Transforming Adequate Staffing with a Voluntary System-wide Nursing Reallocation Program
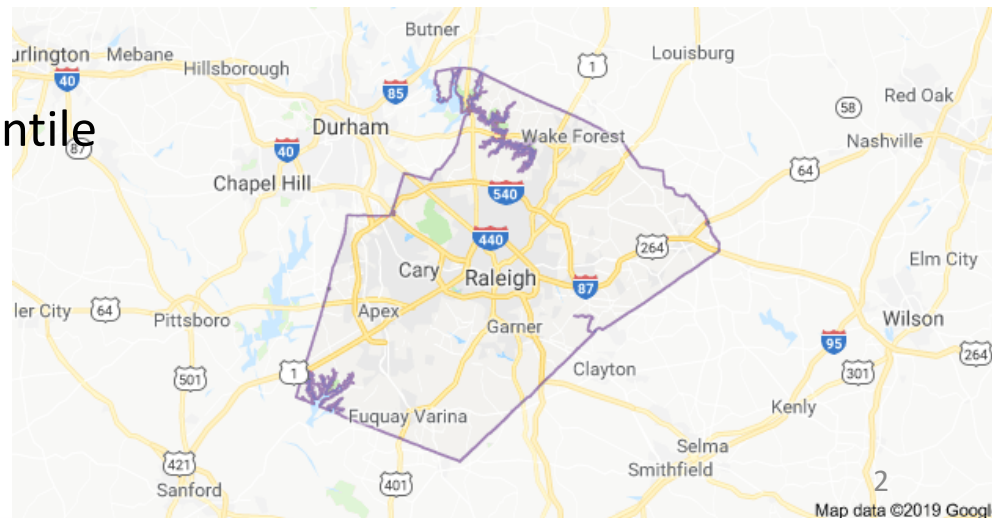
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Raleigh, NC, USA

WakeMed Health & Hospitals

- Private, not for profit, community based
- Largest HC provider in Wake Co., NC
  - 3-hospitals, 919 beds
- "Patients First" focus
- Nursing
  - Magnet® recognized
  - 3,100+ registered nurses
  - Nurse turnover 9.6 -11.9%
  - Nurse engagement 74th percentile

Problem

- Wide unit-to-unit variation in nurse floating, on call, & call back practices
  - Unfair pay practices
  - Staff dissatisfier

- Adequate nurse staffing is an essential component of HWEs that only staff nurses can evaluate for effectiveness and efficiency (AACN, 2005; Kramer & Schmalenberg, 2008).

- HWE is key for delivery of patient-centered quality care (Aiken et al, 2011; Unruh & Zhang, 2012).
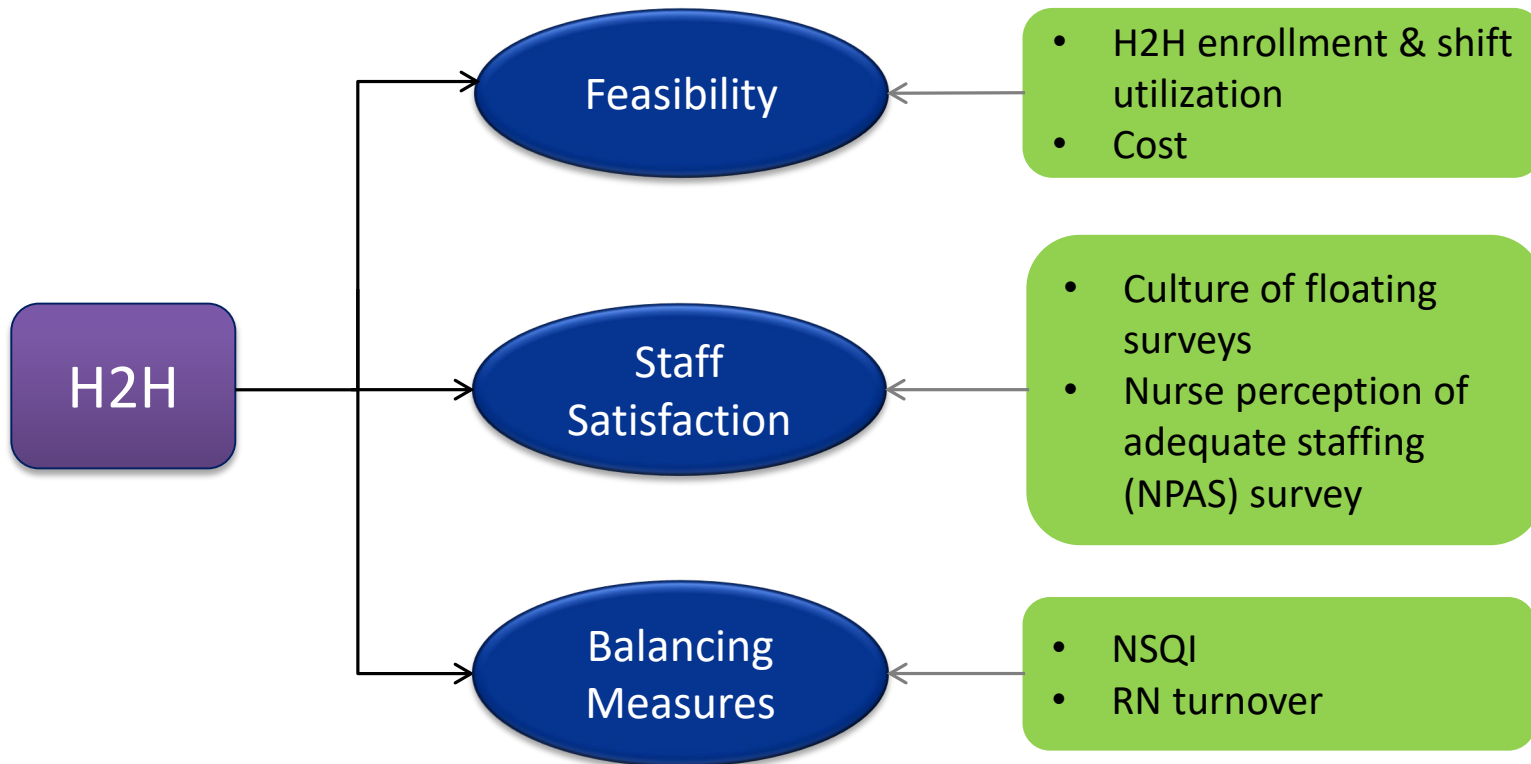
Background

- Our staffing model
  - Conventional, budget-based
  - Patient:nurse ratios with informal acuity estimates
  - Unmet needs
    - A centralized resource team (staffing pool)
    - Floating, on call, call back, and OT of regular staff

- Evidence sparse for additional ways to supplement staffing
  - One voluntary staffing model found (Good & Bishop, 2011).

Aims

- Standardize staffing practices and ensure fair pay practices
- Pilot a voluntary flexible staffing option (H2H) for existing staff
  - Innovate while remaining budget neutral
  - Feasible
  - Patients first
  - Staff satisfier
  - No adverse impact on quality and safety

Framework for Program Evaluation

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                              ┌──────────────────────────┐
                              │  • H2H enrollment & shift│
          ┌──────────────┐    │    utilization           │
          │ Feasibility  │◀───│  • Cost                  │
          └──────────────┘    └──────────────────────────┘

                              ┌──────────────────────────┐
                              │  • Culture of floating   │
┌──────┐  ┌──────────────┐    │    surveys               │
│ H2H  │─▶│    Staff     │◀───│  • Nurse perception of   │
└──────┘  │ Satisfaction │    │    adequate staffing     │
          └──────────────┘    │    (NPAS) survey         │
                              └──────────────────────────┘

                              ┌──────────────────────────┐
          ┌──────────────┐    │  • NSQI                  │
          │  Balancing   │◀───│  • RN turnover           │
          │   Measures   │    │                          │
          └──────────────┘    └──────────────────────────┘
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Methods

PI Design - Standard work, PDSA

Timeline		Interventions
2015		Task force formed
2016		Focus on appropriate staff reallocation and a welcoming culture
2017	Jan	Operational build, Policy revised
	Aug	Unit Welcome Letters with float experience surveys
	Sep	Educate, Promote, Assess barriers Pre NPAS survey
Oct - Dec		H2H Pilot End users invited to TF; Town halls & informational sessions
2018	Jan	Welcoming surveys end, Post NPAS survey conducted
	Mar	Differential increased
	May	Findings internally disseminated

Standardized Program

- On call eliminated

- Voluntary floating program added
  - Hospital nurses invited to enroll in Happy to Help (H2H)
    - Excluded "specialty" areas (ED, W&C, OR, Procedural, Ambulatory)
    - \> 1 year experience
  - Volunteer online for <u>open</u> 4-, 8-, 12- shifts (☺)
  - At start of shift, contacted by central staffing office to be released or fill an organizational need
    - Assignments based on expertise, experience, preference
  - $6.25/hr differential paid if worked

Cultural Aspects of Floating

- Putting out the best linen…
  - Created standardized unit Welcome Letters
  - Included a survey about the float experience
  - Surveys reviewed in real time with followed up, if indicated

Nurse Perceptions of Adequate Staffing (NPAS) Survey

- Survey developed using PAS concepts from the literature (AACN, n.d.; Huddleston, Mancini & Gray, 2017; Pejtersen, Kristensen, Borg & Bjorner, 2015)

  - 15 NPAS items, Likert, 7-point agreement

Current staffing policies, procedures, and processes

| Are…	Ensure…
Voluntary	Nurses feel supported
Appropriately incentivized	Job satisfaction
Benefit patients	Work-life balance
Benefit nurses	System-wide consistency
Benefit the organization	Skills and experience well matched to needs
Stressful	Accountability for meeting productivity targets
Fair & equitable	Right resources regardless of location
Floating nurses place greater demand on unit leadership	

Results:
H2H Utilization
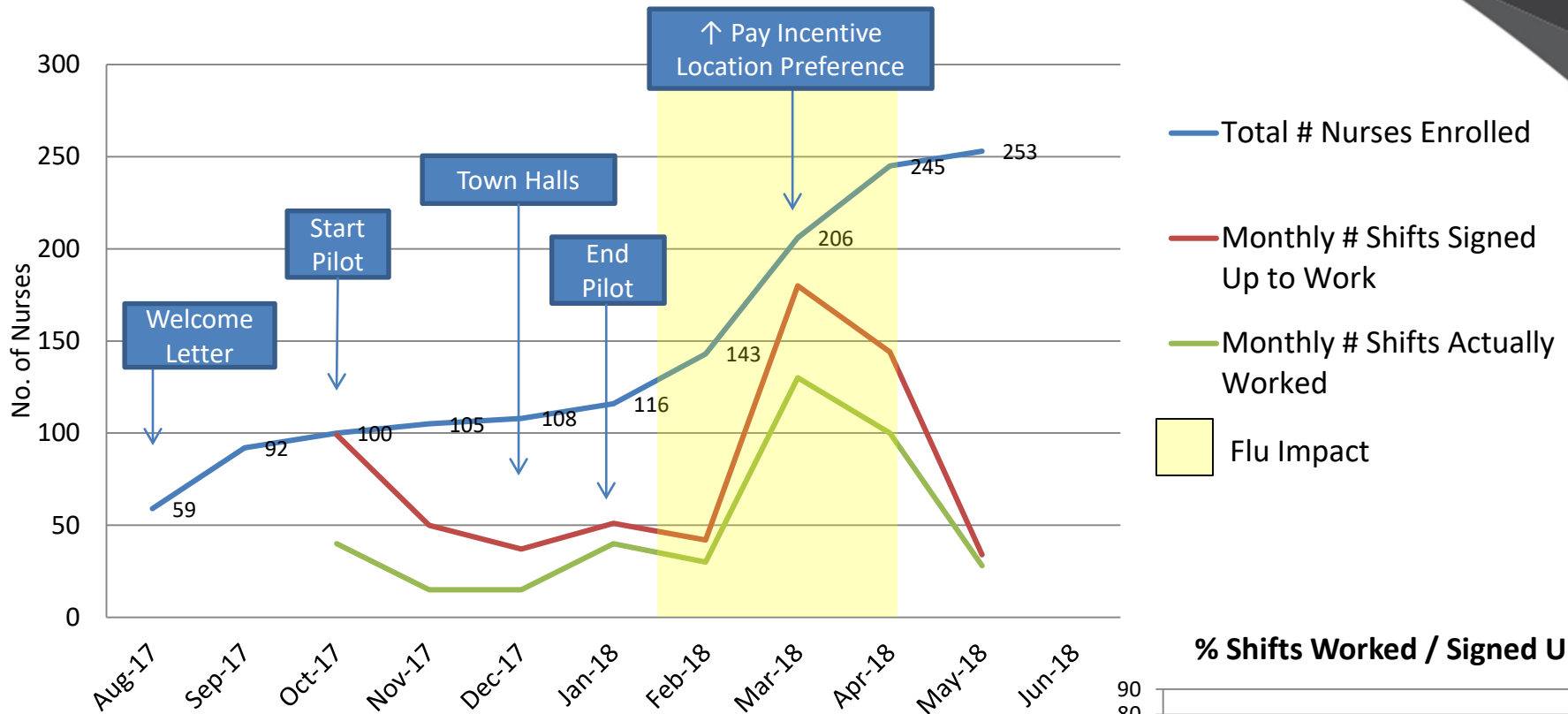
- ➢ Enrollment continued increasing
- ➢ Utilization of H2H shifts stabilized after 3 mo. at 70-80%
- ➢ On average, 5 H2H nurses/mo. floated to another campus
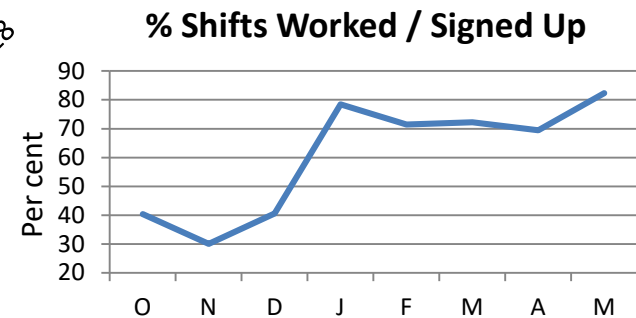
Cost Savings

Reallocation Costs by Year
(On call, Call back, OT, & Bonus Pay)
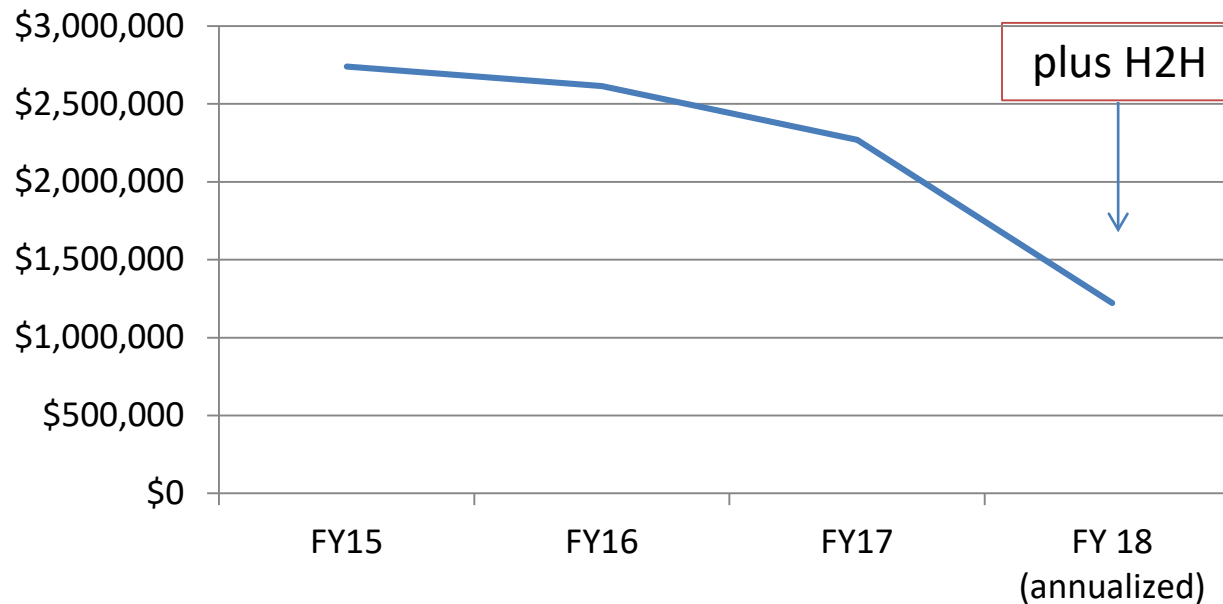
> *Staffing reallocation costs decreased ~$1.5 million/ 3 yrs;*
> *~ $1 million/ H2H year*

Welcome Surveys

Float pool nurses (N=127)

	Pre (Aug - Sep 2017)	Post (Oct – Dec 2017)	p
Meal break offered	87%	98%	.04*
	Mean	Mean	
Welcome Letter helpful	4.7	4.7	ns
Resources I needed	4.8	4.8	ns
Appropriate assignment	4.8	4.9	ns
Enjoyed working today	4.8	5.0	ns
Buddy supportive	4.6	5.0	.001*
Felt like part of the team	4.7	5.0	.001*
Care focused on excellence	4.7	4.9	.01*
Like to be assigned here again	3.9	4.4	.01*

➤ *5 of 9 items significantly improved*

Pre-Post NPAS Survey

- Anonymous, electronic
- Response rates 32%, 12%
- No difference by age, years in nursing, years in current position, shift, or campus.
- Post, more charge nurses (55% vs. 40% Pre); less floating (30% vs. 94% Pre), and fewer hours worked (Mean 25 vs 34 hrs/wk Pre)

Error Bars: 95% CI
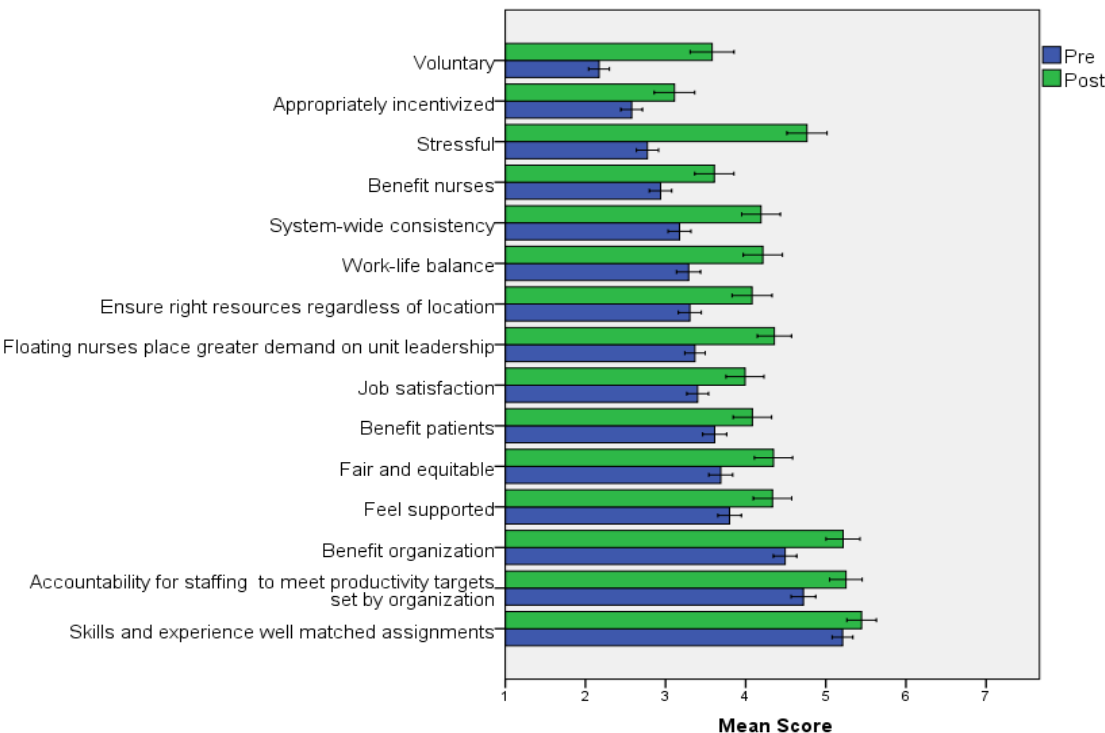
➢ All but 1 item significantly improved (all p ≤.001)

➢ 12 of 15 items scored > 4 (above neutral)

➢ 3 most improved :
-Less stressful (2.79 vs. 4.71)
-Voluntary (2.20 vs. 3.62)
-Consistency (3.21 vs. 4.23)

Enrollment Barriers and Opportunities

- Top 5 barriers (n=654), *Fear of…*
  - Inadequate support
  - Unfamiliar environment
  - Inadequate expertise
  - **Being canceled later in week**
  - **Canceled premium shift**
- Opportunities to increase H2H participation (n=425)
  - More **socialization** on similar units
  - More training on similar units
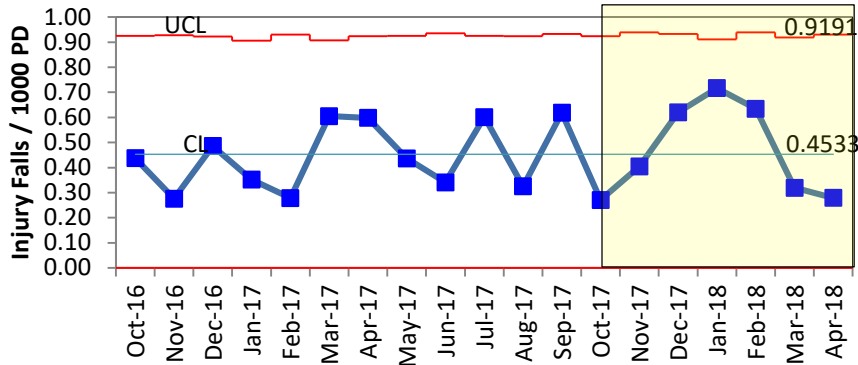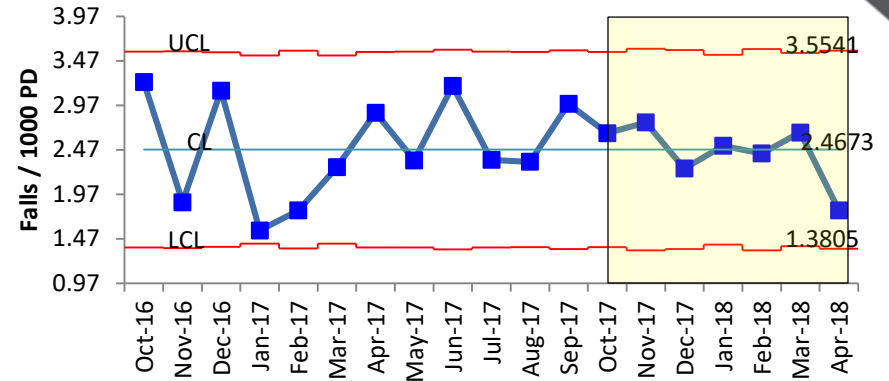 - More formal recognition for volunteering

Survey: Qualitative Data

- Unit contextual factors affected perceptions about H2H
  - Both chronically understaffed and well staffed units were less satisfied
  - Units previously proud to cover own needs felt penalized
- Aversion to being canceled
- Link between lack of H2H understanding and negative perceptions (unfair, inconsistent, not voluntary)

NSQI & RN Turnover: Processes In Control
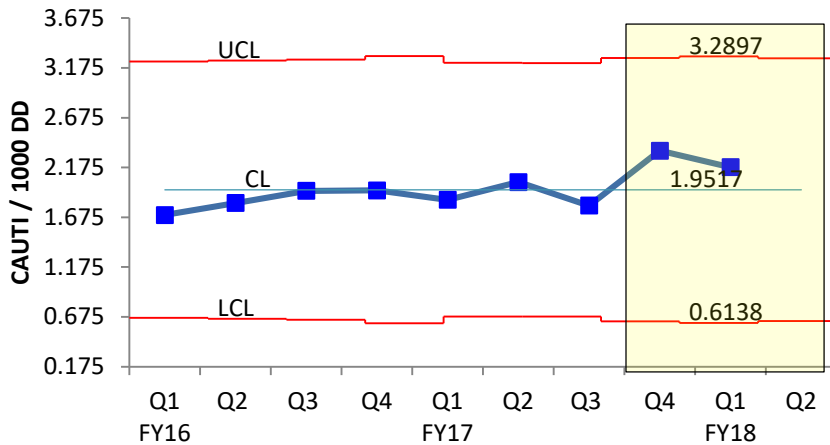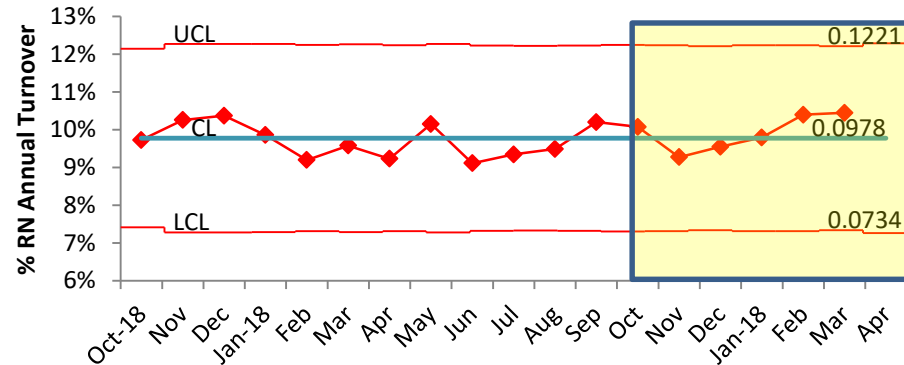

Injury Fall Rate

Fall Rate

CAUTI Rate

RN Turnover

Conclusions

- ## The H2H pilot
  - Incentivized voluntary floating for existing staff, provided an additional layer of flexible staffing for most service lines, and was associated with substantial cost savings without negative impact on NSQIs or turnover.
  - May have increased nurse perceptions of adequate staffing, strengthening one standard for HWE.

- ## Lessons learned
  - Welcoming culture was an important foundation.
  - After H2H implementation, nurses reported floating less often and working fewer hours/wk suggesting better reallocation of resources.
  - Some nurses prefer to work at campuses other than their primary one.
  - A PDSA approach allowed barriers to be incrementally identified and addressed.
    - H2H pay incentive increased to $10.25/hr in March 2018 .

Limitations

- Results not generalizable

- Reliability and validity of tools not established

- Short evaluation period and small H2H sample size

- NPAS Pre-Post sample differences may have affected findings.

- Unclear how an improved culture of floating may have impacted NPAS scores

- Ongoing program evaluation needed due to fluctuations in staffing needs (flu), increased incentives, and more data points for trending balancing measures.

- Not yet known how many H2H nurses are needed to assure optimal flexibility in meeting staffing needs.

H2H Taskforce

	Discipline	Role	Department
Rachel Rafferty, BSN, RN, CMSRN	Nursing	Clinical Nurse II	ED, Cary
Maxine Williams, BSN, RN, CMSRN	Nursing	Clinical Nurse II	1D CEA, Raleigh
Melissa McAllister, BSN, RN, CEN	Nursing	Supervisor/Educator	CED, Raleigh
Kristen Legrand, BSN, RN	Nursing	Supervisor/Educator	2 East Medicine, Cary
Christine Powers, BSN, RN, RN-BC	Nursing	Manager	3W M/S, Cary
Kim Perdue, MSN, RN-BC	Nursing	System Manager	Staffing Resources and Patient Observation Services
Catrice Ayscue, BSN, RN, CNRN	Nursing	Manager	Neuro ICU and STICU, Raleigh
Sandra Van Scoy, BSN, RN, NE-BC	Nursing	Manager	3B CV Surgery Intermediate Care, Raleigh
Brigit Piercy, MHA, BSN, RN-BC	Nursing	Manager	5C Medicine, Raleigh
Sabrina Wells, MHA, BSN, RN	Nursing	Manager	1B, 1C and 1D CEAs, Raleigh
Dawn Craft, MSN, RN, HACP	Nursing	Clinical Administrator System Team Lead	Clinical Administration
Dianna D. Knight, MSN, RN, NEA-BC	Nursing	Director	Adult Acute Care Nursing Services, Raleigh
Sabrina Tyndall, MSN, RN, NEA-BC	IT	Executive Director	Clinical Informatics and Nursing Operations, System
Sandra Wheaton, MSN, RN, NE-BC	Nursing	System Director	Staffing Resources and Patient Observation Services
Pat Woltz, PhD, RN	Nursing	Director	Nursing Administration, Research & EBP, System
Lori Piatt, SPHR, SHRM-SCP	HR	System Director	Talent Acquisition & Diversity, System