

# UPSTATE

## UNIVERSITY HOSPITAL

### Nursing Definitions

2,080 hours:	# of paid hours in a year
FTE:	Full Time Equivalent; the equivalent of 1 full-time employee paid for one year, including both productive and nonproductive (vacation, sick, holiday, etc) time. Each FTE is <u>paid</u> for 2080 hours per year.
UOS:	Unit of Service: the quantity by which workload can be measured; the standard metric for each patient care area. Inpatient unit = Patient Days ED = Visits OR = Cases
Patient Day:	The number of midnights for each stay
ADT:	Admissions, Discharges, Transfers
ADT Index:	Average Daily ADT / Average Daily Census
Productive time:	All worked time
Non-Productive time:	All paid time off
Direct Care role:	Titles in a unit budget that provide direct care to patients (includes RN, HCT, MOA, MHTA, SOT etc).
Indirect Care role:	Titles in a unit budget that are important to the operation of the unit but do not provide direct care to the patient (includes Manager, Asst Manager, NSC etc)
OT:	Overtime; time payed at a rate of time and half or time worked above the obligated hours for the full time FTE status.
ET:	Extra time is time worked above the obligated hours for the FTE status at a straight rate until the employee exceeds 40 hrs (or 80 hrs in a pay period).
Worked Hours:	All hours worked by all staff, any title attached to that unit cost center.
Paid hours:	All worked hours by all staff plus all Non-Productive time
Worked/Paid %:	This percent represents the amount of worked hours to paid hours. Average is ~85%. Lower than 85% - are you granting excessive accruals? Excessive sick leave? is overtime excessive with Greater than 90% - are you not giving enough time off? Is OT excessive?
HPPD:	Hours per Patient Day; calculated as = Total Worked Hours / Patient Days (this calculation works for any UOS)

Direct HPPD: Direct care Worked Hours / Patient Days  
(includes RN, LPN, HCT, MOA; does not include indirect titles)

RNHPPD: RN (only) Worked Hours / Patient Days

**Some Key Thresholds:**

RN Vacancy rate =	10% or less
RN Gr 14 % =	14-30%
Less than 1 year on unit (RN)	5% or less
% of hours worked by all home unit staff	84-89% (85% on average)
Intermittent Sick (as a % of Worked Hours)	5% or less
LOA's (as a % of Worked Hours)	5% or less
SACO/SUWA (as a % of Worked Hours)	4% or less
Vacation/PL/HT (as a % of Worked Hours)	5-10%
Productivity %	95% or more
Holes in the schedule	3-5% max

Ratio Table	
Nurse: Patients	RN HPPD
1:1	24.0
1:2	12.0
1:3	8.0
1:4	6.0
1:5	4.8
1:6	4.0
1:7	3.4
1:8	3.0

**Questions, Answers, Examples**

Question: How do I convert RN HPPD to a ratio?  
 Answer: 24 (hours in a day) / RN HPPD.  
 Example: 24/6 RN HPPD= 4 or 1:4 nurse to patient ratio

Question: How do I convert a ratio to RN HPPD?  
 Answer: 24 (hours in a day) / # patients.  
 Example: 24/4 patients = 6 or 6 hours of RN care

Question: How do I convert occupancy into annual patient days?  
 Answer: # of available beds \* occupancy \* 365  
 Example 24 \* 90% \* 365 = 7,884

Question: How do I convert patient days into occupancy?

Answer: Patient days / 365 / # of available beds

Example:  $7884 / 365 = 21.6$  then  $21.6 / 24 \text{ beds} = 90\%$

Question: How do I calculate my Total FTE budget?

Answer: Compute the Direct FTE, compute and add on the Non-productive FTE, add on Indirect FTE

Question: How do I determine the number of direct care RNs I need?  
(i.e., raw direct; without replacement time)

Answer: = Number of available beds x occupancy x 365 x RN HPPD / 2080

Example:  $= (20 * 95\% * 365) * 6 \text{ RN HPPD} / 2080 = 20.0 \text{ FTE}$

Question: How many FTE's do I need to have 8 RNs on every shift, 24/7, for a 30 bed unit?

Answer: Test this using your WLP table – all the calculations are embedded

Example: Step 1: 8 RN's for 24/7 computes to 6.4 RN HPPD

$(8 \text{ RNs} * 24 \text{ Hours}) / 30 \text{ beds} = 6.4 \text{ RN HPPD}$

Step 2:  $8 \text{ RNs} * 24 = 192 * 365 = 70,080 \text{ hours} / 2080 = 33.7 \text{ FTE without replacement}$

Step 3:  $33.7 \text{ FTE} * 1.105 \text{ (10.5\% On unit replacement \%)} = 37.2 \text{ FTE}$

Question: Do I have enough in my staffing plan? I have 28 beds and 45.0 RN positions in my budget. I think I need 9 RNs on days 07-19, then 8 RNs from 19-07.

Answer: Test this using your WLP table

Example: Step 1: 9 RN's down to 8 RN's computes to 7.3 RN HPPD

$(9 \text{ RNs} * 12 \text{ Hours} + 8 \text{ RNs} * 12 \text{ hours}) / 28 \text{ beds} = 7.3 \text{ RN HPPD}$

Step 2:  $(9 \text{ RNs} * 12) + (8 \text{ RNs} * 12) = 204 * 365 = 74,460 \text{ hours} / 2080 = 35.8 \text{ FTE without replacement}$

Step 3:  $35.8 \text{ FTE} * 1.105 \text{ (10.5\% On unit replacement \%)} = 39.6 \text{ FTE}$

Question: How do I know how much time to grant off? How much is ok?

Answer: Calculate the direct care hours required and convert to FTE's (as in the question above). Filled FTE minus the FTE required will provide you the FTE's that can be off using paid time.

Example:  $22.1 \text{ Filled FTE} - 20.0 \text{ Direct Required} = 2.1 \text{ available for non-productive time}$

Question: When I'm posting my schedule, how many holes are ok to leave open (and post as open shifts to be filled as OT/ET)?

Answer: The best practice is to leave no more than 5% of your shifts open.

Example:  $10 \text{ RNs/shift} * 3 \text{ shifts} * 14 \text{ days in the PP} = 420 \text{ shifts}$ .  $5\% = 21 \text{ shifts max to be left open and posted for OT/ET}$ .