Strategic Workforce Action Planning for Nursing:
Right Staff, Right Time, Right Cost
November 11, 2016
OONE Fall Conference
About Akron Children’s

• Ranked a Best Children’s Hospital by *U.S. News & World Report*

• Magnet® Recognition for Nursing Excellence

• Largest independent pediatric provider in northern Ohio
  • 2 hospital campuses
  • 90 locations offering primary care, specialty services and urgent care
  • The second busiest pediatric emergency department in Ohio
  • Perform more pediatric surgeries than any other hospital in northeast Ohio
  • 5,500 employees

With more than 800,000 patient visits each year, we’ve been leading the way to healthier futures for children and communities through expert medical care, prevention and wellness programs since 1890.
Presenters

• Christine Young, MSN, MBA, RN, NEA-BC
  • Director of Nursing, Neonatal Services

• Matthew White, MBA, CPA
  • Director of Finance, Patient Services

• Megan Dorrington, MSN, RN, CPN
  • Education Coordinator, Center of Nursing Professional Practice

Acknowledgements: The presenters have no commercial support relationships and no financial conflicts of interest pertaining to this activity.
Learning Objective

• Describe how to develop a staffing strategy that supports having the right nursing staff at the right time for the right cost to care for patients.
"I was going to ask how working with a severely limited staff was, but I think I can already guess."

SHORT STAFFED EVERYWHERE

GETTING TO WORK AND FINDING OUT

YOU'RE SHORT STAFFED
Get me some nurses NOW!!!
Ohio Safe Nurse Staffing Legislation
Ohio Revised Code 3727.5 to 3725.57

• Calls for each hospital to have a hospital wide nursing care committee.
• CNO is a member with at least 50% direct care RNs
• RNs must represent all types of nursing care services provided
• Mechanism for input from direct care nurses into nursing services staffing plan
Magnet Recognition Program® Standards

**Transformational Leadership**
TL02: Nurse leaders and clinical nurses advocate for resources to support unit and organizational goals
TL07: Nurse leaders, with clinical nurse input, use trended data to acquire necessary resources to support the care delivery system(s)

**Exemplary Professional Practice**
EP09: Nurses are involved in staffing and scheduling based on established guidelines, such as ANA’s Principles for Nurse Staffing, to ensure that RN assignments meet the needs of the population
EP10: Nurses use trended data in the budgeting process, with clinical nurse input, to redistribute existing nursing resources or obtain additional nursing resources
The Problem

• Variable staffing in Patient Services departments continue to run at less than optimal levels based on reactive processes with long recruiting and orientation times in addition to unplanned continuous and intermittent FMLAs

• Efforts to improve staffing have been made in a uncoordinated manner without much sustained success

• Results in escalating premium wage expenditures and decrease nurse satisfaction
Rapid Organizational Growth

- Four new units opened in partnership with adult hospitals for neonatal/pediatric care
- Conversion of two neonatal units to single patient rooms
- New patient care pavilion opened in May, 2015
  - New Outpatient Surgery Center
  - Move of Emergency Department with capacity expansion
  - Move of NICU with bed expansion (59 to 75 beds)
- Significant growth in neonatal volume at Akron campus
- Inpatient Behavioral Health expansion planned for 2016
Escalating Premium Costs

- $6.9 million in 2015
- $2.4 million in 1st Quarter 2016
- Bonus, Overtime, Traveler/Agency costs
Back to Bedside Basics

• “Back to Bedside Basics” or B2B², was launched in 2016 as the vision of Chief Nursing Officer, Lisa Aurilio

• B2B² is our commitment to focusing our energy on improving care at the bedside for every patient and family.

• Goals and initiatives focus on improvements of direct point of care with our patients:
  • quality outcomes and evidence-based practice
  • patient and family experience
  • healthy work environment and workforce engagement
Clinical Resource Management Council

• Joined the Akron Children’s Hospital shared governance structure
• Provides input to clinical staffing and resource management processes and related policies
• Facilitates evidence-based resource management practices to support quality patient care and outcomes
• Comprised of clinical coordinators, bedside staff nurses, respiratory therapy, managers, and others
• Meets Ohio Safe Staffing laws regarding the annual review of staffing plans by a committee comprised of direct care nurses and the CNO
Shared Governance Organizational Structure

- Advanced Practice Council
- Ambulatory Council
- Research Council
- Quality Council
- Professional Development Council
- Leadership Council
- Integrated Interdisciplinary Informatics Council
- Child Life Council
- Clinical Practice Council
- Clinical Resource Management Council

Nursing Core Assembly
SWAP:
Strategic Workforce Action Planning Committee

• Kick off in October, 2015
• Executive Sponsors: Partnership between VP/Chief Nursing Officer and VP of Human Resources
• Comprehensive approach – multiple-front, interdepartmental and coordinated
• Use evidence-based approach
• Use Lean Six Sigma tools and methodologies
• Metrics developed to track progress on improvements
SWAP Subcommittees

- **Analytics** - develops reports used in decision making
- **Scheduling** - reviews actual schedule vs. expected need
- **Retention** - reviews reasons for turnover
- **Resource allocation** - projects staffing needs and mix
- **Compensation** - evaluates pay equity
- **Quality** - reviews, recommends, and measures the impact of staffing changes on quality outcomes
- **Recruiting** - manages the recruiting and hiring of new staff
- **Education and orientation** - reviews and revises education and orientation processes and metrics
SWAP Committee Membership

- **Co-Champions**
  - CNO/VP of Patient Services
  - VP of Human Resources

- **Co-Chairs of Steering Committee**
  - Director of Nursing, Neonatal Services
  - Director of Finance, Patient Services
  - Clinical Resource Management Council Chair

- **Subcommittee/Team Members**
  - Human Resources
  - Finance
  - Analytics
  - Center for Operations Excellence
  - Nursing Administration
  - Bedside Clinicians
    - 38 clinical nurses, clinical coordinators, respiratory therapists, paramedics, mental health techs, and transport nurses
Our Goal

- Right Staff
- Right Cost
- Right Time
Evidence Based Approach

• PICOT Question
  • In children’s hospitals (P), how does use of the right size core staff (I) compared to contingency resources (C) affect staffing needs met (O) daily (T)

• Evidence Table
  • Level VI and VII evidence
  • 8 references
  • Outcomes synthesis:
    • Stabilized unit staffing
    • Staffing costs
Evidence Based Approach

• “On the Scene” – Cincinnati Children’s Hospital Medical Center
  • Operational vacancy reporting and measurement
  • Flexible staffing resources
  • Balanced and smooth schedules
  • Inpatient RN staffing prediction introduction

• Creation of a Nurse Staffing Playbook – University of Wisconsin Hospital
  • Transparency in principles and processes around scheduling and staffing
  • Used to guide all decision making at all levels – team leaders, coordinators, managers, directors
  • Standardized and consistent processes to function as a team
  • “No Secrets”
Lean Six Sigma Tools

- DMAIC process
- Project Charter
- Value Stream Maps
- Voice of the Customer
- Fishbone Diagrams
- Green Belt project
- A3 Document
High Level Value Stream Map

Staff Needed

100% productivity needed to approve
Length of time until offer
Orientation length of time and intensity
FMLA, sick, PTO, open positions

Approval Process
Recruiting
Orientation
Scheduling

Staff Available to Work

Resource Allocation

Timeline: averaging 191 days from date of approval until available for staffing

Staff requested in hiring manager

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Voice of the Customer

• What keeps us from having the right staff at the right time and at the right cost?
  • What staffing process does the issue relate to?
    • Recruiting
    • Scheduling
    • Resource allocation
    • Budgeting
    • Productivity
    • Other
Voice of the Customer

• Storm Cloud Exercise: 101 responses
  • Clinical Resource Management Council (40%)
  • Patient Services Department Leaders (49%)
  • Finance/Analytics (11%)
What stops you from having the right staff at the right time?

Overall Responses (Total 101)

- Approval to Hire process: 18%
- Insufficient staff: 8%
- Scheduling process: 27%
- Staff Retention: 5%
- Staff Assignment: 8%
- Orientation/Education process: 7%
- Recruiting: 7%
- Reporting/Data: 9%
- All Other: 11%

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What contributes to staffing GAPS on your Unit

**Culture**
- Reactionary Culture
- Can't get timely approval for positions
- Pulling people out of orientation to become staff on another unit
- It is OK to move every 4 hrs. Difficult for staff and a dissatisfier for families
- May take up to 1.5 hrs. in a four hour float to actually get to the unit.
- How fast we get patients
- # of patients on a shift
- When we get patients
- Reactive vs Proactive staffing
- Not having a true system for staffing
- Time it takes to get positions approved and filled
- Temp hires – most stay with Children's but go to another unit and needs more orientation

**Method**
- We don't prepare, staffing wise, for meetings and education events
- We hire temps in a "lump" and wait too long
- Effort and calls to get order for specials – takes time
- Do not prepare for job or role changes for staff
- Do not prepare for retirements in time
- $ Impact of all the premium staffing and now is the norm. Some depend on this pay since has been in effect so long.
- Can't get timely approval for positions
- $ Impact of all the premium staffing and now is the norm. Some depend on this pay since has been in effect so long.

**Measurement**
- Effort and calls to get order for specials – takes time
- What is in Kronos vs what is actually on the unit
- Outdated CORE numbers
- What is the definition of CORE
- Effort and calls to get order for specials – takes time
- What is in Kronos vs what is actually on the unit
- Outdated CORE numbers
- What is the definition of CORE

**Man**
- Too many floats in proportion to total staff
- Wrong skill mix or experience
- Call offs, FMLA, PTO
- Lack of staff and constant floating has huge impact on staff morale

**Patient**
- Orientation
  - How the PRNs self staff
  - Picking up extra shifts may have negative impact later. Also inconsistent # of hrs. makes overall staffing difficult (4, 8, maybe not a full 12) then a deficit the next day.
  - Multiple systems for staffing,. Example: Kronos, paper.
  - Filling existing gaps takes labor of an already short floor with calling staff, calling manager, called office to change the board– too much
  - Attrition means more work for staff, waiting to get staff and then orienting them

**Facility**
- Building and renovations Impacts bed assignments More work due to unfamiliarity
- Changing Acuity
- Specials, 1:1, 2:1

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**What contributes to staffing GAPS on your Unit**
### Top Six Staffing Issues Identified by Staff

<table>
<thead>
<tr>
<th>Issue</th>
<th>Subcommittee Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdated CORE numbers</td>
<td>Scheduling</td>
</tr>
<tr>
<td>Call offs, FMLA, and PTO coverage</td>
<td>Resource Allocation</td>
</tr>
<tr>
<td>Pulling orients to cover other areas</td>
<td>Education/Orientation</td>
</tr>
<tr>
<td>Time it takes to get a position approved and posted</td>
<td>Recruitment</td>
</tr>
<tr>
<td>Skill mix on the units</td>
<td>Scheduling/Resource Allocation</td>
</tr>
<tr>
<td>Acuity/Specials (how they are ordered and how they are covered)</td>
<td>Resource Allocation</td>
</tr>
</tbody>
</table>
Staffing Process Background

• Current State
  • Scheduling
    • Decentralized scheduling and centralized staffing
    • Reactive
    • Based on core staffing plus float pool
  • Position control
    • Based on vacancies plus peak season
    • Lag of several months between vacancy and oriented new staff person
  • Budgeting
    • Historical ratios plus specific goals for next year
  • Productivity
    • Hours/UOS based on annual budget fixed and variable targets
Staffing Background

• **Turnover Rate:**
  • **Patient Services division:**
    • 2015: 11.4%
    • YTD May 2016 Annualized: 11.3%
  • **Staff RN at organization level:**
    • 2015: 10.7%
    • YTD May 2016 Annualized: 10.3%
Staffing Background

• RN candidate Recruitment Pool
  • Pediatric experience in very short supply
  • Most new hires are newly licensed RNs
    • Orientation demands are higher due to inexperience
    • Residency program started in 2015

• Changing culture about jobs and NE Ohio
Staffing Background

• Added FTEs to Position Control
  • Peak season hiring of 43.5 FTEs in Oct-Dec 2015
  • 2016 staffing budget gap reconciliation – approved to hire 22.8 RN FTEs
• 2016 Productivity:
  • Hours within budget for volume
  • Dollars are not within budget due to higher than budgeted premium costs
Core Position Control FTEs

• Core is the average number of Full time and Part-time FTEs in position control available to be scheduled to meet average patient needs based on forecasted volume and acuity

• Core relies on reasonable forecasts
  • Core can fluctuate by both day of week, by shift, and within each quarter for each unit
Position Control
ACH Operational Vacancy

• Didn’t recreate the wheel- thank-you Cincinnati Children’s for your article on operational vacancy!

• Based on Number of FTEs not available to work because of
  • Open positions (approved, not filled) (29 FTEs in 2015)
  • FMLA- continuous (13.5 FTEs in 2015)
  • Positions still in Orientation (hours in training departments) (47.5 FTEs in 2015)

• For the last 15 months Operational Vacancy Rate (OVR) has run between 10% and 21% of total FTEs in Position Control (approved to hire or hired)
New Terms

• Staff available
  • Position control (Full-time & Part-time FTEs) minus Operational vacancy (Open positions, FMLA- Continuous, orientation)

• Staff needed
  • FTEs paid minus orientation FTEs paid

• Staffing gap
  • Staff available minus staff needed

• The larger the staffing gap the higher the cost
  • Premium labor costs with agency, overtime and bonus
  • Supplemental labor – staff working above their approved FTEs
Staffing Par Level

• Number of staff (not FTEs) scheduled to meet patient need per shift based on forecasted volume and acuity
  • Staff par levels can be changed by day of week and by shift per unit per quarter
  • Updated staffing par amounts were developed through the Scheduling subcommittee

• Scheduled staffing par levels should be based mostly on core position control FTEs but also include an acceptable level of supplemental and premium labor
**Staffing Gap**

- Needed to focus on the percentage of not initially scheduled but needed.
- We have had significant staffing gaps in key areas: Example Unit 10

<table>
<thead>
<tr>
<th></th>
<th>Volumes</th>
<th>Staffing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Kronos Acuity</td>
<td>Average Schedule</td>
</tr>
<tr>
<td></td>
<td>Weighted Census</td>
<td>24 Hours Before</td>
</tr>
<tr>
<td>Unit 1</td>
<td>20.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Unit 2</td>
<td>24.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Unit 3</td>
<td>28.8</td>
<td>9.0</td>
</tr>
<tr>
<td>Unit 4</td>
<td>14.0</td>
<td>5.8</td>
</tr>
<tr>
<td>Unit 5</td>
<td>25.7</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>Subtotal - Acute Care - Akron</strong></td>
<td><strong>113.9</strong></td>
<td><strong>31.4</strong></td>
</tr>
<tr>
<td>Unit 11</td>
<td>12.0</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total Acute Care</strong></td>
<td><strong>125.9</strong></td>
<td><strong>35.4</strong></td>
</tr>
<tr>
<td>Unit 9</td>
<td>19.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Unit 10</td>
<td>100.3</td>
<td>24.4</td>
</tr>
<tr>
<td><strong>Subtotal Akron NICUs</strong></td>
<td><strong>119.3</strong></td>
<td><strong>30.5</strong></td>
</tr>
<tr>
<td>Unit 12</td>
<td>30.8</td>
<td>10.0</td>
</tr>
<tr>
<td>Unit 13</td>
<td>9.7</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Subtotal MV NICUs</strong></td>
<td><strong>40.5</strong></td>
<td><strong>11.8</strong></td>
</tr>
<tr>
<td><strong>Total NICUs</strong></td>
<td><strong>159.8</strong></td>
<td><strong>42.3</strong></td>
</tr>
<tr>
<td>Unit 6</td>
<td>61.4</td>
<td>15.7</td>
</tr>
<tr>
<td>Unit 7</td>
<td>17.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Unit 8</td>
<td>13.0</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Total Special Units</strong></td>
<td><strong>91.6</strong></td>
<td><strong>22.6</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>377.3</strong></td>
<td><strong>100.3</strong></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>29.0</strong></td>
<td><strong>7.7</strong></td>
</tr>
</tbody>
</table>
Staff Available and Staff Needed

[Graph showing Staff Available and Staff Needed from Jan-15 to Mar-16 with data points for each month including Staff Needed and Available to Work.]
Staffing Gap

- The larger the staffing gap, the more premium and supplemental labor is used.
ACH Operational Vacancy Rate

Operational Vacancy Rate

<table>
<thead>
<tr>
<th>Month</th>
<th>Vacancy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-15</td>
<td>12%</td>
</tr>
<tr>
<td>Feb-15</td>
<td>13%</td>
</tr>
<tr>
<td>Mar-15</td>
<td>11%</td>
</tr>
<tr>
<td>Apr-15</td>
<td>13%</td>
</tr>
<tr>
<td>May-15</td>
<td>13%</td>
</tr>
<tr>
<td>Jun-15</td>
<td>13%</td>
</tr>
<tr>
<td>Jul-15</td>
<td>16%</td>
</tr>
<tr>
<td>Aug-15</td>
<td>21%</td>
</tr>
<tr>
<td>Sep-15</td>
<td>15%</td>
</tr>
<tr>
<td>Oct-15</td>
<td>19%</td>
</tr>
<tr>
<td>Nov-15</td>
<td>20%</td>
</tr>
<tr>
<td>Dec-15</td>
<td>18%</td>
</tr>
<tr>
<td>Jan-16</td>
<td>15%</td>
</tr>
<tr>
<td>Feb-16</td>
<td>11%</td>
</tr>
<tr>
<td>Mar-16</td>
<td>10%</td>
</tr>
</tbody>
</table>

Akron Children's Hospital
ACH Operational Vacancy

• High operational vacancy comes at a cost
  • High premium costs to fill gaps
  • Overreliance on Float Pool & other units’ temporary reassigned staff
    • Shorting one unit to right size another
    • Challenges related to unit competencies
    • Patient/family dissatisfaction with frequently changing staff assignments
  • Lower Employee morale/satisfaction
    • Slow hiring/orientation process: Date needed vs date available is as much as 6 months or more
## Example -- Staff Analysis

- Needed 140 FTEs and only 103 were available between June ’15 and March ’16

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<thead>
<tr>
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<tbody>
<tr>
<td>ADC</td>
<td>45.7</td>
<td>56.6</td>
<td>24%</td>
<td>57.5</td>
<td>51.0</td>
<td></td>
<td></td>
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<tr>
<td>ADC- AWC</td>
<td>85.3</td>
<td>103.7</td>
<td>22%</td>
<td>104.8</td>
<td>91.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Position Control FTEs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21.6</td>
<td>155.8</td>
</tr>
<tr>
<td><strong>Employee FTEs</strong></td>
<td>113.3</td>
<td>114.0</td>
<td>1%</td>
<td>127.0</td>
<td>20.4</td>
<td>147.4</td>
<td></td>
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<tr>
<td><strong>Open positions</strong></td>
<td>6.2</td>
<td>9.1</td>
<td>48%</td>
<td>8.2</td>
<td></td>
<td>8.3</td>
<td></td>
</tr>
<tr>
<td><strong>Orientation in Training depts</strong></td>
<td>12.4</td>
<td>9.3</td>
<td>-25%</td>
<td>8.5</td>
<td></td>
<td>8.5</td>
<td></td>
</tr>
<tr>
<td><strong>FMLA- continuous</strong></td>
<td>2.7</td>
<td>1.9</td>
<td>-28%</td>
<td>2.2</td>
<td></td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td><strong>Operational vacancy FTEs</strong></td>
<td>21.3</td>
<td>20.3</td>
<td>-4%</td>
<td>18.9</td>
<td>19.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operational vacancy rate</strong></td>
<td>18%</td>
<td>17%</td>
<td>14%</td>
<td></td>
<td></td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Available to Work</td>
<td>98.2</td>
<td>102.8</td>
<td>5%</td>
<td>116.3</td>
<td>136.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Patient Care Staff FTEs Paid</td>
<td>118.5</td>
<td>149.5</td>
<td>26%</td>
<td>146.4</td>
<td>130.4</td>
<td>146.4</td>
<td></td>
</tr>
<tr>
<td><strong>Staff Needed- FTEs Paid less Education FTEs</strong></td>
<td>106.1</td>
<td>140.2</td>
<td>32%</td>
<td>137.8</td>
<td>125.8</td>
<td>137.8</td>
<td></td>
</tr>
<tr>
<td>Total Budgeted FTEs</td>
<td>124.1</td>
<td>127.2</td>
<td>3%</td>
<td>130.4</td>
<td>130.4</td>
<td>130.4</td>
<td></td>
</tr>
<tr>
<td><strong>Staffing Gap (Available to work versus paid)</strong></td>
<td>(7.9)</td>
<td>(37.5)</td>
<td>375%</td>
<td>(21.5)</td>
<td>(1.1)</td>
<td></td>
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</tbody>
</table>
ACH Operational Vacancy

- In 2015 operational vacancy rate of 18% in Akron
- Premium % of 7.7% (16.9 premium FTEs)

<table>
<thead>
<tr>
<th>Unit</th>
<th>Premium Costs</th>
<th>Premium %</th>
<th>Operational Vacancy FTEs</th>
<th>OVR</th>
<th>Staff Available</th>
<th>Staff Needed</th>
<th>Staffing Gap</th>
<th>Core Staff %</th>
<th>Premium Staff %</th>
<th>Supplemental Staff %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>$ 57,886</td>
<td>3%</td>
<td>3.1</td>
<td>10.0%</td>
<td>29.1</td>
<td>29.8</td>
<td>(0.7)</td>
<td>97.7%</td>
<td>1.3%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Unit 2</td>
<td>$ 43,192</td>
<td>2%</td>
<td>3.5</td>
<td>11.0%</td>
<td>25.9</td>
<td>30.1</td>
<td>(4.2)</td>
<td>86.0%</td>
<td>1.0%</td>
<td>13.0%</td>
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<tr>
<td>Unit 3</td>
<td>$ 110,595</td>
<td>4%</td>
<td>3.9</td>
<td>9%</td>
<td>38.4</td>
<td>39.9</td>
<td>(1.5)</td>
<td>96.2%</td>
<td>1.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Unit 4</td>
<td>$ 92,059</td>
<td>5%</td>
<td>3.8</td>
<td>14.0%</td>
<td>21.8</td>
<td>27.0</td>
<td>(5.3)</td>
<td>80.4%</td>
<td>2.6%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Unit 5</td>
<td>$ 92,766</td>
<td>5%</td>
<td>4.8</td>
<td>14.0%</td>
<td>27.5</td>
<td>30.5</td>
<td>(3.0)</td>
<td>90.2%</td>
<td>2.6%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Unit 6</td>
<td>$ 117,775</td>
<td>6%</td>
<td>4.0</td>
<td>11.0%</td>
<td>28.2</td>
<td>29.0</td>
<td>(0.8)</td>
<td>97.2%</td>
<td>2.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Unit 7</td>
<td>$ 586,785</td>
<td>11.3%</td>
<td>13.9</td>
<td>19.0%</td>
<td>61.2</td>
<td>68.2</td>
<td>(7.0)</td>
<td>89.7%</td>
<td>4.8%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Unit 8</td>
<td>$ 63,782</td>
<td>7.3%</td>
<td>1.7</td>
<td>12.0%</td>
<td>11.2</td>
<td>14.7</td>
<td>(2.1)</td>
<td>85.7%</td>
<td>3.4%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Unit 9</td>
<td>$ 75,359</td>
<td>5%</td>
<td>4.1</td>
<td>16.0%</td>
<td>22.3</td>
<td>23.0</td>
<td>(0.6)</td>
<td>15.4%</td>
<td>2.2%</td>
<td>82.4%</td>
</tr>
<tr>
<td>Unit 10</td>
<td>$ 1,351,718</td>
<td>13.5%</td>
<td>20.5</td>
<td>16.0%</td>
<td>99.6</td>
<td>127.1</td>
<td>(27.5)</td>
<td>78.4%</td>
<td>6.7%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Akron subtotal without float pool</td>
<td>$ 2,641,903</td>
<td>7.8%</td>
<td>63.3</td>
<td>19.0%</td>
<td>365.2</td>
<td>419.3</td>
<td>(52.7)</td>
<td>82.8%</td>
<td>4.0%</td>
<td>13.1%</td>
</tr>
</tbody>
</table>

Float Pool | $ 2,197 | 1% | 12.2 | 282.0% | 31.1 | 0.0 | 31.1 |

In Scope for SWAP | $ 2,644,100 | 7.7% | 75.5 | 18.0% | 396.3 | 419.3 | (21.6) | 82.8% | 4.0% | 13.1% |

Total of staffing gap and operating vacancy | 75.5 | 21.6 |
Predictive Hiring

• Higher premium costs are due to two main factors
  • Orientation is overlapping into peak season which is leading to higher premium costs since staff not available to work yet
  • Incremental volumes in Akron NICU and ED

• Operational vacancy needs to be much lower during peak season to close the staffing gap which is leading to high premium costs
## Right Sizing Position Control Using Data

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Initiative</th>
<th>FTE add</th>
<th>Number of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan, 2015</td>
<td>Conversion of Peak Temporary Positions to Permanent</td>
<td>29.7 RN</td>
<td>32 RN</td>
</tr>
<tr>
<td>Jan, 2015</td>
<td>Variable Position Control Reconciliation to Budget</td>
<td>22.5 RN</td>
<td>35 RN</td>
</tr>
<tr>
<td>May, 2015</td>
<td>KJP Staff additions - NICU</td>
<td>9.0 RN</td>
<td>10 RN</td>
</tr>
<tr>
<td>May, 2015</td>
<td>KJP Staff additions - OSC</td>
<td>0.6 RN</td>
<td>1 RN</td>
</tr>
<tr>
<td>May, 2015</td>
<td>KJP Staff additions - ED</td>
<td>2.4 RN</td>
<td>3 RN</td>
</tr>
<tr>
<td>Jan, 2016</td>
<td>Variable Position Control Reconciliation to Budget</td>
<td>22.8 RN</td>
<td>26 RN</td>
</tr>
<tr>
<td>Feb, 2016</td>
<td>Conversion of Peak Temporary Positions to Permanent</td>
<td>19.5 RN</td>
<td>11 RN</td>
</tr>
<tr>
<td>Feb, 2016</td>
<td>Addition of 31 new PRN Positions</td>
<td>0</td>
<td>31 RN</td>
</tr>
<tr>
<td>May, 2016</td>
<td>SWAP Initiative positions</td>
<td>28.1 RN</td>
<td>32 RN</td>
</tr>
<tr>
<td>May, 2016</td>
<td>SWAP Volume related positions</td>
<td>13.4 RN</td>
<td>19 RN</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>151.1 RN</strong></td>
<td><strong>200 RN</strong></td>
</tr>
</tbody>
</table>
Premium costs/day decreased 49% from the 1st Qtr
Metrics to Measure Success

• Develop acceptable metrics for:
  • Operational vacancy (%)
  • Premium costs – Overtime, Bonus and Travelers/Agency (%)
  • Premium costs/patient day ($)
  • Supplemental labor (%)
  • Balanced Scheduling (%)

<table>
<thead>
<tr>
<th>Proposed Metrics</th>
<th>2015 Year</th>
<th>2015 1st Quarter</th>
<th>2016 1st Quarter</th>
<th>Proposed Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium costs</td>
<td>8%</td>
<td>9%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>Premium costs/patient day</td>
<td>$ 38</td>
<td>$ 38</td>
<td>$ 72</td>
<td>$ 30</td>
</tr>
<tr>
<td>Core Staff %</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>Premium Staff %</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Supplemental Staff %</td>
<td>12%</td>
<td>11%</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>% Not schedule 24 hours before</td>
<td>NA</td>
<td>NA</td>
<td>13-15%</td>
<td>11%</td>
</tr>
<tr>
<td>Operational vacancy</td>
<td>15%</td>
<td>12%</td>
<td>12%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Communication Plan

- Mailed Letter to all Patient Services Staff
- Emails
- Staffing Plan Retreat Updates
- Nursing Newsletter
- Frequent updates shared at council meetings
- Presentations to different councils and committees

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SWAP Special Edition

Since October 2015, the Strategic Workforce Action Planning (SWAP) committee has worked to improve workforce engagement and a healthy work environment. The major focus of this ongoing work was to map out a strategy to keep the right staff at the right time for the right cost to care for patients. The SWAP committee has several subcommittees working on all the interconnected elements that make up the work environment ecosystem.

Figure 1: The Strategic Workforce Action Planning committee structure

The co-champions of this important work are Lisa Avitto, vice president, Patient Services/CNO and Walt Schoebel, vice president, Human Resources. Leading the steering committee are Christine Young, director of Nursing; Mark White, director of Patient Services Finance, and Megan Dormington, Clinical Resource Management council chair. The various subcommittee chairs are:

- Analytics:
  - Cheryl Legnociello, financial coordinator, Patient Services
  - Todd Philippe, HR Analyst

June 2016—Special Edition
NDNQI RN Satisfaction Results

Akron Region
August, 2016

Staffing and Resource Adequacy
–Improved from 2015: 2.89 to 2.92
NDNQI RN Satisfaction Results

Mahoning Valley Region August, 2016

Staffing and Resource Adequacy – Improved from 2015: 3.13 to 3.18
## Employee Engagement Survey – June 2016

<table>
<thead>
<tr>
<th>Items with GREATEST IMPROVEMENTS since last survey</th>
<th>Domain</th>
<th>2016 ACH</th>
<th>% Unfav</th>
<th>2013 ACH</th>
<th>Natl Child HC Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. My work unit is adequately staffed.</td>
<td>ORG</td>
<td>3.30</td>
<td>28%</td>
<td>+.16</td>
<td>-.09</td>
</tr>
</tbody>
</table>
We Aren’t Done Yet!

• Focus now shifts to process improvement work to improve the operational side of staffing and scheduling

• Themes:
  • Orientation Processes
  • Recruitment Efficiency
  • Reduction in Operational Vacancy
  • Staffing Office Operations
  • Balanced Scheduling
  • Float Pool Utilization
  • PRN Staff Utilization
  • Status Mix
  • Consistent Staffing Practices and Decision-Making
  • Creation of Staffing Playbook
SWAP Kaizen Events

• Three events, 4 hour each
• Facilitated by a member of the Center for Operations Excellence
• Participants: equal numbers of staff, coordinators, nurse managers with nursing directors as available resource
• Goal
  • Develop unified principles and standardized processes for clinical staffing to meet patient and family care needs
• Three Deliverables
  • Balanced and smooth scheduling
  • Proactive, predictive daily staffing practices
  • Playbook development
SWAP Kaizen Activity
6 Week Schedule Analysis

Unit: ____________________ Dates of Schedule: ____________________

Par Level = __________ (Number of nurses scheduled every day to meet average census/occupancy)

Average Budgeted Daily Census = __________

Staffing Deficit (Par Level – Actual number of nurses scheduled = deficit)

Number of 4 Hour Shifts that do not meet par level = _____/252 shifts

Number of 8 Hour Shifts that meet par level = _____/252 shifts

Number of 4 Hour Shifts that exceed par level = _____/252 shifts

Largest staffing deficit = _____ Day of Week: __________ Date: __________ Shift

Largest staffing overage = _____ Day of Week: __________ Date: __________ Shift

Operational Vacancy (Number of Staff on position control but unavailable to work)

FMLA: # of staff members = __________ Total FTE = __________

(Occasionally only)

Orientation: # of staff members = __________ Total FTE = __________

Vacancies: # of open positions = __________ Total FTE = __________

# of positions on hold due to productivity = __________

Replacement:

PRN: Total hours scheduled = __________ Total number of staff = __________

OT/PCC: Total hours scheduled = __________ Total number of staff = __________

PT Extra Hours: Total hours scheduled = __________ Total number of staff = __________

Prescheduled Float: Total hours scheduled = __________ Total number of staff = __________
References

• Hoying, C., Lecher, W. T., Mosko, D. D., Roberto, N., Mason, C., Murphy, S. W., ... & Schoettker, P. J. (2014). “On the Scene”: Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio. *Nursing Administration Quarterly, 38*(1), 27-54. doi: 10.1097/NAQ.00000000000000002


Contact Information

• Christine Young, MSN, MBA, RN, NEA-BC
  • Director of Nursing, Neonatal Services
  • cyoung2@chmca.org

• Matthew White, MBA, CPA
  • Director of Finance, Patient Services
  • mwhite@chmca.org

• Megan Dorrington, MSN, RN, CPN
  • Education Coordinator, Center of Nursing Professional Practice
  • mdorrington@chmca.org
Questions and Discussion