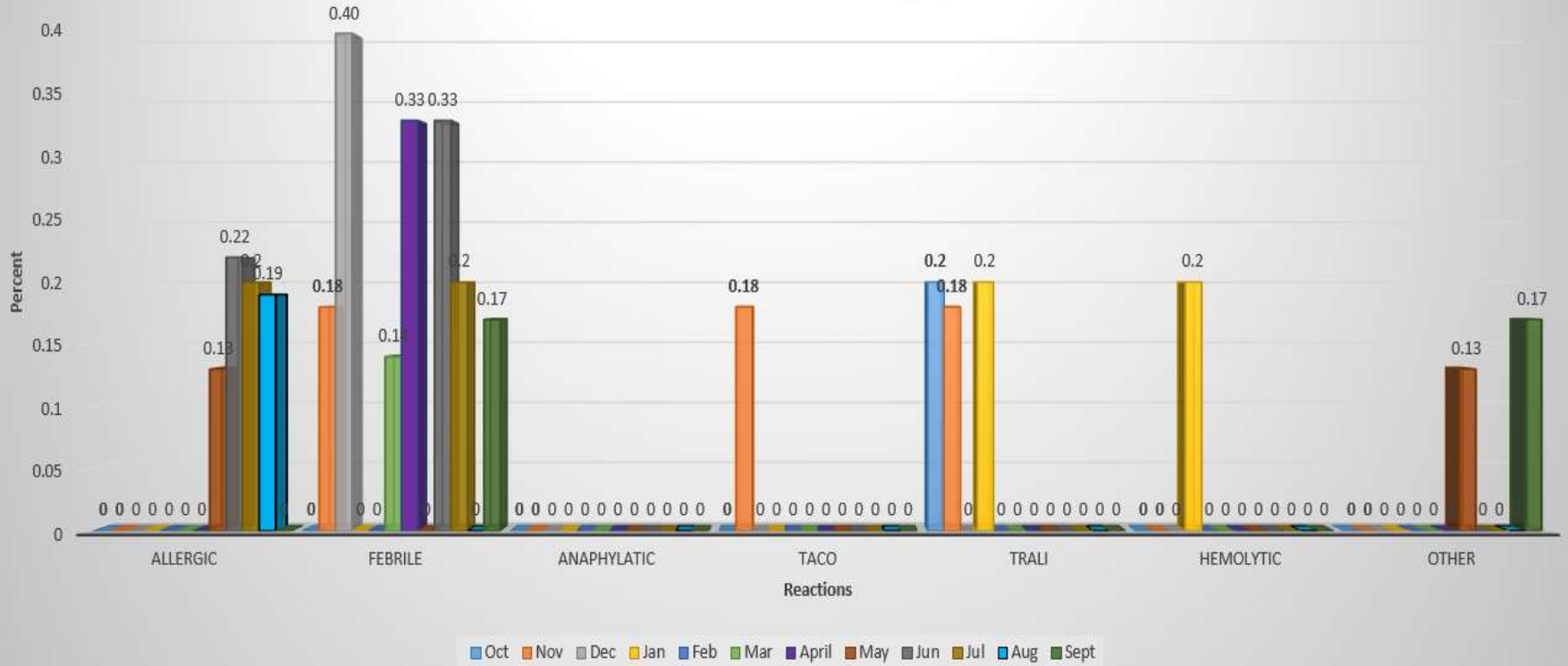


— Lower Control Range — Upper Control Range
— BH ⋯ YNHHS Median

Type and Screen Volume



2022 Transfusion Reaction – Bridgeport Campus

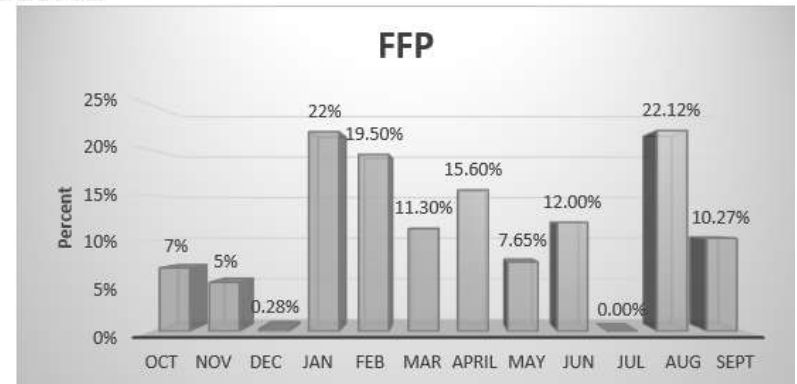


	October	November	December	January	February	March	April	May	June	July	August	September	YTD % Adverse Reaction
# of Reaction 1	3	2	2	0	1	2	2	2	5	1	1	2	22
# of Products Transfused	636	553	498	437	362	697	604	745	891	565	514	571	7,073
Overall Percentage	0.20%	0.54%	0.4%	0.4%	0	0.14%	.33%	.26%	.56%	0.2%	.19%	.35%	.31%

Wastage By Blood Components 2022 - Bridgeport Campus

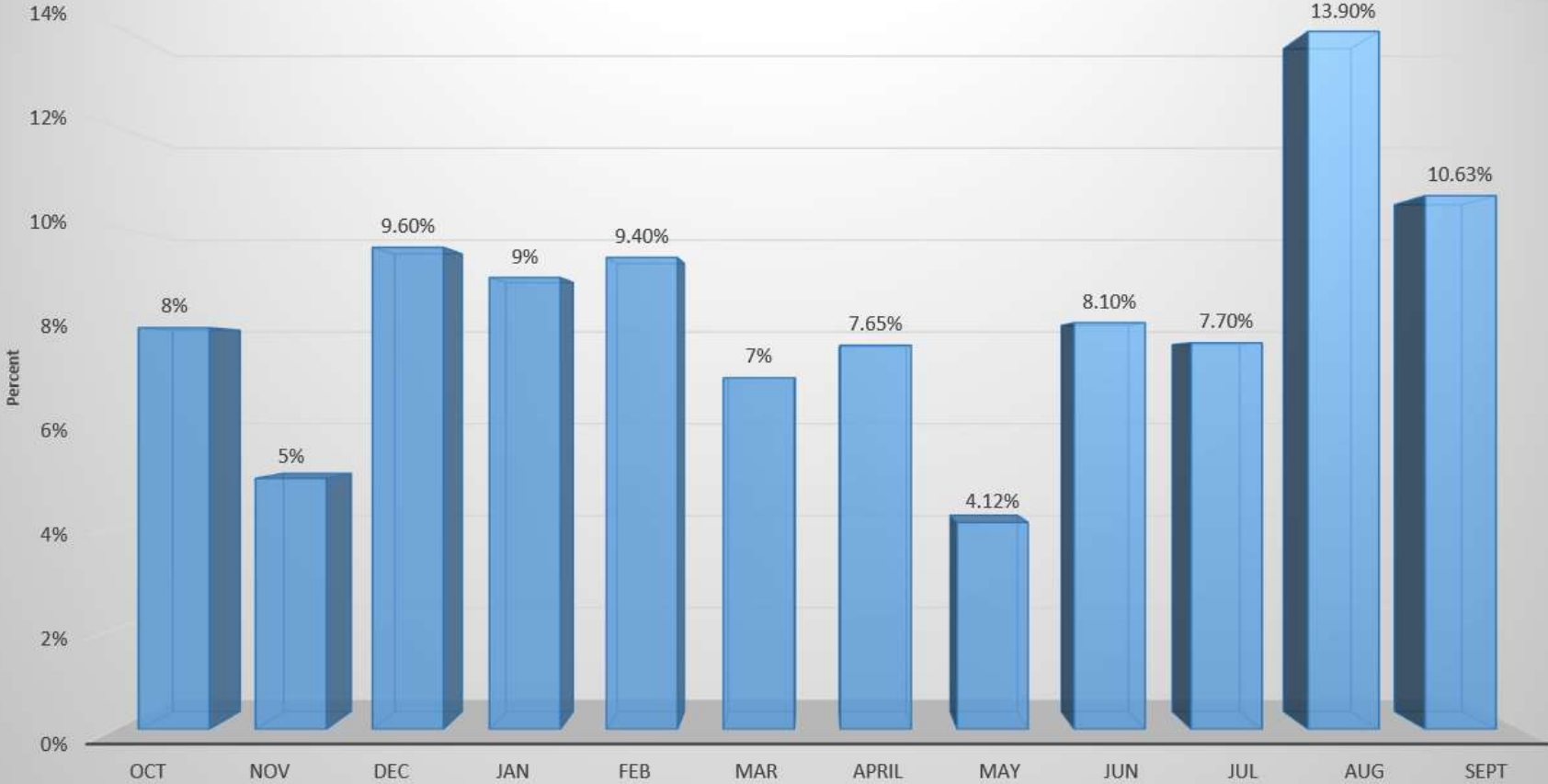


Total Amount \$285,910.41

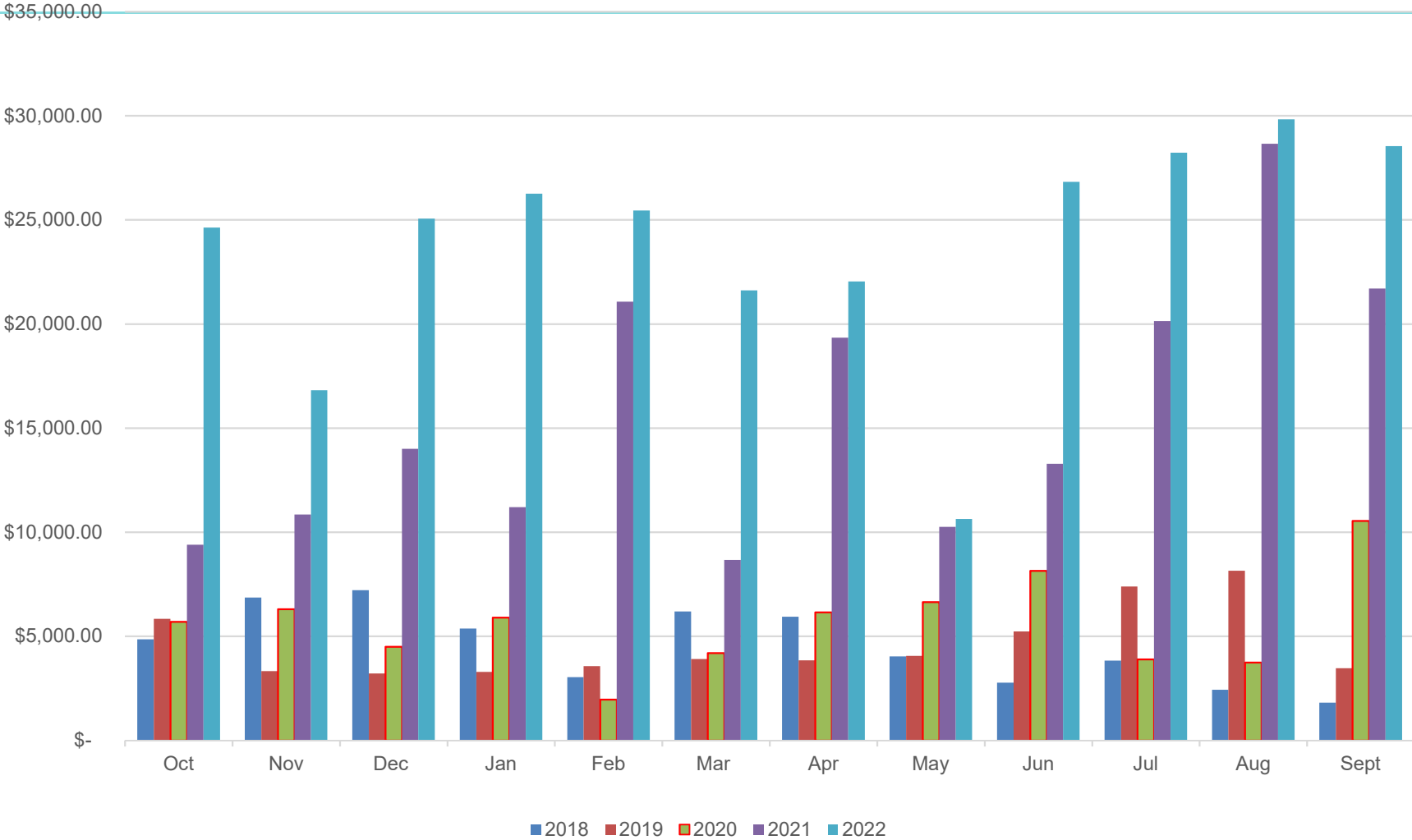


	October	November	December	January	February	March	April	May	June	July	August	September
# of Products Used	688	582	498	547	461	697	604	745	749	565	514	571
# of Products Wasted	52	29	53	55	48	53	50	32	68	47	83	71

2022 Overall Wastage Bridgeport Campus



Bridgeport Campus Blood Wastage FY18, FY19, FY20, FY21, FY22

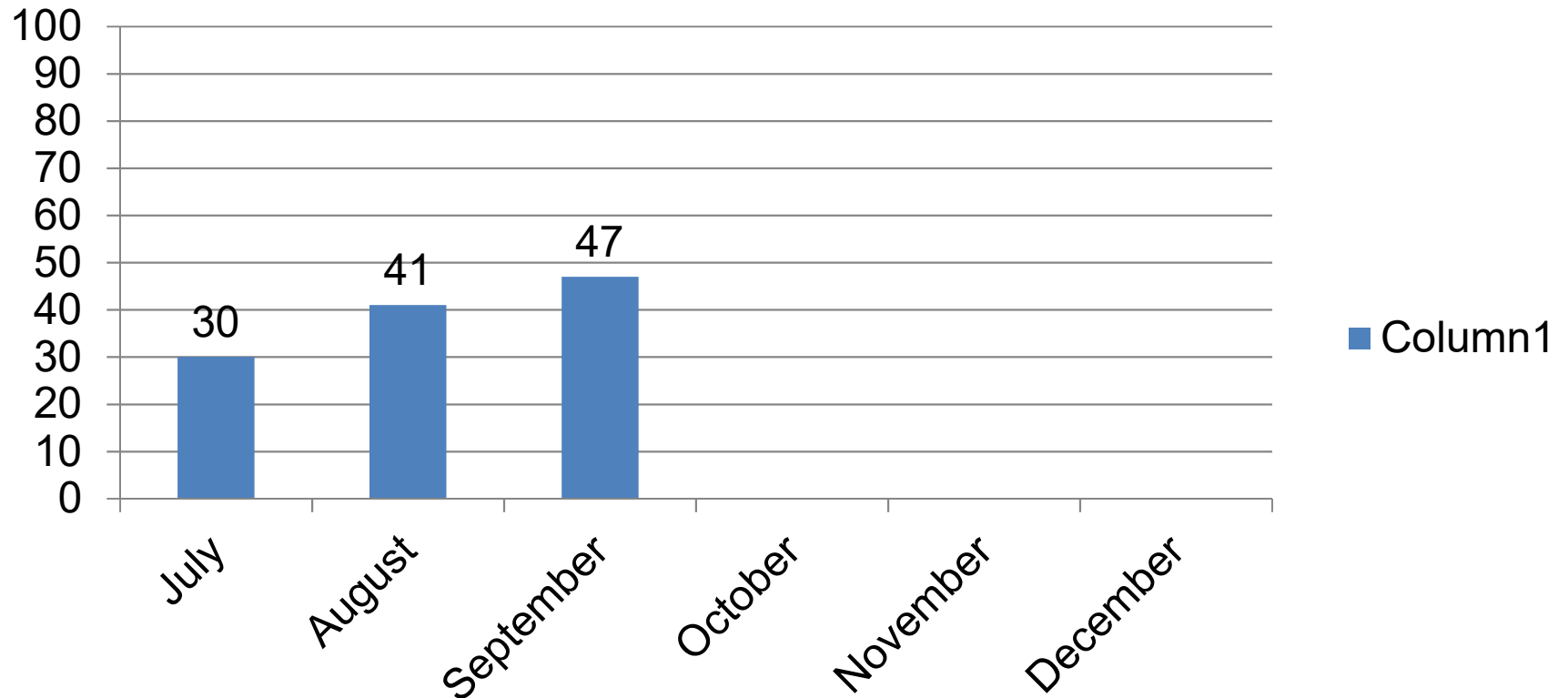


Bridgeport Campus – 2022 Point of Care Performance Report Summary

BRIDGEPORT HOSPITAL LABORATORY														
FY 2021-2022 POCT QA PERFORMANCE REPORT SUMMARY														
MONTH	Threshold	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
HbA1c Documentation errors/ omissions	0 errors	7	5	8	0	2	2	2	4	0	1	1	1	1 result was not documented. 2 had venous blood drawn. Spoke to the tech and reminded her that the M.D. MUST enter the order before the test is performed.
		N=108	N=99	N=119	N=46	N=179	N=276	N=201	n=196	n=173	n=112	n=169	n=135	
# of i-STAT codes / # of cartridges run		18 / 445	18 / 347	6/227	11/336	14/335	27/395	14/287	14/280	21/359	19/302	12/295	9/199	Below Threshold. One new employee had 2 codes- getting used to filling sufficiently without overfilling.
i-STAT Quality Check Codes	<5.0%	4.0%	5.2%	2.6%	3.3%	4.2%	6.8%	4.9%	4.8%	5.8%	6.3%	4.1%	4.5%	

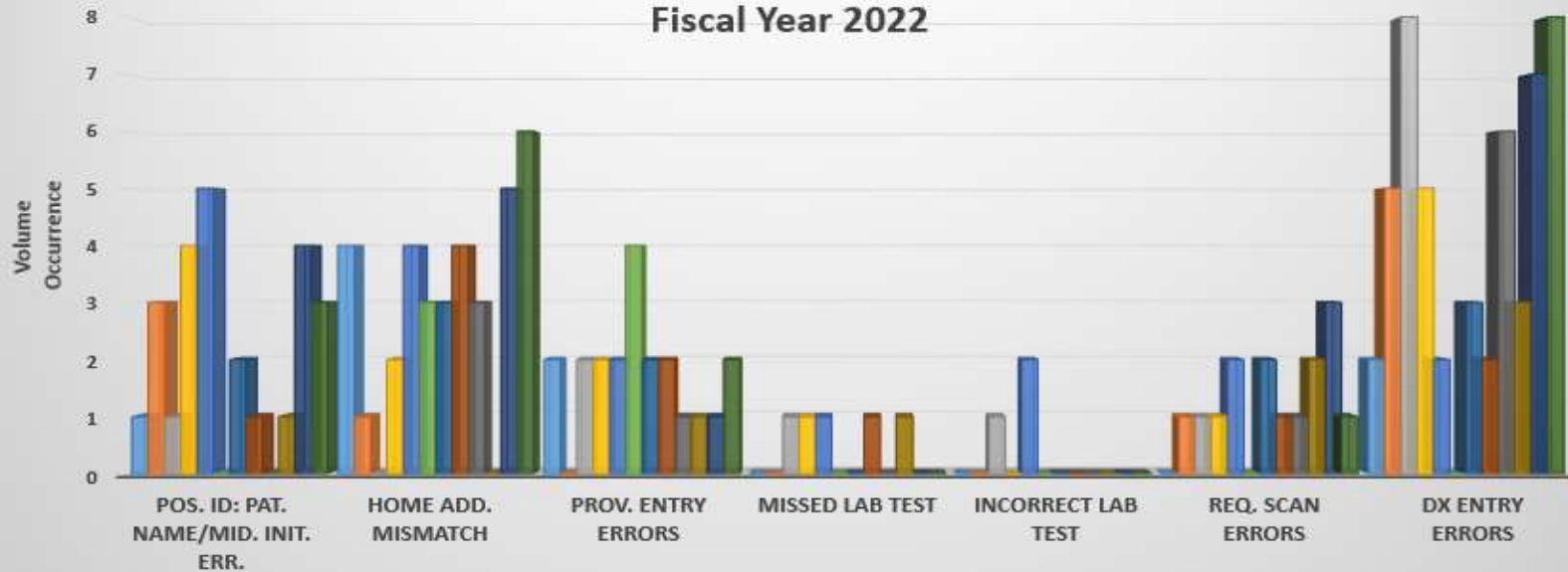
Bridgeport Hospital Laboratory CAP Competency Completions July 2022 – December 2022

Goal 100%



Completed	July	August	September	October	November	December
Completed/ Total	103/34 0	145/35 7	173/37 0			
% Completed	30%	41%	47%			

Test Requisition QI Monitoring Check Vol. Occurrence Milford Draw Station (40 Commerce Park, MFD., CT.) Fiscal Year 2022



	Pos. ID: Pat. Name/Mid. Init. Err.	Home Add. Mismatch	Prov. Entry Errors	Missed Lab Test	Incorrect Lab Test	Req. Scan Errors	Dx Entry Errors
OCT 2021	1	4	2	0	0	0	2
NOV 2021	3	1	0	0	0	1	5
DEC 2021	1	0	2	1	1	1	8
JAN 2022	4	2	2	1	0	1	5
FEB 2022	5	4	2	1	2	2	2
MAR 2022	0	3	4	0	0	0	0
APR 2022	2	3	2	0	0	2	3
MAY 2022	1	4	2	1	0	1	2
JUNE 2022	0	3	1	0	0	1	6
JULY 2022	1	0	1	1	0	2	3
AUG 2022	4	5	1	0	0	3	7
SEPT 2022	3	6	2	0	0	1	8

■ OCT 2021 ■ NOV 2021 ■ DEC 2021 ■ JAN 2022 ■ FEB 2022 ■ MAR 2022
■ APR 2022 ■ MAY 2022 ■ JUNE 2022 ■ JULY 2022 ■ AUG 2022 ■ SEPT 2022

O-N = 70
N-N = 74
D-N = 75
J-N = 69
F-N = 86
M-N = 73
A-N = 85
M-N = 89
J-N = 93
J-N = 84
A-N = 89
S-N = 109

Pos. Patient ID for Pat. :

- a. Full Name including Mid. Init.
- b. Date of Birth (DOB)
- c. Medical Record Nbr (MRN)

Prov. Error: Missing / different Provider from requisition listing (i.e. "CC"etc.)

Missed Lab Test: Test on requisition; not ordered in EPIC

Incorrect Lab Test: EPIC ordered test different from Requisition

Req. Scan Error: Requisition NOT saved or scanned incorrectly.

Dx Errors: One or more requisition Dx Not listed or are different in EPIC, for visit.

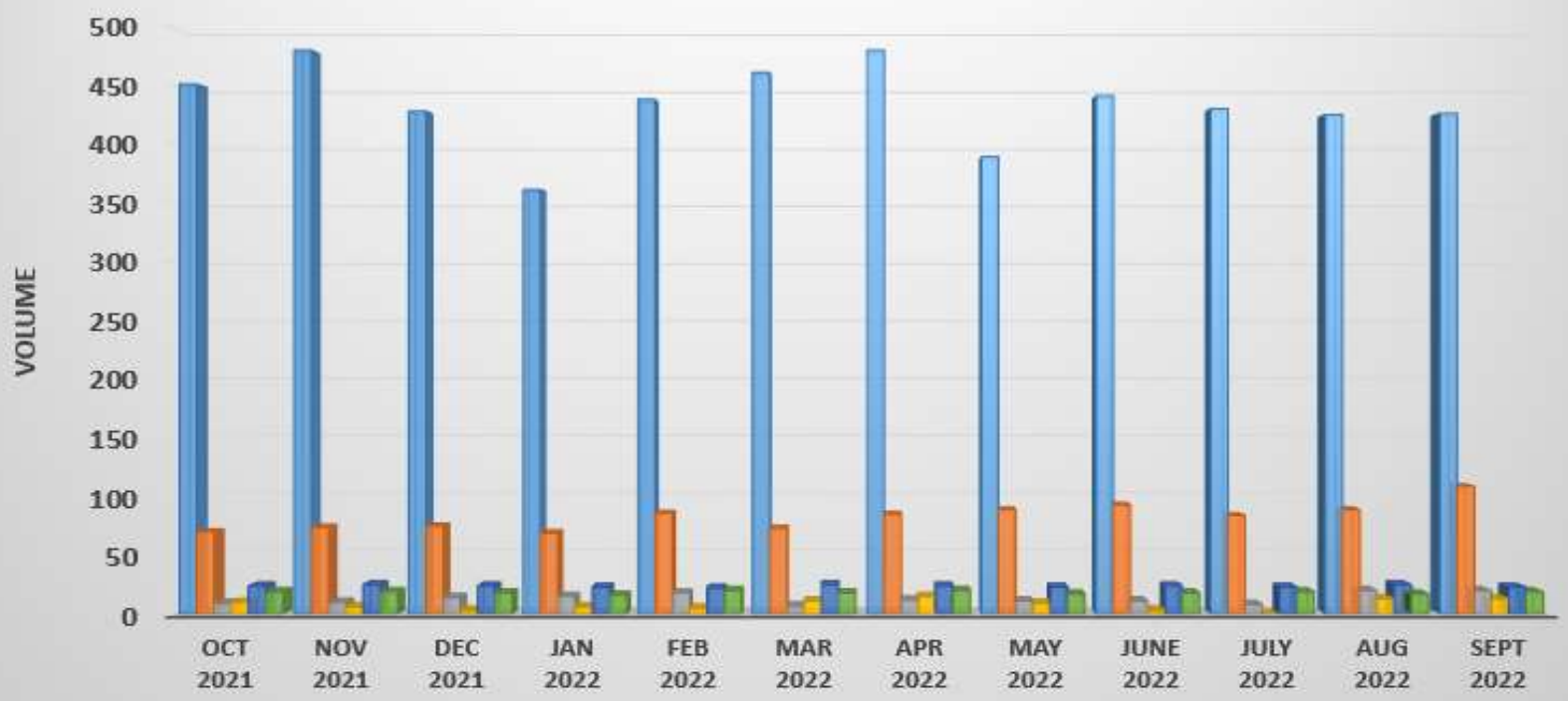
Milford Draw Station

Outpatient Test Requisition QC Monitoring Check

Error Metric Defined

Outpatient Test Requisition QC Monitoring Check	#2	10/11/2022
Milford Draw Station: 40 Commerce Park, MFD, CT. 06460		
Error Metric Defined		
SEPTEMBER 2022		
<p>A. Note: Phone number checks have been omitted, as they are not part of laboratory positive ID related matters.</p> <p>B. As a non YNH private lab requisition, 8 instances of incomplete hand printed requisition demographics is apparent. (DOB, address, phone number, not included (or illegible DOB) on requisition). Note: Use of a non-YNH lab requisition also presented with missing test order date. Note: Use of a non-YNH/EPIC lab requisitions, with missing demographic information, consequently is then reflected in higher demographic error rates that would otherwise be less of an issue.</p> <p>C. 2 instances of missing name-middle initial, of patient, from EPIC, yet listed on requisition. 1 instance of patient first name difference from requisition and EPIC MRN.</p> <p>D. 1 instance of provider mismatch and 1 instance of 2nd provider not included with test orders.</p> <p>E. EPIC use providers (not Milford practice providers) is reflected in other patients visitng the Milford site draw station, thereby demonstrating additional convenience for YNH patients and their providers.</p>		

Patient and Requisition Volume QC Monitor Check Milford Draw Station (40 Commerce Park MFD, CT) Fiscal Year 2022

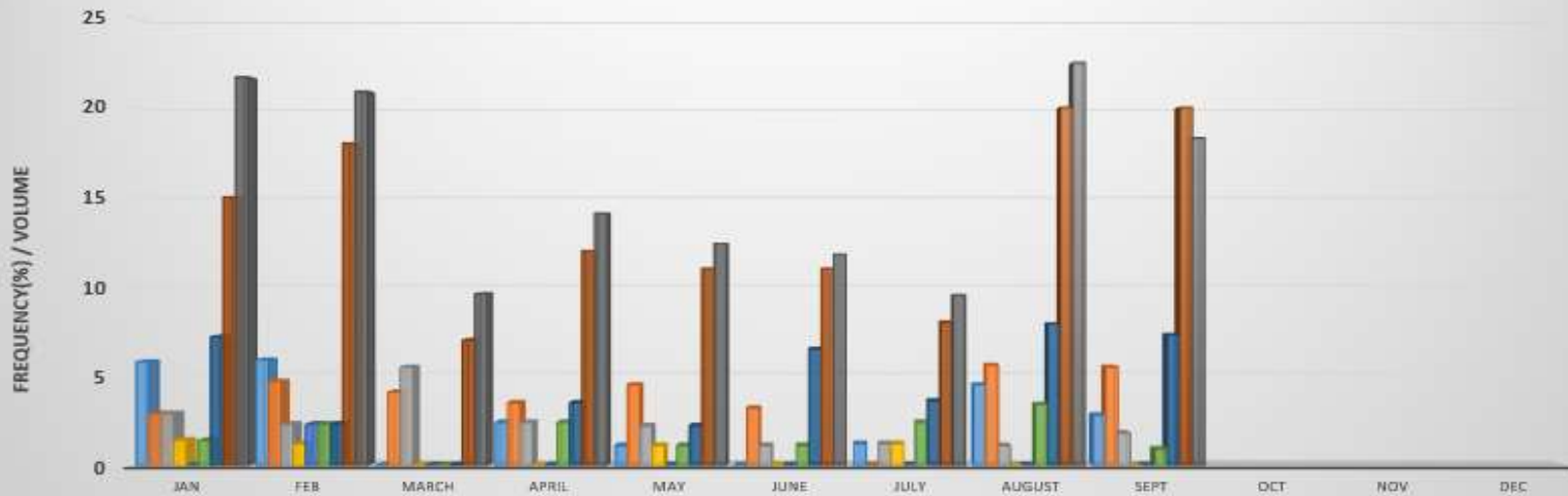


	OCT 2021	NOV 2021	DEC 2021	JAN 2022	FEB 2022	MAR 2022	APR 2022	MAY 2022	JUNE 2022	JULY 2022	AUG 2022	SEPT 2022
Tot. Patient Volume	452	481	429	362	439	462	481	390	442	431	426	427
# of Req. Reviewed	70	74	75	69	86	73	85	89	93	84	89	109
Mnthly Errors	9	10	14	15	18	7	12	11	11	8	20	20
EPIC Prov. Entry	10	6	3	6	5	11	15	9	3	0	13	13
# of Business Days/month	24	25	24	23	22	25	24	23	24	23	25	23
Est. Ave. Patients per day	19	19	18	16	20	18	20	17	18	19	17	19

■ Tot. Patient Volume
 ■ # of Req. Reviewed
 ■ Mnthly Errors
■ EPIC Prov. Entry
 ■ # of Business Days/month
 ■ Est. Ave. Patients per day

Note: EPIC Prov. Entry: Lab test orders transcribed, into EPIC, directly by NEMG/YNHH Provider or authorized Provider staff.

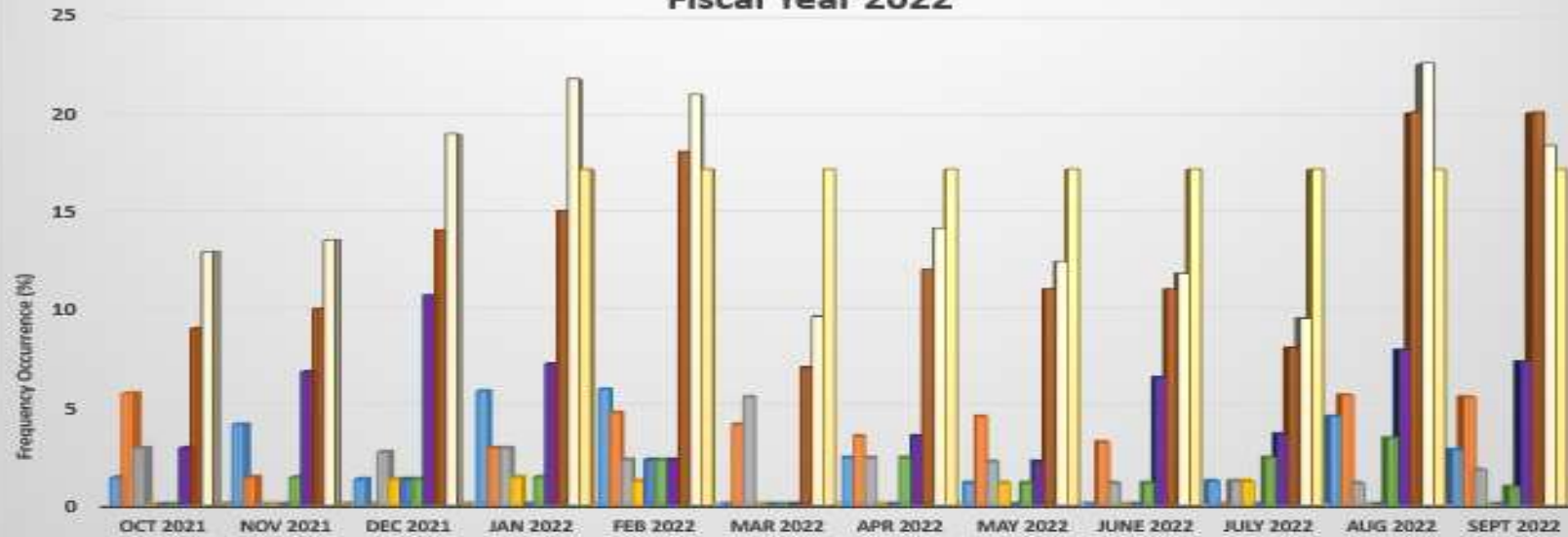
Lab Requisition QC Data Entry Error Rate (%) Milford Draw Station (40 Commerce Park, MFD., CT) Calendar Year 2022



	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
Pos. ID: Pat. Name/Mid. Init. Errors (as %)	5.8	5.9	0	2.4	1.1	0	1.2	4.5	2.8			
Home Add. Mismatch (%)	2.9	4.7	4.1	3.5	4.5	3.2	0	5.6	5.5			
Prov. Entry Error (%)	2.9	2.3	5.5	2.4	2.2	1.1	1.2	1.1	1.8			
Missed Lab Test (%)	1.4	1.2	0	0	1.1	0	1.2	0	0			
Incorrect Lab Test (%)	0	2.3	0	0	0	0	0	0	0			
Req. Scan Error (%)	1.4	2.3	0	2.4	1.1	1.1	2.4	3.4	0.9			
Dx Entry Error (%)	7.2	2.3	0	3.5	2.2	6.5	3.6	7.9	7.3			
Total Errors	15	18	7	12	11	11	8	20	20			
Total Error Rate (%)	21.7	20.9	9.6	14.1	12.4	11.8	9.5	22.5	18.3			

- Pos. ID: Pat. Name/Mid. Init. Errors (as %)
 ■ Home Add. Mismatch (%)
 ■ Prov. Entry Error (%)
- Missed Lab Test (%)
 ■ Incorrect Lab Test (%)
 ■ Req. Scan Error (%)
- Dx Entry Error (%)
 ■ Total Errors
 ■ Total Error Rate (%)

Lab Requisition QC Data Entry Error Rate (%) Milford Draw Station (40 Commerce Park, MFD., CT) Fiscal Year 2022

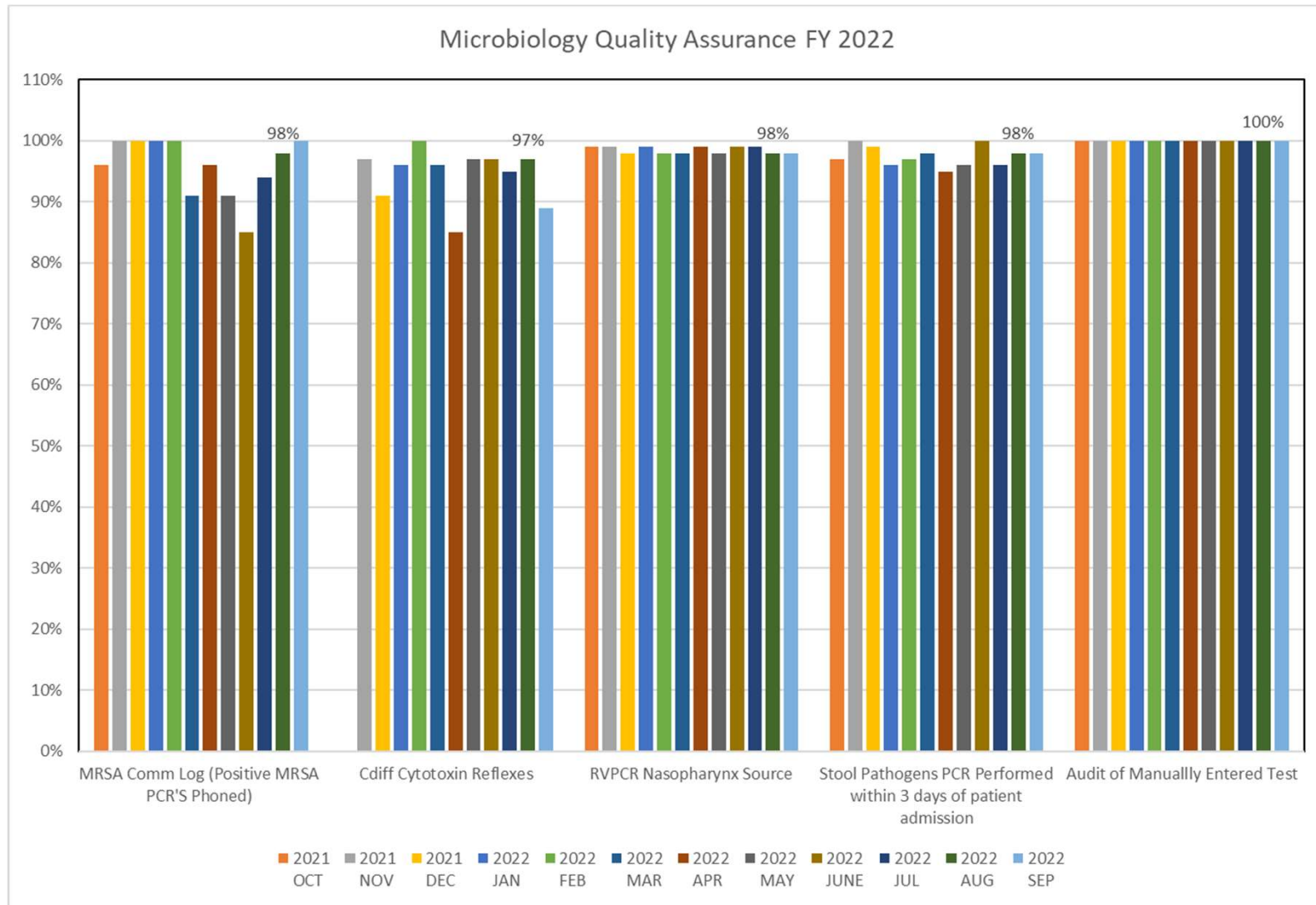


	OCT 2021	NOV 2021	DEC 2021	JAN 2022	FEB 2022	MAR 2022	APR 2022	MAY 2022	JUNE 2022	JULY 2022	AUG 2022	SEPT 2022
Pos. ID: Pat. Name/Mid. Init. Err. (as %)	1.4	4.1	1.3	5.8	5.9	0	2.4	1.1	0	1.2	4.5	2.8
Home Add. Mismatch (%)	5.7	1.4	0	2.9	4.7	4.1	3.5	4.5	3.2	0	5.6	5.5
Prov. Entry Error (%)	2.9	0	2.7	2.9	2.3	5.5	2.4	2.2	1.1	1.2	1.1	1.8
Missed Lab Test (%)	0	0	1.3	1.4	1.2	0	0	1.1	0	1.2	0	0
Incorrect Lab Test (%)	0	0	1.3	0	2.3	0	0	0	0	0	0	0
Req. Scan Error (%)	0	1.4	1.3	1.4	2.3	0	2.4	1.1	1.1	2.4	3.4	0.9
Dx Entry Error (%)	2.9	6.8	10.7	7.2	2.3	0	3.5	2.2	6.5	3.6	7.9	7.3
Total Errors (as # of Occ.)	9	10	14	15	18	7	12	11	11	8	20	20
Total Error Rate 2022 (%)	12.9	13.5	18.9	21.7	20.9	9.6	14.1	12.4	11.8	9.5	22.5	18.3
Ave Error Rate Calen. 2021 (%)	0	0	0	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1

- Pos. ID: Pat. Name/Mid. Init. Err. (as %)
- Home Add. Mismatch (%)
- Prov. Entry Error (%)
- Missed Lab Test (%)
- Incorrect Lab Test (%)
- Req. Scan Error (%)
- Dx Entry Error (%)
- Total Errors (as # of Occ.)

Note: The average overall error % rate for FY2022 did not exceed that of 2021 (15.6% vs. 17.1%).

September 2022

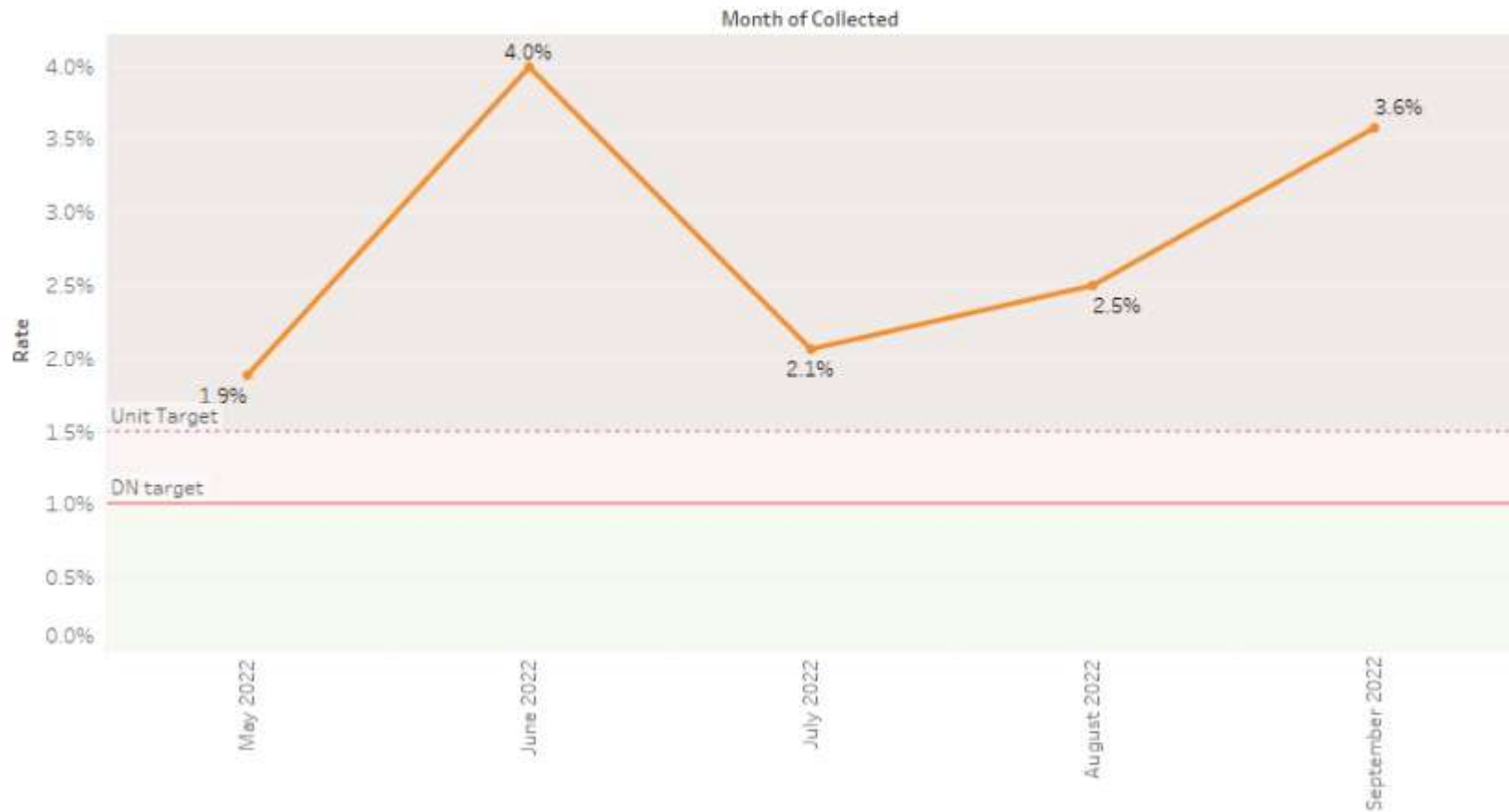


September 2022 Total Volumes

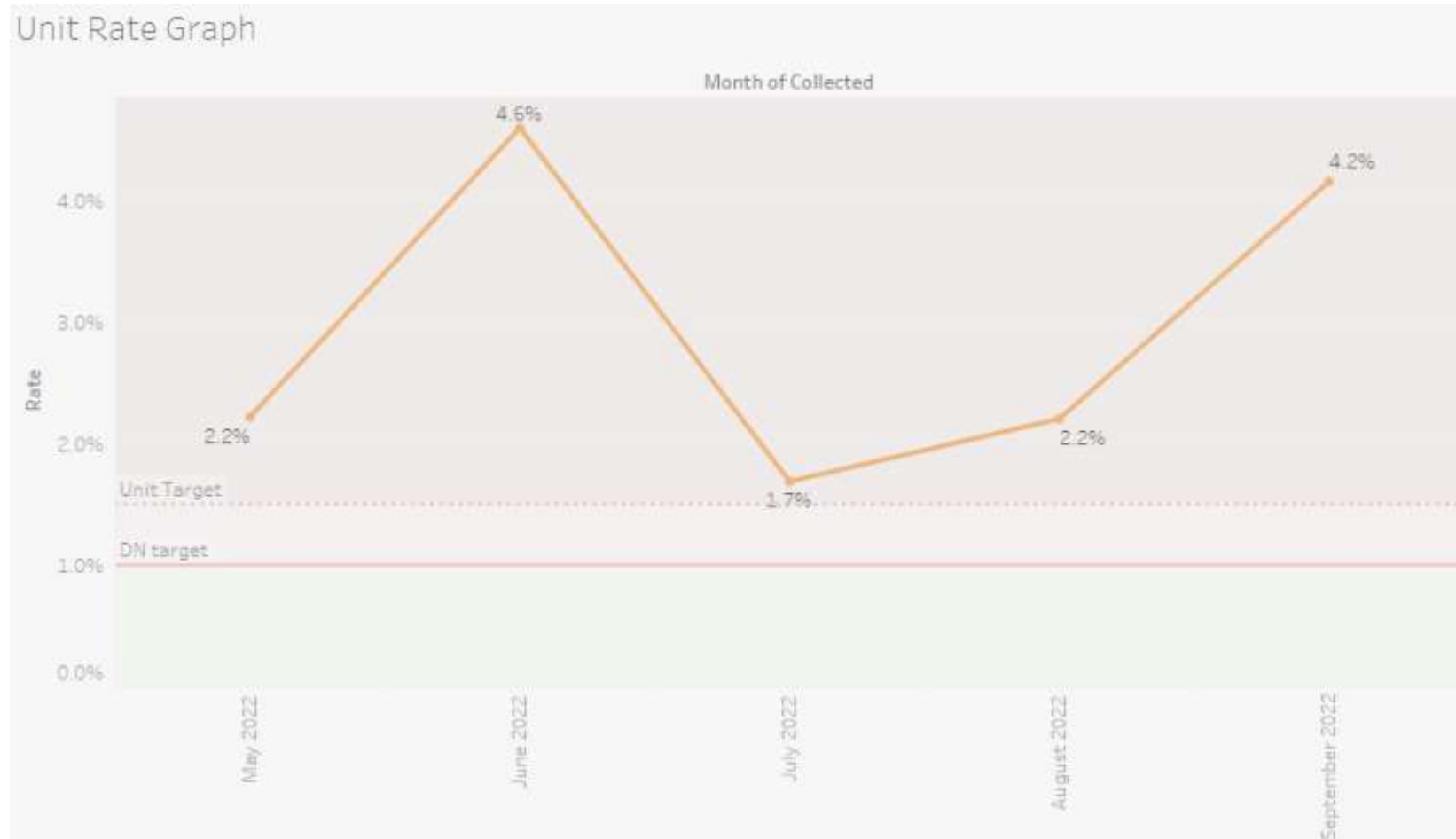
2022 Total V	October	November	December	January	February	March	April	May	June	July	August	Sept
MRSA	236	269	313	299	216	249	309	450	395	384	405	363
MRSA +	27	23	38	32	25	34	47	45	39	51	50	33
Cdiff	142	133	121	121	136	144	138	153	140	137	133	132
Cdiff +	20	33	33	24	24	23	20	34	30	21	29	27
RVP	211	263	242	107	95	129	155	199	228	173	190	210
Stool	141	126	100	109	123	150	132	150	128	146	134	127
Stool Admitted	68	48	51	57	64	65	63	57	74	48	61	48
Errors	6	2	0	2	3	0	0	1	0	2	1	1
Missed Specimen	0	0	0	0	0	0	0	0	0	0	1	0

BH Blood Culture Contamination Rate

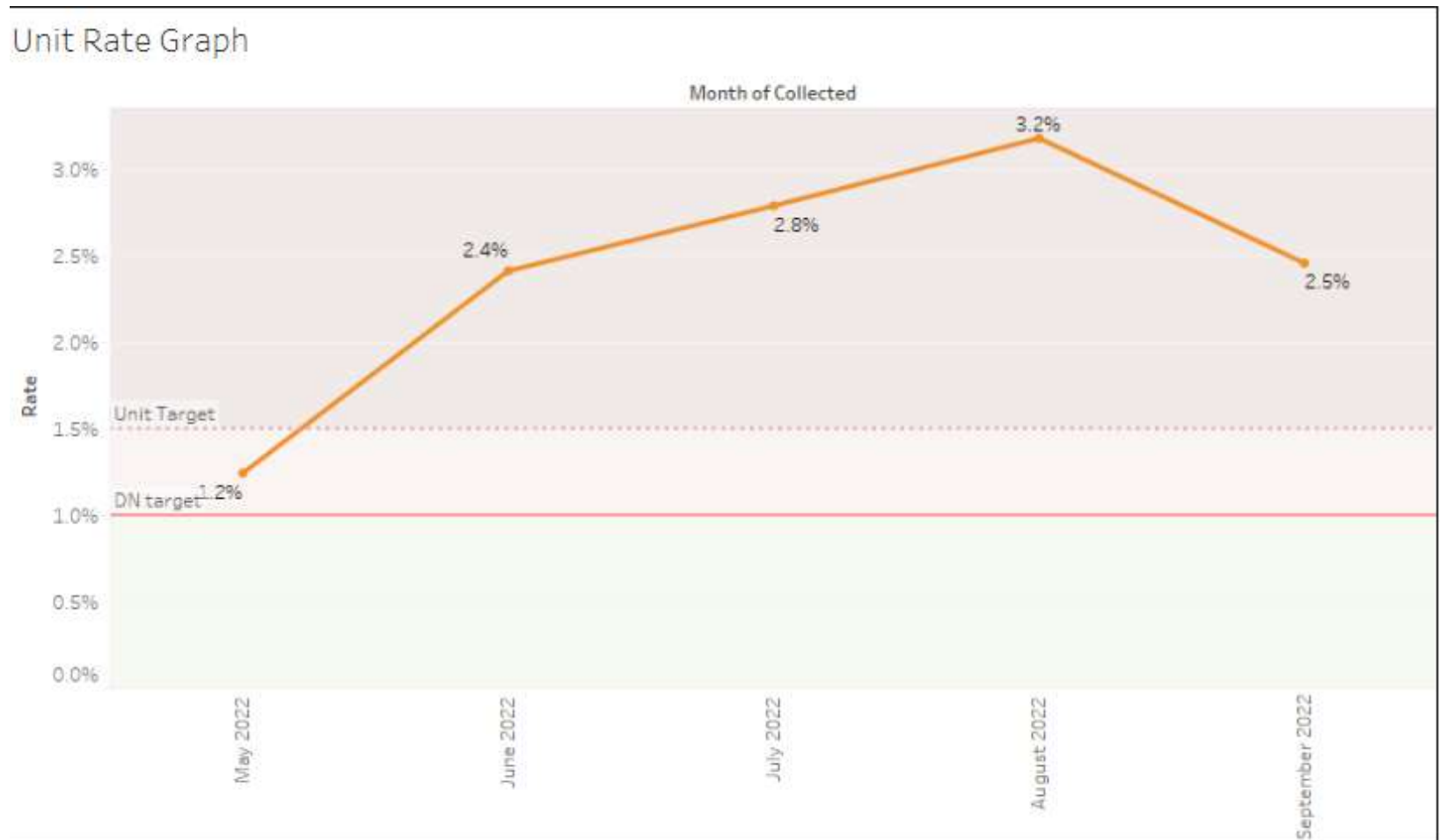
Unit Rate Graph



BH Blood Culture Contamination Rate(ED only)



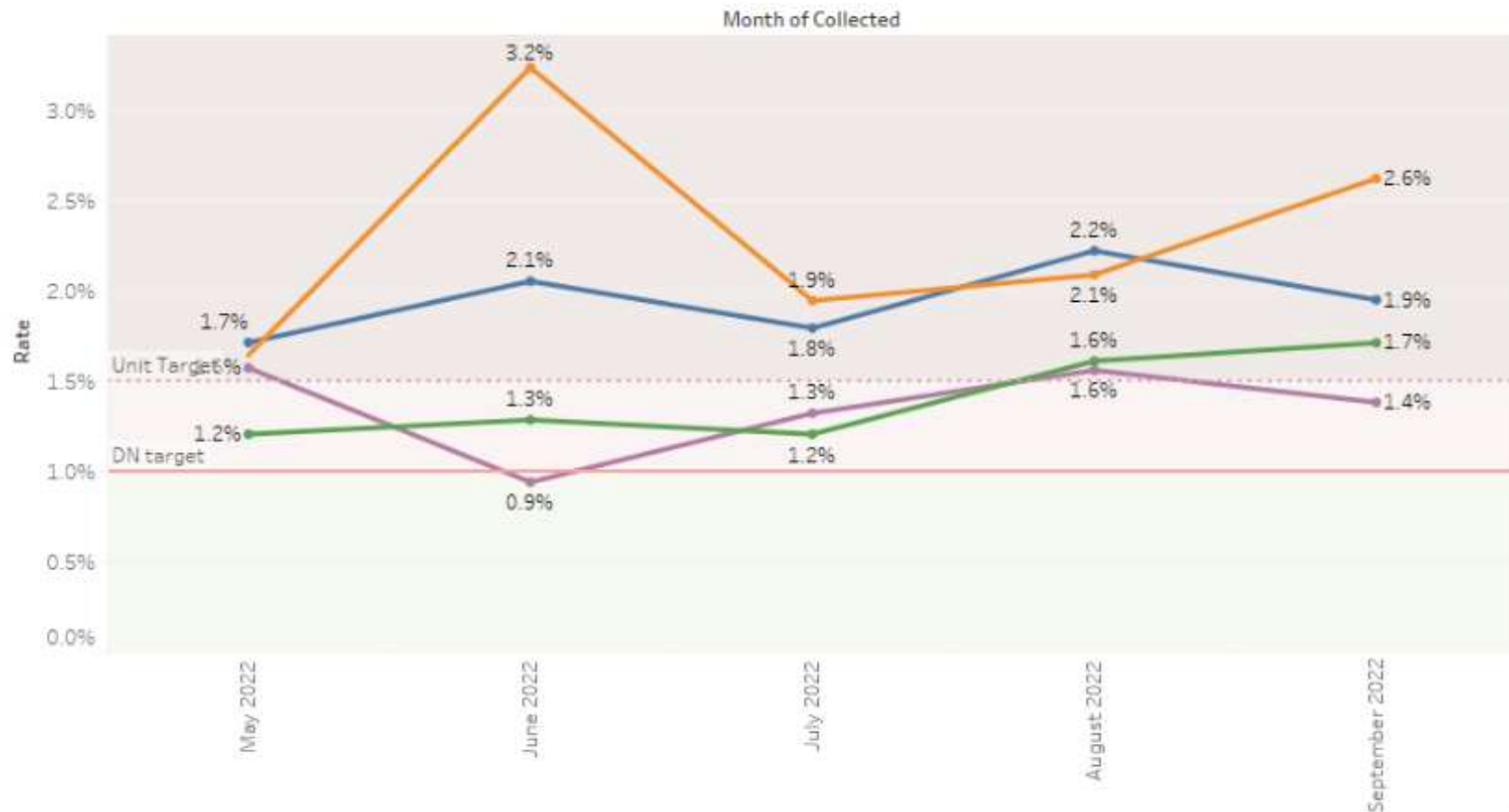
BH Blood Culture Contamination Rate (excluding ED)



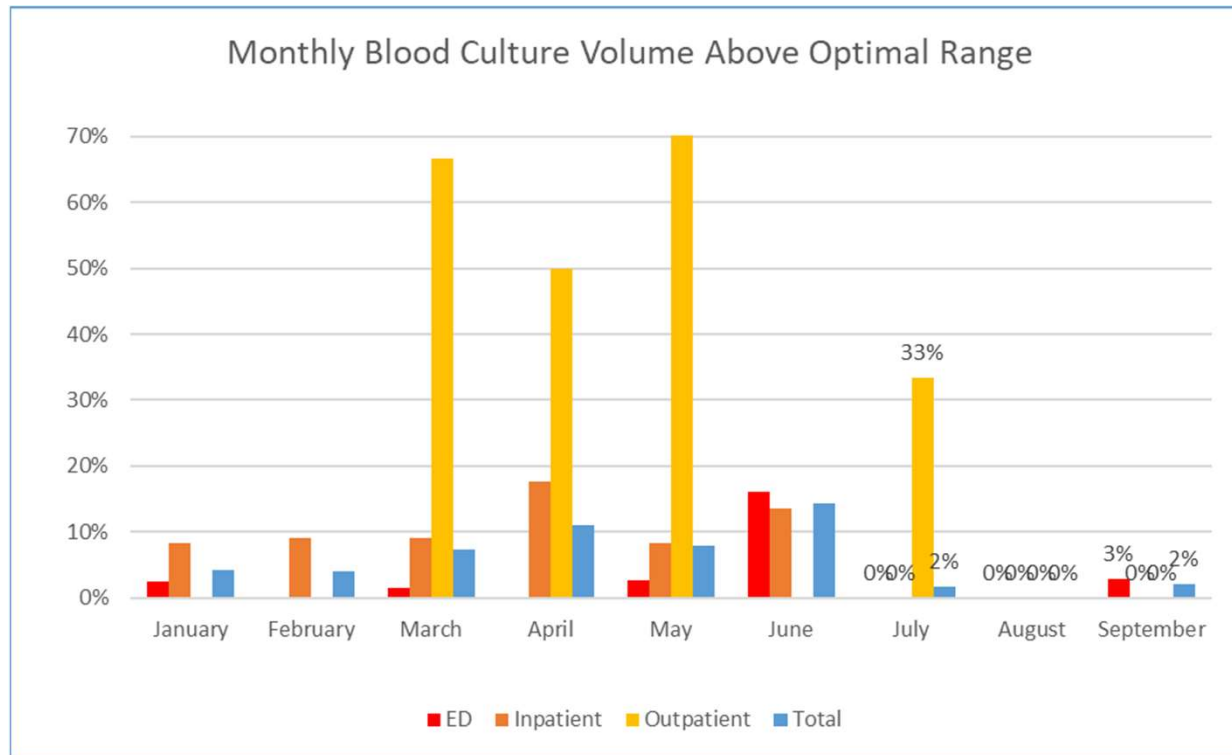
Blood culture Contamination Rate DN Comparison

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

Unit Rate Graph

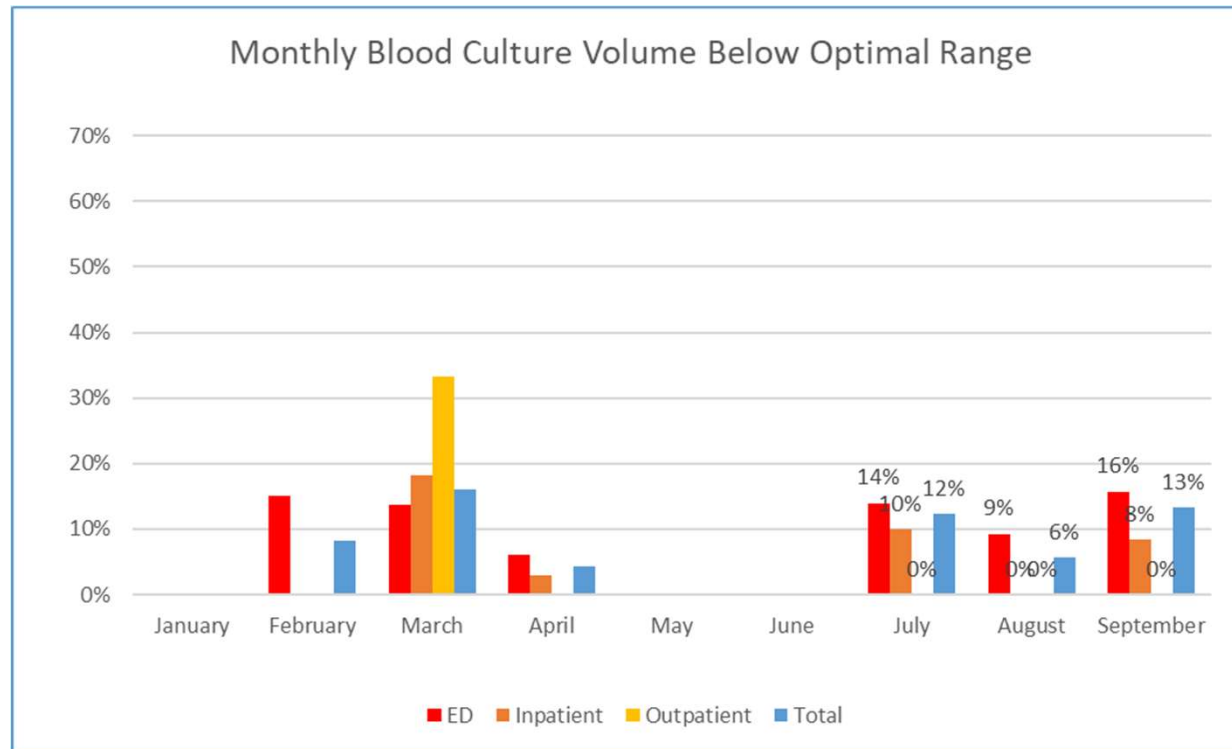


Blood Culture Bottle Volumes – Above Optimal



Total Number of Bottles Drawn			
Total	ED	Inpatient	Outpatient
98	70	24	4
Number of Bottles Above Acceptable Volume			
Total	ED	Inpatient	Outpatient
2	2	0	0

Blood Culture Bottle Volumes – Below Optimal



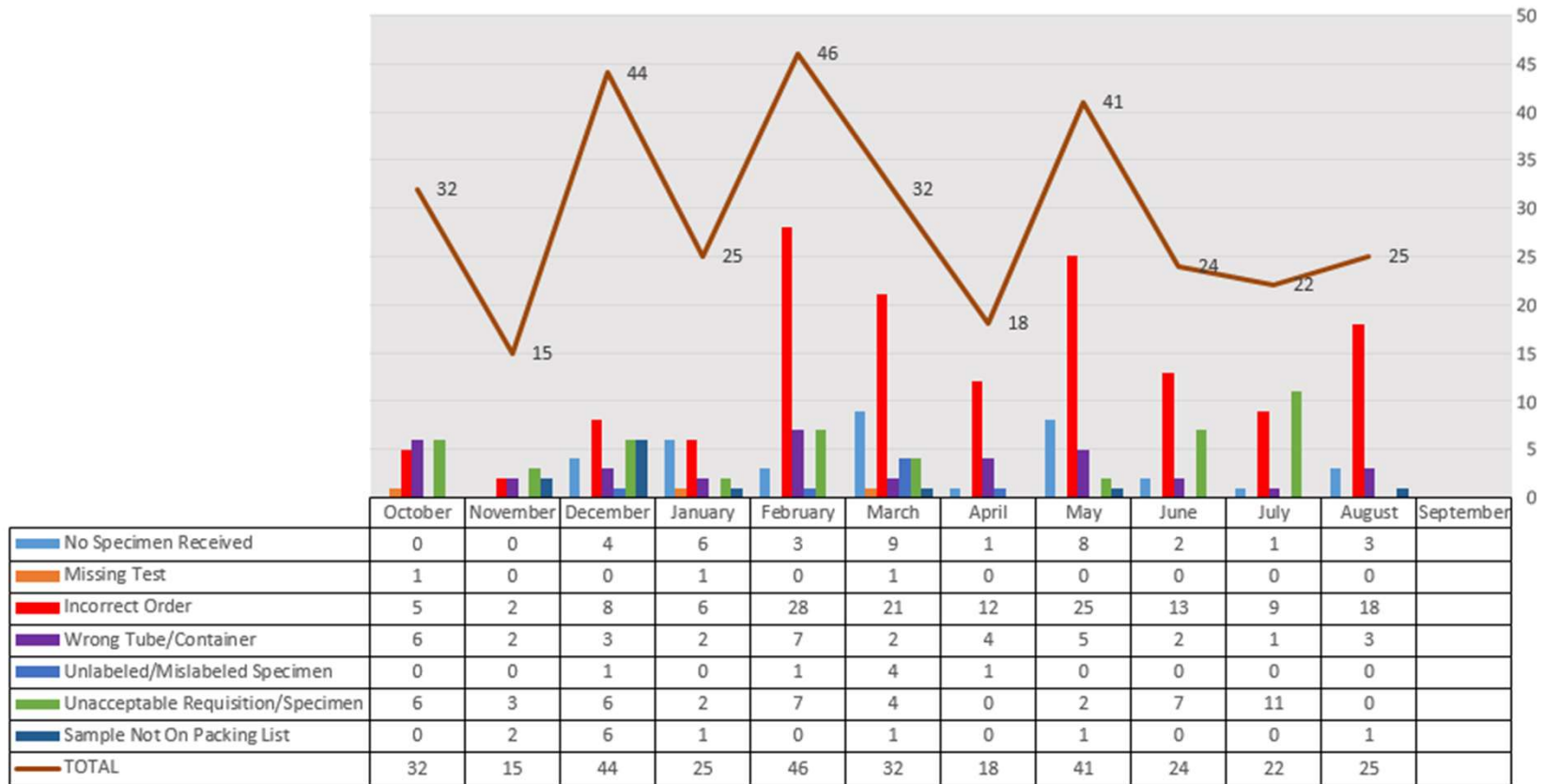
Total Number of Bottles Drawn			
Total	ED	Inpatient	Outpatient
98	70	24	4
Number of Bottles Below Acceptable Volume			
Total	ED	Inpatient	Outpatient
11	9	2	0

Molecular Statistics

Date	Tests	Sample size	Positive Count	% Positivity	Lower Limit	Upper Limit	Environment Monitoring	Epidemiological Trends	Evaluation Notes
Sep-22	Chlamydia trachomatis, NAAT	672	38	5.70%	2%	7%	Negative	None	None
Sep-22	GBS PCR Pen Allergic	17	3	17.60%	1%	49%	Negative	None	None
Sep-22	GBS PCR Pen NonAllergic	107	31	29.00%	15%	33%	Negative	None	None
Sep-22	Group A Strep PCR	296	22	7.40%	3%	21%	Negative	None	None
Sep-22	HSV 1 AND 2 DIRECT PCR,	31	9	29.00%	0%	56%	Negative	None	None
Sep-22	Influenza A/B RNA, NAAT	838	4	0.50%	0%	12%	Negative	None	None
Sep-22	Influenza/RSV by RT-PCR	2473	56	2.30%	0%	7%	Negative	None	None
Sep-22	MRSA Colonization Status	317	33	10.40%	4%	19%	Negative	None	None
Sep-22	MRSA/SAUR Blood PCR	43	10	23.30%	15%	52%	Negative	None	None
Sep-22	MTB w/rflx Rifampin PCR	5	2	40.00%	0%	98%	Negative	None	None
Sep-22	N. gonorrhoeae, NAAT	673	11	1.60%	1%	3%	Negative	None	None
Sep-22	Resp Virus PCR Panel	191	55	28.80%	1%	55%	Negative	None	None
Sep-22	SARS CoV-2 (COVID-19) RNA	10805	1082	10.00%	0%	22%	Negative	None	None
Sep-22	Stool Pathogens PCR	123	11	8.90%	0%	19%	Negative	None	None

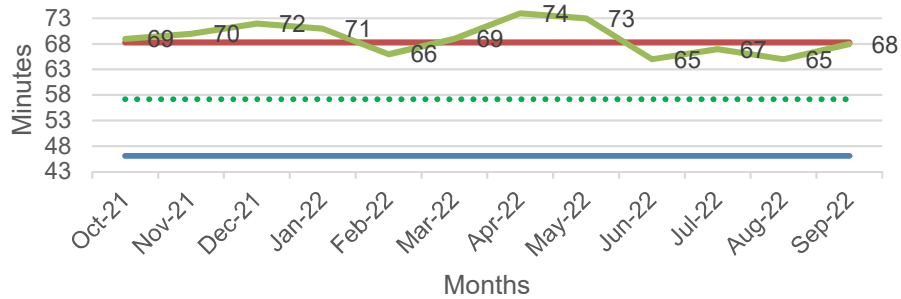
FY2022 Draw Station Errors

Draw Station Errors



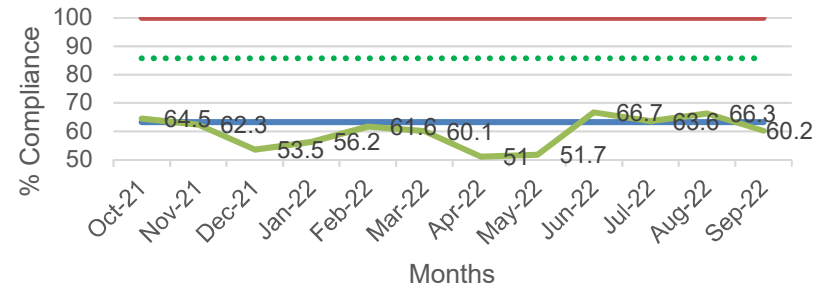
Bridgeport Campus – COVID-19 Cepheid

Covid Cepheid Median TAT



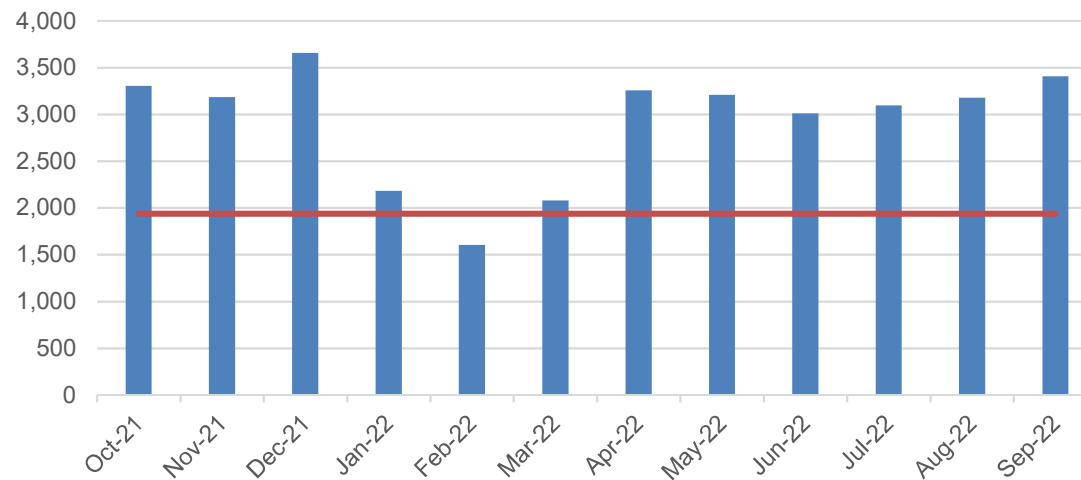
— Lower Control Range — Upper Control Range
— BH YNHHS Median

Covid Cepheid % Compliance < 75 mins TAT



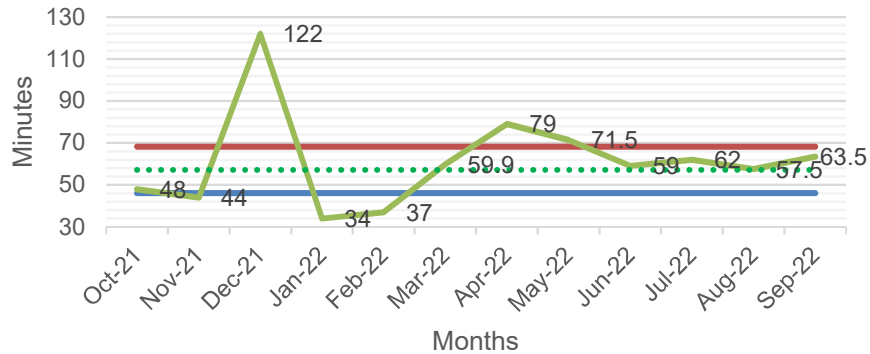
— Lower Control Range — Upper Control Range
— BH YNHHS Median

Covid Cepheid Volume



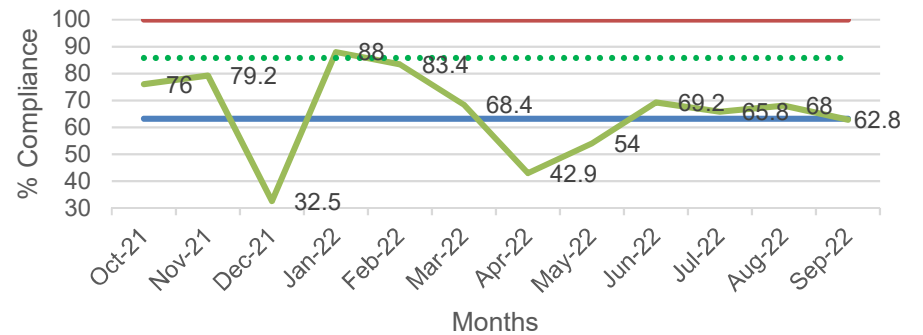
Bridgeport Campus – COVID Liat

Covid Liat Median TAT



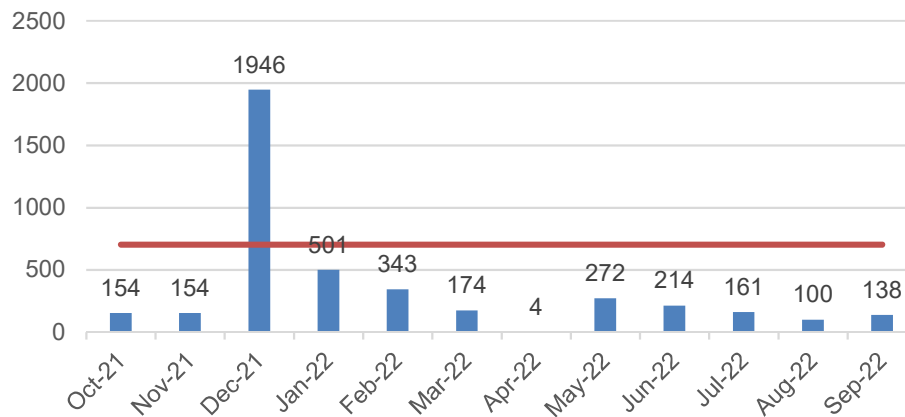
— Lower Control Range — Upper Control Range
— BH ⋯ YNHHS Median

Covid Liat % Compliance < 75 mins TAT

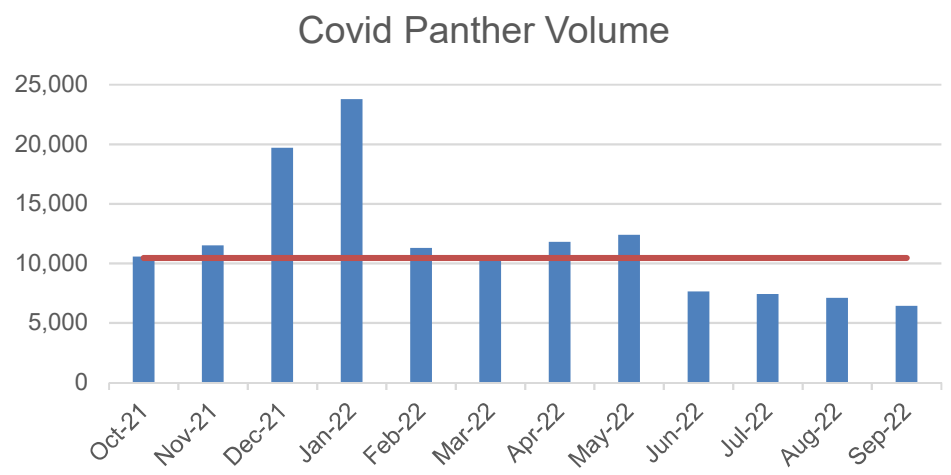
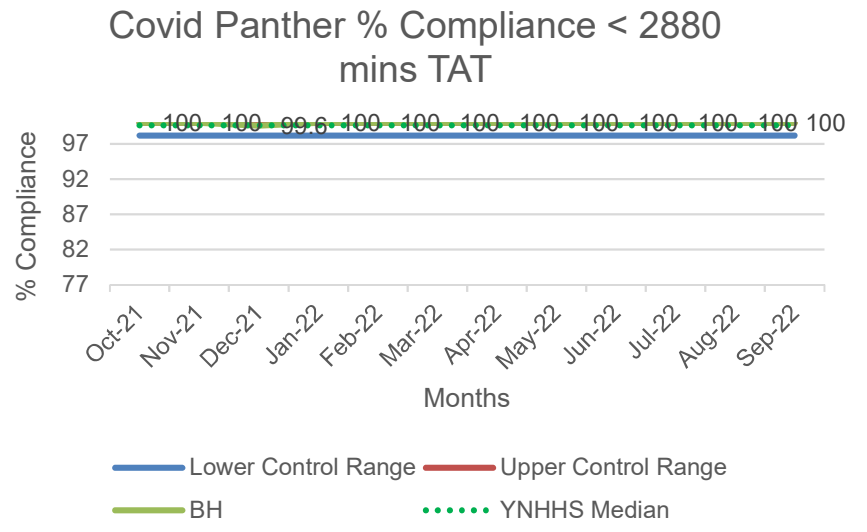
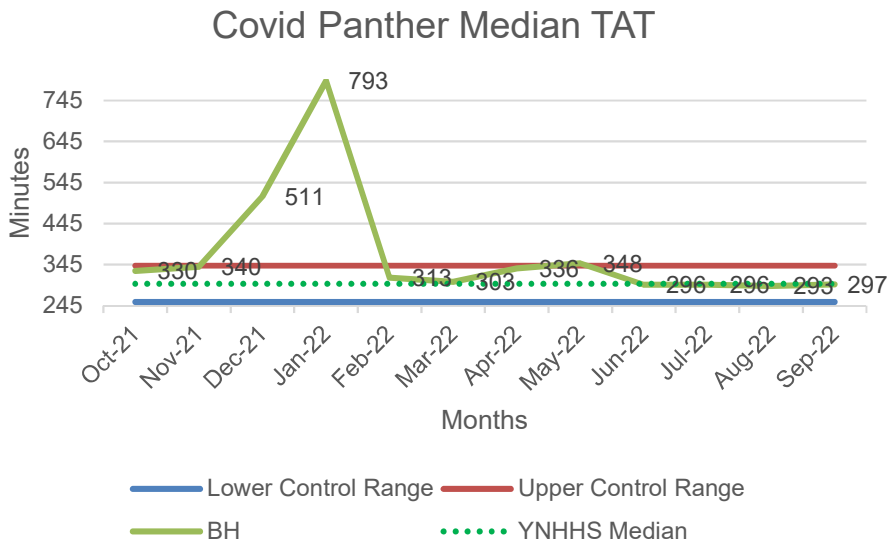


— Lower Control Range — Upper Control Range
— BH ⋯ YNHHS Median

Covid Liat Volume

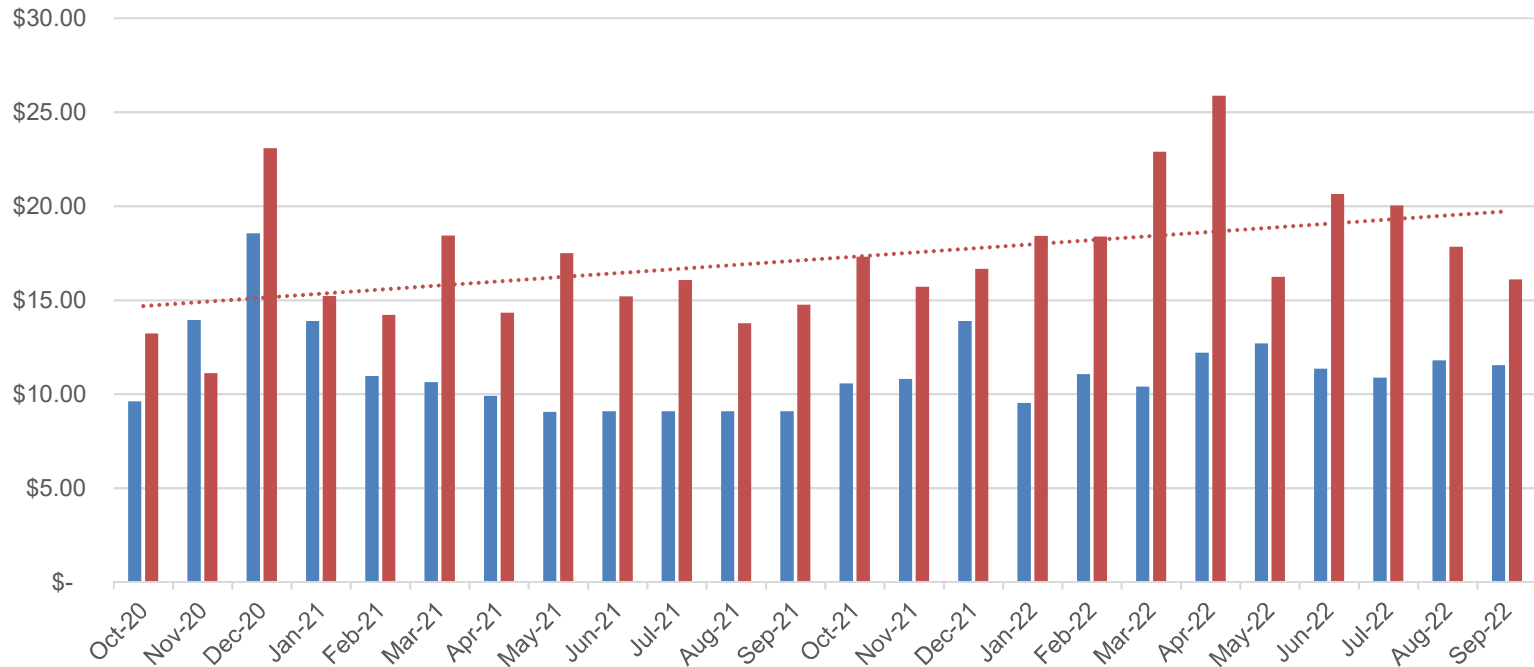


Bridgeport Campus – COVID-19 Panther



Cost Per Billable

FY2021 vs. FY2022 Cost Per Reportable (Total # of Expenses/# of Tests)
Bridgeport vs. Milford



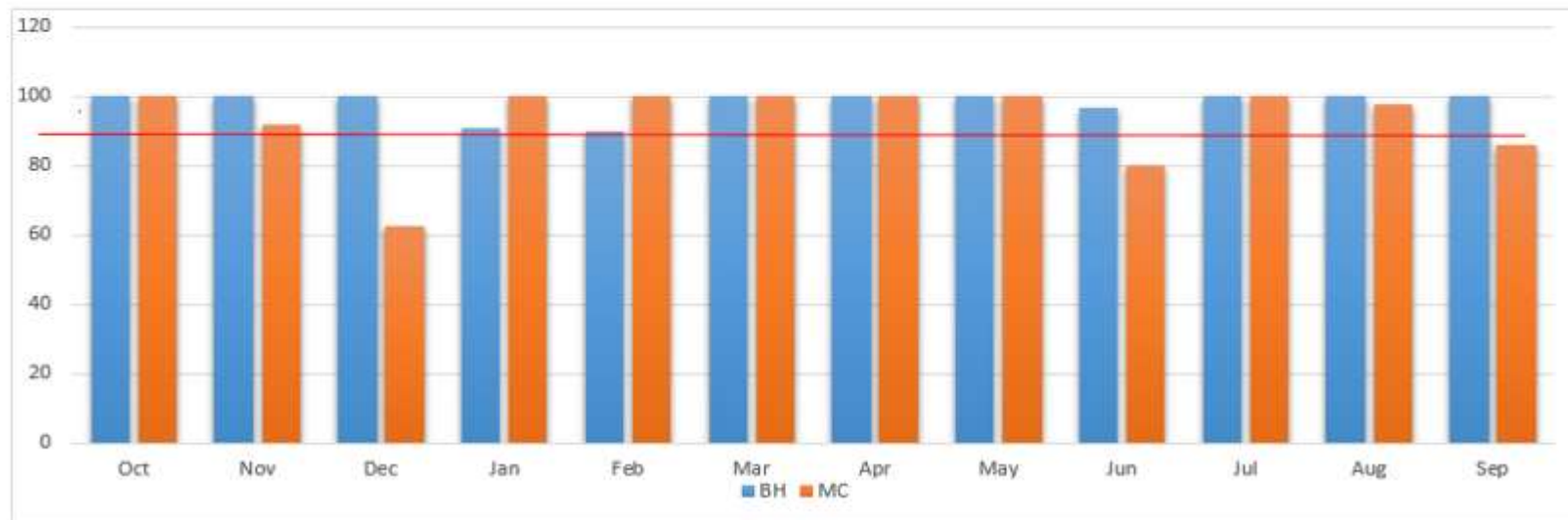
	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
BH Cost per billable	\$9.6	\$13.	\$18.	\$13.	\$10.	\$10.	\$9.9	\$9.0	\$9.0	\$9.0	\$9.0	\$9.0	\$10.5	\$10.	\$13.	\$9.5	\$11.	\$10.	\$12.	\$12.	\$11.	\$10.	\$11.	\$11.
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.	16.1

■ BH Cost per billable
 ■ MC Cost per billable
 ⋯ Linear (MC Cost per billable)

Lab General - Bridgeport

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	100% (22/22 surveys)	100%	None	None U-B MC survey required followup for a >2SDI (results were acceptable by CAP, no patient impact).	Lab management and administration
		MC	86% (6/7 surveys)	88%			

CAP PT Evaluation Completion TAT within 30 days
Benchmark 90%



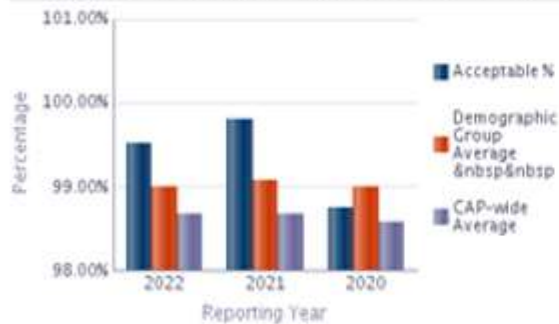
Lab General - Bridgeport

Proficiency Testing Performance BC	98%	103/103 analytes	100%	100%	None	None required for benchmark-each section investigates failed/unsatisfactory performances.	Laura
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Proficiency Testing Performance Overview ?

Select View: Graph ▼

Acceptable Proficiency Testing by Year and Group



10 Mailings with New Evaluations	0 Mailings with Revised Evaluations	0 Analytes with Unsatisfactory PT	0 Analytes with Unsuccessful PT	0 Analytes with Repeat Unsuccessful PT
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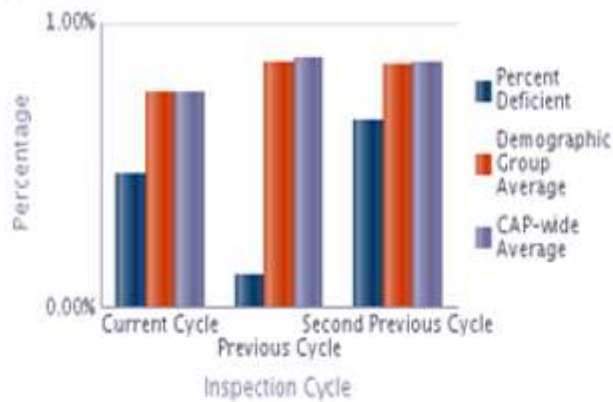
Reporting Year	Acceptable %	Demographic Group Average ?	CAP-wide Average
2022	99.51%	99.00%	98.67%
2021	99.81%	99.07%	98.67%
2020	98.76%	98.99%	98.58%

Lab General - Bridgeport

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
3/29/2022	Routine	0.47	1

Period Name	Percent Deficient	Demographic Group Average ?	CAP-wide Average
Current Cycle	0.47%	0.76%	0.75%
Previous Cycle	0.11%	0.86%	0.88%
Second Previous Cycle	0.65%	0.85%	0.86%

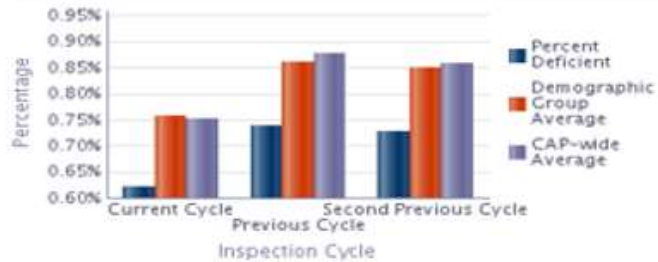
Lab General -Bridgeport

Milford Accreditation overview

Accreditation Performance Overview ?

Select View: Graph ▼

Deficient Accreditation Performance by Cycle and Group



Last Accreditation Decision	Date
Accredited	5/9/2022

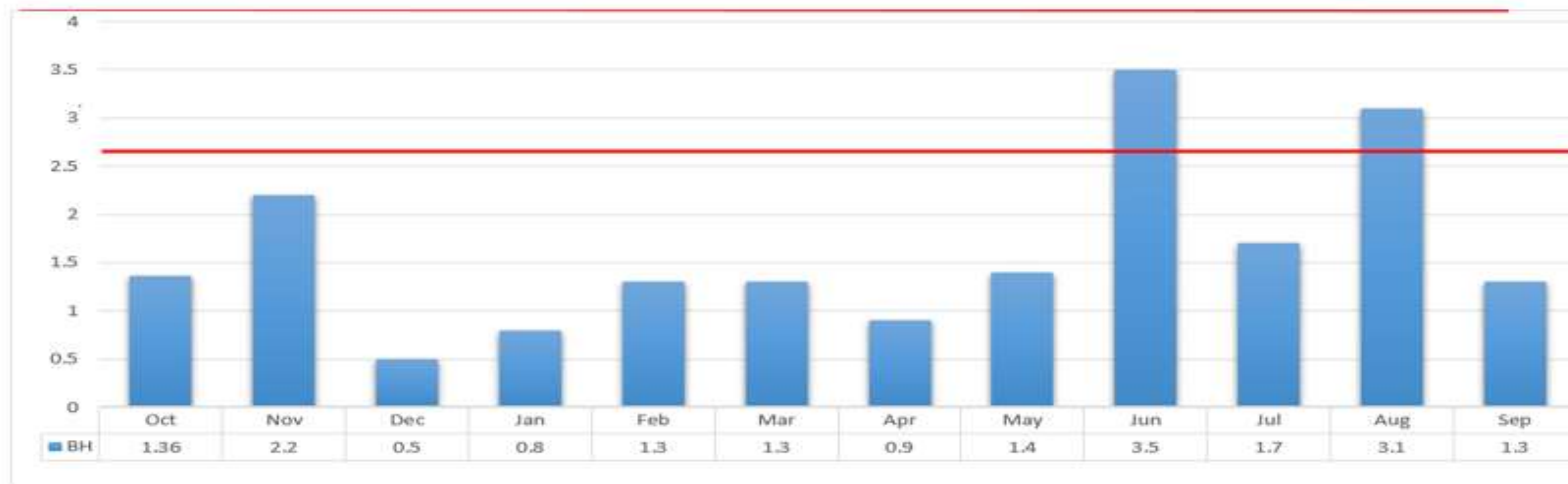
Current Cycle Inspection(s)			
Date	Inspection Type	% Deficient	Recurring Deficiencies
3/26/2022	Routine	0.62	0

Period Name	Percent Deficient	Demographic Group Average ?	CAP-wide Average
Current Cycle	0.62%	0.76%	0.75%
Previous Cycle	0.74%	0.86%	0.88%
Second Previous Cycle	0.73%	0.85%	0.86%

Lab General - Bridgeport

Quality Metric	Target	Sample size	Current performance	Previous month	Patient Impact	Corrective action and follow-up	Responsible
BC Lab Corrected/amended reports	<2.7/10,000 tests	195,273tests	1.3 (Per 10,000 results 0.013%)	3.1 (0.031%)	Corrected reports can lead to adverse patient outcomes	None needed benchmark met	Laboratory administration

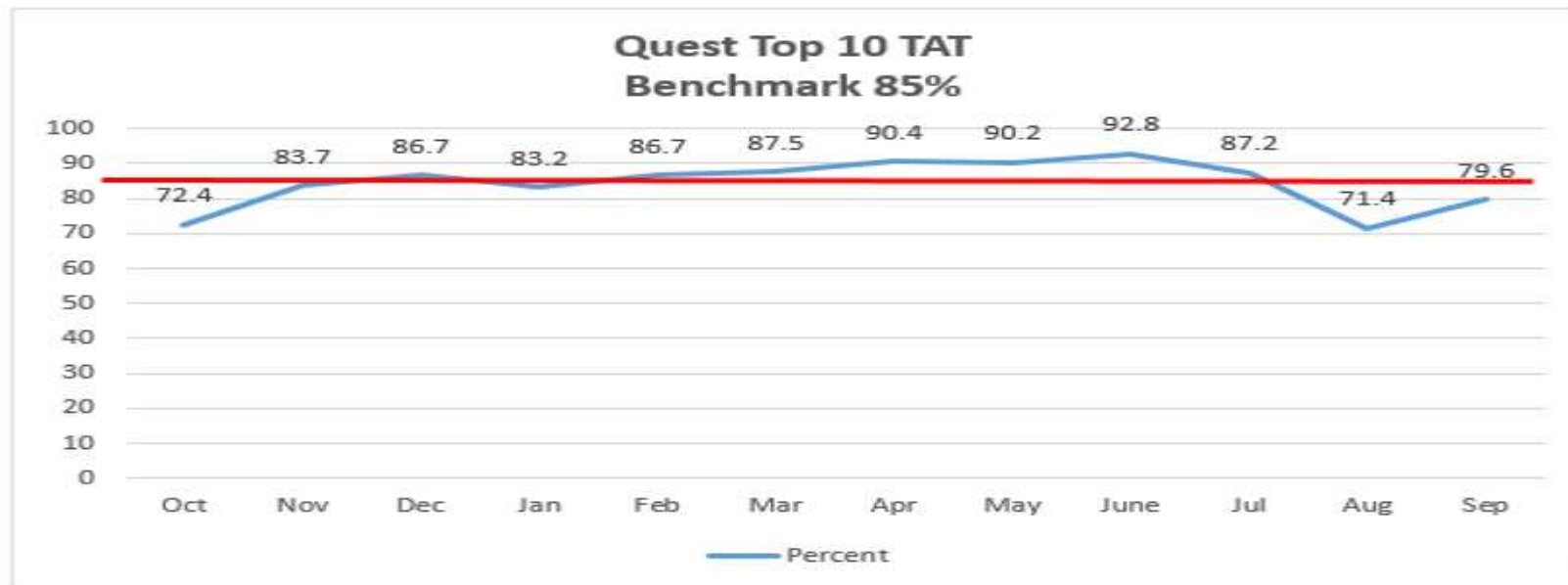
**Corrected Reports per 10,000 test results-Bridgeport Campus
Benchmark <2.7**



**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 electrolyte ISE malfunction requiring patients to be run and 38 corrections.**

Lab General - Bridgeport

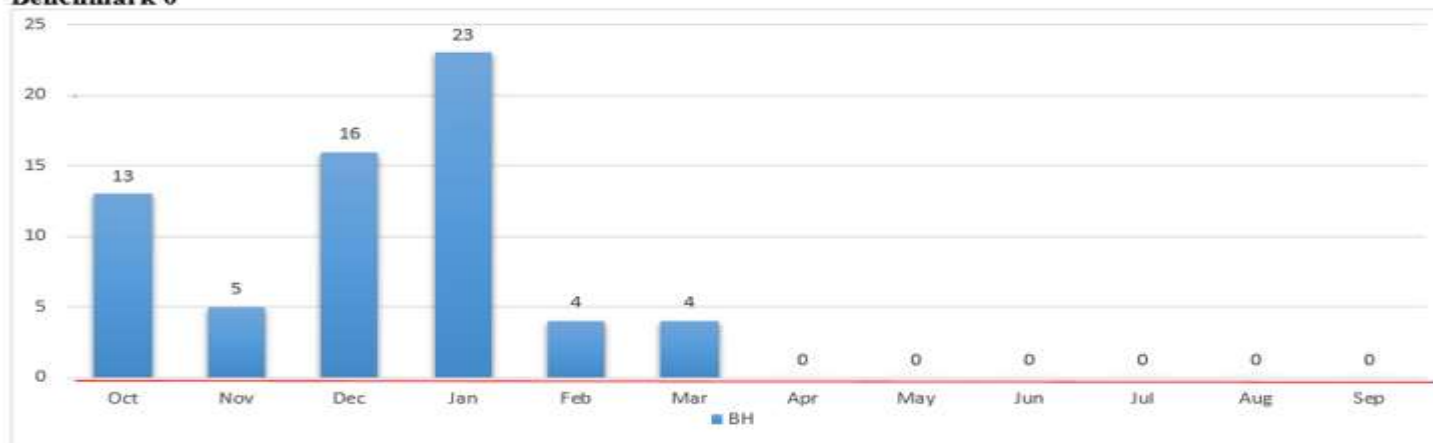
Quality Metric	Target	Sample size	Current performance	Previous month	Patient Impact	Corrective action and follow-up
Quest TAT Top 10 tests by volume	85% On time	481 Tests	79.6%	71.4%	Can cause delays in patient treatment/therapy	Target was lowered to 85% in FY21. Slightly improved but still down from the FY22 average TAT of 84%. Continue increasing test sent to YH and bringing some sendouts inhouse.



Lab General - Bridgeport

Quality Metric	Target	Sample size	Current performance	Previous month	Patient Impact	Corrective action and follow-up	Responsible Staff
Nonconforming events BC	0	195,273 tests	0	0	None	None needed	Lab administration and management

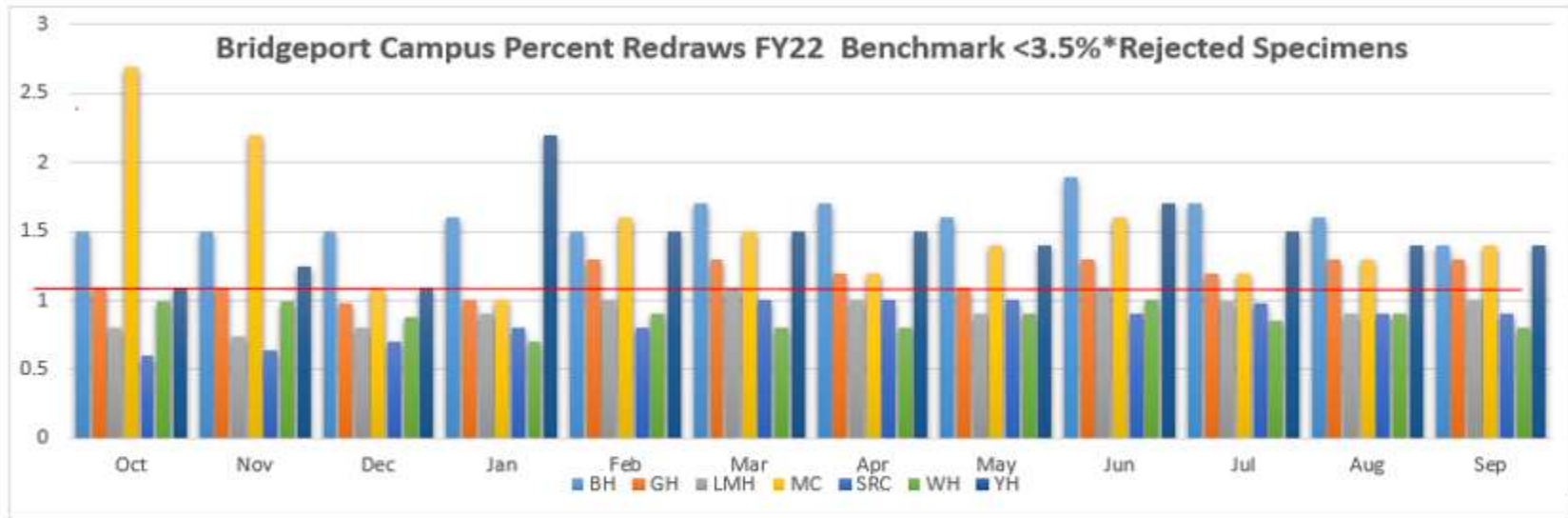
****Bridgeport Campus Nonconforming Events
Benchmark 0**



****Mid FY22 the definition of non-conforming events for the purpose of this QA monitor was revised to include irreplaceable samples only.**

The laboratory continues to work with Outreach, in-house patient units and the ED to decrease the number of samples (ex. blood) needing recollection as part of another Quality Measure.

Lab General - Bridgeport

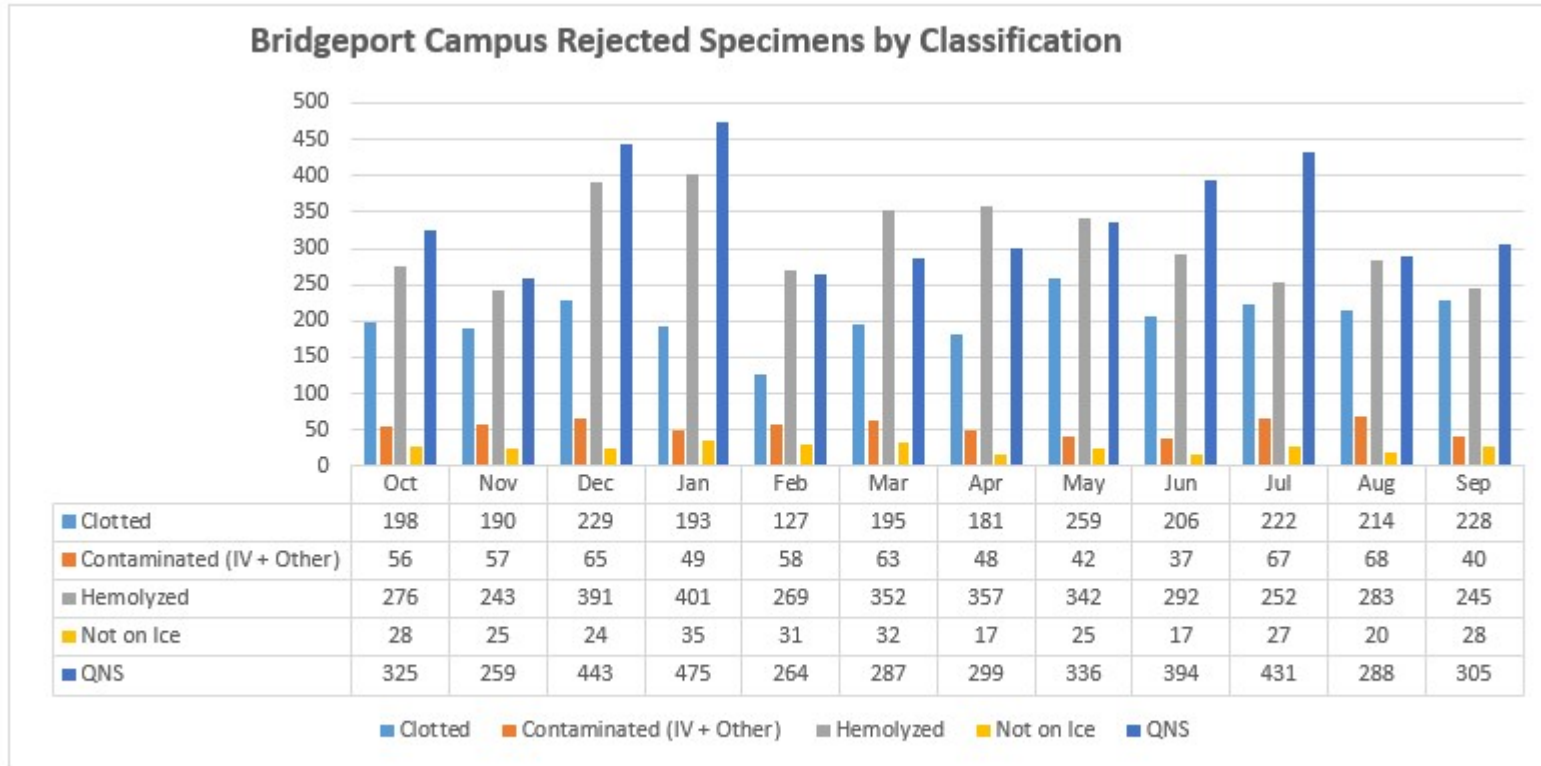


— YNHHS Benchmark (1.1% FY22 to date)

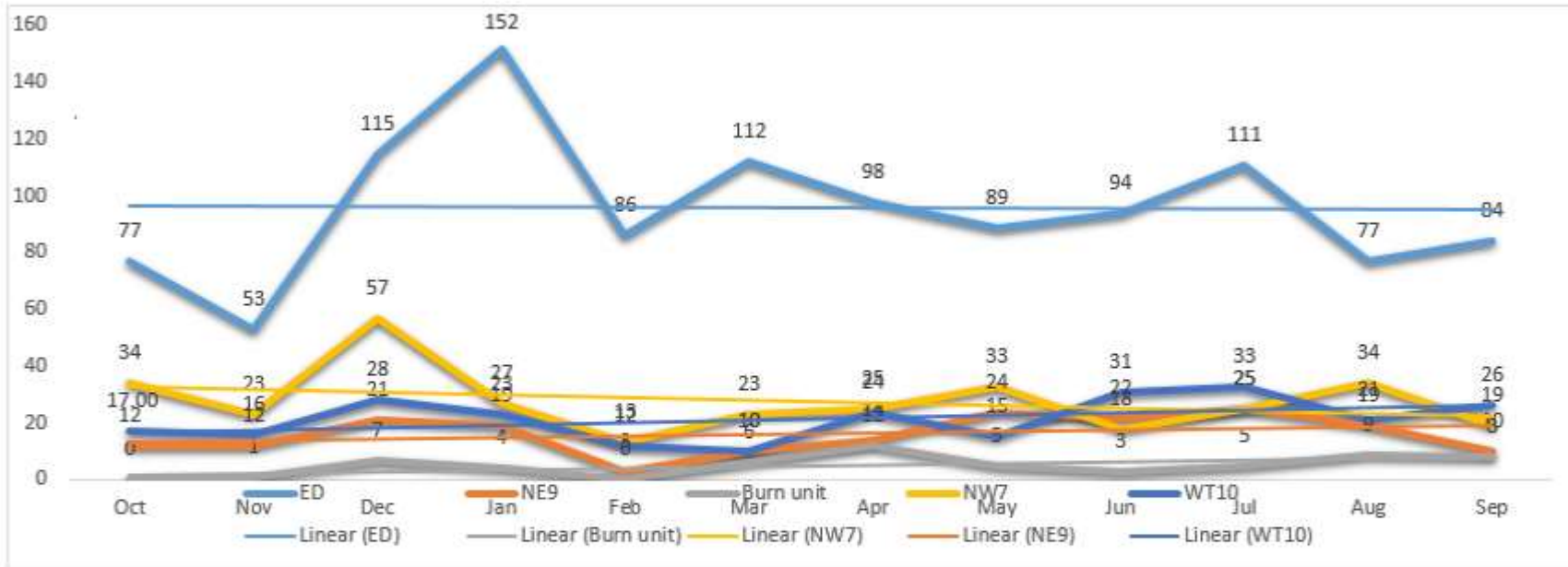
*Rooper L. Carter, J., Hargrove, J., Hoffman, S & Riedel, S. (2017). Targeting rejections: analysis of specimen acceptability and rejection. *Journal of Clinical Laboratory Analysis*, volume 31, issue 3

	BH	GH	LMH	MC	SRC	WH	YH
Sep	1.4	1.3	1	1.4	0.9	0.8	1.4

Lab General – Bridgeport (Specimen Rejection Analysis)



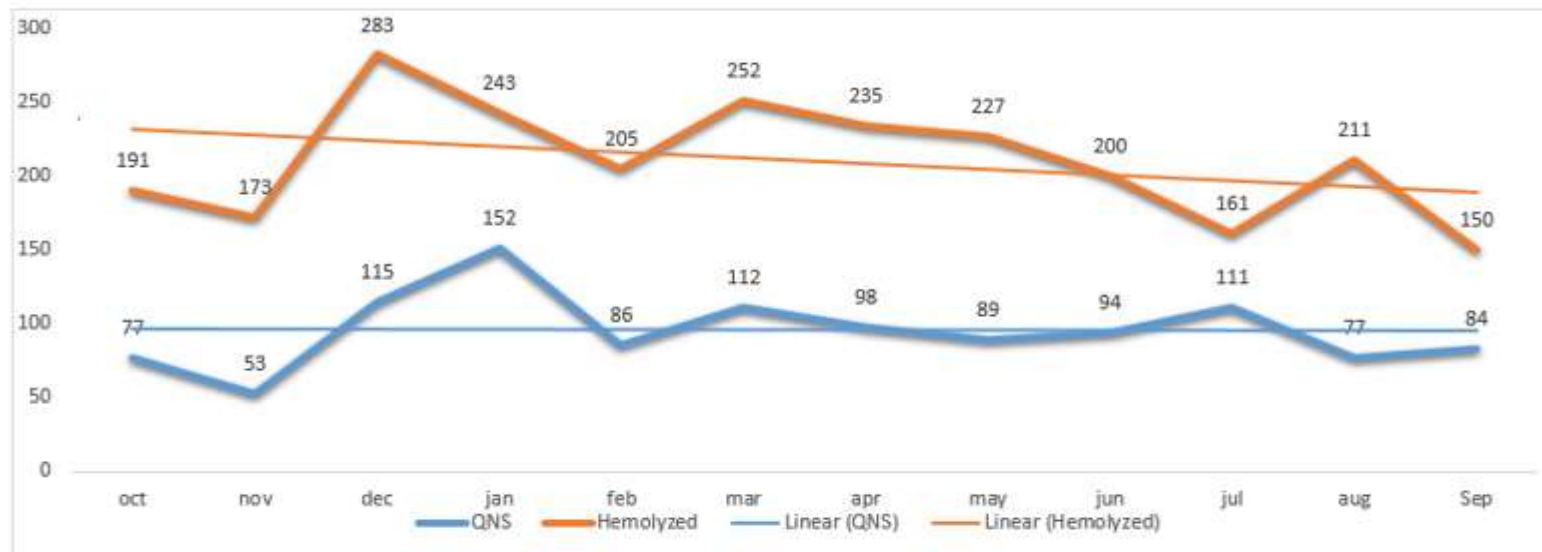
Floor Audits of QNS specimens FY2022



	ED	NE9	Burn unit	NW7	WT10
Sep	84	10	8	19	26

ED Hemolyzed and QNS Specimens Rejected

ED Hemolyzed and QNS Specimens rejected



Laboratory General - Bridgeport

BH & MCBH Events Calendar Completed

Benchmark 100%

91% 20/22 events completed.



BSC training (June) has been completed

Centrifuge training (July) almost done

Liat instrument comparison (August) still pending sign off.

Instrument PM's and comparisons pending in Micro (Sept)

Sample not on ice by Delivery Network

Beaker Lab Rejections Rejection Classification Totals



System Organization	Rejection Classification	Test Cancellation Date 2022									
		April	Q2		June	July	Q3		September	Q4	Grand Total
BH	Collection Issue: Not on Ice	21	28	21	31	21	29			174	
CSHH	Collection Issue: Not on Ice					1				1	
GH	Collection Issue: Not on Ice						1			1	
L&M	Collection Issue: Not on Ice	4	1	2			1		3	11	
NEMG	Collection Issue: Not on Ice			1						1	
WH	Collection Issue: Not on Ice		3	1	3	1	3		2	13	
YNHH	Collection Issue: Not on Ice	74	83	62	64	80	80		43	491	
Grand Total		99	115	87	98	103	114		76	692	



Select Timeframe
Last 6 Months

Begin Date
1/1/2020

End Date
10/25/2022

Delivery Network
(Multiple values)

Campus
(All)

Collection Department
(All)

Resulting Section
(All)

Rejection Classification
Collection Issue: Not on Ice

Specimen Type
(All)

Test Name
(All)

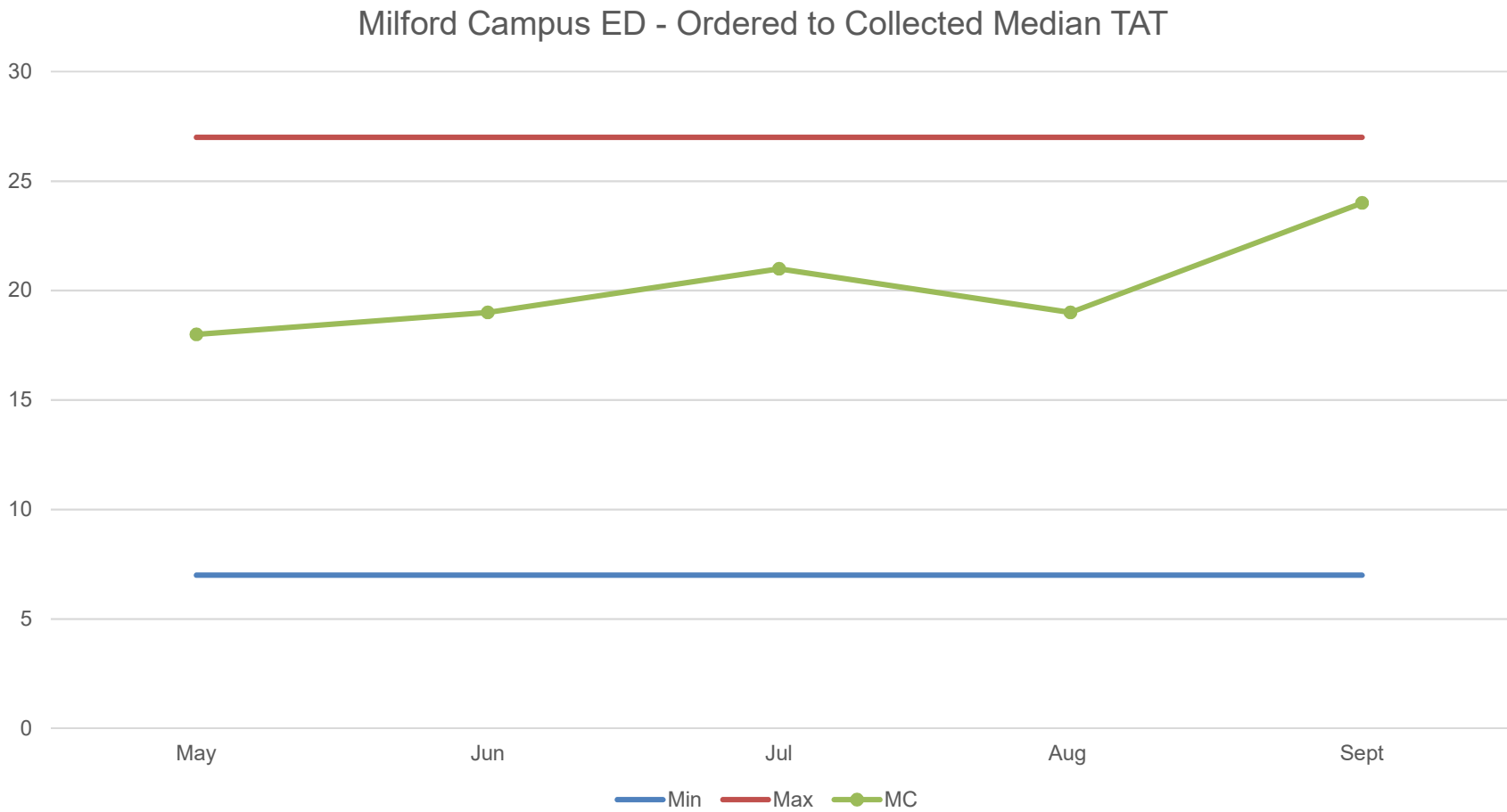
Sept 2022 Summary for samples not on ice

Bridgeport Hospital														
2022 Sample Rejection - not on ice														
Floor	Baseline	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	YTD Average
ED	9	12	8	8	4	6	6	6	6	6				7
MICU	2.91	0	0	2	1	3	2	2	2	1				1
NW7	1.27	1	0	0	1	2	0	1	1	1				1
SICU	1.45	1	4	3	2	1	1	1	2	0				2
WT10	1.73	2	1	4	2	2	0	0	0	4				2
WT7	0.82	2	0	1	1	0	0	3	1	1				1
WT8	1.82	1	0	1	0	1	0	0	3	1				1

Overall Tests:

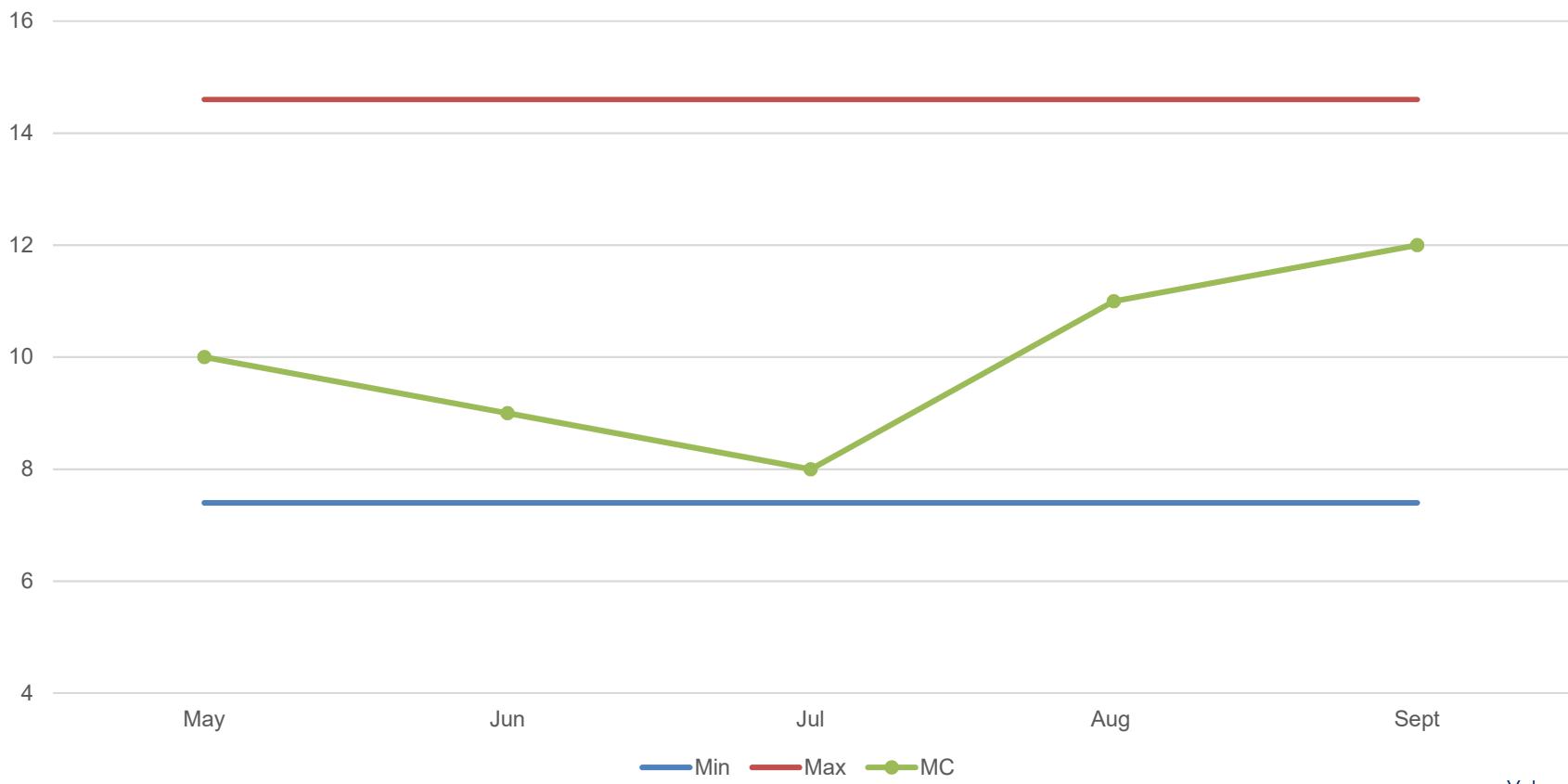
Row Labels	Count of Specimen ID
METHYLMALONIC ACID (YH BH)	10
AMMONIA	9
PTH, INTACT (BH)	6
CALCIUM, IONIZED, WHOLE BLOOD	1
SOMATOSTATIN	1
LACTIC ACID, WHOLE BLOOD (VENOUS) (MC)	1
METANEPHRINES, FRACT, FREE, LC/MS/MS, PLASMA (BH GH LMW)	1
(blank)	
Grand Total	29

Milford Campus ED TAT Ordered to Collected



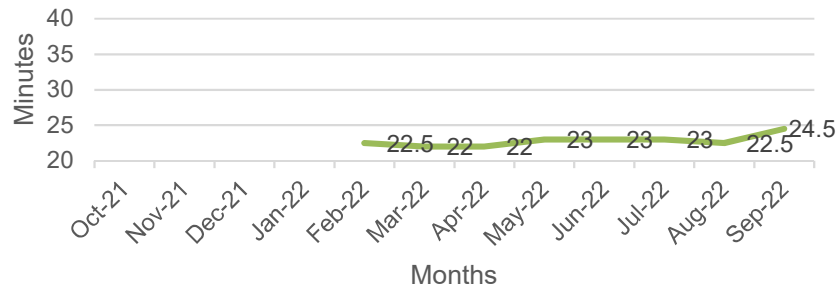
Milford Campus ED TAT Collected to Received

Milford Campus ED - Collected to Received Median TAT



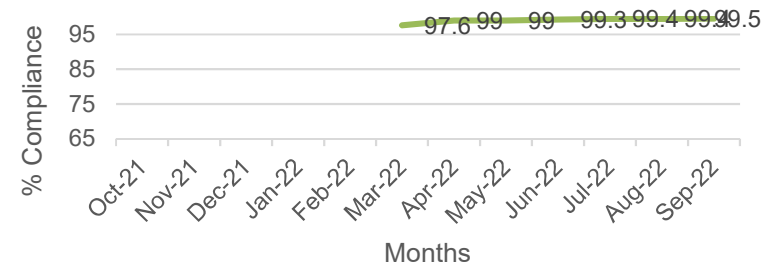
Milford Campus – Gen 5 Troponin TAT

Gen5 Troponin Median TAT



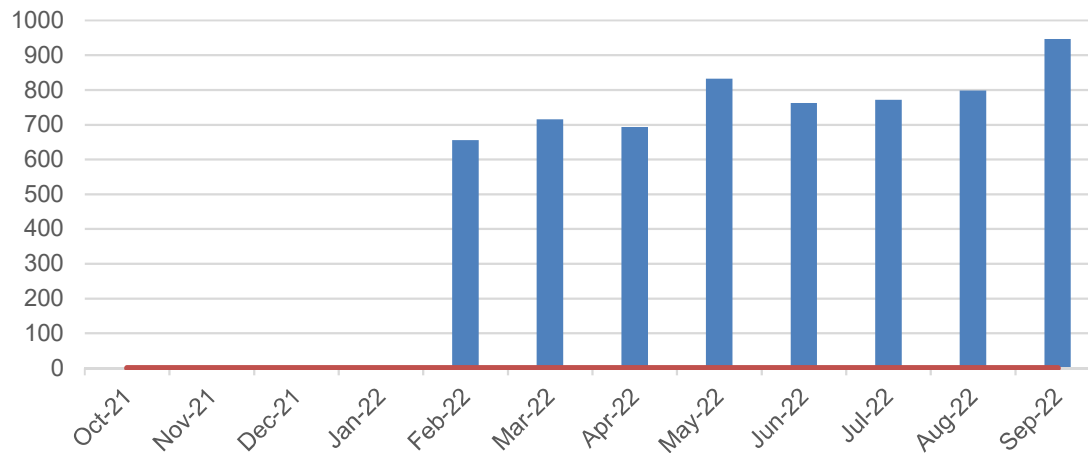
— Lower Control Range — Upper Control Range
— MC YNHHS Median

Gen5 Troponin % Compliance < 45 mins TAT



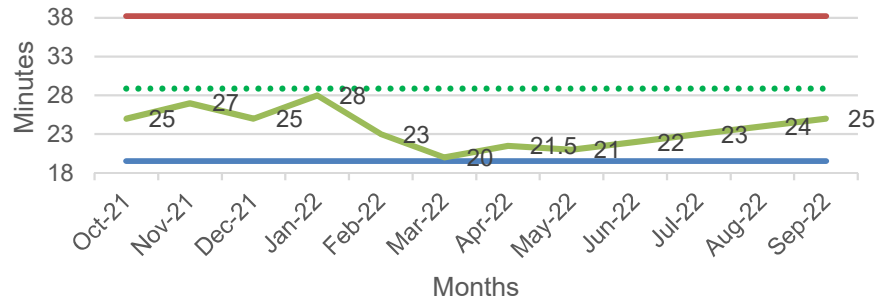
— Lower Control Range — Upper Control Range
— MC YNHHS Median

Gen5 Troponin Volume

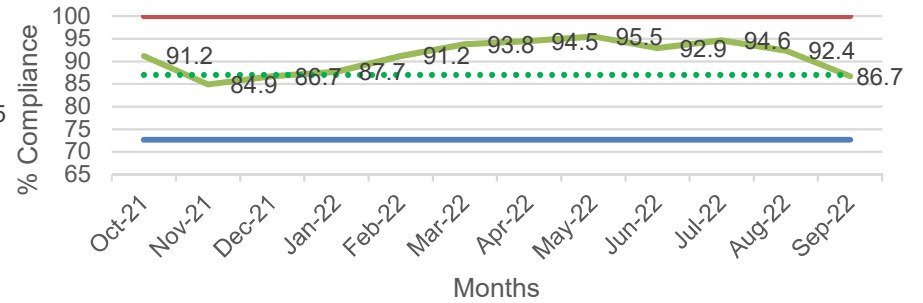


Milford Campus – Basic Metabolic Panel (BMP) ED TAT

BMP Median TAT



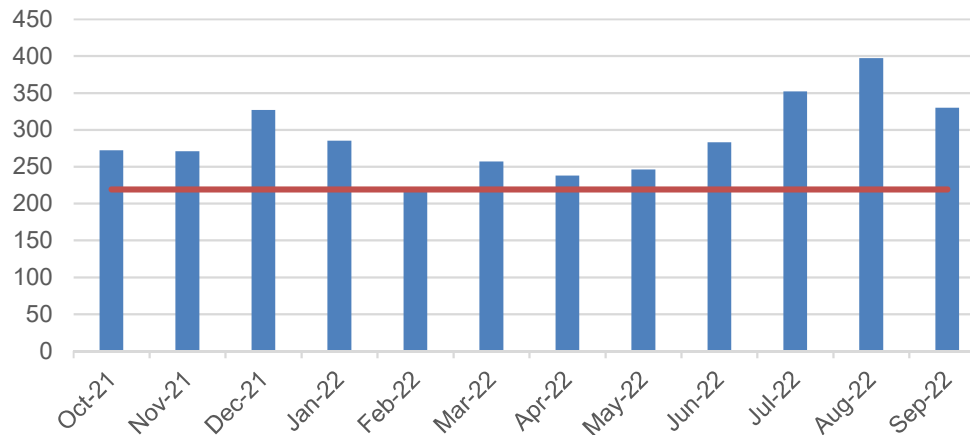
BMP % Compliance < 45 mins TAT



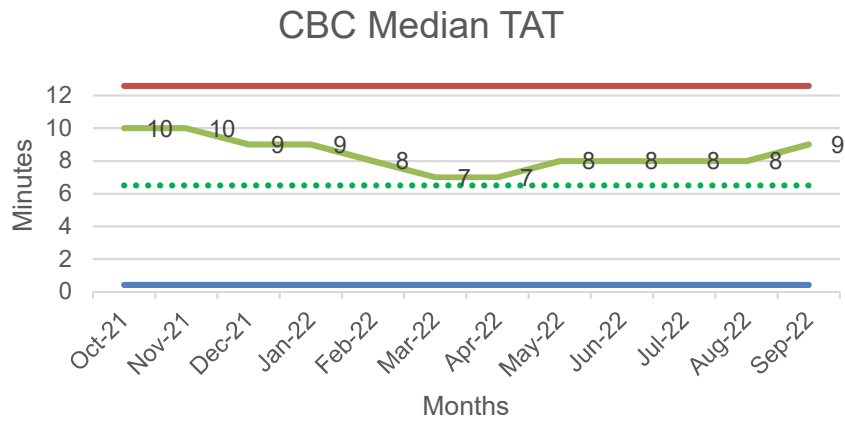
— Lower Control Range — Upper Control Range
 — MC YNHHS Median

— Lower Control Range — Upper Control Range
 — MC YNHHS Median

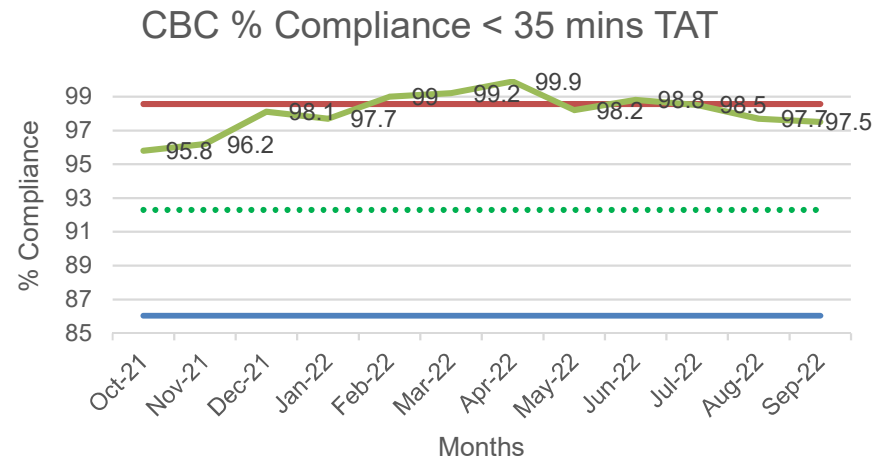
BMP Volume



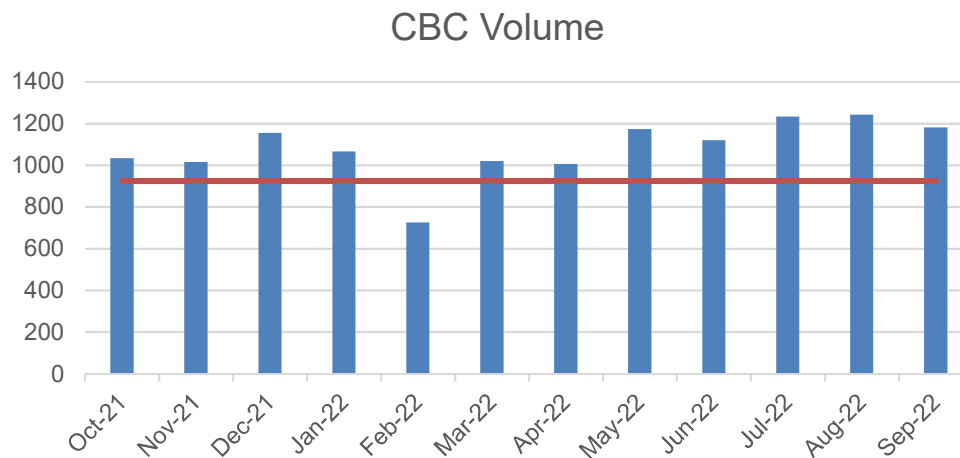
Milford Campus – Complete Blood Count (CBC) ED TAT



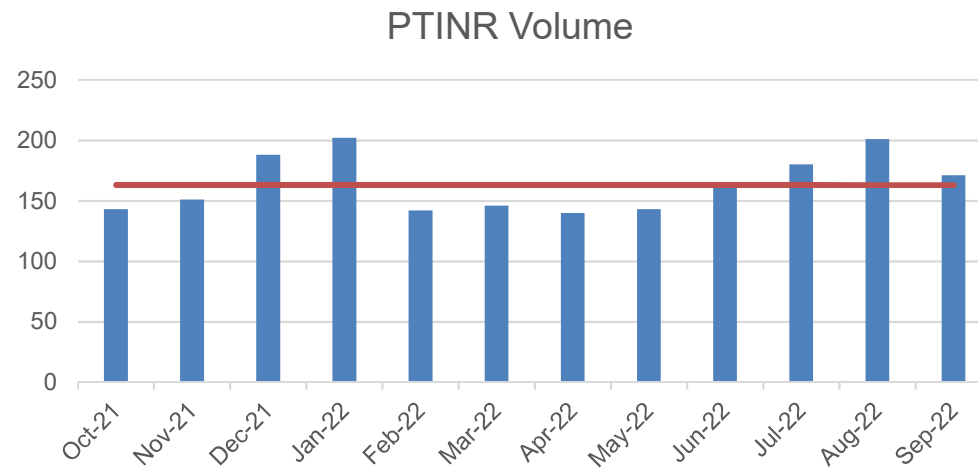
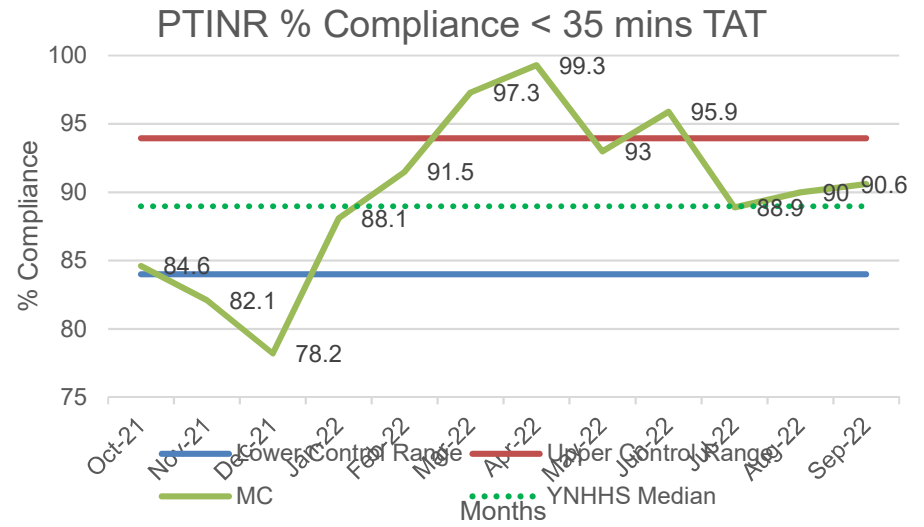
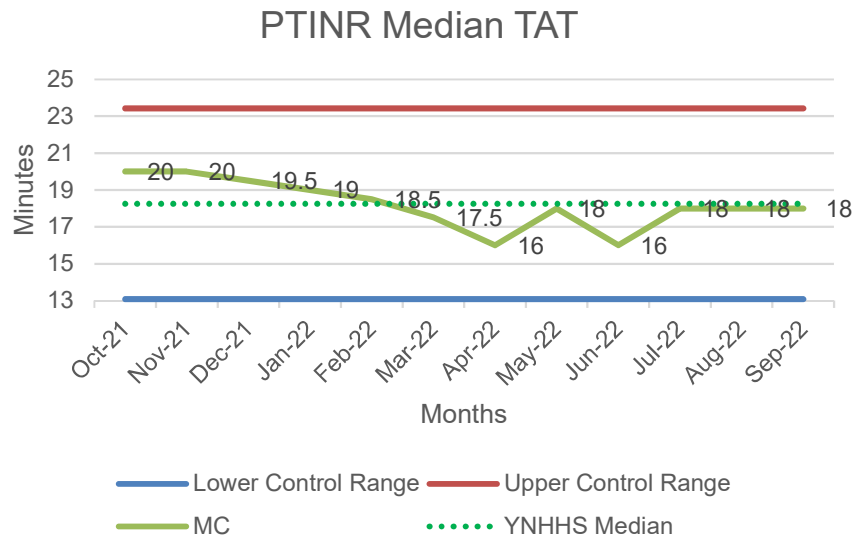
— Lower Control Range — Upper Control Range
— MC ⋯ YNHHS Median



— Lower Control Range — Upper Control Range
— MC ⋯ YNHHS Median

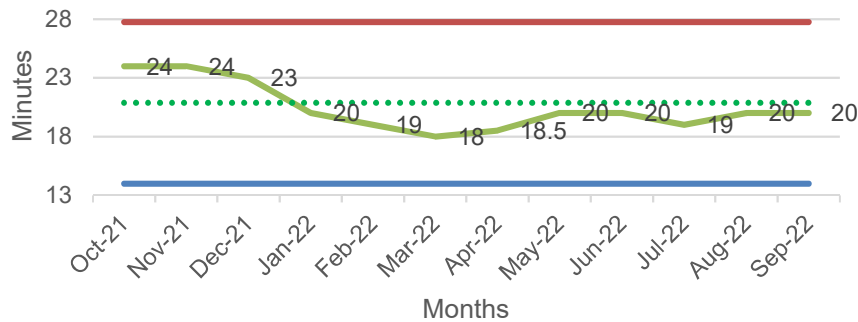


Milford Campus – PTINR ED TAT



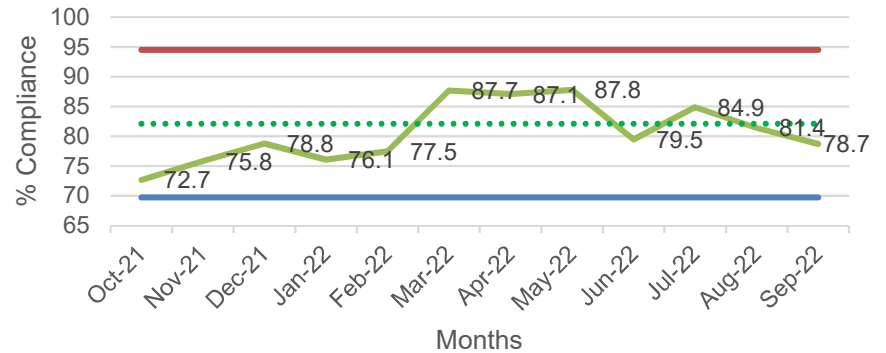
Milford Campus – D-dimer ED TAT

D-dimer Median TAT



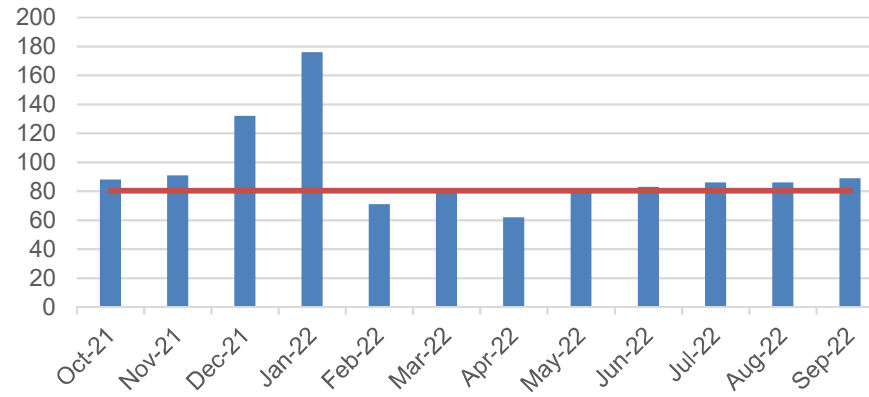
— Lower Control Range — Upper Control Range
— MC ⋯ YNHHS Median

D-dimer % Compliance < 35 mins TAT



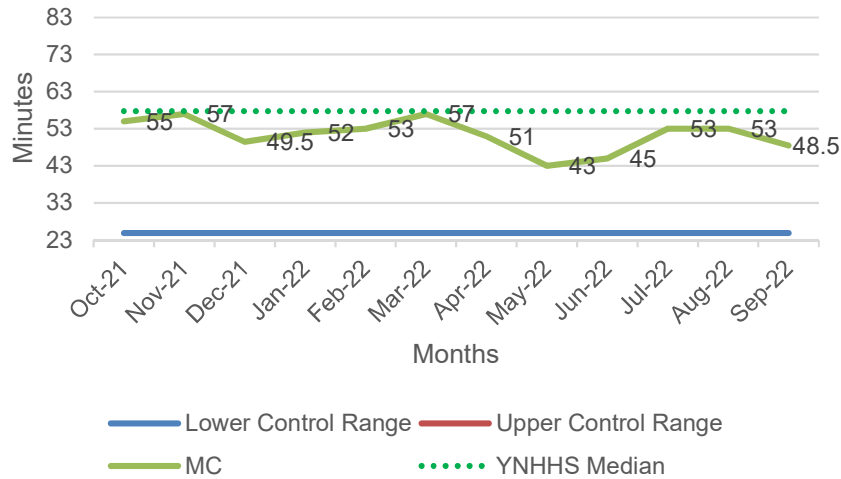
— Lower Control Range — Upper Control Range
— MC ⋯ YNHHS Median

D-dimer Volume

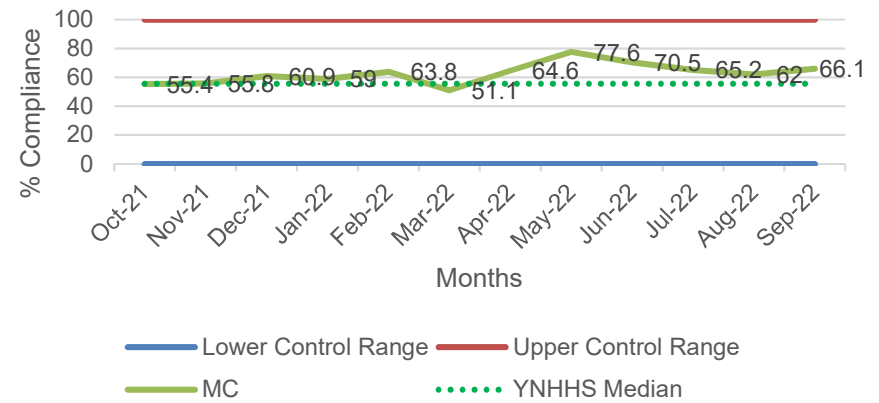


Milford Campus – Type and Screen ED TAT

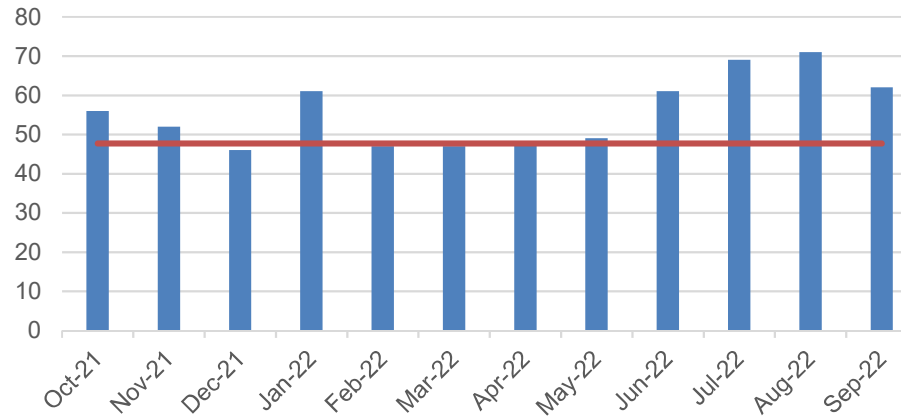
Type and Screen Median TAT



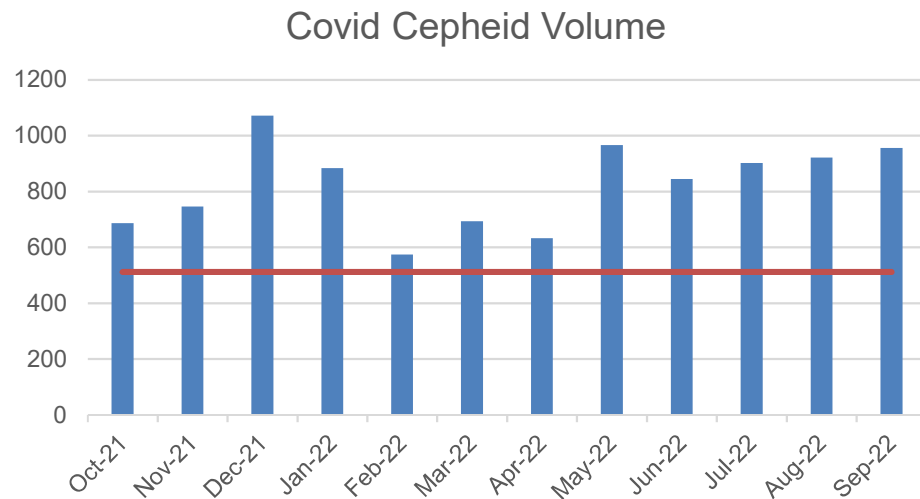
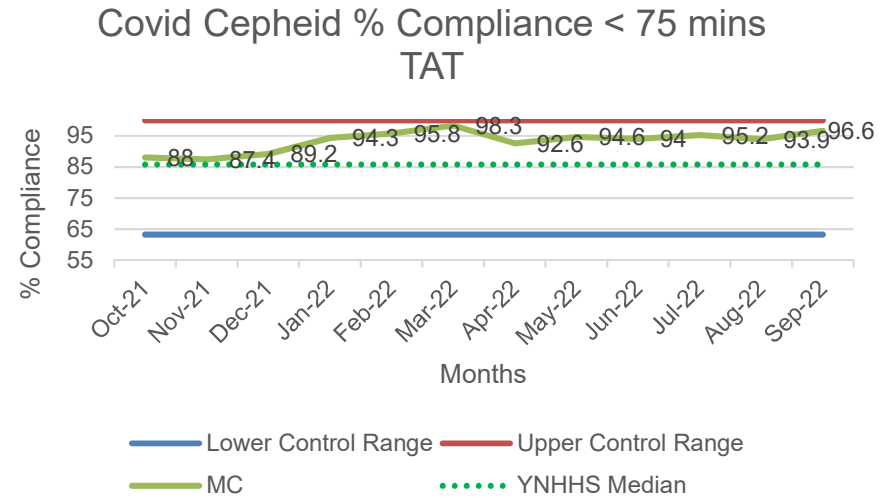
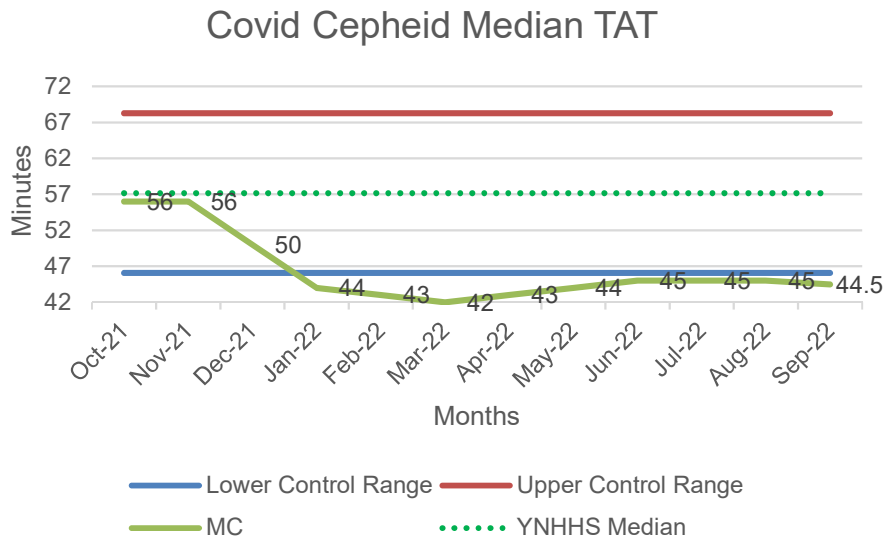
Type and Screen % Compliance < 60 mins TAT



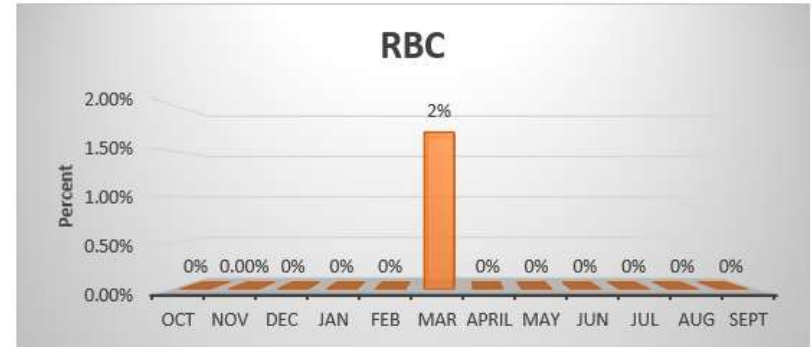
Type and Screen Volume



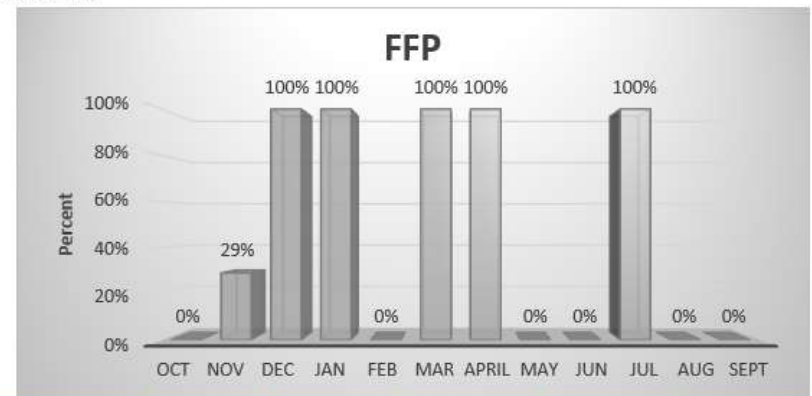
Milford Campus – COVID Cepheid PCR ED TAT



Milford Campus – Wastage By Blood Components

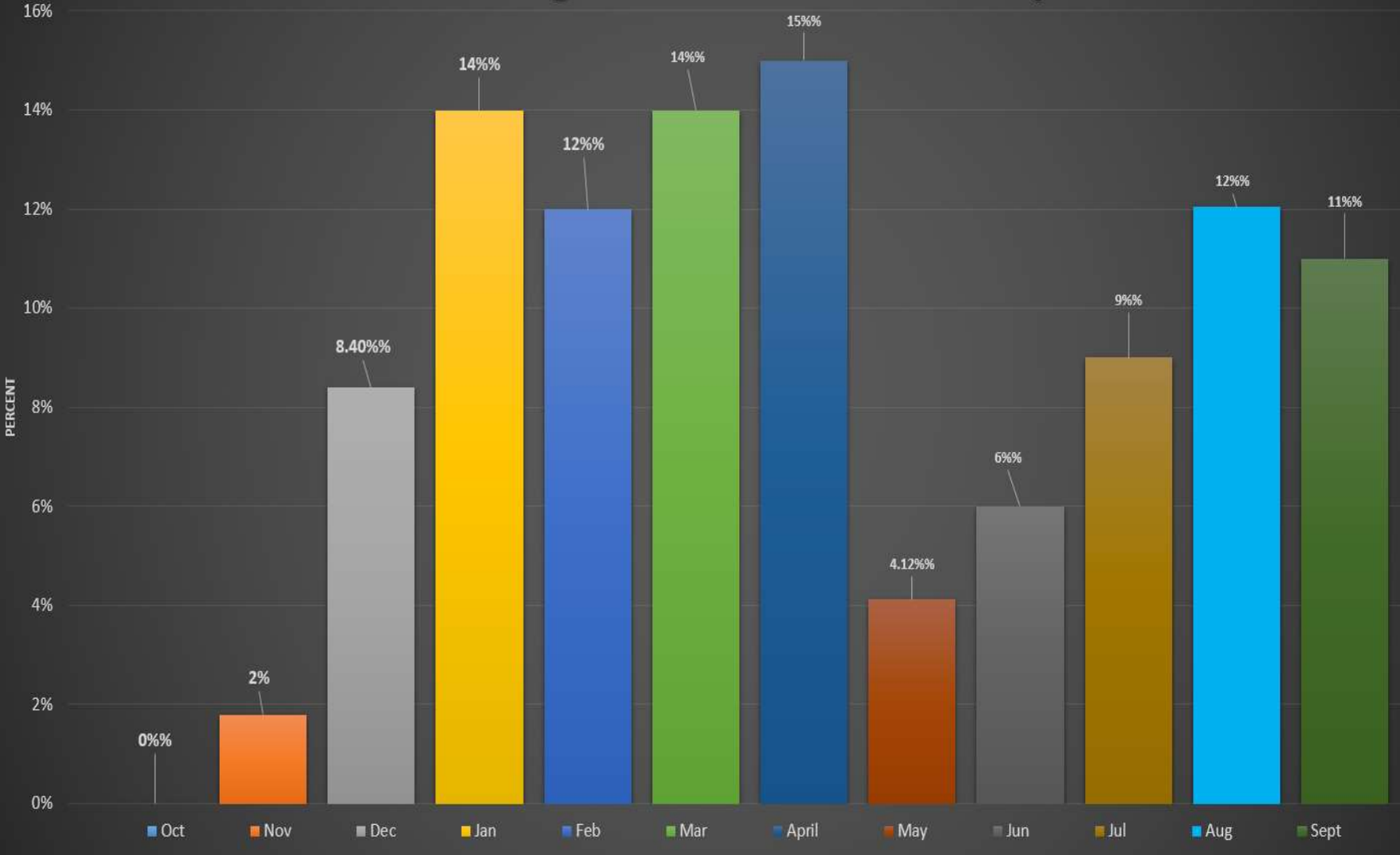


Total Amount \$53,902.31



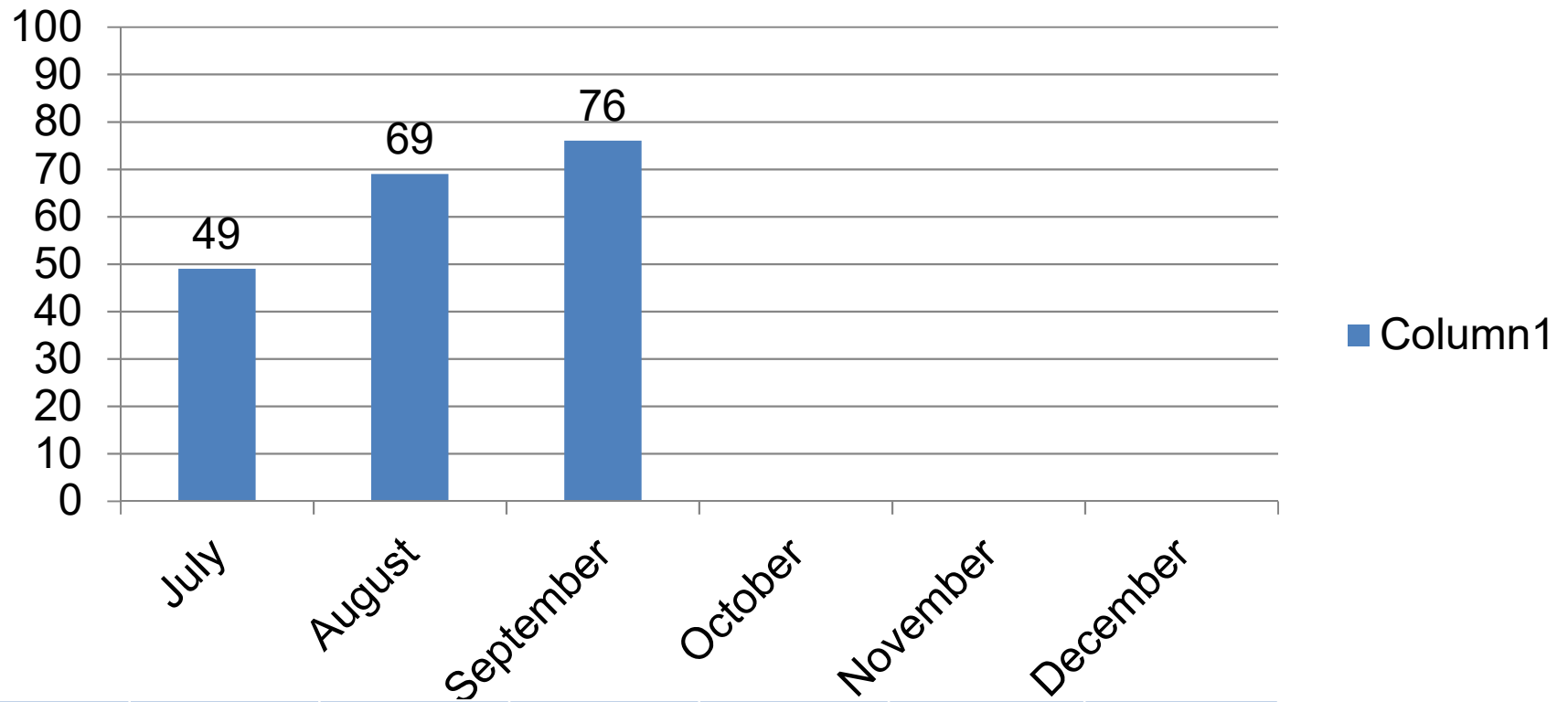
	October	November	December	January	February	March	April	May	June	July	August	September
# of Products Used	100	111	87	58	65	60	56	93	85	85	95	93
# of Products Wasted	0	2	8	10	9	10	10	4	5	8	13	13

Overall Wastage YTD 2022 Milford Campus



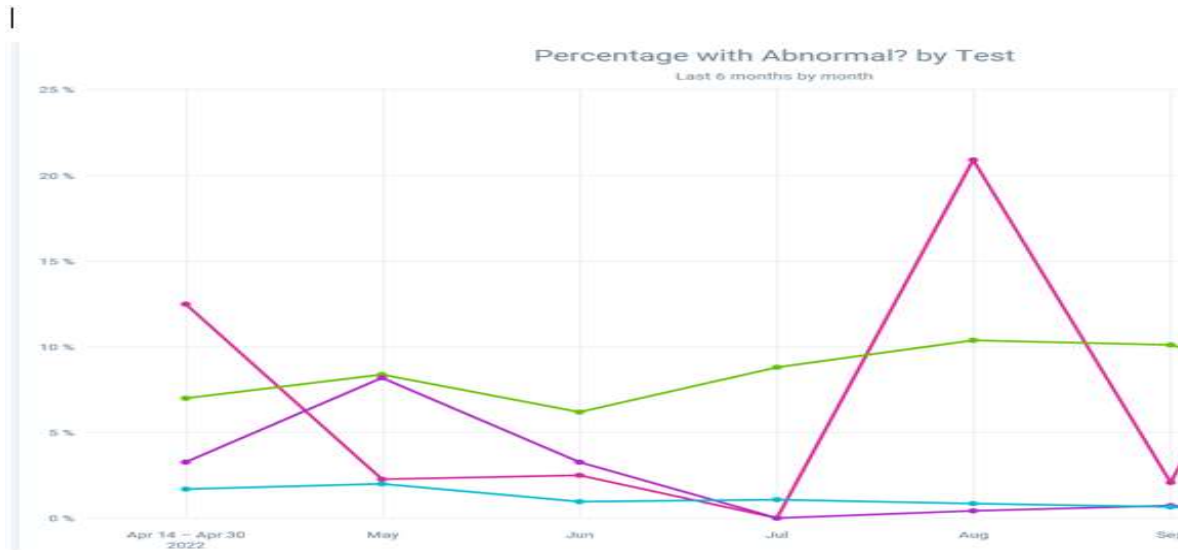
Bridgeport Hospital Milford Campus Laboratory CAP Competency Completions July 2022 – December 2022

Goal 100%



Completed						
Completed/ Total	47/95	73/105	84/110			
% Completed	49%	69%	76%			

Milford Campus Molecular Dashboard



- Group A Strep PCR
- SARS CoV-2 (COVID-19) RNA
- Influenza A/B RNA, NAAT
- Influenza/RSV by RT-PCR

Date	Tests	% Positivity	Derived Baseline	Environment Monitoring	Physician Feedback	Epidemiological Trends	Evaluation Notes	Corrective Action (if needed)
22-Sep	SARS-CoV-2	10.1	3-12%	Negative	None	None	None	None
22-Sep	Group A Strep	2.1	0-24%	Negative	None	None	None	None
22-Sep	Flu A/B	0.7	0-0%	Negative	None	None	None	None
22-Sep	Flu/RSV	0.7	0-24%	Negative	None	None	None	None

Lab General – Milford (1 of 2)

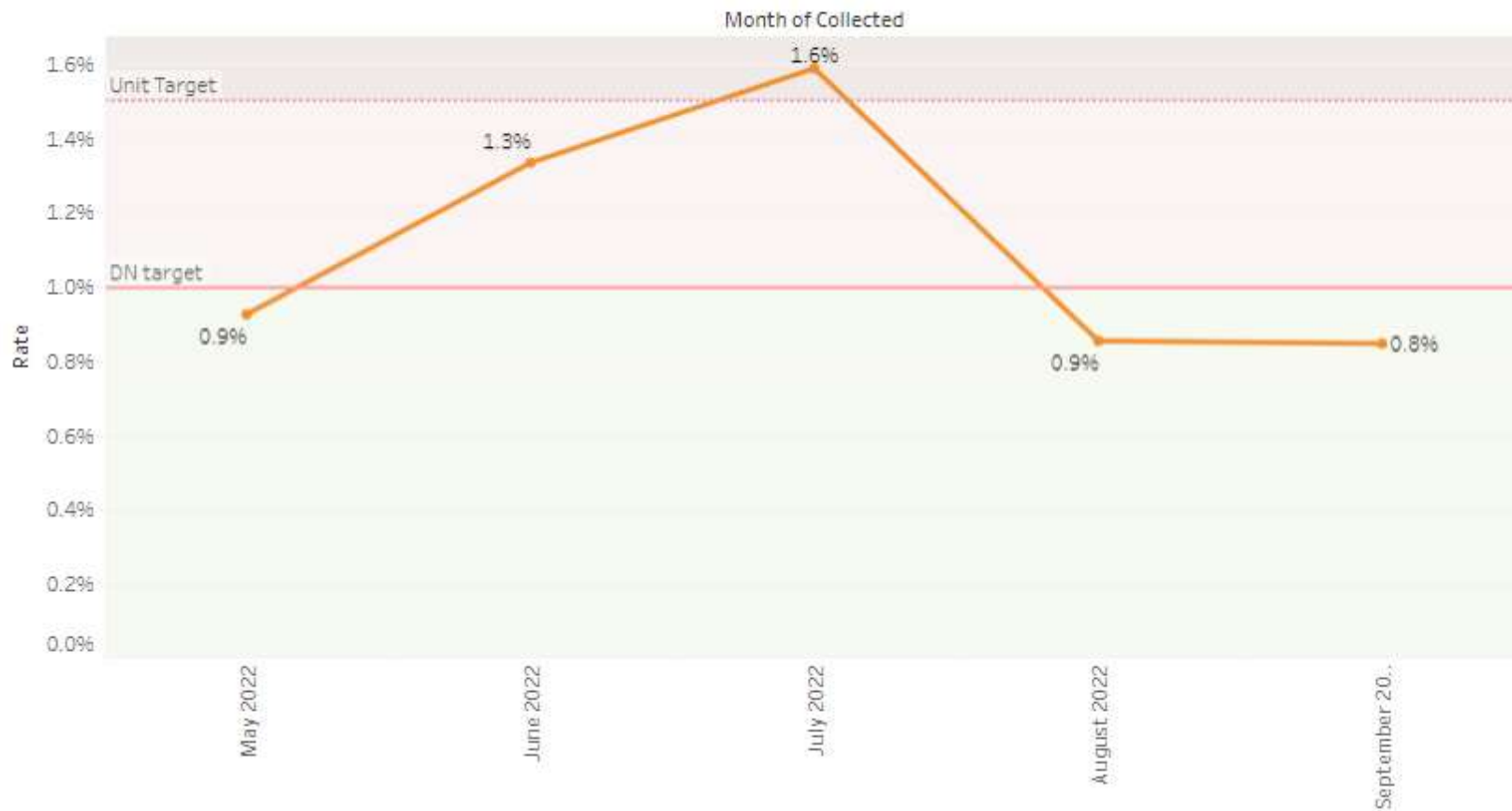
Aspect of Care	Threshold Expected/Target	Sample Size	Data Source	Achieved Current month	Previous month	Corrective Action	Patient Impact	Follow up and evaluation	Staff responsible
Non-Conforming Events	0	# Tests 21,041	Manual Collection	0	0		none	Corrections without a completed <u>comm log</u> are seen as non-conforming. All corrected reports in September were accompanied by <u>completed comm logs</u> .	Supervisors
Proficiency Testing	98% CAP Q Probe data	# <u>Analytes</u>	CAP	99%	100%	None required	None	None needed	Supervisors
Laboratory corrected reports	2.7/10,000	# tests 21,041	Manual collection	1.4	0.9	Individual coaching/counseling, and/or documented verbal warning.	none	Daily review by BH lab admin and <u>followup</u> by MC lab manager is having a positive impact on frequency of corrected reports.	Supervisors
Laboratory Injuries	0	Employees n=33	IMC	0	0		none	none	Supervisors
Redraws		# Tests 21,041				The excessive hemolysis of specimens is <u>presumed to be</u> the result of a model change of IV initiation sets. Supply chain issues prevent return to previous model.	Minor impact due to necessary recollection of samples. Percent redraws = 0.6%	"Other" category expanded using Tableau to capture Incorrect specimen type, Duplicate order, and Incorrect order by provider. "QNS" category divided into QNS and unable to obtain specimen.	Nursing, Providers & Phlebotomy
Clotted	0			25	14				
Contamination (IV & other)	0		Beaker+ Tableau	4	2				
Hemolyzed (RN)	0			54	44				
(Phleb)	0			16	2				
Not on ice	0			3	1				
QNS	0			13	21				
Wrong container	0			1	9				
Duplicate order	0			0	0				
Incorrect order by provider	0			0	0				
Unable to obtain specimen.	0			15	2				
Incorrect specimen type.	0			0	0				

Lab General – Milford (2 of 2)

Exceeded clinical time requirements Lab accident				1 0	0 2				
Critical Call TAT	30 min		Beaker	4.1	5.9	Formatted report to show true TAT. Comm log completed on 100% of critical calls	<30 minute compliance = 97%	System decision to call criticals prior to verifying occurred in April. 3 >30 min outliers were due to delays in reaching providers timely. Use of MHB being reinforced.	Supervisors

MC – ED Blood Culture Contamination

Unit Rate Graph



CRSQ Report Out

Committee of Regulatory, Safety, & Quality

October 2022

Bridgeport Hospital

Department of Laboratory Medicine

Teodorico Lee MPH, Mingkui Chen M.D., Christine Minerowicz M.D., Edward Snyder M.D., Laura Buhlmann M.S.

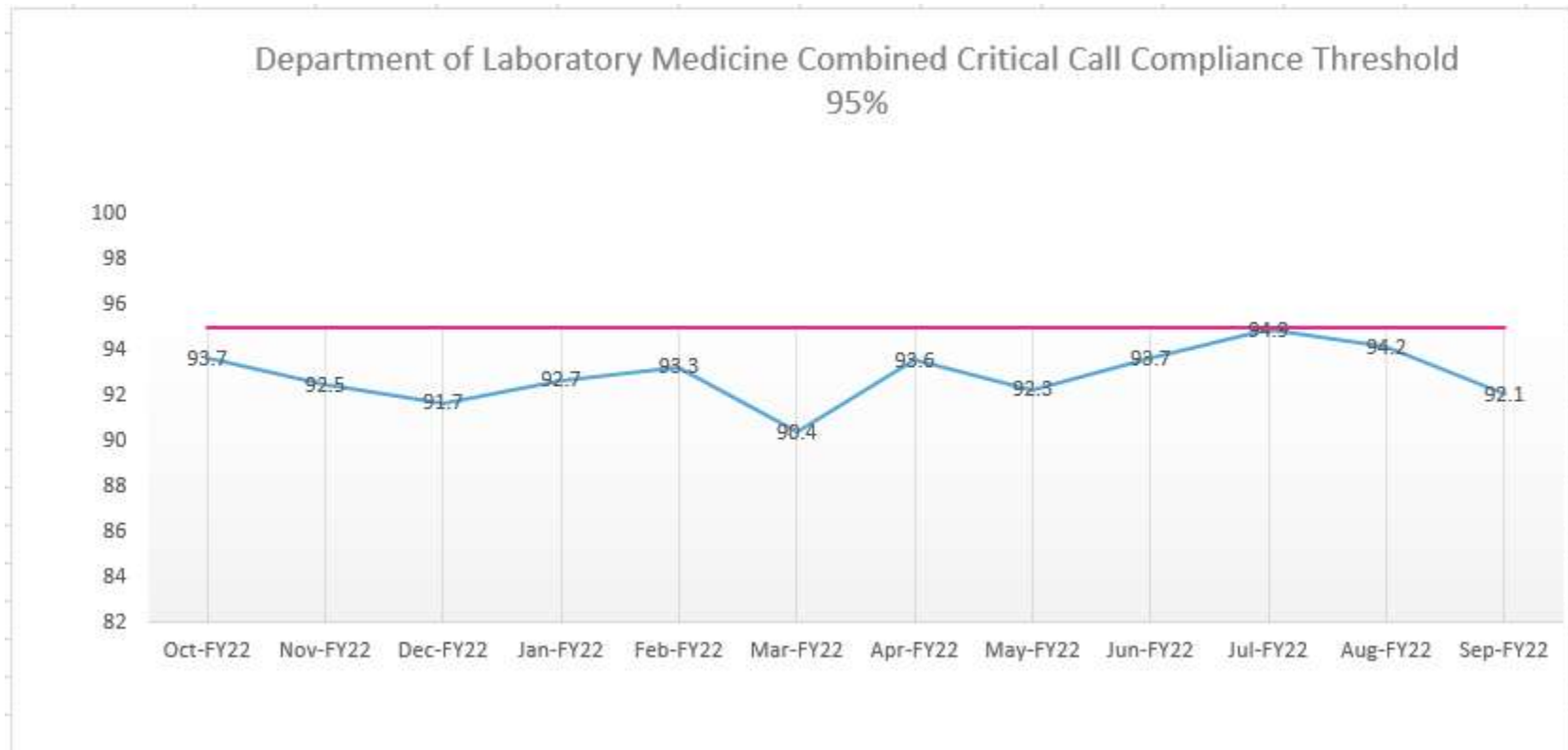
<p>SMART Aim <i>Specific-Measurable-Actionable-Relevant-Timely</i></p>	<p>Increase the critical result notification compliance with our 30-minute goal to 95% at Bridgeport Hospital by September 30th, 2022.</p> <ul style="list-style-type: none"> • The 30-minute time period is from the moment the critical value is final verified to the moment the communication log in Epic is completed. • We are currently at 92.1% compliance as a department.
<p>Key drivers <i>measurable processes impacting the outcome</i></p>	<p>Decrease the time from result verification to communication log completion.</p> <ul style="list-style-type: none"> • Increase performance of correct workflow (verify result first and then notify provider). • Timely communication of outpatient critical values
<p>Interventions <i>actions/changes necessary to impact key drivers</i></p>	<p>Standardize critical call list workflow</p> <ul style="list-style-type: none"> • 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).
<p>Results* <i>accomplishments, modifications, barriers</i></p>	<p>Accomplishments</p> <ul style="list-style-type: none"> • The Month of July 2022 had a 94.9% compliance (highest in the 12 month period of Oct 2021-Sep 2022). • Department of Laboratory Medicine averages approximately 1800 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

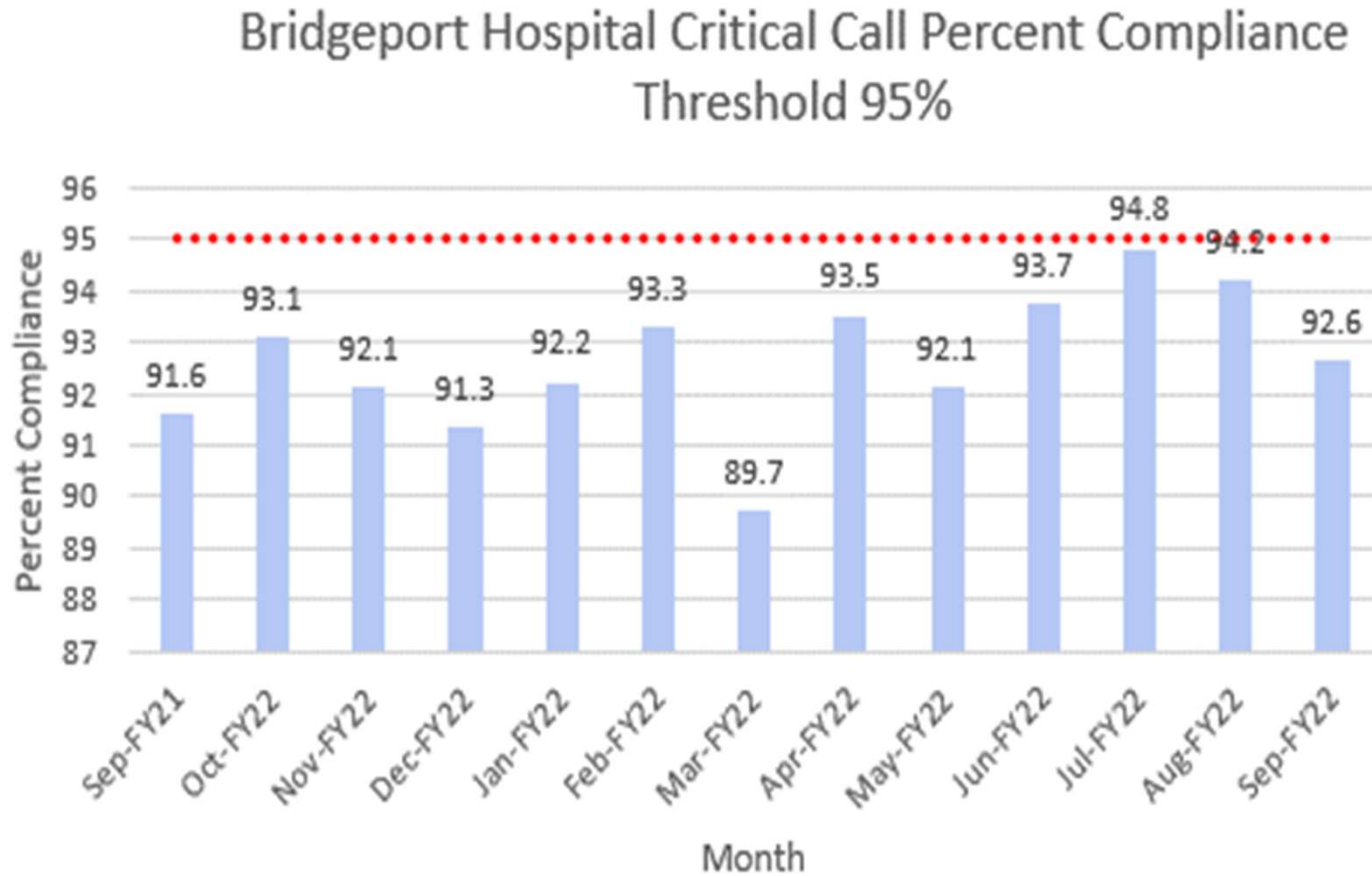
Bridgeport Hospital Department of Laboratory Medicine Critical Call Percent Compliance 92.9% (cumulatively)

10/1/2021-9/30/2022



Bridgeport Campus Critical Call Percent Compliance 92.6%

10/1/2021-9/30/2022



Milford Campus Critical Call Percent Compliance 95.0% 10/1/2021-9/30/2022

