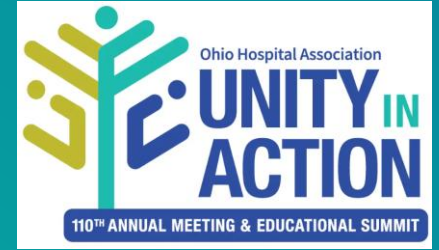




Health  
Carousel



# Operational Vacancy: An Effective Tool for Workforce Planning

*Ohio Hospital Association  
Unity in Action  
110<sup>th</sup> Annual Meeting & Education Summit  
May 20, 2025*

Bill Lecher  
Director of Nursing



# SPEAKER INTRODUCTION



## Bill Lecher, DNP, MBA, RN, NE-BC Director of Nursing

- Nurse, Husband, Father, Outdoor Enthusiast
- Doctorally prepared, board certified nurse leader
  - 30+ years of nursing experience
- **Specific Expertise:**
  - Strategic planning
  - Workforce development
  - Staffing operations
  - Capacity management, patient placement and flow
  - Inpatient, outpatient, support services
  - Diversity, equity and inclusion
  - Community relations and community engagement
  - Professional associations: AONL, SPN, NAHN, AAMN, NATHO

# Conflict of Interest Statement

I have no real or perceived conflicts of interest that relate to this presentation.

# OBJECTIVES



**Describe the difference between traditional vacancy rate reporting and operational vacancy rate reporting**



**Demonstrate understanding of the operational vacancy reporting standard operational procedures**



**Discuss how to incorporate operational vacancy in your work setting**

# We are not out of the woods yet, and It is likely to get worse again

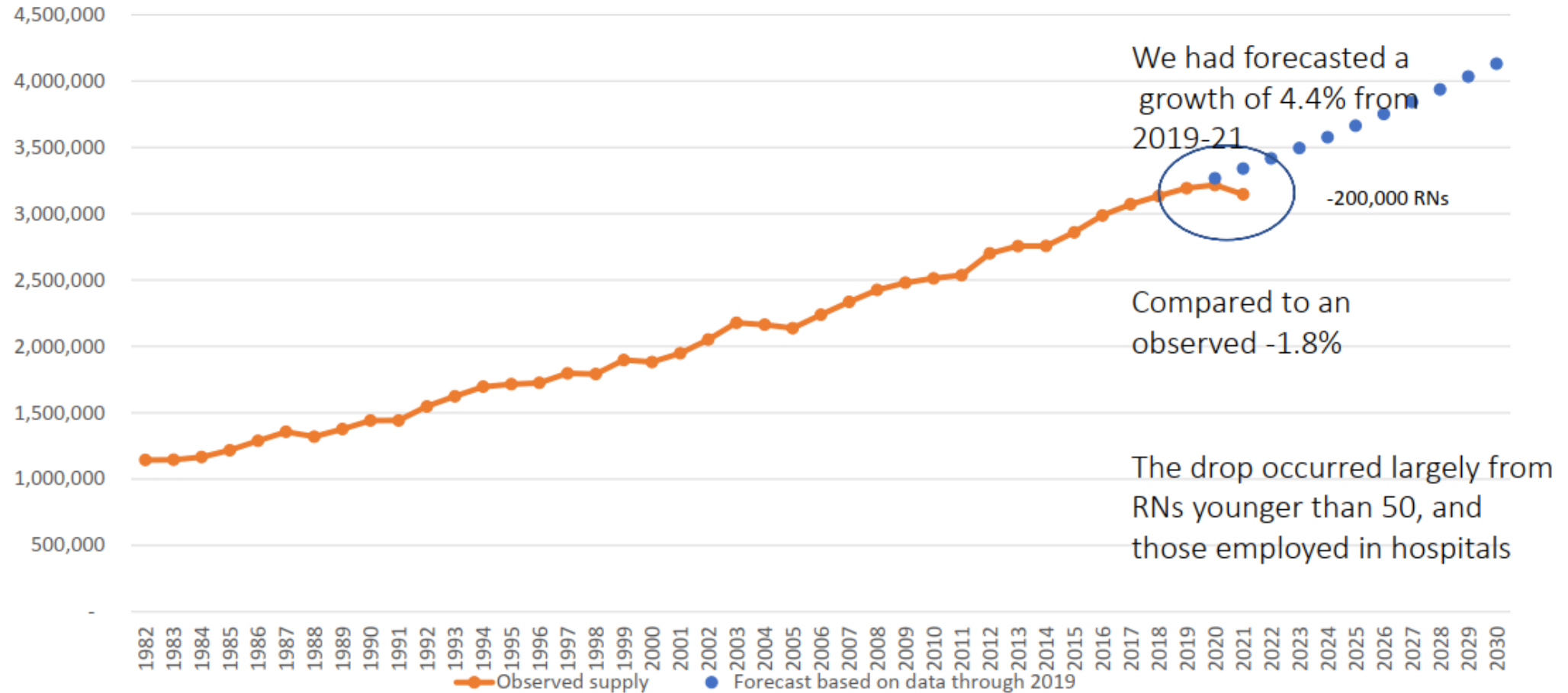


# State of the Union

National statistics

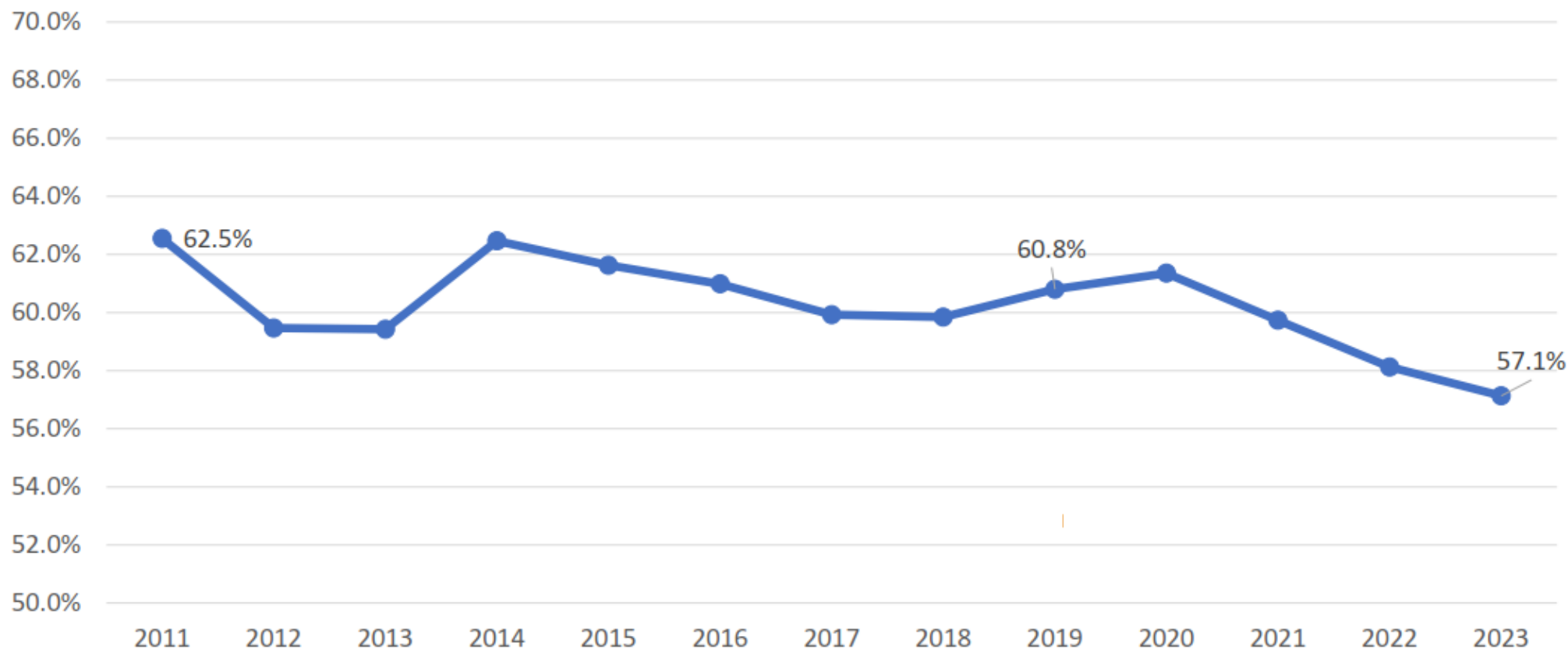


# Total RN Supply in 2021 Dropped nearly 200,000 Below What had been Forecast!



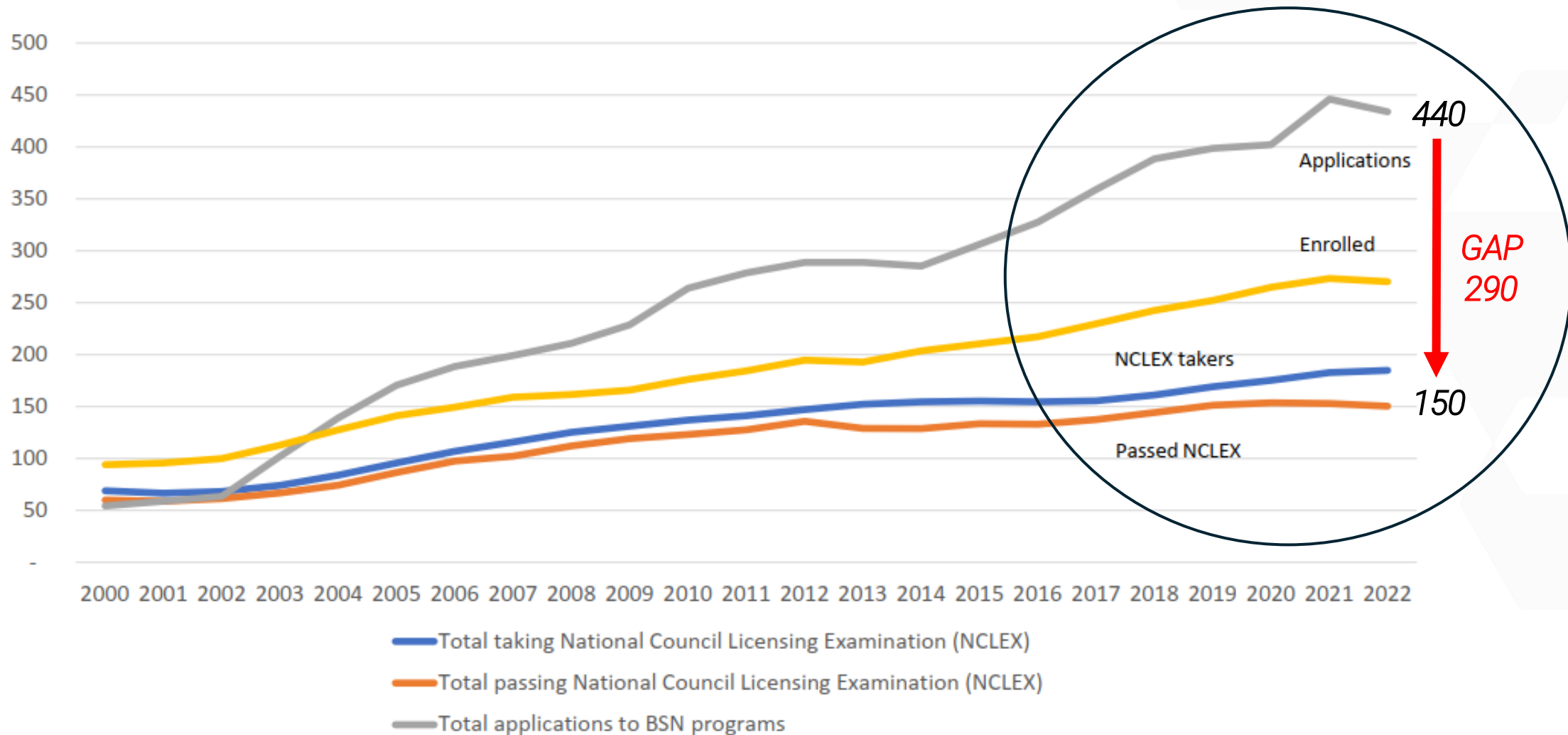
\*See: Auerbach, D, Buerhaus, P, Staiger, D, Donelan K (2022). A worrisome drop in the number of young nurses. *Health Affairs Forefront*. April 13, 2022 [10.1377/FOREFRONT.20220412.311784](https://doi.org/10.1377/FOREFRONT.20220412.311784)

# Percentage of RN's Working in Hospitals at an All-time Low



Source: Analysis of Current Population Survey made by David Auerbach, 2023; unpublished data.

# Applications & Enrollment Slowing? NCLEX Flat, Not Increasing

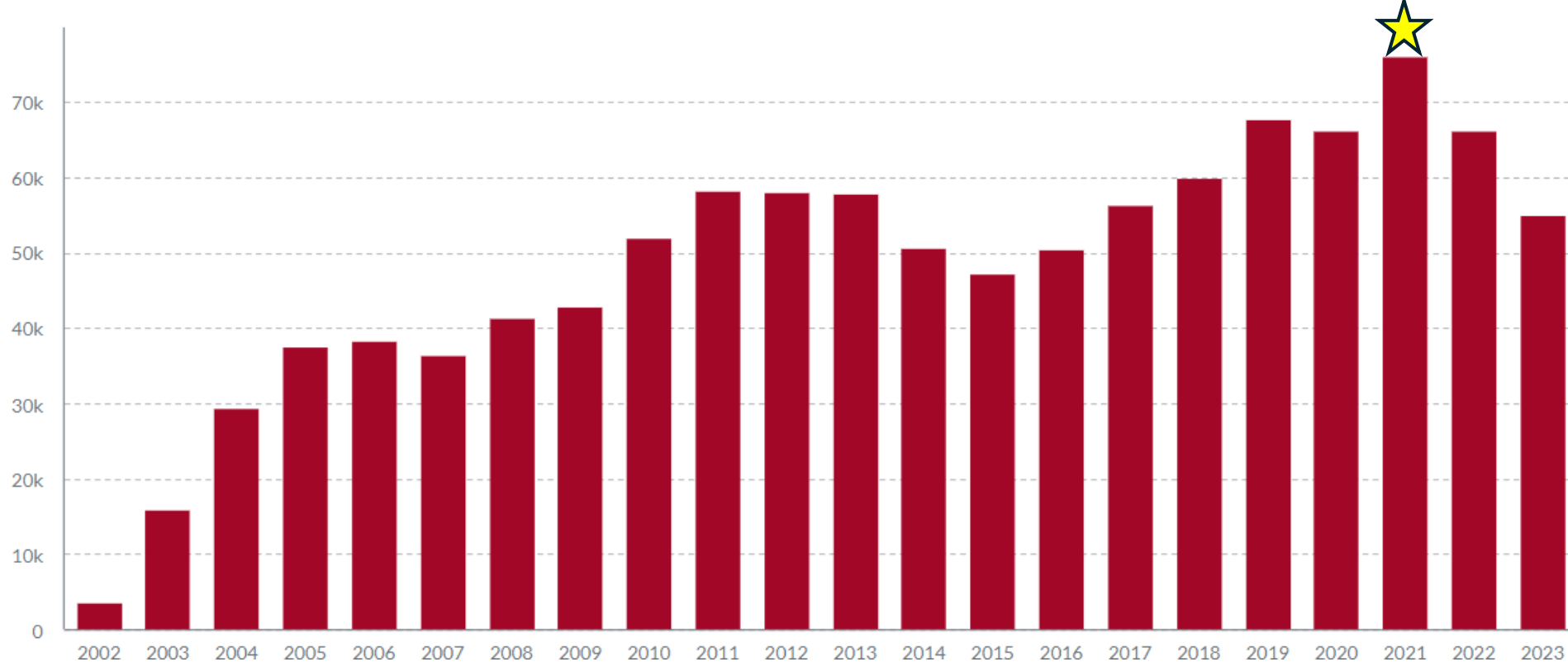


# Qualified Applicants Turned Away

New AACN Data Points to Enrollment Challenges Facing U.S. Schools of Nursing, April 15, 2024

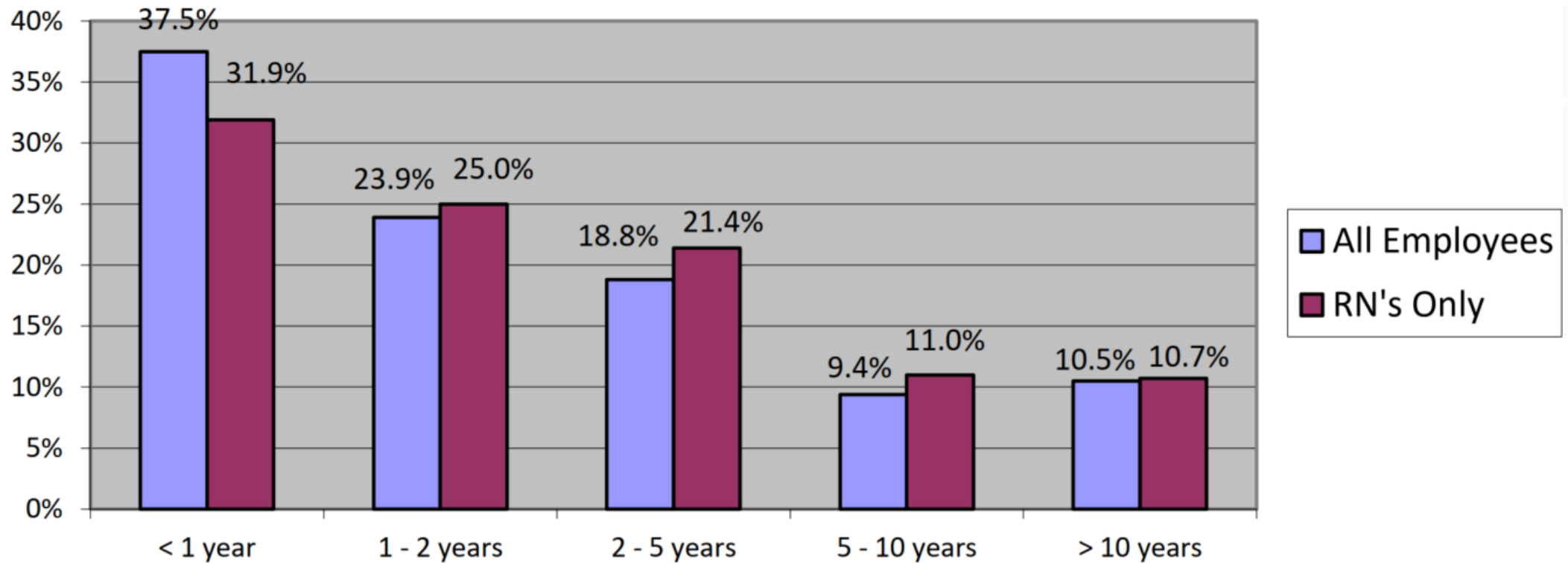
- In 2023, a total of 55,111 qualified students were turned away from entry-level baccalaureate nursing programs
- 76,140 were turned away in 2021 ... THEY ARE NOT GRADUATING SPRING, 2025

Qualified Applications Turned Away from Entry-Level Baccalaureate Programs 2002-2023



# First year turnover accounts for a third (31.9%) of all RN separations

## HOSPITAL TURNOVER BY TENURE



# Cost of RN Turnover

- Controlling labor costs are essential for a strong bottom line.
- 2025 the average cost of turnover for a **staff RN increased by 8.6% in the past year to \$61,110**
  - Separation costs
  - Hiring costs
  - Training & orientation
  - Lost productivity
  - Increased cost of OT; incentive, bonus shifts
  - Increased cost of contract labor

# HOW ARE HOSPITALS ATTACKING THE PROBLEM



- Hiring more unlicensed assistive personal (UAPs)
- Offering more OT, incentive and bonus shifts
- Workforce redesign:
  1. Utilizing RN top of license intervention & monitoring
  2. Testing care model designs, reintroducing LPN's
  3. Implementing virtual nursing and video monitoring
- Partnering with a flexible staffing company

# Comparing Overtime/Incentives/Bonus Shifts vs. Non-Licensed Staff

## Overtime/Incentive/Bonus

Pros

Financial Benefit to team

Flex Schedule for staff

Cons

Physical well-being of staff may be impacted

May impact work-life balance

Patient Care may be compromised

Increases burnout

## Non-Licensed Staff (UAP's)

Pros

Less competitive hiring market

Lower staffing costs (55%-77% of an RN salary)

Cons

Can't deliver independent patient interventions

Don't have knowledge, training, or support to take on a greater role in patient care

Require more supervision  
Higher turnover

# Workforce Redesign

1. Utilizing RN top of license intervention & monitoring
2. Testing care model designs, team-based care, reintroducing LPN's
3. Leveraging technology, implementing virtual nursing and video monitoring

All aimed at improve patient outcomes, enhance efficiency, reduce costs, improve retention.

# Flex Staffing Solution: Travel Nurses

Hospitals are reducing travelers post-Covid, yet still an effective strategy to temporarily fill staffing gaps

- Allows you to staff up and staff down as needed
- Gain access to an experienced talent pool
- Less worry about overtime costs
- Help staff difficult-to-fill nursing positions



# Flex Staffing Solution: International Nurses

Hire international nurses that convert to full-time employees

- Widely utilized
- Outstanding Feedback
- Long-term solution
- Likely to convert to full-time
- A new pipeline of experiences, qualified talent.



# OPERATIONAL VACANCY



## ***You want this tool in your toolbox***

- Keeps positions filled better
- Predicts attrition and predictive hiring reduces premium pay
- Reduces reliance on travelers or justifies traveler use when and where needed

Let's go ...

# Have you ever heard? Or said?

- Why does the schedule you just put out have so many holes in it? Your RN vacancy rate is only 9%.
- Sure your vacancy rate is 18% so we approved your department to offer incentive (or bonus) shifts. Why are you asking for travelers?

# Here's why ...

- Most departments are not fully staffed.
- Just because you think you are fully-staffed you are not.
- Pay attention to your operational vacancy, rather than traditional vacancy.

# OPERATIONAL VACANCY: Why does it matter?

- 1 Better quantifies ability to staff effectively by showing hidden staffing deficits that exists
- 2 Factors in predicted attrition, non-productive orientation and FML
- 3 Effectively using operational vacancy reporting leads to improved recruitment
- 4 Reduces premium pay (OT, bonus, incentive)
- 5 Reduces contract labor spend
- 6 If operational vacancy is too high, it quantifies contract labor justification and how long needed/when to discontinue
- 7 Overall improved staffing improves nurse retention

# OPERATIONAL VACANCY AND RECRUITMENT & RETENTION

Applicable for both hospital and other nursing workforce settings

Operational vacancy reporting can be applied for other licensed and unlicensed hospital workers

- Respiratory Therapy
- Surg Techs
- Nursing Assistant
- Sterile Processing
- Imaging



# VACANCY RATE

A function of open positions only

## VACANCY RATE CALCULATION

$$\frac{\text{Open FTE's}}{\text{Total budgeted FTE's}} = \text{Vacancy Rate}$$

### EXAMPLE:

$$\frac{7.6 \text{ open}}{92.8 \text{ budgeted}} = 8.1\% \text{ Vacancy Rate}$$

# OPERATIONAL VACANCY RATE

Captures employees hired and paid, but not productive and not working

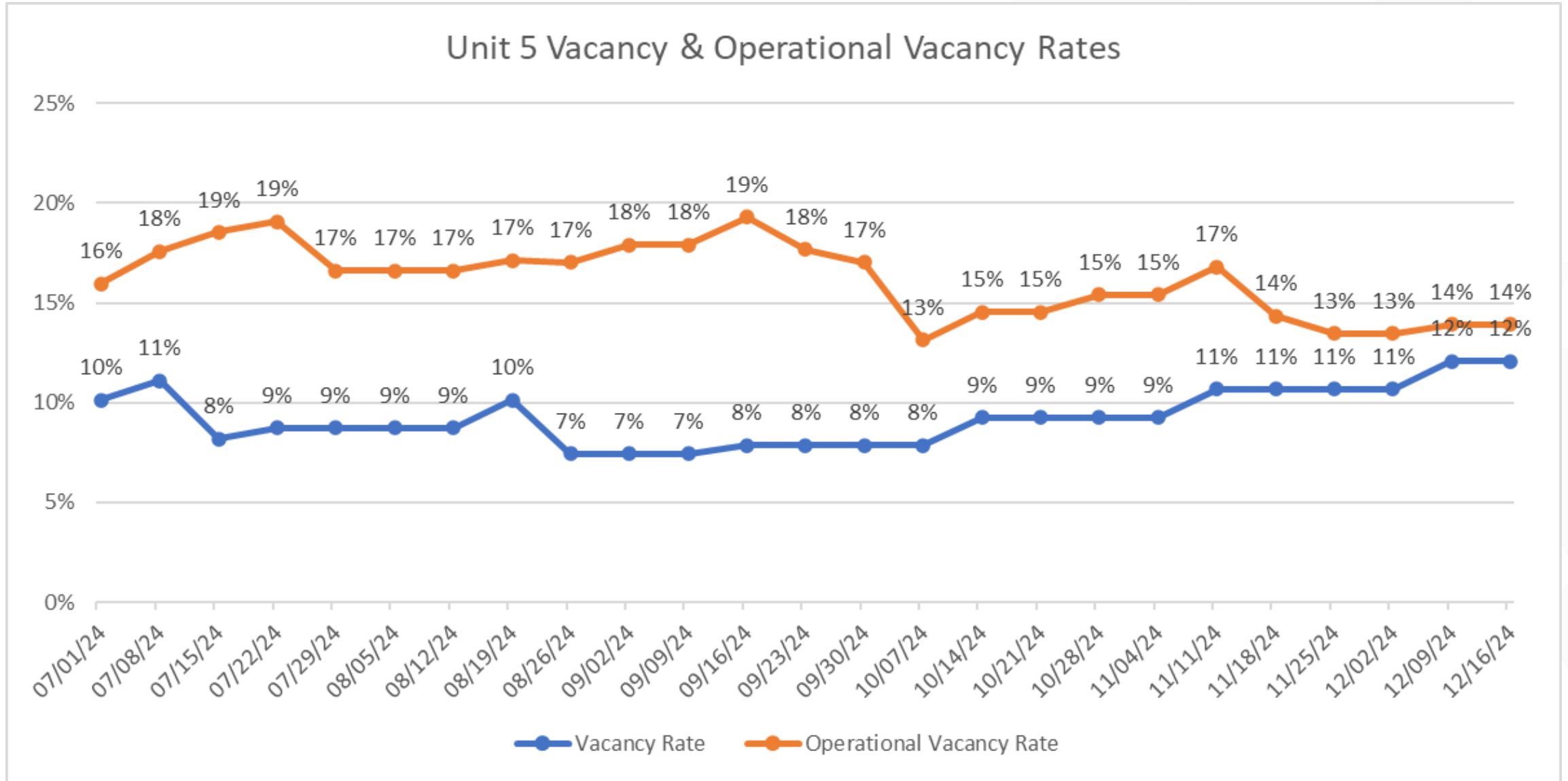
## OPERATIONAL VACANCY RATE CALCULATION

$$\frac{(\text{Open FTE's} + \text{Orientation FTE's} + \text{Continuous FML FTE's})}{\text{Total budgeted FTE's}} = \text{Operational Vacancy Rate}$$

### EXAMPLE:

$$\frac{(7.6 \text{ open} + 5.3 \text{ orientation} + 4.3 \text{ FML})}{92.8 \text{ budgeted}} = 19\% \text{ Operational Vacancy Rate}^*$$

\*Often runs 2 or more times traditional vacancy rate



# OPERATIONAL VACANCY: HOW TO DO IT

- 1 Budgeted RN FTE's by nursing unit
- 2 Orientation weeks by nursing unit
- 3 RN attrition – historical calculation from prior year
- 4 Predict RN attrition prospectively for the current fiscal year
- 5 Update actual RN attrition every pay period (every 2 weeks)
- 6 Add new RN's hired (FTE's)
- 7 Subtract RN's in orientation (FTE's)
- 8 Subtract RN's on FML (FTE's)
- 9 Monitor, report, hire for attrition
- 10 Balance with premium pay (OT, bonus, incentive), resource pool, travelers, international RN's

# STEPS &

## Budgeted RN FTE's and Orientation Weeks by nursing unit

Nursing Unit	FY25 Budgeted RN FTEs	Orientation Weeks
1	44.2	8
2	101.7	12
3	16.4	8
4	71.3	12
5	92.8	12
6	29.5	8
7	51.6	8
8	52.2	8
9	65.3	8
10	32.6	8
<b>FTE Total</b>	<b>557.6</b>	

# STEP 3

## RN Attrition – Historical Calculation from Prior Year

Nursing Unit	FY25 Budgeted RN FTEs	FTE Attrition	Percent Turnover	Attrition/4 wk schedule
1	44.2	12.3	28%	0.9
2	101.7	15.5	15%	1.2
3	16.4	3.6	22%	0.3
4	71.3	8.0	11%	0.6
5	92.8	16.8	18%	1.3
6	29.5	8.9	30%	0.7
7	51.6	7.9	15%	0.6
8	52.2	11.1	21%	0.9
9	65.3	8.2	13%	0.6
10	32.6	6.0	18%	0.5
	557.6	98.3	18%	7.6

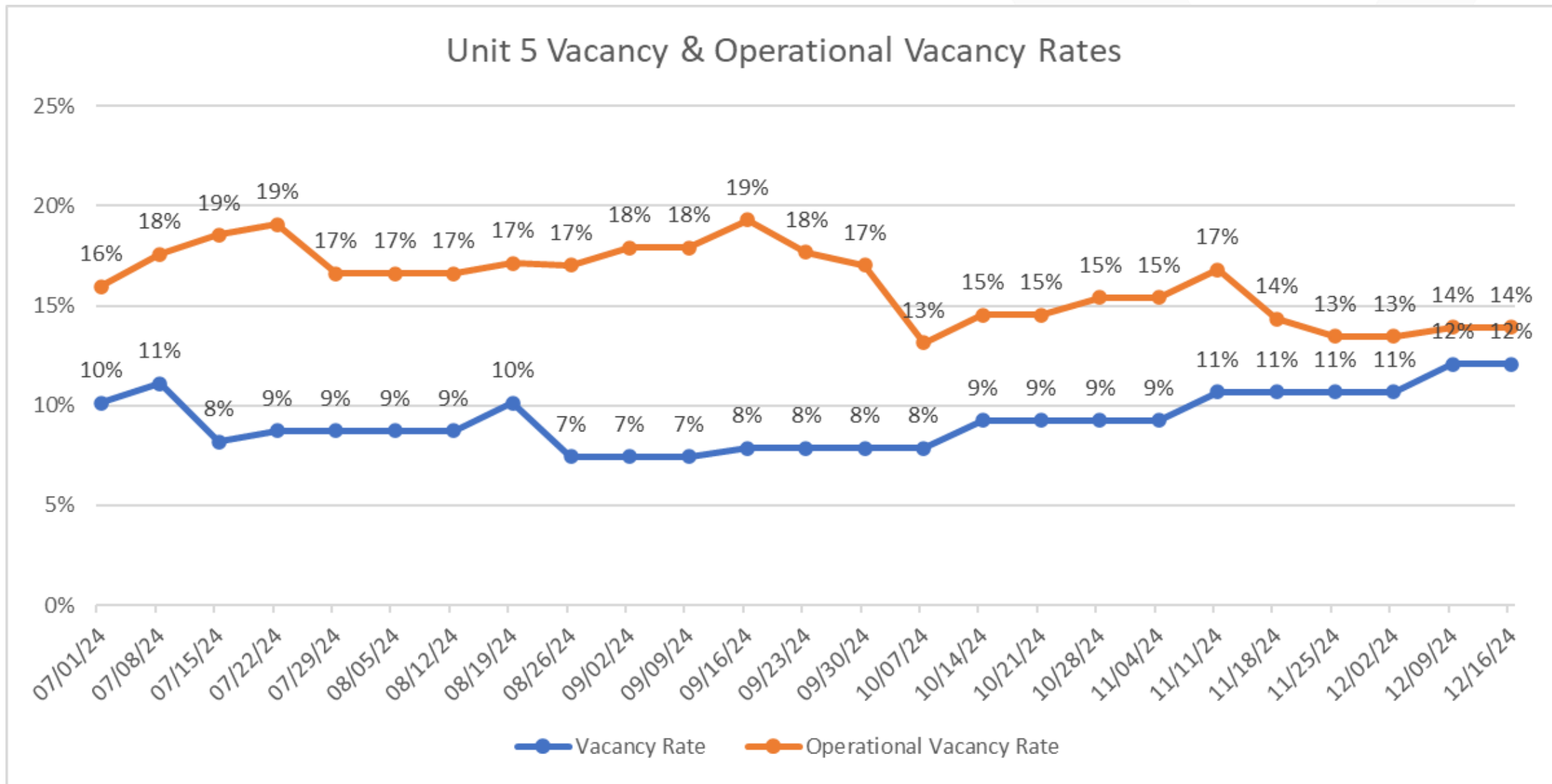
# Operational Vacancy Report

## Nursing Unit 5 Example

This Week



OPERATIONAL VACANCY REPORTING NURSING UNIT 5															
	07/01/24	07/08/24	07/15/24	07/22/24	07/29/24	08/05/24	08/12/24	08/19/24	08/26/24	09/02/24	09/09/24	09/16/24	09/23/24	09/30/24	
Budgeted RN FTEs Total	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	
Filled RN FTEs	83.4	82.5	85.2	84.7	84.7	84.7	84.7	83.4	85.9	85.9	85.9	85.5	85.5	85.5	
<b>Total Current Open RN FTEs</b>	9.4	10.3	7.6	8.1	8.1	8.1	8.1	9.4	6.9	6.9	6.9	7.3	7.3	7.3	
<b>Vacancy Rate</b>	<b>10%</b>	<b>11%</b>	<b>8%</b>	<b>9%</b>	<b>9%</b>	<b>9%</b>	<b>9%</b>	<b>10%</b>	<b>7%</b>	<b>7%</b>	<b>7%</b>	<b>8%</b>	<b>8%</b>	<b>8%</b>	
Actual/Predicted RN Attrition (note as FTE)		0.9		0.5				1.3				1.3			
New RN Hire (note as FTE in Start Week)			2.7						2.5			0.9			
Total Orientation FTE	2.6	2.6	5.3	5.3	3.5	3.5	3.5	3.5	5.2	5.2	5.2	6.1	6.1	6.1	
Total FML FTE	2.8	3.4	4.3	4.3	3.8	3.8	3.8	3.0	3.7	4.5	4.5	4.5	3.0	2.4	
Operational Vacant FTE's	5.4	6.0	9.6	9.6	7.3	7.3	7.3	6.5	8.9	9.7	9.7	10.6	9.1	8.5	
<b>Open and Operationally Vacant FTE's</b>	14.8	16.3	17.2	17.7	15.4	15.4	15.4	15.9	15.8	16.6	16.6	17.9	16.4	15.8	
<b>Operational Vacancy Rate</b>	<b>16%</b>	<b>18%</b>	<b>19%</b>	<b>19%</b>	<b>17%</b>	<b>17%</b>	<b>17%</b>	<b>17%</b>	<b>17%</b>	<b>18%</b>	<b>18%</b>	<b>19%</b>	<b>18%</b>	<b>17%</b>	



# STEPS 4 & 5

Predict RN Attrition Prospectively for the Current Fiscal Year and Update Actual RN Attrition Every Pay Period (every 2 weeks)

OPERATIONAL VACANCY REPORTING NURSING UNIT 5															
	07/01/24	07/08/24	07/15/24	07/22/24	07/29/24	08/05/24	08/12/24	08/19/24	08/26/24	09/02/24	09/09/24	09/16/24	09/23/24	09/30/24	
Budgeted RN FTEs Total	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	
Filled RN FTEs	83.4	82.5	85.2	84.7	84.7	84.7	84.7	83.4	85.9	85.9	85.9	85.5	85.5	85.5	
<b>Total Current Open RN FTEs</b>	9.4	10.3	7.6	8.1	8.1	8.1	8.1	9.4	6.9	6.9	6.9	7.3	7.3	7.3	
Vacancy Rate	10%	11%	8%	9%	9%	9%	9%	10%	7%	7%	7%	8%	8%	8%	
Actual/ <b>Predicted</b> RN Attrition (note as FTE)		0.9		0.5				1.3				1.3			
New RN Hire (note as FTE in Start Week)			2.7						2.5			0.9			

# STEP 6

Add new RN's hired (FTE's)

OPERATIONAL VACANCY REPORTING NURSING UNIT 5															
	07/01/24	07/08/24	07/15/24	07/22/24	07/29/24	08/05/24	08/12/24	08/19/24	08/26/24	09/02/24	09/09/24	09/16/24	09/23/24	09/30/24	
Budgeted RN FTEs Total	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	
Filled RN FTEs	83.4	82.5	85.2	84.7	84.7	84.7	84.7	83.4	85.9	85.9	85.9	85.5	85.5	85.5	
<b>Total Current Open RN FTEs</b>	9.4	10.3	7.6	8.1	8.1	8.1	8.1	9.4	6.9	6.9	6.9	7.3	7.3	7.3	
Vacancy Rate	10%	11%	8%	9%	9%	9%	9%	10%	7%	7%	7%	8%	8%	8%	
Actual/ <span style="color: orange;">Predicted</span> RN Attrition (note as FTE)		0.9		0.5				1.3				1.3			
New RN Hire (note as FTE in Start Week)			2.7						2.5			0.9			

# STEP 7

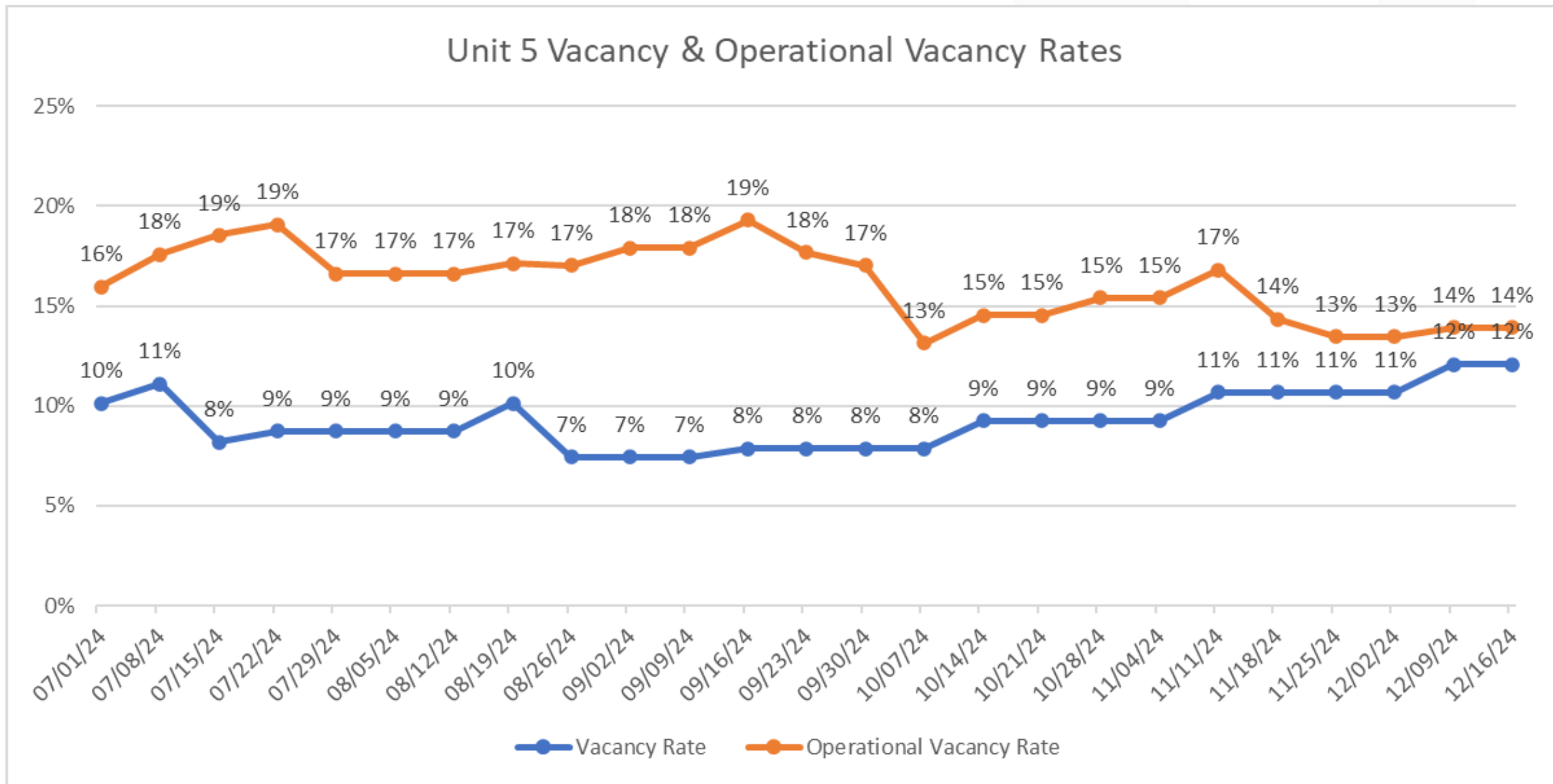
Subtract RN's in orientation (FTE's)

OPERATIONAL VACANCY REPORTING NURSING UNIT 5															
		07/01/24	07/08/24	07/15/24	07/22/24	07/29/24	08/05/24	08/12/24	08/19/24	08/26/24	09/02/24	09/09/24	09/16/24	09/23/24	09/30/24
RNs in Orientation (12 Weeks - note FTE)	Start Date	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE
B.D	5/6/2024	0.9	0.9	0.9	0.9										
B.A	5/6/2024	0.9	0.9	0.9	0.9										
N.L	6/3/2024	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8						
M.L	7/15/2024			0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
D.H.	7/15/2024			0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
N.W	7/15/2024			0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
A.T.	8/26/2024									0.8	0.8	0.8	0.8	0.8	0.8
K.T.	8/26/2024									0.8	0.8	0.8	0.8	0.8	0.8
T.C	8/26/2024									0.9	0.9	0.9	0.9	0.9	0.9
M.M.	9/23/2024												0.9	0.9	0.9
<b>TOTAL FTE's in Orientation</b>		<b>2.6</b>	<b>2.6</b>	<b>5.3</b>	<b>5.3</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>5.2</b>	<b>5.2</b>	<b>5.2</b>	<b>6.1</b>	<b>6.1</b>	<b>6.1</b>

# STEP 8

## Subtract RN's on FML (FTE's)

OPERATIONAL VACANCY REPORTING NURSING UNIT 5															
		07/01/24	07/08/24	07/15/24	07/22/24	07/29/24	08/05/24	08/12/24	08/19/24	08/26/24	09/02/24	09/09/24	09/16/24	09/23/24	09/30/24
RNs on FMLA (note as FTE)	Start Date	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE
EE #1	4/29/2024	0.5	0.5	0.5	0.5										
EE #2	5/20/2024	0.8	0.8	0.8	0.8	0.8	0.8	0.8							
EE #3	6/10/2024	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		
EE #4	6/10/2024	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9		
EE #3	7/8/2024		0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
EE #4	7/22/2024			0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
EE #5	9/14/2024									0.7	0.7	0.7	0.7	0.7	0.7
EE #6	9/20/2024										0.8	0.8	0.8	0.8	0.8
EE #7	10/28/2024														
EE #8	11/18/2024														
<b>Total FML FTE's</b>		<b>2.8</b>	<b>3.4</b>	<b>4.3</b>	<b>4.3</b>	<b>3.8</b>	<b>3.8</b>	<b>3.8</b>	<b>3.0</b>	<b>3.7</b>	<b>4.5</b>	<b>4.5</b>	<b>4.5</b>	<b>3.0</b>	<b>2.4</b>



# POWER WITH UNIT-LEVEL & HOSPITAL ROLL-UP REPORTING

## Step 9: Monitor, Report, Hire for Attrition

- Identify nursing units with sound staffing
- Identify nursing units with at risk RN staffing

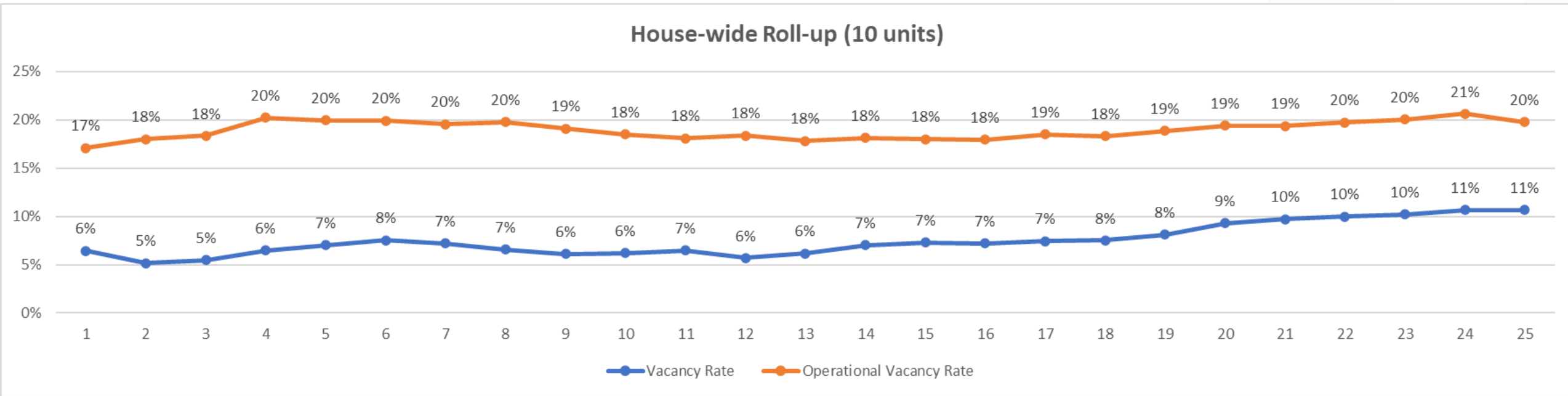
## Step 10: Balance nurse staffing with...

1. Day-to-day, shift-to-shift RN reassignments
2. Internal resource pool
3. Premium pay (OT, bonus, incentive)
4. Temporary RN travelers
5. Long-term nursing workforce stabilization with international RN's

# STEPS 9 & 10

Monitor, Report, Hire for Attrition and Balance with Premium Pay (OT, Bonus, Incentive), Resource Pool, Travelers, International RN's

House-wide Roll-up (10 units)



# STEPS &

Monitor, Report, Hire for Attrition and Balance with Premium Pay (OT, Bonus, Incentive), Resource Pool, Travelers, International RN's

<b>Vacancy Rate: All Units &amp; Roll-up</b>														
Unit	07/01/24	07/08/24	07/15/24	07/22/24	07/29/24	08/05/24	08/12/24	08/19/24	08/26/24	09/02/24	09/09/24	09/16/24	09/23/24	09/30/24
1	10%	13%	13%	11%	11%	13%	13%	13%	13%	13%	13%	10%	10%	11%
2	9%	9%	10%	10%	10%	12%	12%	8%	8%	10%	10%	11%	11%	9%
3	-5%	-9%	-9%	-6%	-6%	-6%	-4%	-5%	-5%	-5%	-4%	-8%	-7%	-5%
4	8%	7%	6%	6%	7%	8%	3%	2%	0%	0%	1%	1%	0%	2%
5	10%	11%	8%	9%	9%	9%	9%	10%	7%	7%	7%	8%	8%	8%
6	12%	4%	10%	13%	13%	16%	16%	17%	17%	16%	16%	16%	17%	17%
7	5%	7%	7%	4%	4%	4%	4%	4%	4%	2%	2%	2%	4%	7%
8	11%	7%	7%	7%	10%	9%	9%	7%	7%	10%	12%	13%	13%	13%
9	7%	6%	6%	6%	7%	8%	8%	7%	7%	7%	7%	3%	5%	10%
10	-4%	-4%	-4%	6%	6%	3%	3%	3%	3%	1%	1%	1%	1%	-2%
<b>Average</b>	<b>6%</b>	<b>5%</b>	<b>5%</b>	<b>6%</b>	<b>7%</b>	<b>8%</b>	<b>7%</b>	<b>7%</b>	<b>6%</b>	<b>6%</b>	<b>7%</b>	<b>6%</b>	<b>6%</b>	<b>7%</b>

# STEPS &

Monitor, Report, Hire for Attrition and Balance with Premium Pay (OT, Bonus, Incentive), Resource Pool, Travelers, International RN's

Operational Vacancy Rate: All Units & Roll-up														
Unit	07/01/24	07/08/24	07/15/24	07/22/24	07/29/24	08/05/24	08/12/24	08/19/24	08/26/24	09/02/24	09/09/24	09/16/24	09/23/24	09/30/24
1	20%	21%	21%	22%	21%	22%	23%	24%	23%	24%	25%	24%	23%	23%
2	23%	25%	26%	27%	26%	29%	29%	28%	28%	28%	28%	28%	27%	26%
3	7%	3%	2%	5%	4%	3%	4%	1%	0%	0%	1%	3%	4%	8%
4	14%	17%	16%	18%	18%	21%	16%	21%	19%	16%	17%	15%	13%	11%
5	16%	18%	19%	19%	17%	17%	17%	17%	17%	18%	18%	19%	18%	17%
6	26%	26%	31%	34%	32%	37%	37%	43%	41%	34%	31%	31%	29%	27%
7	17%	21%	20%	19%	19%	20%	21%	17%	16%	16%	13%	12%	11%	15%
8	22%	24%	24%	22%	26%	24%	24%	24%	24%	25%	28%	29%	28%	28%
9	22%	23%	22%	24%	23%	20%	19%	18%	18%	18%	15%	18%	20%	22%
10	5%	2%	2%	11%	13%	6%	6%	6%	6%	6%	6%	6%	6%	6%
<b>Average</b>	<b>17%</b>	<b>18%</b>	<b>18%</b>	<b>20%</b>	<b>20%</b>	<b>20%</b>	<b>20%</b>	<b>20%</b>	<b>19%</b>	<b>18%</b>	<b>18%</b>	<b>18%</b>	<b>18%</b>	<b>18%</b>

# POWER WITH UNIT-LEVEL & DIVISIONAL ROLL-UP REPORTING

## Step 9: Monitor, Report, Hire for Attrition

- Identify nursing units with sound staffing
- Identify nursing units with at risk RN staffing

## Step 10: Balance nurse staffing with...

1. Premium pay (OT, bonus, incentive)
2. Internal resource pool
3. Temporary RN travelers
4. Long-term nursing workforce stabilization with international RN's



**Q&A**



# THANK YOU

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