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Unit Staffing Collaborative
Invasive Cardiology Cath Lab

Add date completed here

VERMONT FEDERATION OF NURSES & HEALTH PROFESSIONALS

THE University of Vermont MEDICAL CENTER

Timeline

- The USC Project plan must be completed and submitted to the Chief Nursing Officer of the Hospital and President the VFNHP within three (3) months of completion of project **(Inpatient: 11/20/2020; Ambulatory: 12/1/2020).** The manager will make reasonable time available for the committee to work on the written plan. Staffing plans developed under this Article 20B shall require approval by both the Chief Nursing Officer of the Hospital and President of the VFNHP. A decision on the memorandum of agreement shall be made within three (3) months of the submission of the final report **(2/22/21)**. A failure to reject the plan or provide specific reasons for the rejection by either party within three (3) months of submission shall be considered acceptance. Where a final USC Project plan is rejected in good faith by either party, the USC committee shall reconvene and submit a new final report within three (3) months. Either party may initiate mediation following the rejection of a report.

Components of USC Project Plan

- Unit/clinic profile: define patient population
- Minimum staffing levels
- Average Daily Census volume measurement used by USC
- Staff turnover/vacancy—from HR—coming from group
- Required annual certifications and new employee orientation: how incorporated into staffing plans?
- Analysis of time spent by nurses on nursing and non-nursing activities- discussion about what we do that are non nursing and estimate time.
- Analysis and recommendation of acuity process and/or tool
- Analysis and determination for Circulating RN(s) to enable Circulating RN(s) to facilitate meal/break coverage and assist in transfers/discharges in all critical, procedural and acute care units N/A
- Staffing effectiveness data (see Article 20), including unit specific quality data and NDNQI RN satisfaction and Practice Environment results
- Clinic/Unit-specific quality data, including unit-based improvement initiatives
- Staffing data, including the unit budget
- Financial impact of the proposal
- Metrics to be used to measure the effectiveness of the USC Project

Unit/ Clinic USC Members

Amanda McCormack

Darla Buffa

Melie Campos

Angelica Tringale

Karen McKenny

Meeting Dates

- 9/22/2020
- 9/29/2020
- 10/6/2020
- 10/12/2020
- 10/20/2020
- 11/3/2020
- 3/1/201

Unit Profile

Unit Profile- Patient Population:

- Patients from across Central and Northern Vermont and upper New York state with Cardiology issues that includes the need for diagnostic and interventional Cardiology, Structural Heart and Vascular procedures. Patients are cared for from across the network to have further study of positive or inconclusive Non-Invasive testing, referred from clinic for CHF, Structural Heart , or other heart disease, or that present with NSTEMI or STEMI to UVMMC or our referring hospitals to include Porter, NMC, CVH, and Copley. We also see patients from a wider range of referring hospitals to include Rutland, CVPH, and other upper NY state sites. We are the only Interventional Cath lab for this catchment area and have over 300 STEMI or emergent activations a year. Recent changes coming up—increased in structural heart. Complex cases and increased acuity with constant new technology and procedures.

Scope of Service

- The cardiology cath lab runs three mixed-use labs 10 hours per day. The lab provides diagnostic procedures (only), diagnostic and interventional procedures (PCI), PCI procedures (only), peripheral diagnostic and interventional procedures, and structural heart procedures.
- The department has a mix of private cardiologists and UVMMC cardiologists. All of the University cardiologists have cardiology fellows.
- The department has a modified block booking scheduling system.
- The Cath lab is a 100 percent RN team. A team of three RNs provides on-call coverage from 5:30 p.m. to 7:00 a.m. weekdays and 24 hours per day on weekends and holidays.

Orientation/Certifications

- Orientation is 16 weeks
  - New staff orient to a role for 4 weeks and then assume the role independently for 4 weeks.
  - New staff members have 2 primary preceptors
- Employees are required to maintain competency and become recertified every 2 years for BLS and ACLS
  - Certification includes demonstration of BLS and ACLS skills as well as the online course
  - BLS and ACLS are offered each spring for half the staff on a yearly rotating basis.
  - Time for certification work is provided during working hours and is supported during low census time, prior to procedures starting, per diem coverage, or currently by lowering the staffing level in one room. The new staffing plan will allow this vital work to not be at the expense of room coverage.
- Employees are required to complete annual hospital and cath lab competencies
- Employees are required to maintain and demonstrate competency in Point of Care testing to use the AVOX and ACT machine

Minimum Staffing Levels

- Minimum staffing currently:
- 2 nurses per room (3 rooms)
- 1 Charge nurse and 2 holding area staff
- 4 nurses for Structural heart cases.

This staffing provides no coverage for lunch which means cath lab rooms stop performing procedures. If staff is out due to illness or post call a room shuts down for the day. Demands on the staff present increases to meet this need.

New Staffing levels

As we move to our new staffing model the third person allows us to meet the national standard for best practice set by the Society for Cardiovascular Angiography and Intervention (SCAI)

- **Optimal Catheterization Laboratory Team**
- "A multidisciplinary approach within the CCL is needed. The primary operators must be adequately trained and credentialed. They are usually assisted by a physician trainee and/or physician extenders (e.g., certified technologist, physician assistant, or nurse). Typically, 1–2 CCL staff are tableside, with an additional 2 CCL staff serving in "circulating" and "monitoring/recording roles." Tableside assistants must be trained in the setup of manifolds, automatic/power injectors, the use and preparation of wires, catheters, balloons, and other devices, as well as in radiation safety and sterile technique. Appropriate staffing to ensure an adequate nurse-to-patient ratio should be ensured. A nurse providing moderate sedation during the procedure must have no other responsibilities that would compromise continuous patient assessment. In cases where there is concern for using more than moderate sedation, an anesthesia provider should be present, and policies should be drafted that are consistent with hospital credentialing and state guidelines. Basic Life Support and Advanced Cardiovascular Life Support certification of all staff should be up to date."

Catheterization and Cardiovascular Interventions DOI 10.1002/ccd.

Published on behalf of The Society for Cardiovascular Angiography and Interventions (SCAI).

Minimum Staffing Levels

- 3 staff per room allows for meal coverage with no stoppage of procedures and no shut down of a room if there are call outs. We are also able to continue with procedures beyond 1530 leading to less OT.
- During normal operating hours with low volume staff are offered VA or CTO after 3 pm if **all cases are done**. 2 rooms of staff , 1 charge nurse, 1 holding area staff person until 1630 for STEMI and inpatient emergencies. After 1630 if still no procedures one team is in house until end of operation hours 1730. This is a rare occurrence as volumes fluctuate per day.

Direct Patient Care and Coordination (outside of the cath lab)

Structural Heart Care Coordinators

RESPONSIBILITIES INCLUDE:

- Receive and review patient referrals for appropriateness, reviewing with an attending provider as needed.
- Establish contact with patient/family. Explain process and work-up and screening tested needed for Structural heart evaluation.
- Obtain all outside imaging, scheduling screening procedures and structural heart clinic visit and assist patient/family with navigation of testing schedule.
- Participate in development of treatment plan. Knowledge and skills necessary to modify care according to patient's needs and ability and structural heart procedures available to patient group.
- Patient and family education.
- Facilitate direct contact between cardiologist and referring physician regarding treatment plan and testing results as needed.
- Attend structural heart patient consults to coordinate assessment and coordinate any additional testing i.E. cath, TEE, CT as needed.
- Upload required data to appropriate vendor and maintain communication with device representatives.
- Facilitate scheduling and authorization of structural heart procedures including patient procedure instructions and education.
- Contacts the patient post discharge and then as needed until stable.
- Participates follow-up visits and coordinates further follow-up per TVT registry requirement.
- Coordinates concerns among multiple departments including but not limited to Radiology, OR, cath lab, anesthesia, CT, echo, vascular, hospital units including all network hospitals.
- Knowledge of Medicare/Medicaid rules/regulations necessary to understand criteria for admission.
- Tracks required registry data to be sure requirements are being met up to 1 year post procedure including coordinating outpatient follow up clinics and needed post procedure TEE/Echo.
- Prepare new patients presentations for weekly valve conferences, including obtaining needed images.
- Coordinate Continuing Medical Education for fellows and Attending's and coordinators as new technology becomes available
- Be available to patients and families through all stages of care.
- Establish strong working relationship with surgeons, interventionalist/cardiologist, advanced practice providers, clinical staff and device representatives.
- Flexibility to adapt to new technologies and procedures as they evolve: Transcather Aortic Valve replacement (TAVR), Transcatheter Edge-to Edge repair (TEER) MitraClip, Left Arterial appendage occlusion (LAAO) WATCHMAN, etc.

Time Spent on Nursing vs Non-Nursing Duties

The non nursing duties in the cath lab include:

- Room Turn Over between procedures (3 rooms/2-3 total hours a day.)
- Stocking rooms/Putting away supplies (30 mins /day)
- Transporting patients to expedite workflow and/or transport is not readily available. (1 hour/day non RN required transport). Nurses always transport patients post intervention or on cardiac monitor for patient safety.

Discussions with staff indicate that the levels of non nursing work is acceptable. Room turnover involves the entire team assigned to the room and includes set up for the next procedure which is more efficient with staff who have direct cath lab expertise. Stocking supplies assists with knowledge of where supplies are located and par levels. Prepping patients pre procedure is also when you are doing your assessment and building a rapport.

There are duties that are not direct patient care but are vital and or required, and having nursing involved supports both our internal and network wide quality assurance program and required registries.

- STEMI feedback program
- Inventory liaison
- Unit Quality Council
- Quality Assurance Nurse
- Advanced Testing Nurse

Non Direct Patient Care Nursing Duties

STEMI feedback program-

- Started in 2008, the STEMI feedback program is a team of two nurses that collect data on national STEMI time indicators such as door to balloon time. They maintain a data base on every STEMI (over 350 activations last year). They also collect quality data for the network on all STEMI transfers and send a report back after each patient with all quality driven times and outcomes to the sending institution in both VT and NY. The program data is also shared in our monthly multidisciplinary Quality Assurance program. As nurses in the cath lab they bring the expertise to manage this role. Both team members work full time in the lab.

Inventory Liaison-

- Our inventory liaison nurse helps bridge the knowledge and staff support/resource gap with our increasingly technology driven program. We provide coronary and peripheral interventions that involve over 14 different technologies and therapies. Our inventory is constantly evolving and new therapies are added yearly. This nurse assists the manager and inventory clerk (non nurse) with fluctuating par levels, management of two EHR systems, equipment issues with vendors, physicians and staff. This nurse is also a fully trained full time cath lab nurse who continues to work in the lab and is clinically focused.

Non Direct Patient Care Nursing Duties

Advanced Testing Nurse-

- This nurse manages our outpatient population similar to the pre op nurse. She works with the scheduler to make sure each patient is scheduling appropriately, makes pre procedure calls to all patients and or support members to review instructions, medications, visitor polices, covid testing and results. She reviews medical history, allergies, past procedures, and medications. She works with the fellow to make sure orders are written. She also emails and/or mails all instructions after the phone call. She manages the phone for incoming patient calls with questions or concerns and reviews charts again 1-2 days ahead of time to make sure orders are complete and Covid results are completed both at UVMMC and across VT and NYS. This nurse also follows up with physicians regarding special circumstances or patient questions and documents all encounters.
- This nurse manages this for all Cath lab patients and patients having Electrophysiology procedures. This nurse does not work in the cath lab as this is a full time role. She is a former cath lab nurse. She manages approximately 25-30 patient pre op calls and documentation as week as well as an equal number of triage calls with issues.

Non Direct Patient Care Nursing Duties

Quality Assurance Nurse-

- Quality Assurance Nurse for Invasive Cardiology (Cath lab) and data manager for the CathPCI and TVT registry, in addition to that the QA Nurse is responsible for internal quality reporting for all cases performed in the Cath lab as well as overseeing multiple registries, and is the site manager for the National Cardiovascular Data Registry (NCDR). The NCDR provides us with a reporting system that allows us to look at our quality metrics internally, but also allows us to be benchmarked against the hospitals in the US that participate in the registry. This shows us how we do in comparison to others who do our same volume. This data, which is several hundred data points per patient, is extracted by the quality nurse, who also manages the data. The TVT registry as well as the LAAO registry require extensive follow up for the patients after discharge, for up to 2 years. Additionally, internal quality reports are created monthly and reflect the real time data of the patients that were seen in the Cath lab the prior month. This data which includes volumes, complications, deaths, etc., is presented at a monthly QA conference which occurs the second Thursday of every month and has participation from the nurses, fellows and attending physicians. We use this information to make clinical decisions in the best interest of our patients, and also monitor for trends in the metrics that would alert us to anything that needs attention or correcting. At times, a deep dive is taken into data so we can have a better understanding as to why a patient falls into a certain metric. This allows us to pinpoint any correction. In addition, valuable data is provided for the cardiology fellows (and others), for research that accompanies our role as a teaching institution. The QA nurse also manages the STEMI feedback team, with assistance from the nurse manager. This STEMI Feedback team provides real time feedback data to the outside hospitals as well as our own emergency department that send STEMI patients to UVMMC for immediate PCI. This work is essential to the wellbeing of the citizens in the state of Vermont who require emergency care for STEMI. This quality assurance work is also essential to the clinical care that we are able to provide. Network level data is also provided for interventional cardiology and this requires a close collaboration with the quality nurses at our sister hospital in NYS. An in-depth year-end review report is also created by the QA nurse which follows the fiscal year. This report allows us to review our volume and quality metrics for a year at a glance, and also allows us to compare ourselves to past years performances.

Analysis/ Recommendation of Acuity Tool/Process

Actual procedure volume weighted by procedure type. (For FY 2019)

UNIVERSITY OF VERMONT MEDICAL CENTER
CARDIOLOGY CATH LABORATORY
LABOR TARGET SUMMARY

	Average Case Length[1]	Average # of Staff	Required Worked Hours	Target 95% Utiliz	Benefit Time Replacement	Paid Hours Per Case	Benchmark Range
Diagnostic Caths (only)	1.00	3.00	3.00	3.16	1.13	3.57	3.20 – 3.90
Diagnostic & Interventional Caths	1.30	3.00	3.90	4.10	1.13	4.64	4.20 – 5.00
Peripheral Caths	4.00	4.00	16.00	16.84	1.13	19.03	18.00 – 20.00
Structural Heart	3.50	4.50	15.75	16.59	1.13	18.73	18.50 – 19.50

[1] *Average case length is defined as "wheels in room to wheels out of room" time. Average case length values exclude room turnover time.*

Analysis/ Recommendation of Acuity Tool/Process

Compared actual 2020 procedure volumes excluding March, April, May, June data due to covid 19 to previous year (percentage change). Predicted increases in Structural Heart and Endovascular procedures.

From : Jan/Feb 2019 -to- Jan/Feb 2020

- Diag (+1.7%)
- PCI (-16%)
- Endo (+14%)
- PVI (-18%)
- Struc (+18%)

Jul/Aug 2019 -to- Jul/Aug 2020

- Diag (-2.7%)
- PCI (-7%)
- Endo (+14%)
- PVI (0%)
- Struc (+2.6%)

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Staffing Effectiveness Data

CARP (Clinical Advancement Recognition Program):

- Until recently, staff members in the cardiac catheterization lab (cath lab) were not included in the professional clinical advancement ladder. Although the type of work done in the lab is highly specialized and provides ample opportunity to practice at higher levels than that of a Staff Nurse II, there was no formal way for our nurses to be recognized for their excellence in clinical care, leadership, and quality improvement initiatives. Due to strong advocacy on the part of one of our nurses who didn't want to lose her hard won Staff Nurse III position solely by virtue of having moved to a non-integrated department, there is a new opportunity for RNs in the lab to document, and be recognized for, that excellence. This has the potential to increase staff satisfaction due to both the recognition and the increased wages related to advancing on the ladder.

Staffing Effectiveness Data

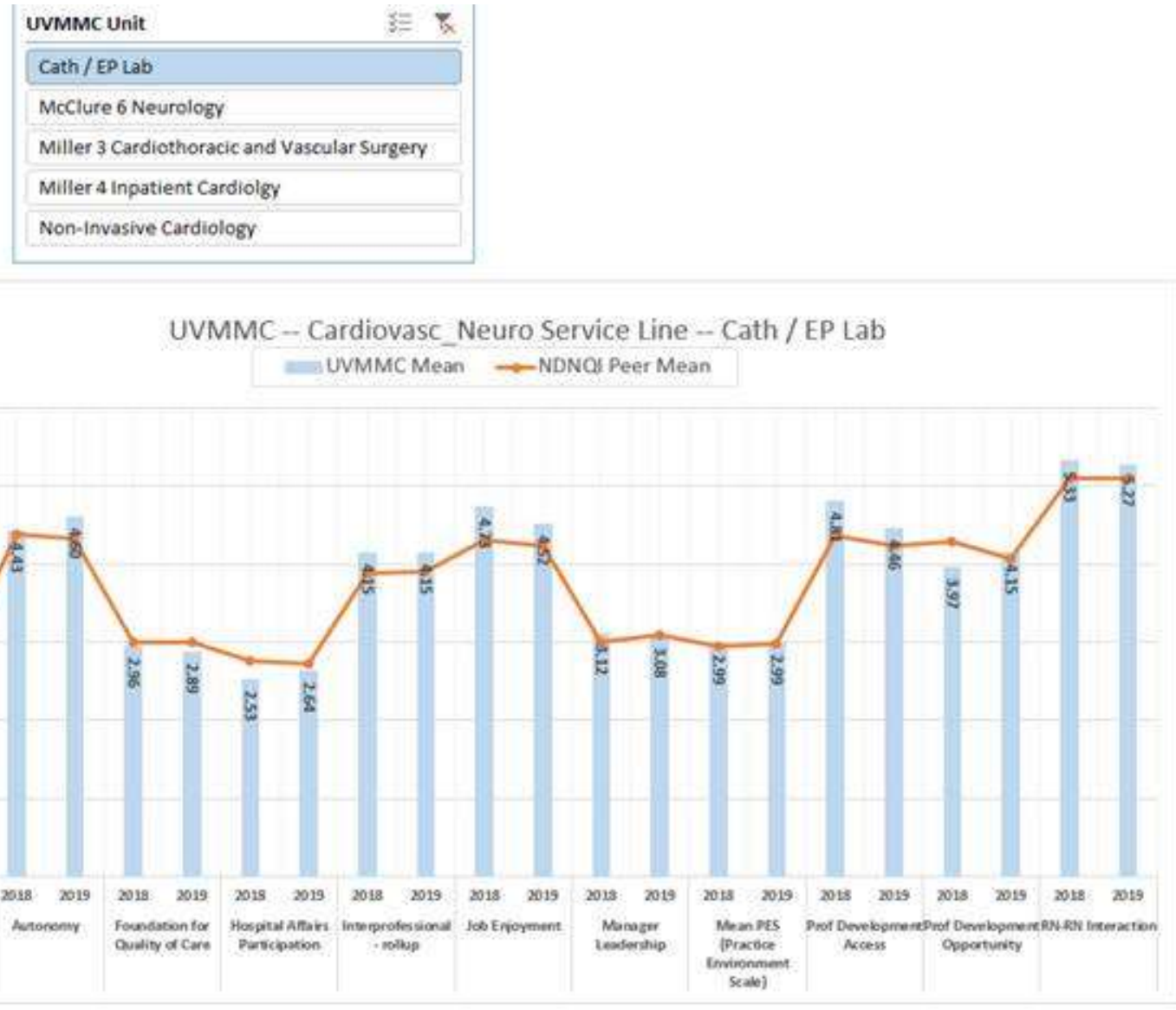
Turn Over- 5 years:

- 2016: 3 staff (2 internal transfer,1 Out of state) (OOS)
- 2017: 3 staff (2 internal transfer, 1 OOS)
- 2018: 3 staff (2 internal transfer, 1 OOS)
- 2019: 3 staff (1 internal transfer, 1 to Industry, 1 OOS)
- 2020: 2 staff (1 retirement (now per diem), 1 OOS)

Internal transfers commonly related to call volume/high acuity.

NDNQI staff satisfaction data 2019

ow Labels	UVMMC Mean	NDNQI Peer Mean
dequate Staffing		
2018	3.08	2.86
2019	3.04	2.80
utonomy		
2018	4.43	4.38
2019	4.60	4.33
oundation for Quality of Care		
2018	2.96	2.99
2019	2.89	3.00
ospital Affairs Participation		
2018	2.53	2.76
2019	2.64	2.73
nterprofessional - rollup		
2018	4.15	3.89
2019	4.15	3.90
ob Enjoyment		
2018	4.73	4.30
2019	4.52	4.23
Manager Leadership		
2018	3.12	3.01
2019	3.08	3.09
Mean PES (Practice Environment Scale)		
2018	2.99	2.95
2019	2.99	2.98
rof Development Access		
2018	4.81	4.36
2019	4.46	4.24
rof Development Opportunity		
2018	3.97	4.29
2019	4.15	4.06
N-RN Interaction		
2018	5.33	5.10
2019	5.27	5.10



Unit/ Clinic Specific Quality Data

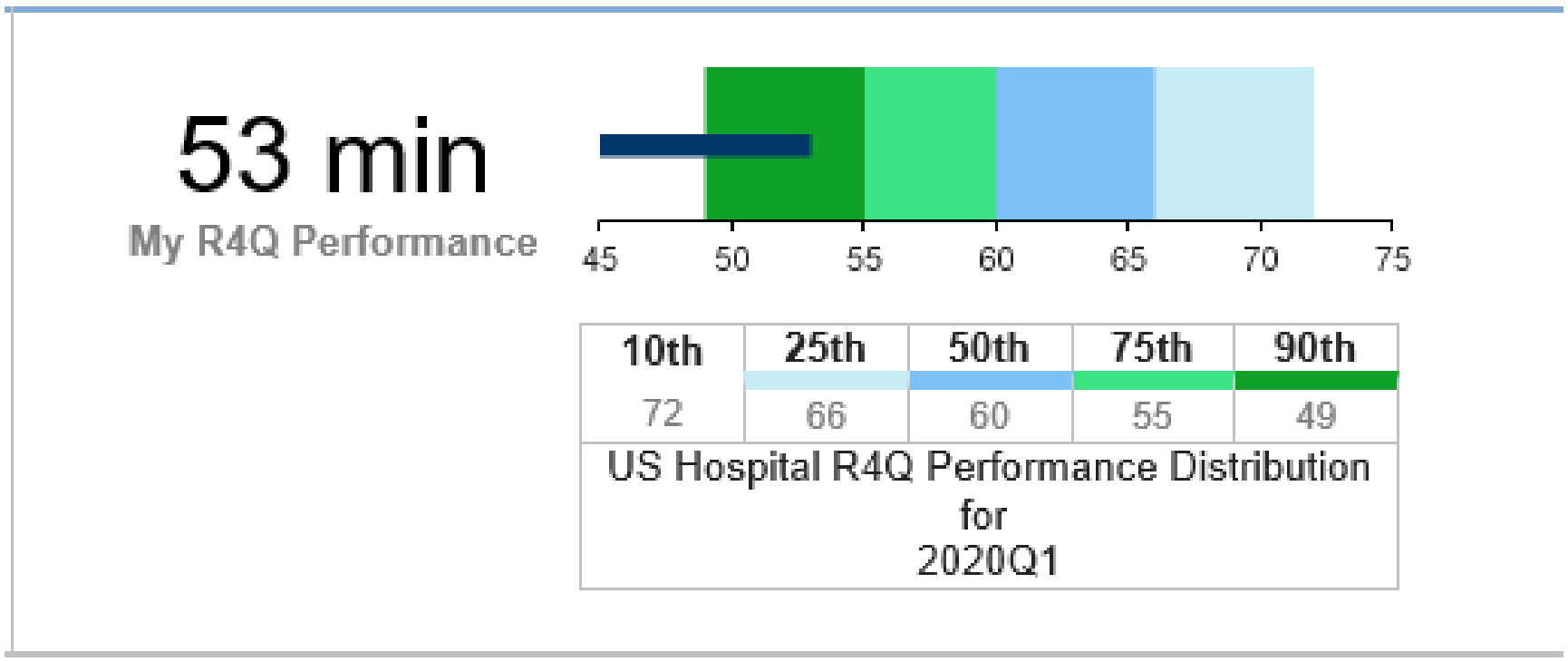
Time out audit data- Invasive Cardiology continues to be 100% compliant with performing Time Out prior to procedure.

Mallampati- Began adding Mallampati to our time out for procedures in March and went from 71% to 93% compliant. Epic issues with this in June impacted %- now resolved.

August 2020	86% (193)
July 2020	85% (213)
June 2020	87% (199)
May 2020	93% (161)
April 2020	87% (82)
March 2020	93% (138)
February 2020	76% (191)
January 2020	77% (217)
December 2019	73% (181)
November 2019	71% (122)

Unit Specific Quality Data

Median time for Immediate PCI for STEMI UVMMC



Current Staffing Plan including Ancillary Staff

Current staffing plan:

- Our current staffing plan is 2 to 3 staff per room for standard cases, 3 for peripheral, 4 or 5 for structural heart depending on type of procedure, 1 charge nurse, 2 nurses and 1 LNA in holding area for procedures each day. In addition we have a Nurse Manager, 1 QA RN, 2 Care Coordinators, Inventory clerk PT, 1 Advanced Testing nurse, and a 3 D imaging tech.
- On call is a 3 person team from 1730-07 weekdays, 24 hrs. weekends and holidays.
- Average number of shifts per month is 5-6 per person.
- Average amount of call time per month = 2.3 FTE. As the only cath lab in VT and that also serves upper NY state our on call hours are on average 17% of our total monthly volume. Our average case time for these procedures is often longer then the weighted average due to the acuity of STEMI.
- This level of call leads to staff needing to utilize sleep time the day after to recover.
- Current staffing: this does not include replacement or call FTE's.
  - 1 Nurse Manager
  - 1 QA RN
  - 2 Care coordinators for structural heart
  - .5 unit Inventory Clerk
  - 1.5 Scheduling/Clerical
  - .8 Nurse Educator- currently unfilled
  - .9 LNA
  - 15.55 RN –includes room staff, charge nurse, holding area staff, RN inventory liaison, STEMI feedback team.
  - 1 Advanced Testing Nurse
  - .8 3D imaging tech
  - Current total 25.1

Staffing Data including Unit Budget

Currently FTE YTD 27.3

FTE's budgeted for FY 21= 28.21

USC targeted FTE= 29.1 to meet target staffing needs

University of Vermont Medical Center
Cost Center #12011445
Cardiology Cath Lab
Workload Standard Development Summary Table

Workload Volume Indicator: Cath Lab Cases
FY'19 Actual Annual Volume: 4,991

AMS Benchmark Paid Hours Per Case: 12.12 – 14.04
AMS Benchmark Worked Hours Per Case: 10.73 – 12.47
AMS Benchmark Required Paid FTEs: 29.09 – 33.81

Hours/Case			Paid FTEs		
Current Pattern Paid	FY '21 Target Paid	Paid/ Productive Ratio	Current Pattern Actual	FY '21 Target	Variance Act to Tar
11.38	12.12	1.128	27.3	29.1	(1.8)

Staffing Data including Unit Budget

Staffing Plan

- The FY 2019 labor distribution report for the Cardiology Cath Lab indicated 25.06 paid FTEs. All of these FTEs were Hospital employees. No contract agency RN traveler hours were utilized.
- The current staffing pattern reflects 27.3 paid FTEs but the department has two vacant positions. The example of a target staffing pattern reflects 29.1 paid FTEs. This department has been targeted at the most productive low end of the benchmark range because of this experienced staff's ability to successfully and consistently perform cath lab cases at the most productive low end of the benchmark ranges projected in the attached benchmark development methodology.
- The current and an example of a target staffing pattern considering the FY 2019 actual case volume follows this narrative and identifies by skill and hour of the day the FTEs required based on the patterns.

Financial Impact of the Proposal

Financial cost moving from budgeted FY21 28.21 to USC target FTE 29.1

.89 RN FTE at department average hourly wage of $41.56 = $102K for salary and benefits.

Current Staffing Grid

University of Vermont Medical Center

Current Staffing Pattern
Cardiology Cath Lab
Cost Center# 12011445

Average Daily Cath Lab Case:	19.2
Maximum Capacity:	0
FY 2019 Cath Lab Cases:	4,991

Skill	Description	Shift Length (hours)	Number of Staff							Total Weekly Shifts	Total Weekly Req. Hrs w/o repl	Req. FTEs w/o replace	Replacement Factor	Total Paid Hours	Total Paid FTEs
		A	Days							B	C=AxB		D	E=CxD	F=E/40
			Mon	Tue	Wed	Thur	Fri	Sat	Sun						
Nurse Manager	7:00am - 3:30pm	8.0	1.0	1.0	1.0	1.0	1.0			5.0	40.0	1.0	1.000	40	1.0
Care Coordinators	7:00am - 3:30pm	8.0	2.0	2.0	2.0	2.0	2.0			10.0	80.0	2.0	1.000	80	2.0
Charge Nurse	7:00am - 5:30pm	10.0	1.0	1.0	1.0	1.0	1.0			5.0	50.0	1.3	1.000	50	1.3
Nurse Educator	7:00am - 3:30pm	8.0	0.8	0.8	0.8	0.8	0.8			4.1	32.8	0.8	1.000	33	0.8
Q/A RN	7:00am - 3:30pm	8.0	1.0	1.0	1.0	1.0	1.0			5.0	40.0	1.0	1.000	40	1.0
RN	7:00am - 5:30pm	10.0	12.0	11.0	13.0	12.0	13.0			61.0	610.0	15.3	1.134	692	17.30
3D Imaging Tech	7:00am - 3:30pm	8.0	0.8	0.8	0.8	0.8	0.8			3.9	30.8	0.8	1.000	31	0.8
Inventory Tech	7:00am - 3:30pm	8.0	0.8	0.8	0.8	0.8	0.8			4.0	31.6	0.8	1.000	32	0.8
Sched./ Clerical	7:00am - 3:30pm	8.0	1.5	1.5	1.5	1.5	1.5			7.4	58.8	1.5	1.000	59	1.5
LNA	7:00am - 4:30pm	9.0	1.0	1.0	1.0	1.0				4.0	36.0	0.9	1.000	36	0.9
										109.3	1,010.0	25.3		1,092	27.3

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AMS Recommended (Target) Staffing Grid

REVISED 9/14/2020

University of Vermont Medical Center

Example of a Target Staffing Pattern

Cardiology Cath Lab

Cost Center# 12011445

Average Daily Cath Lab Case:	19.2
Maximum Capacity:	0
FY 2019 Cath Lab Cases:	4,991

Skill	Description	Shift Length (hours)	Number of Staff Mon	Tue	Wed	Thur	Fri	Sat	Sun	Total Weekly Shifts	Total Weekly Req. Hrs w/o repl	Req. FTEs w/o replace	Replacement Factor	Total Paid Hours	Total Paid FTEs
		A								B	C=AxB		D	E=CxD	F=E/40
		Days													
Nurse Manager	7:00am - 3:30pm	8.0	1.0	1.0	1.0	1.0	1.0			5.0	40.0	1.0	1.000	40	1.0
Care Coordinators	7:00am - 3:30pm	8.0	2.0	2.0	2.0	2.0	2.0			10.0	80.0	2.0	1.000	80	2.0
Charge Nurse	7:00am - 5:30pm	10.0	1.0	1.0	1.0	1.0	1.0			5.0	50.0	1.3	1.000	50	1.3
Nurse Educator	7:00am - 3:30pm	8.0	0.8	0.8	0.8	0.8	0.8			4.1	32.8	0.8	1.000	33	0.8
Q/A RN	7:00am - 3:30pm	8.0	1.0	1.0	1.0	1.0	1.0			5.0	40.0	1.0	1.000	40	1.0
RN	7:00am - 5:30pm	10.0	13.0	13.0	14.0	13.0	14.0			67.0	670.0	16.8	1.140	764	19.10
3D Imaging Tech	7:00am - 3:30pm	8.0	0.8	0.8	0.8	0.8	0.8			3.9	30.8	0.8	1.000	31	0.8
Inventory Tech	7:00am - 3:30pm	8.0	0.8	0.8	0.8	0.8	0.8			4.0	31.6	0.8	1.000	32	0.8
Sched./ Clerical	7:00am - 3:30pm	8.0	1.5	1.5	1.5	1.5	1.5			7.4	58.8	1.5	1.000	59	1.5
LNA	7:00am - 4:30pm	9.0	1.0	1.0	1.0	1.0				4.0	36.0	0.9	1.000	36	0.9
										115.3	1,070.0	26.8		1,164	29.1

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THE University of Vermont MEDICAL CENTER

VERMONT FEDERATION OF NURSES & HEALTH PROFESSIONALS

Proposed Staffing Grid

REVISED 9/14/2020

University of Vermont Medical Center

Example of a Target Staffing Pattern

Cardiology Cath Lab

Cost Center# 12011445

Average Daily Cath Lab Case:	19.2
Maximum Capacity:	0
FY 2019 Cath Lab Cases:	4,991

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Care Coordinators	7:00am - 3:30pm	8.0	2.0	2.0	2.0	2.0	2.0			10.0	80.0	2.0	1.000	80	2.0
Charge Nurse	7:00am - 5:30pm	10.0	1.0	1.0	1.0	1.0	1.0			5.0	50.0	1.3	1.000	50	1.3
Nurse Educator	7:00am - 3:30pm	8.0	0.8	0.8	0.8	0.8	0.8			4.1	32.8	0.8	1.000	33	0.8
Q/A RN	7:00am - 3:30pm	8.0	1.0	1.0	1.0	1.0	1.0			5.0	40.0	1.0	1.000	40	1.0
RN	7:00am - 5:30pm	10.0	13.0	13.0	14.0	13.0	14.0			67.0	670.0	16.8	1.140	764	19.10
3D Imaging Tech	7:00am - 3:30pm	8.0	0.8	0.8	0.8	0.8	0.8			3.9	30.8	0.8	1.000	31	0.8
Inventory Tech	7:00am - 3:30pm	8.0	0.8	0.8	0.8	0.8	0.8			4.0	31.6	0.8	1.000	32	0.8
Sched./ Clerical	7:00am - 3:30pm	8.0	1.5	1.5	1.5	1.5	1.5			7.4	58.8	1.5	1.000	59	1.5
LNA	7:00am - 4:30pm	9.0	1.0	1.0	1.0	1.0				4.0	36.0	0.9	1.000	36	0.9
										115.3	1,070.0	26.8		1,164	29.1

Eves

THE University of Vermont MEDICAL CENTER

VERMONT FEDERATION OF NURSES & HEALTH PROFESSIONALS

Metrics to Measure the Effectiveness of the USC Project Plan

- Actual and budgeted FTE's
- Recruitment and Retention data
- NDNQI data
- OT monthly end of day usage vs call
- Unit Based Council initiatives
- Increase in number of RN 3 and 4 on unit

Highlighted Changes

- Currently have 1 approved replacement position posted, when filled target staffing will be met.
- Current budget has FTE's that were unbudgeted as we transitioned to the new staffing pattern mid budget cycle. Also variance due to orientation of 2 new staff in 2019-2020.
- SCAI data on minimum staffing standard for Interventional Cath Labs.
- Completion of new staff orientation will bring our room standard to national level and will also decrease our per person call burden which will lead to improved staff satisfaction and allow for focused patient care especially with sedation responsibilities.
- The nurse responsible for conscious sedation may have no other responsibilities including other circulating duties- equipment , ACT, managing technology to include FFR, OCT, IVUS, etc.
- Our new staffing pattern allows us to continue procedures through lunch or to absorb call outs which in turn means less over time at the end of the day to complete cases and less patients being bumped to the next day.
- Since filling this report in October the decision was made to remove the LNA from the staffing mix and increase the Nurse Educator from .8 to 1.0. The nurse educator role includes support of both invasive and non invasive staff as well as physicians and fellows.

Time line and Deliverables

- Check in/progress update - schedule call with P. Gagne and D. Snell by **October 15, 2020**

- Final plans submission deadline:
  - **INPATIENT UNITS: November 20, 2020**
  - **AMBULATORY CLINICS: December 1, 2020**

- Submit to: CNO and President VFNHP
  - Scan as 1 document and email to Peg.Gagne@uvmhealth.org and debs@vfnhp.org

Final approval letter

THE University of Vermont MEDICAL CENTER

May 10, 2021

Dear Invasive Cardiology/ Cath Lab USC Team,

Thank you very much for your engagement and efforts in the Unit Staffing Collaborative (USC) project. We are pleased to let you know that your project plan with additional staffing as indicated below has been approved. If there is an urgent need for the 0.2 FTE educator addition prior to FY 22 (10/1/2021), please follow the position review/ approval process with your leadership team:

- 0.89 FTE Staff RN (FY 21)
- 0.2 FTE Nurse Educator Increase (FY22)

If you have any questions about the USC project approvals, please let us know.

Going forward, your USC team is responsible for the implementation and ongoing monitoring of the effectiveness and progress of your staffing plans, review of any Concern Forms and submission of proposed changes/ reports to the Staffing Committee (see Article 20B).

If you have not already done so, please incorporate any updates made based on our feedback into your original presentation (some of you attached a separate letter with the answers to our request for more information – everything should be included in one powerpoint presentation which the Staffing Committee will be using as the foundation for this work going forward). Add the attached approval slide at the end of the presentation and resubmit to us by 5/17/2021.

Regards,

Peg and Deb

Peg Gagne, MS, RN
Chief Nursing Officer
Peg.Gagne@uvmhealth.org

Deb Snell, RN
President VFNHP
Debs@vfnhp.org

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