

Unit Staffing Collaborative: Cancer Services

February 15, 2021

Revised: April 5, 2021

Note: One slide deck per HCS USC, calling out differences between clinics as appropriate

Unit/ Clinic USC Members

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- **Bold = Active member of this subgroup**

Components of USC Project Plan Per Article 20B

- Unit profile
- Minimum staffing levels
- Analysis of time spent by nurses on nursing and non-nursing activities
- 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
- Staffing effectiveness data (see Article 20), including unit specific quality data and NDNQI RN satisfaction and Practice Environment results
- Unit-specific quality data, including unit-based improvement initiatives
- Staffing plan (grid) that includes patient care staffing of RNs and ancillary staff where appropriate
- Staffing data, including the unit budget
- Financial impact of the proposal
- Metrics to be used to measure the effectiveness of the USC Project

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: 2/15/2021**). 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 (**3/31/21**). 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.

Unit Profile

- The Hematology/Oncology Infusion Center is a referral-based practice and is located in the Ambulatory Care Center on level 2.
- The Infusion Center provides services to outpatients Monday through Friday, 7:00 am to 6 pm. Occasional services are provided past 6pm.
- The Infusion Center works in collaboration with the conjoined Hem/Onc clinic and provides chemotherapy and some additional supportive services to oncology patients.
- The Infusion Center also supports a wide array of injections and medication administrations that are associated with oncology treatment plans
- On average there are an estimated 10,000 infusion visits and 4,000 short stay visits per year.
- Services are provided to all ages 18 and up.
- The Hem/Onc clinic is FACT and Commission on Cancer accredited.

Meeting Dates

- 9/1- Kick off meeting
- **9/10- Primary/Nurse Navigator and Infusion**
- 9/18- Rad/Onc
- **9/24- Primary/Nurse Navigator and Infusion**
- 9/25- Gyn/Onc
- 10/2- Rad/Onc
- **10/8- Primary/Nurse Navigator and Infusion**
- 10/9- Gyn/Onc

Meeting Dates

- 10/16 - Rad/Onc
- **10/22 - Primary/Navigator and Infusion**
- **12/17 - Primary/Navigator and Infusion**
- **12/17 - Infusion**
- 12/18 - Gyn/Onc
- 12/18 - Rad/Onc
- **1/7- Infusion**
- **1/14- Infusion**
- **1/19- Infusion**
- **2/4/- Infusion**

- **Bold = Dates reflective of this subgroup**

Minimum Staffing Levels

- What are your core RN staffing levels?
 - 11 RN's/day
 - 1 Charge, 1 short stay, 1 RN/bay, floats
 - Current RN to patient ratio is 1:4. Based on acuity levels this ratio may be less. In current state, this ratio is maxed out daily.
- Speak to what the minimum number of RNs needed, address LPNs if applicable
 - If there was only 1 patient, we would need 3 RN's. 2 to get drugs hung and 1 charge nurse (cover lunches, etc.)
 - As volumes increase, RN's will be added to maintain the 1:4 RN to chair ratio (current state ratio. Ideal is 1 RN to 3 chairs)
- Address tactics to flex staffing up and down (i.e. sister sites, floating, per diems, resource pool)
 - Oncology certified resource pool (has been discussed in the past, did not gain traction)
 - Bulk up our per diem depth to 6 RN's
 - Continue to partner with Shep 4 or Miller 5
 - Explore more cross coverage with other oncology services (Rad/Onc, Gyn/Onc, Surg/Onc)
 - Explore oncology certified depth across the network

Time Spent on Nursing vs Non-Nursing Duties

- What is the *approximate* time per week spent on non-nursing functions?
 - i.e. RNs doing MA and PSS work
 - 1-2 hours per week, per RN
 - What non-nursing functions are consistently assigned to RNs?
 - Stocking, scheduling, transporting patients upstairs after appointment, putting orders in, patient food
- Is there a recommendation on who could do the work? (goal is to identify options, not solve/implement)
 - Volunteers, MAs, Dedicated APP/Scheduler, Nurse Scheduling
- What activities do not require RNs or prevent RNs from doing core RN work (i.e. RNs can perform rooming function, but does it keep RNs from staffing triage calls)
 - Getting orders signed, chasing providers for communication, reconciliation of future appointments
- Discuss what is needed to have RNs working to top of license
 - Better communication, thorough safety checks, accurate scheduling, potential system efficiencies within Beacon/Epic

Recommendation for Acuity Process

- Acuity of our patients, based on complexity, volume, multi-drug regimens, is high
 - Current RN/patient ratio is 4 chairs:1 RN
 - Approximately 40 patients/day across 20 chairs. 1 nurse supporting 4 chairs with sporadic/inconsistent availability of float nurses. These leads to a ratio of 1 nurse/4-5 patients per day at minimum. Generally, the ratio of RN:patient is about 5-7 patients.
 - Charge does not take an assignment. Short Stay is staffed with 1 nurse (about 18 visits per day)
 - Inability to measure complexity/acuity/multi drug regimens at a glance or within scheduling makes distributing acuity difficult
 - Communication, acute scheduling, prevents ability to proactively distribute patients
 - What non-phone work drives more acute staffing needs?
 - The lack of documentation, signed orders, or complete information around dosing/other meds/parameters
 - Department/provider insistence on same day coordination makes patient flow difficult
 - » Steep bell curve from 9am – 3 pm creates backlog and increased acuity
 - How does volume of nursing procedures affect acuity?
 - Volume of infusions generally correlates to the need for more staff, although the real measure is volume times acuity
 - Does in basket volume drive more acute staffing needs?
 - Requires a lot of touches
 - Very sick patients or patients with physical/cognitive impairment will require more acute staffing needs
 - High resource utilizers
 - The volume of multi drug regimens or high acuity patients is the biggest driver of need
 - Document acuity process, what is considered/discussed
 - Acuity is managed within charge nurse role, though extraneous variables listed above make this management difficult
- What are the “work triggers” which cause a change in practice?
 - Clinical practice changes
 - New Meds, safety checks, Beacon utilization, lack of DOD/APPOD presence, COVID model
 - What requires more nursing support
 - Lack of orders/communication, clarifying treatment changes, adding meds same day
 - Doing more bone marrow biopsies has required a slight increase in RN support

Analysis for Nurse Circulator

- For critical, procedural, acute care units – N/A for ambulatory
 - This may have value in the infusion bays. However, we currently allocate support for our bays/patients with internal "float nurses". This assignment (and the inherent tasks) changes day to day, as does the individual occupying the float role. We believe support is needed, but not in the form of a formal Nurse Circulator, as this description is generally fulfilled by one of our infusion nurses.

Staffing Data including Unit Budget

- Total Budgeted RNs in 1465: 24.8
- Total Budgeted RNs supporting Infusion Nursing: 13.2
 - The remaining 11.6 FTEs from this cost center are budgeted for Primary Nursing
- The positive variance of 2.1 FTEs is mainly rooted in some turnover and our inability/preference not to post incremental FTEs due to the financial impacts of the pandemic. The budgeted 13.2 FTEs for infusion was discussed during budget meetings for FY21 as we foresaw staffing needs, but full staffing has yet to come to fruition.

AMS Benchmark Staffing Grid

Staffing Summary Hematology Oncology Infusion Room & Clinic Visits				
Skill	Actual Paid FTEs	Current Pattern FTEs	Target Pattern FTEs	Variance Current – Target Pattern
RN-Infusion Room		12.9	12.9	0.0
RN-Hem-Onc Clinic		13.8	13.8	0.0
Grand Total	22.37	26.76	26.76	0.0

AMS Benchmark Staffing Grid

University of Vermont Medical Center

Current & Example of a Target Staffing Pattern

Hematology & Oncology

Cost Center: 12011405

Clinic & Infusion Vests 20,509

Average per Day 148

		Shift Length (hours)	Number of Staff							Total Weekly Shifts	Total Weekly Rep. Hrs w/o repl	Rep. RTGs w/o replace	Stm Replace Ratio	Total Paid Hours	Total Paid RTGs	Hours per Indicator		
Skill	Description		Mon	Tue	Wed	Thur	Fri	Sat	Sun	Worked	Paid							
		A								B	C=A x B	D		E=C x D	F=E/40			
		RN																
RN	Infusion Room Clinic	9.0	10.0	10.0	10.0	10.0	10.0			50.0	450.0	11.3	1.151	518	12.9	0.8409	0.7377	
RN		8.0	12.0	12.0	12.0	12.0	12.0			60.0	480.0	12.0	1.151	552	13.8	0.8837	0.7889	
									Pattern Total		110.0	930.0	23.3	1.151	1,070	26.78	1.328	1.328

AMS Benchmark Staffing Grid

Target Workload Summary

University of Vermont Medical Center Cost Center# 12011465 Hematology & Oncology – Infusion Room Workload Standard Development Summary Table Volume Indicator: Infusion Room Visits Annualized Volume: 15,563 AMS Benchmark Paid Hours Per Visit Range: 2.09 – 2.21 AMS Benchmark Worked Hours Per Visit Range: 1.81 – 1.92 AMS Benchmark Required Paid FTEs: 15.61 – 16.54					
Hours/Visit			Paid FTEs		
Current Pattern Paid	FY'21 Target Paid	Paid/ Productive Ratio	Current Pattern	FY'21 Target Pattern	Variance Cur to Tar
1.37	1.37	1.151	12.9	12.9	0.0

AMS Benchmark Staffing Grid

University of Vermont Medical Center oo# 12011455a - Hematology & Oncology (Infusion) Labor Benchmark Analysis						
Major Work Category	Benchmark Indicator	Actual Volume FY 2019	Benchmark Paid Hours per Indicator			Benchmark Required FTEs
			Low		High	Low High
<u>Component Benchmarks</u>						
Acuity Category 1 (Definition below)	Visits	4,787				
Acuity Category 2 (Definition below)	Visits	350				
Acuity Category 3 (Definition below)	Visits	5,700				
Acuity Category 4 (Definition below)	Visits	3,738				
Acuity Category 5 (Definition below)	Visits	1,008				
<u>Additional Workload/Functions</u>						
	# Weeks	52	0.00	-	0.00	0.00 - 0.00
Non-productive time adjustment	# Weeks	52	5.97	-	8.32	0.15 - 0.16
Total Paid Hour Benchmark	Visits	15,563	2.09	-	2.21	15.61 - 16.54
Total Worked Hour Benchmark	Visits	15,563	1.81	-	1.92	13.57 - 14.37

Current Staffing Pattern/Schedule

- Year to date actual at job code level
 - RNs, LPNs for clinics who have LPNs
 - YTD for Infusion RN staffing is 11.1 FTEs (20.5 actual, but 9.4 coming from primary). We also have a YTD of 1.1 traveler.
 - How is this different from budget and if different, why?
 - With the traveler, this is a favorable variance to budget by 1.0 FTE. This is inclusive of per diem hours and a significant amount of overtime. We believe the proposed changes will result in a decrease of overtime
 - How is this different from AMS benchmark staffing grid and if different, why?
 - This is lower than the AMS proposal regarding paid hours/unit by 3-4 FTEs (benchmark is 15.6-16.5). The proposed staffing pattern is not reflective of a variance to the benchmark because the AMS data is inclusive of both primary and infusion RNs. When combining these 2 areas (that have different volume indicators and different paid hours/unit), you get a neutral staffing pattern that doesn't reflect the actual indicators. This can be noted in the variance between Target Pattern FTEs (slide 13) and Benchmark Paid FTEs (slide 15).
- How do you staff M-F (weekends if applicable)?
 - How many RN FTEs are needed per day?
 - Monday- Friday, 10 to 11 RN's, Shifts between 8,9,and 10 hours. Bell curve of staffing through the day starting at 7am. This allows us to staff around demand.
- What is your current staffing pattern?
 - 10 nurses on Mon., Tues., Thurs, 11 RNs on Wed, Fri.
- How will scheduled and unscheduled CTO and unproductive time will be covered?
 - Utilization of per diem staff.
 - Continued development of cross training between primary RNs, Shep 4, Miller 5 to create added depth

Proposed Staffing Pattern/Schedule

- Please add proposed RN staffing and staffing pattern (LPNs if applicable)
 - Current budget is 13.2 FTEs. We are proposing an additional 2.4 FTEs to reach the low end of the benchmark. This would support potentially 10 additional shifts (0.5 RN w/ 2, 10-hour shifts, 0.9 RNs w/ 4 9-hour shifts, 1.0 RN with 4, 10-hour shifts). These 10 shifts would be spread evenly through the week (2 each day) to accommodate. Additional 2 nurses would help with:
 - Getting our RN to patient ratio to 1:3
 - Maintaining safe staffing across all infusion bays
 - Confirming future appointments
 - Tracking down answers to questions from providers
 - Providing depth in RN role to support charge
- Address differences from current staffing pattern/schedule and AMS benchmark (if applicable)
 - AMS proposal is built around including primary nursing in the overall volume of nurses, which is inaccurate. Thus, current staffing pattern of 10 nurses/day is approximately 2.4 FTEs short (2 nurses/day) of the low end of the AMS benchmark.

Financial Impact of the Proposal

- Cost of additional RN/LPN (if applicable)
 - 2.4 RNs
 - $\$72,902 \times 2.4 = \$174,964$
 - 1 APP *Removed from formal ask, see slide 22
 - Midpoint of $\$55.97 \times 2080 \text{ hours} = 116,417$
 - $\$116,417 + \text{Fringe (29.44\%)} = \$150,690$
 - 1 Assistant Nurse Manager *Removed from formal ask, see slide 22
 - Midpoint of $\$48.52 \times 2080 \text{ hours} = \$100,922$
 - $\$100,922 + \text{Fringe (29.44\%)} = \$130,633$

Total Cost = \$174,964

Metrics to Measure the Effectiveness of the USC Project Plan

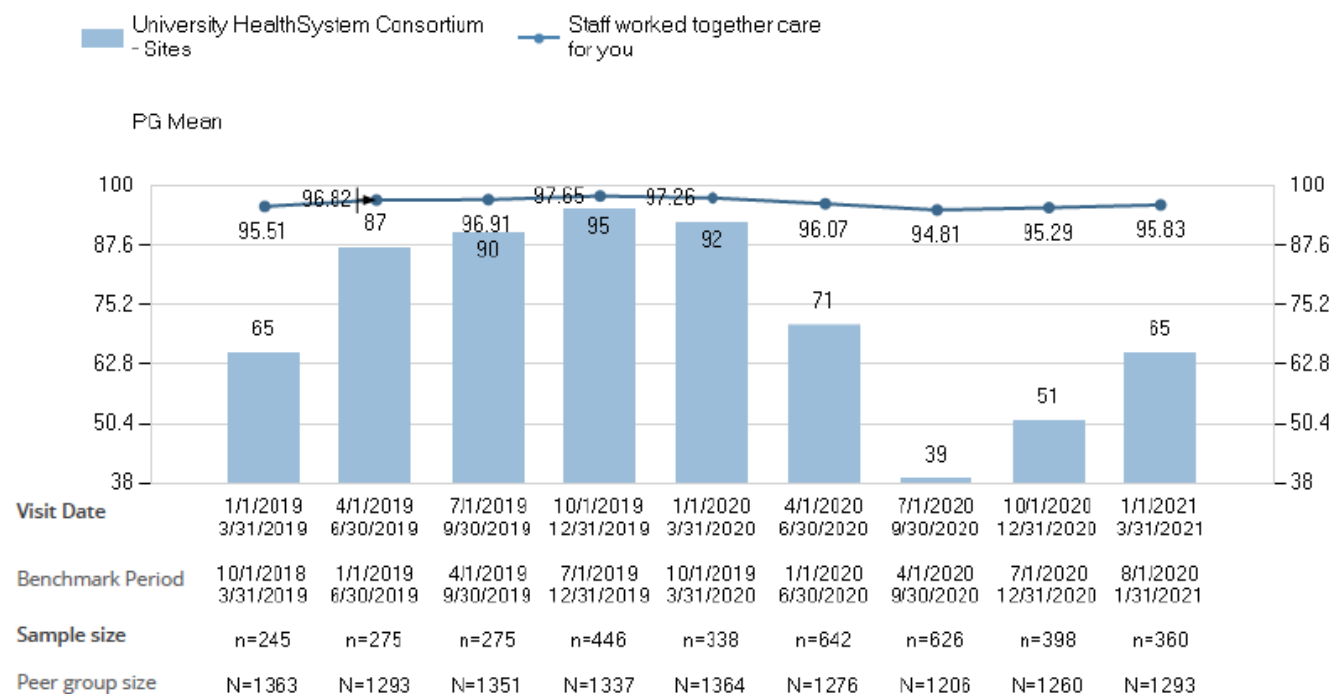
- How will you know staffing levels and changes are effective?
 - All of the items below are indicators of whether the change has been effective
 - Incidence of infusion based SAFE reporting
 - Press Ganey metric specific to nursing
 - NDNQI metric
 - Utilization of premium pay/OT
 - Utilization of per diems
 - Utilization of resource pool
 - RNs maintain certifications and CARP responsibilities
 - We will also be requesting a data set driven from Epic which will detail time between:
 - Arrival, lab draw, lab result, chemo release, start time, end time
 - We will use the baseline data from past experience and determine if our additional staffing has direct impact on patient flow and experience
- Have the items you identified in the USC (i.e. non-nursing functions) been addressed
 - In progress. Many of the operational changes needed have been identified will take time to implement.
 - This assessment will be ongoing beyond initial recommendations

Baseline Data

Press Ganey

Medical Practice

My Sites: Total

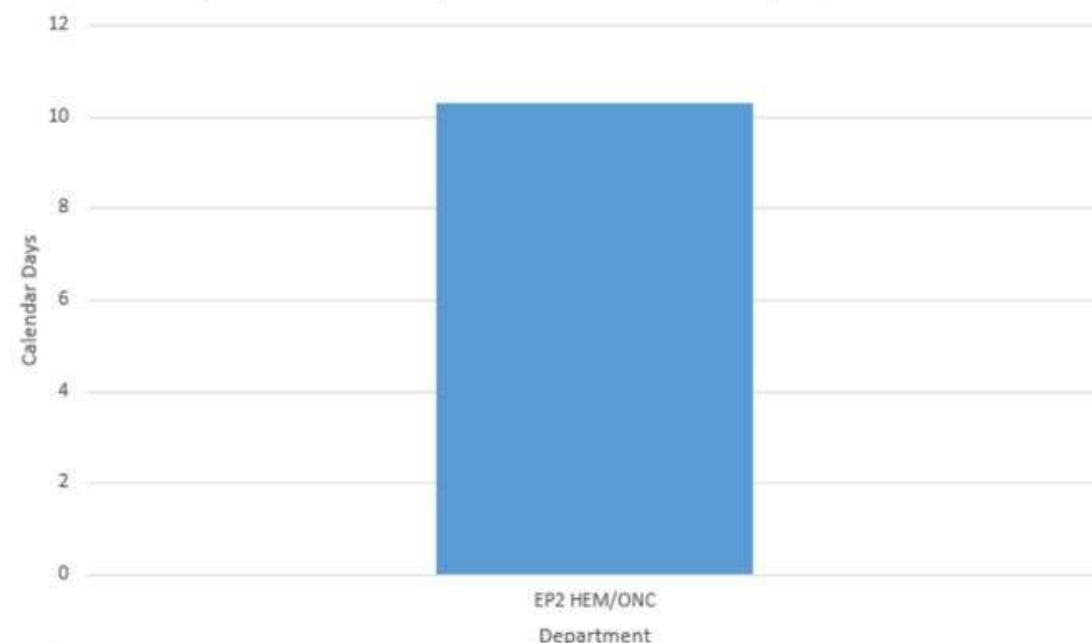


NDNQI

Unit - Survey DESC	Measure Short Desc	Year	Srvy Unit Mean	RNSrvy_PGUnitMean
Cancer Health Care Service	Adq staff to get work done	2020	2.22	2.63

MyChart Response Time

MyChart Medical Request Turnaround Time - By Department



*Baseline data for EP2 HemOnc included below. Infusion RNs don't leverage MyChart, so this may be a difficult metric to leverage. We will be using data on infusion throughput and wait times to gauge success (currently being developed by Epic Informatics Team).

Highlighted Changes

- 2.4 Incremental FTEs (Priority #1)
 - To maintain safe, sustainable RN staffing in this high volume, high acuity unit, we are requesting 2.4 incremental RN FTEs. This increase will get us to the low end of the benchmark provided by AMS and better reflect the core staffing we require.
- Dedicated infusion APP (Priority #2)
 - Removed from formal ask. Though this is not part of this project's scope, our nurses feel this opportunity and need is worth highlighting.
 - As a secondary priority, we are requesting an incremental APP that is dedicated to the infusion area. This additional provider would be onsite to support RNs with out of scope questions and orders that are needed in real time. This individual could also provide direct patient support and education for patients in need. This is a model employed by multiple infusion centers across the nation.
- Assistant Nurse Manager (Priority #3)
 - Removed from formal ask. Though this is not part of this project's scope, our nurses feel this opportunity and need is worth highlighting.
 - As a tertiary priority, we are requesting a dedicated Assistant Nurse Manager to support both the infusion and clinic side of ambulatory hematology/oncology. This position would provide a layer of support that is provided across other comparable units.

Highlighted Changes

- The proposed staffing pattern of 15.6 FTEs (2.4 over budget) would meet the minimum worked hours/indicator provided by AMS, and would represent a model that would provide the depth to achieve our goals of:
 - Lower wait times
 - Quicker chair turnaround
 - Increased patient and nurse satisfaction
 - Increase in quality/decrease in safety concerns
- The variance between our budgeted FTEs and our actuals (2.1) may play a role in reducing our FTE ask. However we would want to ensure that we have the appropriate data to gauge the success and that we maintain a focus on the acuity of our patients and the benchmarks AMS provided.
 - Getting accurate data to measure the goals listed above would help us identify whether incremental gains are having the desired impact. We are awaiting some data requests around the wait times and turnaround times. As our staffing potentially grows, we intend on objectively measuring the impact and maintaining an ongoing dialogue with our nurses as to the success of our staffing model.

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: February 15, 2021**
- Submit to: CNO and President VFNHP
 - Scan as 1 document and email to Peg.Gagne@uvmhealth.org and debs@vfnhp.org

Follow Up Items Submitted on 3/8/21

- Primary and Infusion areas perform distinctly different roles, and though there is collaboration and some cross training, are approached as separate entities. However, the FTEs come from the same cost center (1465). We've included data and financials to reflect both the approach of independent divisions and as one unit.
- Baseline key indicators for mychart messaging may be difficult to leverage, as infusion RNs don't utilize this tool. We are exploring an Epic dashboard to provide details around wait times and chair turnaround to better gauge the impact of our ask.
- Our proposed timeline for implementation of FTE budget additions is October 2021.

Project Plan Approval

May 3, 2021

Dear Cancer Services USC Teams (Nurse Navigation, Primary Nursing, Infusion Nursing):

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 plans with the following FTEs have been approved for FY 22. For the Nurse Navigation USC, the addition of 0.5 Primary Nursing and shared 1.0 support staff with the Primary Nursing group is approved which should impact overall nurse navigator workload – the additional 1.0 FTE Nurse Navigator is not approved. If there is an urgent need for FTE additions prior to FY 22 (10/1/2021), please follow the position review/ approval process with your leadership team:

Service	Staffing Addition	FTE
Surg Onc/ Navigation	RN, Primary Nursing	0.5
Radiation Oncology	MA	0.5
Infusions	RN	2.4
Primary/ Navigation	Support Staff (PSS or Intake Coordinator)	1.0

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 plan, review of any Concern Forms and submission of proposed changes/ reports to the Staffing Committee (see Article 20B).

Regards,
Peg and Deb

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