

The Virtual Workplace: Or, what do nurses wear to work?

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Purpose

- Compare differences between a traditional in office and a virtual distributed telephonic nurse environment*

*aka Work at Home (WAH)

Design & Methodology

- Descriptive case study approach
- Population of Registered Nurses (RN) employed by a US health insurer
- Retrospective and concurrent reviews analyzed key, secondary and intangible factors
- Data collected from July 31, 2005 through January 8, 2006

Results

- 263 traditional in office and virtual distributed telephonic nurses (WAH)
 - 131 WAH nurses
 - 132 traditional in office nurses
- Analysis and discussion of key, secondary and intangible factors

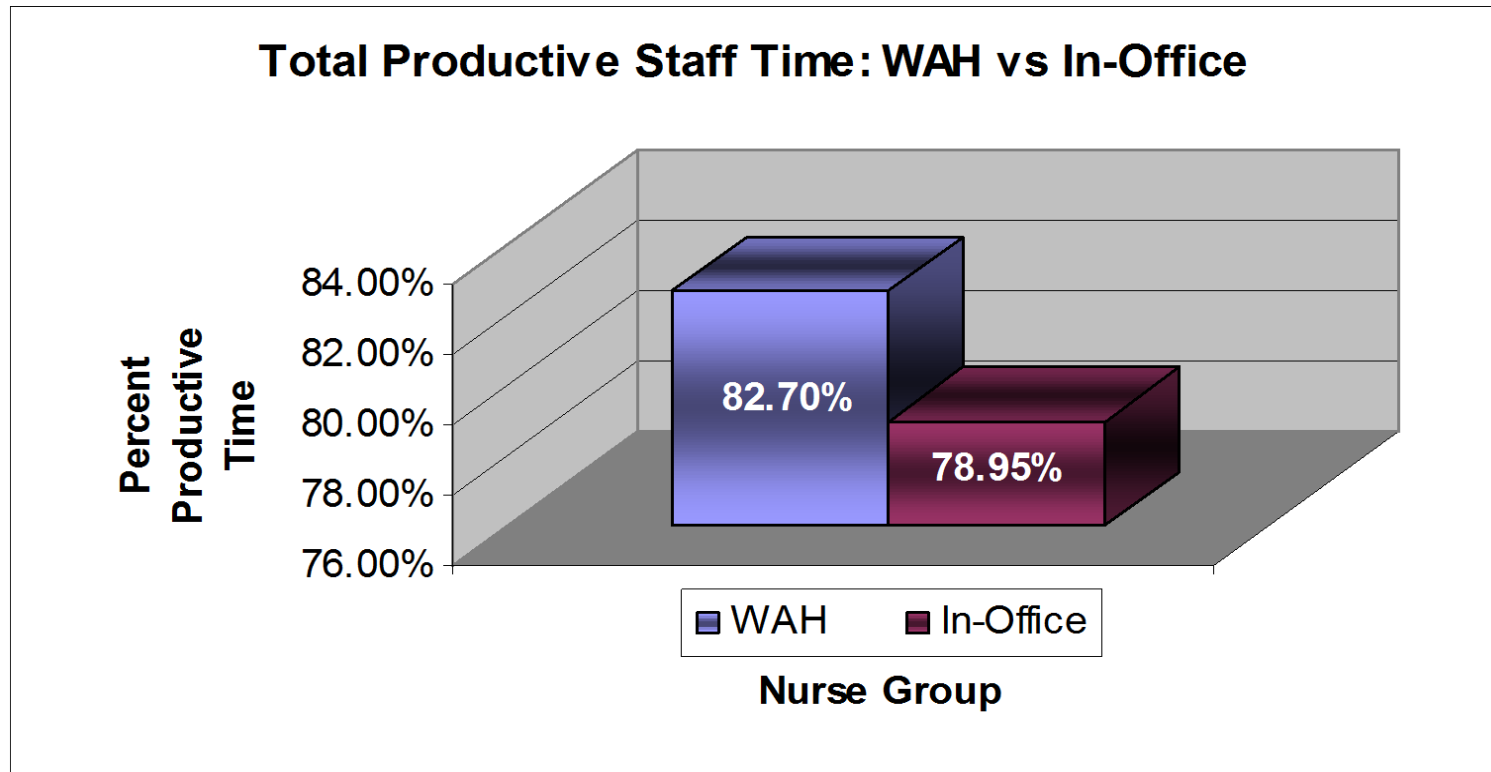
Key Factors

- Productivity
 - Overtime
- Attrition rate
- Quality scores
 - Cost data

Productivity

Productive Staff Time

Comparison of Productive Staff Time Between WAH and In-office Nurses For Weeks 10/23/2005 through 1/8/2006

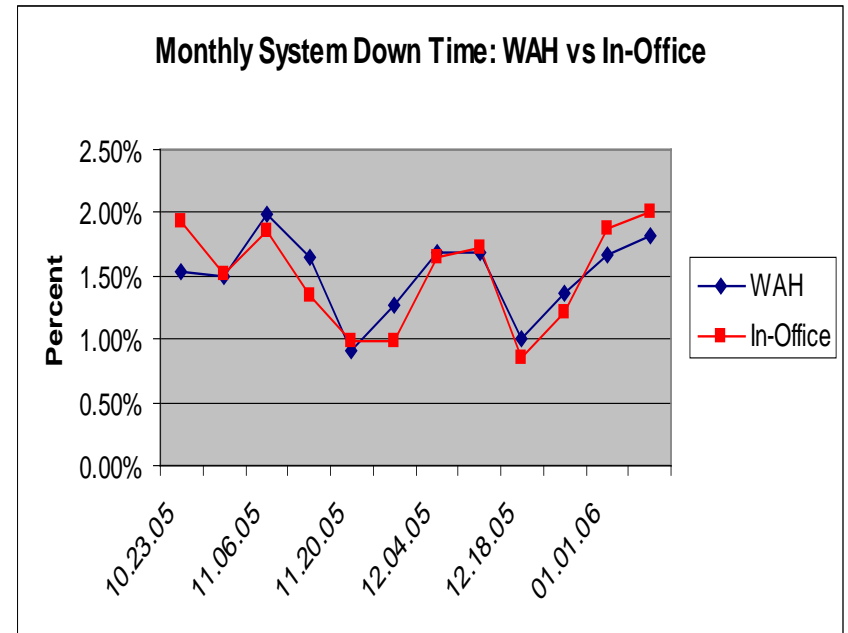
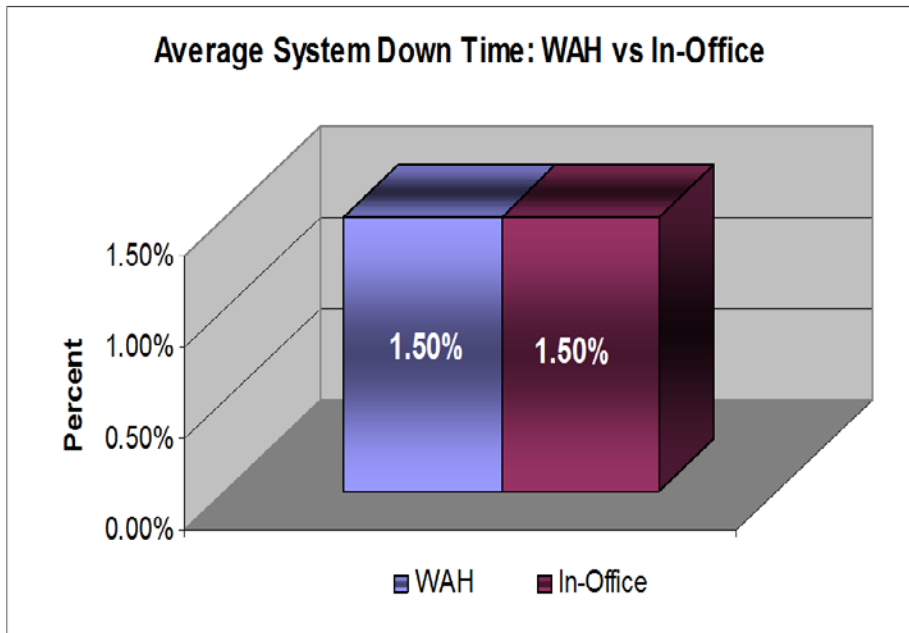


For the weeks tracked, WAH Nurses had significantly more productive hours proportionally than did In-Office Nurses.

Productivity

Comparison of Average Weekly Down Time between WAH and In-office Nurses

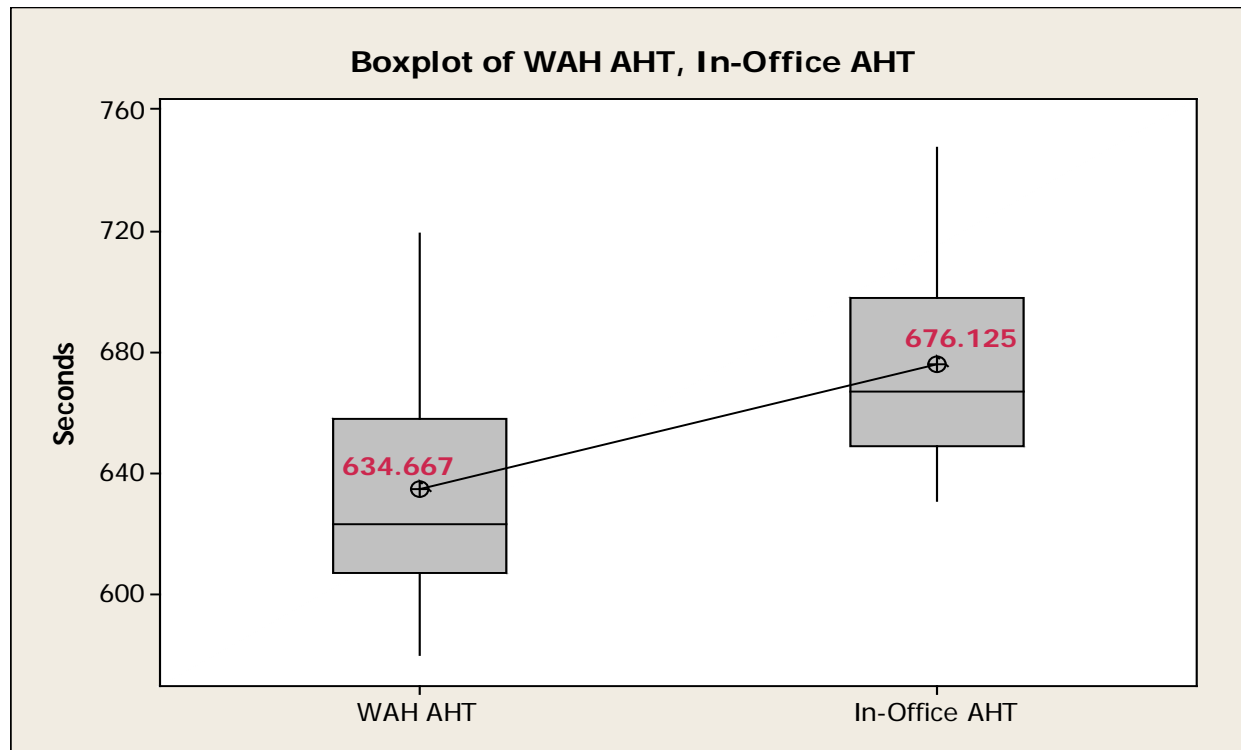
For Weeks 10/23/2005 through 1/8/2006



For the weeks tracked, there was no significant difference in % of system downtime between WAH and In-Office Nurses.

Productivity

Comparison of Average Handle Time Between WAH and In-office Nurses
for weeks 7/31/2005 through 1/8/2006

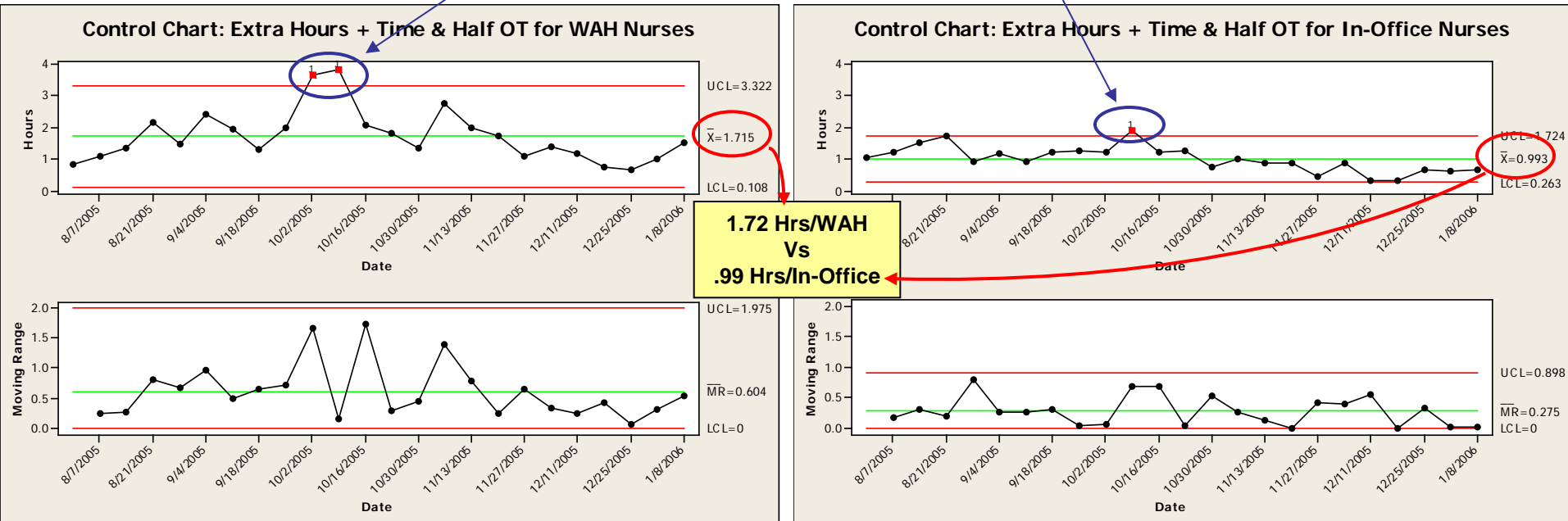


There is a significant difference in Average Handle Time between In-office and WAH Nurses.

Overtime

Comparison of Average Extra Hours & Time & Half Overtime for WAH and In-office Nurses
For Weeks 7/31/2005 through 1/8/2006

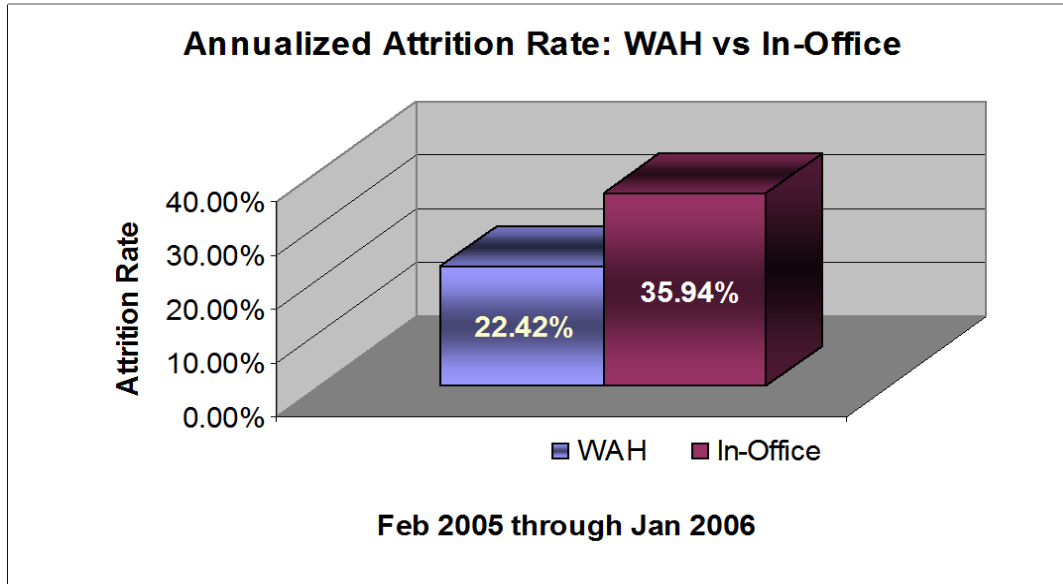
Extra time was requested during HC3 transition



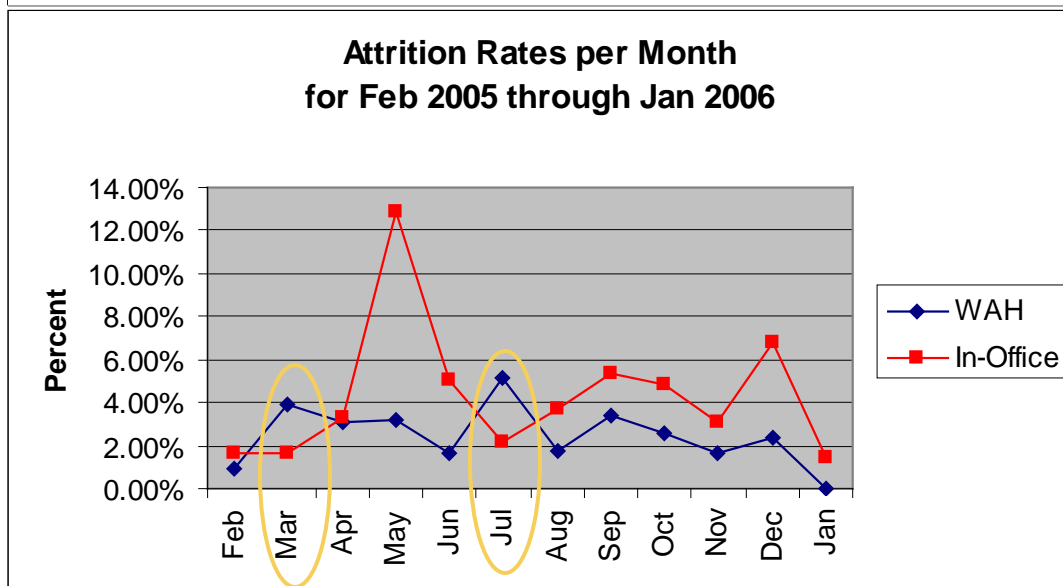
For the weeks tracked, WAH nurse were more likely to work overtime than In-office nurses.

Attrition Rate

Annualized Attrition Rate Comparison Between WAH and In-Office Nurses



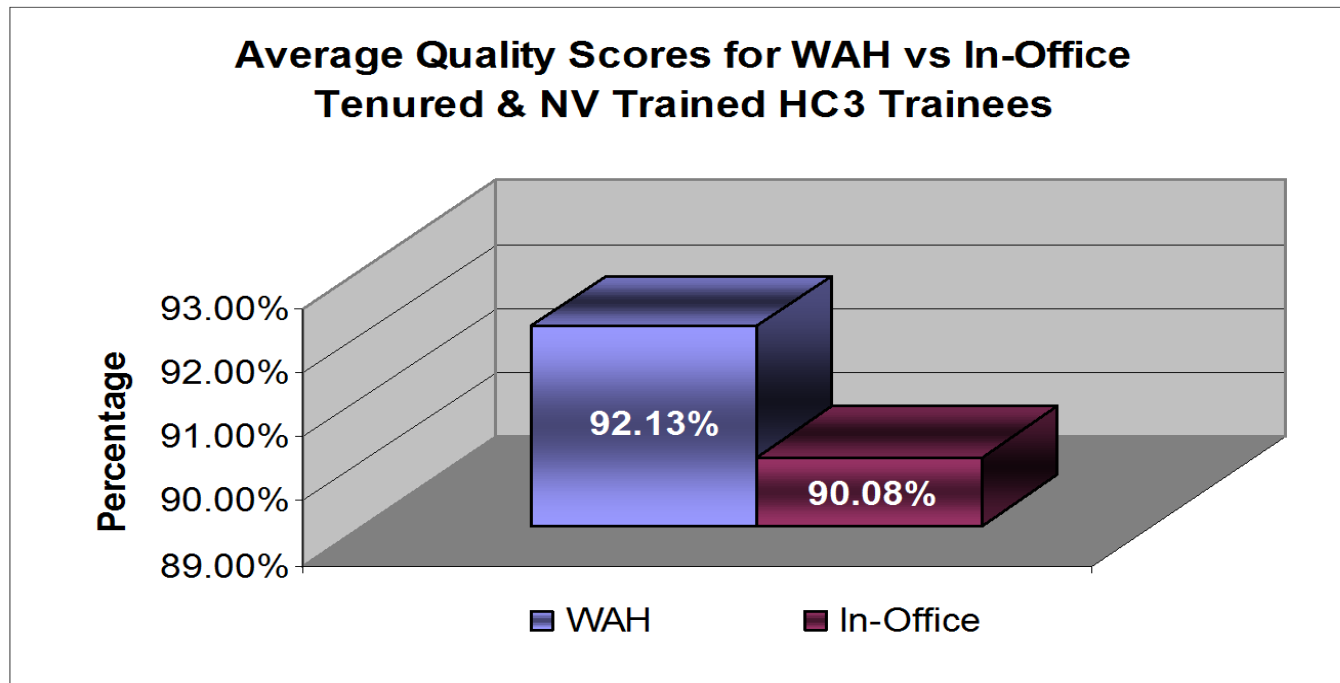
The annualized attrition rate for In-Office Nurses is slightly more than 50% greater than that of WAH Nurses.



With the exception of the months of March and July, the monthly attrition rate was consistently higher for In-Office Nurses than for WAH Nurses.

Quality Scores

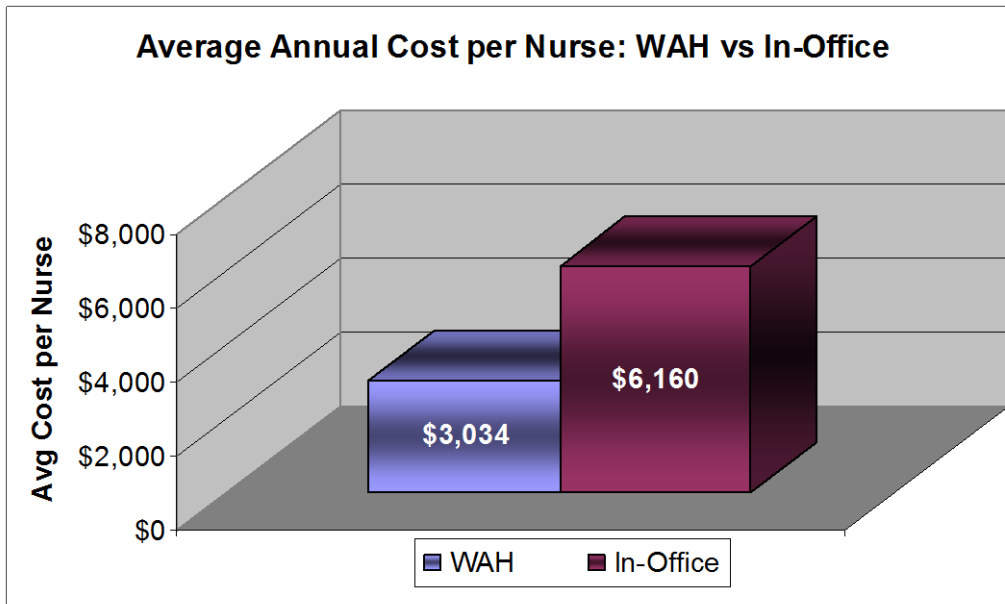
Comparison of Average Quality Scores Between WAH* and In-office Nurses
For Months April through December 2005



***Average WAH Nurse quality scores are significantly higher than average In-Office Nurse scores.**

Cost Data

Annualized Cost Comparison Between WAH and In- Office Nurses



	WAH	In-Office
*Workspace cost	\$1,151	\$5,200
Furniture, Fixture & Equipment		\$960
Port charges		***?
Business phone line	\$600	
Internet	\$900	
**WAH set-up	\$383	
Total annual cost per Nurse	\$3,034	\$6,160

*Workspace cost is the average between all 7 of the sites. For WAH Nurses workspace cost is the average cost per nurse for backup cube space.

**WAH set-up costs show as 1/3 the total as costs should be amortized over 3 years.

***Port charges could be as low as \$230/yr. And as high as \$1060/yr.

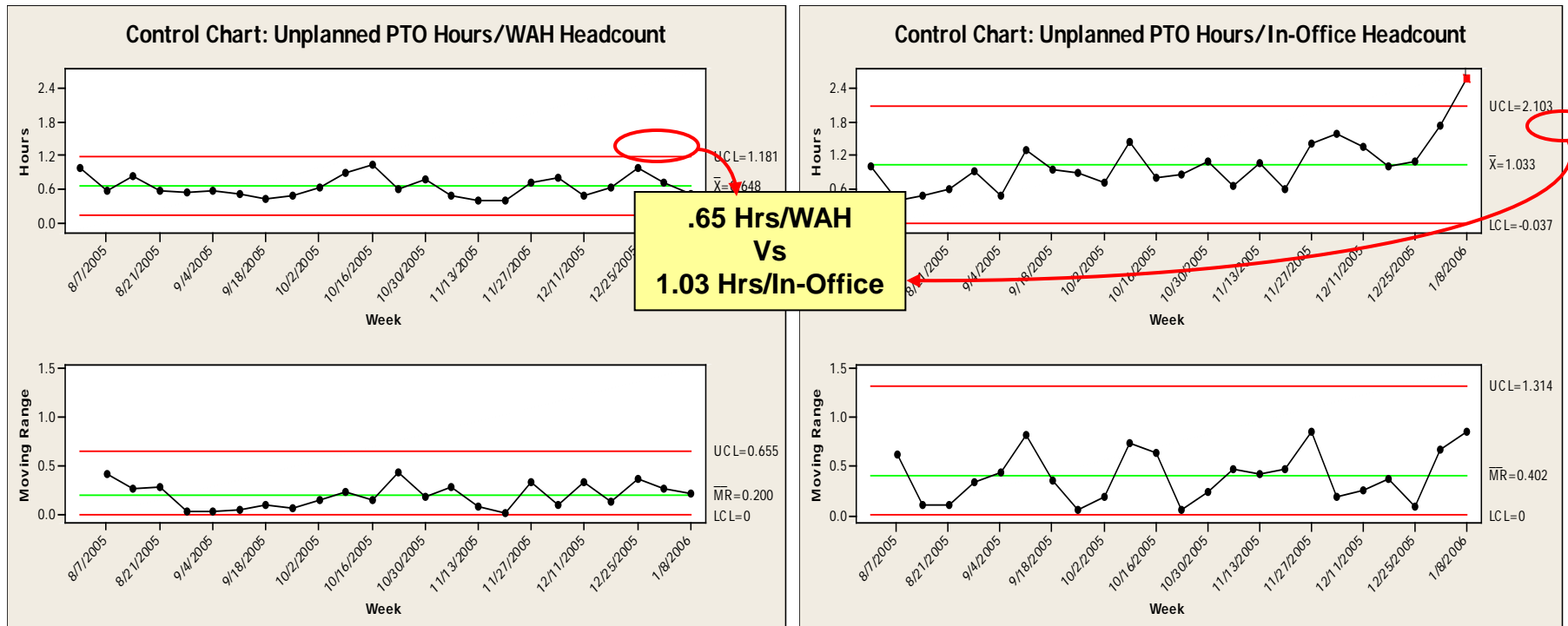
The annualized cost for In-Office Nurses is more than double that of WAH Nurses.

Secondary Factors

- Unplanned Personal Time Off (PTO)
- Family Medical Leave Act (FMLA) and Sick Time Day(STD)
- Adherence to schedule
- Conformance to schedule

Unplanned Personal Time Off (PTO)

Comparison of Unplanned PTO – Hours per Headcount - for WAH and In-office Nurses
For Weeks 7/31/2005 through 1/8/2006

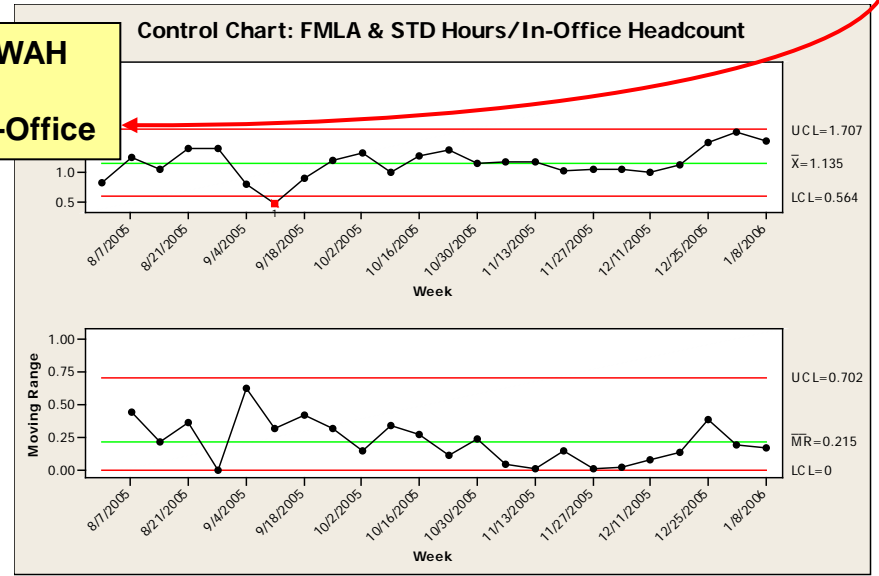
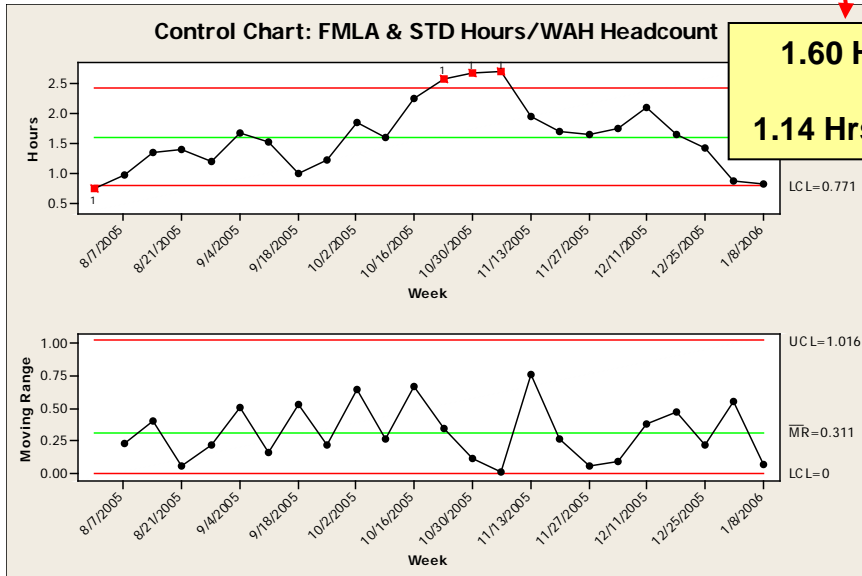


On Average, In-Office Nurses had .4 hrs (slightly more than half again as much) more unplanned PTO time per Nurse than WAH Nurses.

FMLA and STD

Comparison of FMLA and STD – Hours per Headcount for WAH and In-office Nurses - Weeks 7/31/2005 through 1/8/2006

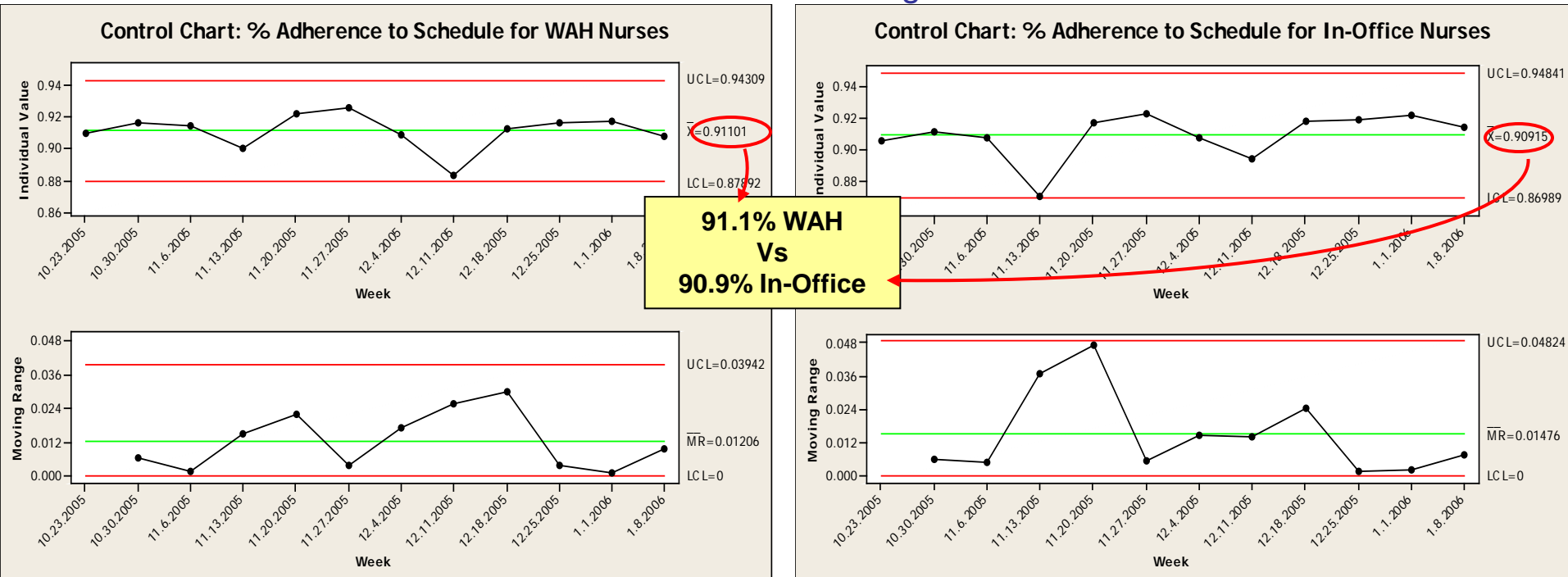
Out of control for these 3 Weeks



On Average, WAH Nurses had just under a half-hr more FMLA & STD time per Nurse than In-Office Nurses.

Adherence to Schedule

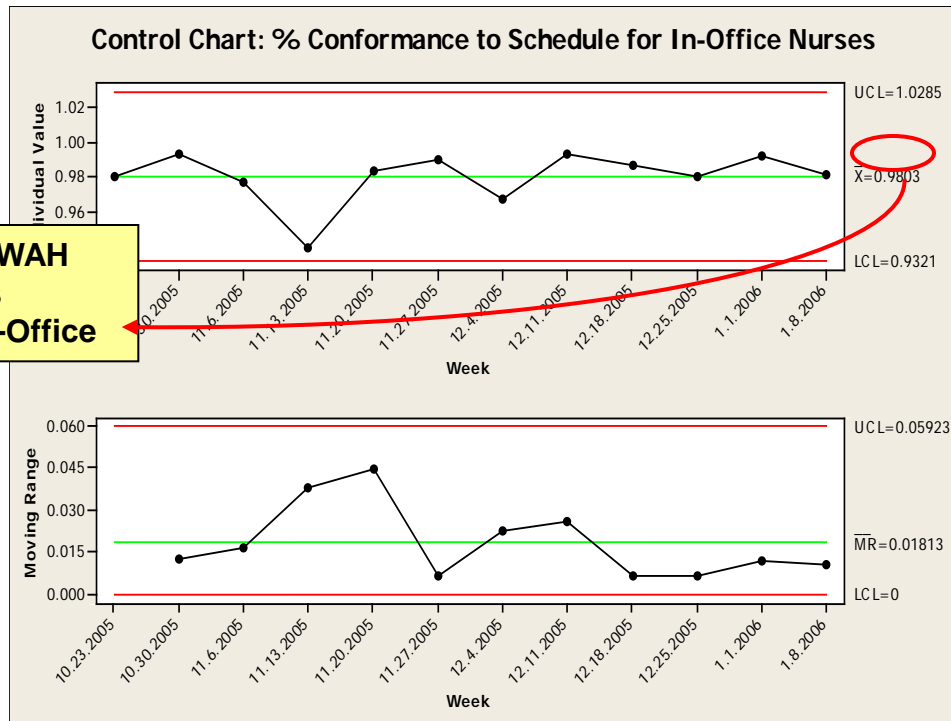
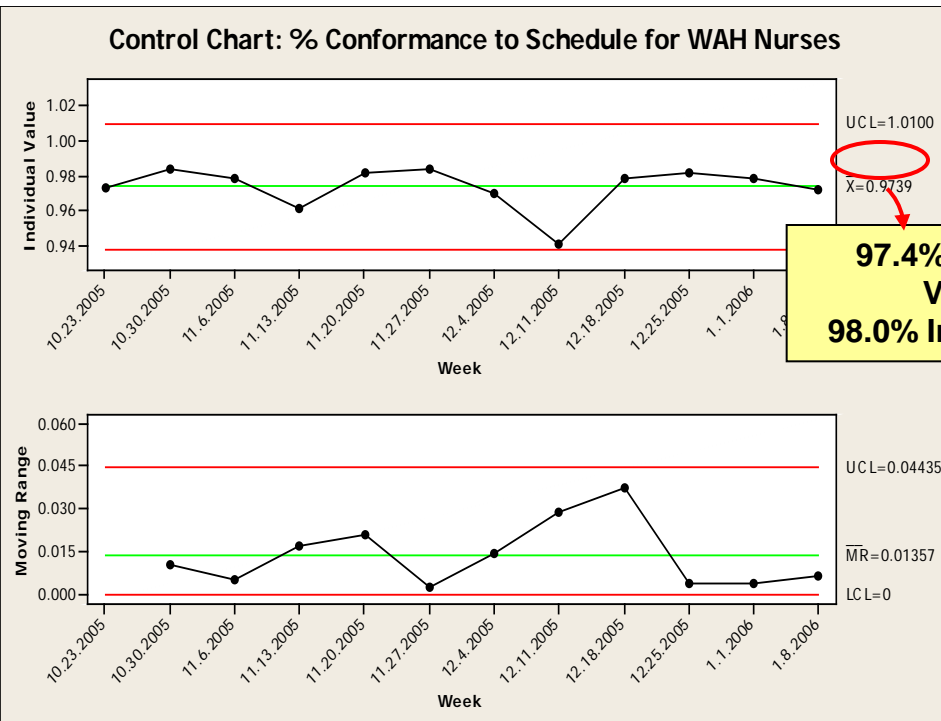
Comparison of Percent Adherence to Schedule for WAH and In-office Nurses
For Weeks 10/23/2005 through 1/8/2006



There is minimal difference in adherence to schedule for WAH Nurses vs. In-Office Nurses.

Conformance to Schedule

Comparison of Percent Conformance to Schedule for WAH and In-office Nurses
For Weeks 10/23/2005 through 1/8/2006



**There is minimal difference in conformance to schedule
for WAH Nurses vs. In-Office Nurses.**

Intangibles

Advantages with WAH Nurses:

Responses to job openings when WAH is advertised as an option are at least double than when WAH is not specified as an option. This is anecdotal information from Site Directors. One Example: Ohio had 30 applicants for an opening when WAH was not promoted and 100+ applicants when it was.

WAH nurses that are at .7 FTE or lower are required to put in an additional 12 hours per month depending on call volumes and business need.

There is lower loss of productive time during inclement weather due to the elimination of travel time.

There is minimal impact to WAH nurses as a group when there is a power outage, e.g., only 1 WAH nurse may be impacted if their location suffers an outage while a number of In-Office nurses are impacted if a site suffers an outage.

If a WAH nurse is impacted by a power outage or internet problems, the nurse can go into the office and use one of the backup cubes to take calls.

Advantages with In-Office Nurses:

Easier access to a nurse for spontaneous 1 on 1 meeting with a supervisor. (This advantage is mitigated somewhat by using Sametime with WAH nurses.)

A sense of camaraderie among In-Office nurses. (This is one complaint made by WAH nurses.)

Easier and quicker access to information for handling workarounds.

Able to more quickly respond to urgent situations.

Intangibles

Advantages with WAH Nurses (Cont.):

Meetings and trainings for WAH nurses are often done outside the normal schedule to minimize lost production time.

There is a reduced risk of an ill WAH nurse infecting other nurses.

If a pandemic occurs, WAH nurses may be able to staff a functioning NL call center because of reduced exposure to the disease.

WAH option has been used to entice nurses to voluntarily take less desirable shifts when business needs dictate.

When performance criteria for selecting WAH nurses is properly applied at mixed WAH and In-office sites, it is an incentive to nurses to raise and maintain a higher performance level.

WAH nurses are more willing to put in short periods on the phones (1 or 2 hours) outside their shift schedule.

Advantages with In-Office Nurses:



Key Factor	Advantage		
	WAH	In-Office	Neutral
Productivity - Productive Staff Time	X		
Productivity - System Downtime			X
Productivity - AHT	X		
Overtime	X		
Attrition	X		
Quality Scores	X		
Cost	X		
Secondary Factors			
Unplanned PTO	X		
FLMA & STD		X	
Adherence to Schedule			X
Conformance to Schedule			X
Intangible Factors	X		

Conclusion

There are significant business advantages for a nurse call center WAH Program.

Conclusion

- Health insurers have begun to adopt virtual work places
- Nurses who work for health insurers have joined the ranks of virtual workers at virtual work places
- Potential for an over whelming percentage of nurses to work in a virtual environment
- Healthcare IT executives suggest that remote workers save the company money

Serendipity

- Increased job satisfaction expressed verbally by WAH nurses

Limitations

- Small sample size
- Limited, non-consecutive data sets analyzed
- One health insurer
- Inability to generalize across other health insurers
- Need for IRB or Privacy Board Review

Implications

- Places nurses can practice:
 - Hospital
 - Clinic
 - University
 - Internationally
 - Virtually from the comfort of their own home

Choices



[You Tube Video](#)

Thank you!

