

A Step Forward: Our Journey to Implement Hourly Rounding including Step Tracking and Staff Nurse Perceptions of Barriers and Solutions

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Disclosures to Participants

I would like to note that I have no financial or other conflicts to disclose.

Objectives

- After completing this activity, the learner will:
 - identify key data analysis surrounding the relationship between hourly rounding (HR) and patient safety
 - define HR strategies effective in program implementation
 - define nursing staff identified barriers and solutions to HR implementation

Who remembers trying HR?

- How many times did you try?
- What tools did you try?
- Any successes that were hardwired?

Hourly Rounding Log:

7A _____	8A _____	9A _____	10A _____
11A _____	12P _____	1P _____	2P _____
3P _____	4P _____	5P _____	6P _____
7P _____	8P _____	9P _____	10P _____
11P _____	12A _____	1A _____	2P _____
3A _____	4A _____	5A _____	6A _____

HOURLY ROUNDING

Pain (Dolor) Personal Needs (Necesitas Personales) Position (Postion)

Pain Personal Needs Position 0600	Pain Personal Needs Position 0700	Pain Personal Needs Position 0800	Pain Personal Needs Position 0900	Pain Personal Needs Position 1000	Pain Personal Needs Position 1100
Pain Personal Needs Position 1200	Pain Personal Needs Position 1300	Pain Personal Needs Position 1400	Pain Personal Needs Position 1500	Pain Personal Needs Position 1600	Pain Personal Needs Position 1700
Pain Personal Needs Position 1800	Pain Personal Needs Position 1900	Pain Personal Needs Position 2000	Pain Personal Needs Position 2100	Pain Personal Needs Position 2200	Pain Personal Needs Position 2300
Pain Personal Needs Position 1200	Pain Personal Needs Position 0100	Pain Personal Needs Position 0200	Pain Personal Needs Position 0300	Pain Personal Needs Position 0400	Pain Personal Needs Position 0500

Date:	12am	2 am	4am	6am	7am	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9 pm	10pm	
Intentional rounds completed by: (place initials in box indicating time of rounds, check all items below that apply for that time)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
3 P-s																					
Pain Assessment	/	/	/					/					/								
Toileting (potty) - assist patient to restroom								/					/								
Positioning	/	/	/					/					/								
Environmental scan																					
Fall risk hazards: bed in low position, cords are secured	/	/	/					/					/								
Phone, water, tissue, urinal, bedside table, trashcan, and call light are within reach	/	/	/					/					/								
Temperature of room, blankets, pillows	/	/	/					/					/								
Prior to leaving room																					
Ask, "Is there anything else I can do for you? I have the time."								/					/								
Remind the patient that a staff member (let them know who) will be back in about an hour to round on them again.								/					/								
Document the round on the patient's chart.																					

Why Hourly Rounding?

- HR is used to improve:
 - patient safety
 - patient satisfaction
 - nursing staff satisfaction
- Implemented successfully, HR can decrease:
 - call lights
 - patient falls

Why Hourly Rounding?

- Little data available regarding nursing perceptions related to HR
- Investment of bedside nurses in HR is essential to successful:
 - implementation
 - sustainability

Something needed done

- CHI Health St. Francis had tried 4 times in the past
- Used:
 - Paper
 - White board
- These were not successful

Something needed done

- Staff not on board
- Current process not effective

Initial Hourly Rounding Study

- Qualitative pre- and post- design
 - Education on HR
 - Demonstration of skills
 - Implementation of HR software

Initial Hourly Rounding Study

- Convenience sample of bedside nurses and PCAs
 - Included staff at two separate data points
 - n=159 (2014)
 - n=137 (2016)

Initial Hourly Rounding Study

- Validated survey tool
 - Dr. Donna Fabry
 - Tool included questions about:
 - barriers and solutions to HR
 - reasons for HR
 - thoughts surrounding computerized HR tool

Additional Step Intervention

- The electronic HR tool vendor hypothesized that:
 - decreasing call lights through HR = decreased steps

Additional Step Intervention

- Nursing staff on the medical-surgical unit documented steps taken each shift
 - 2 month baseline pre-implementation of HR system
 - 6 months post-implementation
- Call light usage, on-time rounds, and falls were tracked

How did we do it?

- Step trackers
- Manual data aggregation
 - Nurse assignment data from EMR report
- Call light data
- Fall data from database
 - Same numbers that are entered for NDNQI
- HR data from electronic rounding tool

Fitbit #10 - Med/Surg Unit			If you leave the unit for tasks unrelated to patient care please take off your Fitbit.					
Date	First Name, Last Initial	Nurse Type	Time-In	Steps-In	Time-Out	Steps-Out	Patient Load	Patient Room Numbers
7/6	Becky S	RN PCA Charge	0555	0	1835	8399		
7/7	Julie	RN PCA Charge	0553	0	1843	6550		
7/7	Whitney W	RN PCA Charge	1850	1753	2359	?		
7/8	Whitney W	RN PCA Charge	0000	0	0630	3350		
7/8	Chanda S	RN PCA Charge	0635	3358	1845	11053		7695
7/8	Susie	RN PCA Charge	1845	11053	MN	16095 / 4012		9054
7/8	Leticia	RN PCA Charge	0630	4012	1830	22,903		18981
7/9	Susie	RN PCA Charge	MN	0	0630	3996		3996
7/10	Myka P	RN PCA Charge	0600	0	1900	8096		8096
7/11	Stephanee S	RN PCA Charge	0600	0	1830	12109		12109
7/11	Susie	RN PCA Charge	1830	12109	MN	19027		
7/12	Susie	RN PCA Charge	MN	0	0640	5153		12071
7/12	Wrandi	RN PCA Charge	0630	5153	1830	20063		14910
7/13	Julie	RN PCA Charge	0554	0				

Electronic Hourly Rounding Tool (EHRT)

Rounding Map at Nurses' Station

The screenshot displays a web application interface for a nurses' station. The browser address bar shows the URL <http://cmgrinobl01/vigilance/>. The page header includes the text "Every Patient, Every Hour" and the date and time "15 February 2017 at 04:19 pm | 5 Ortho/Med/Surg". The user is logged in as "aburch" in "Room 501".

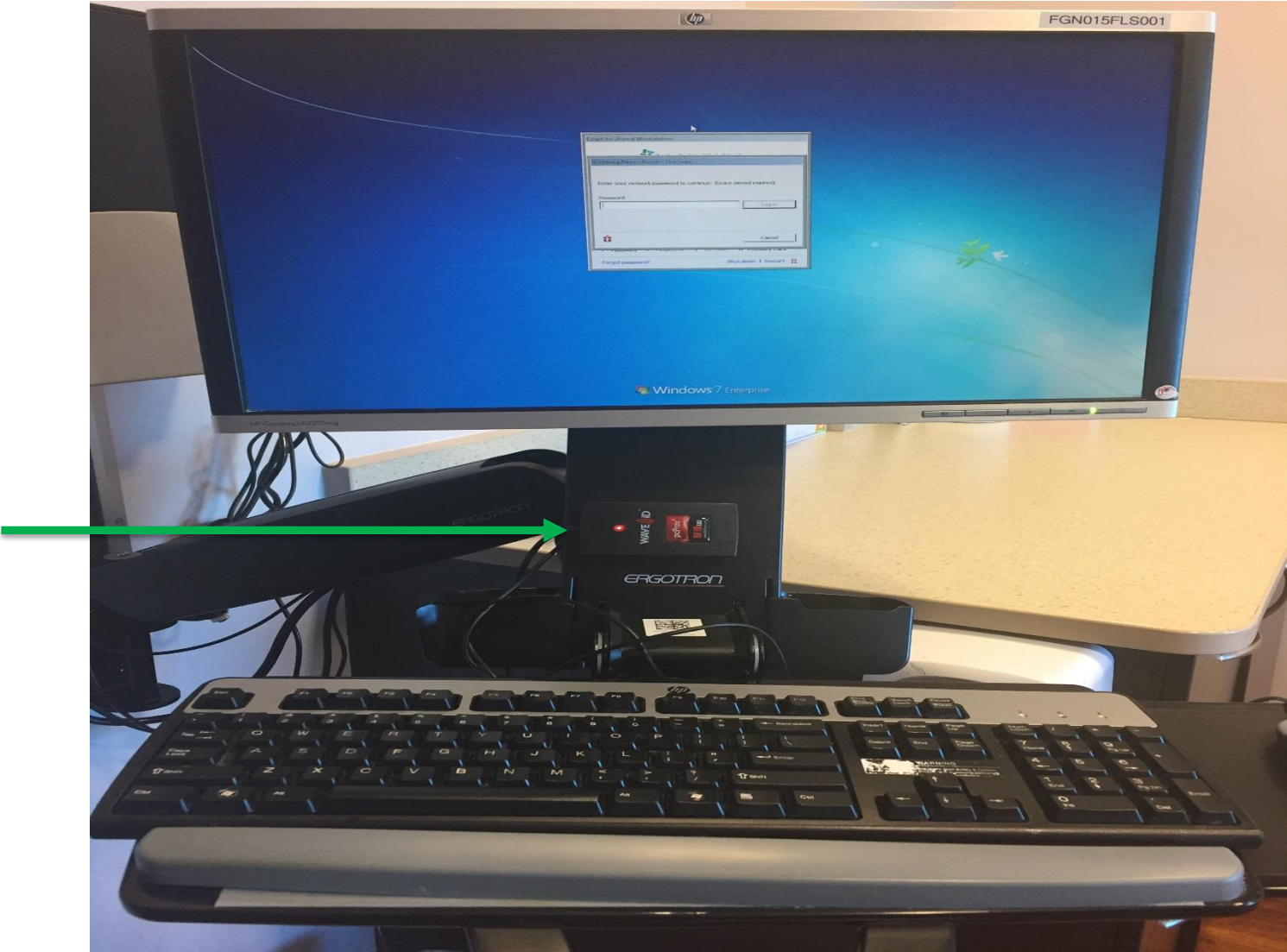
The main content area is divided into two parts: a floor plan on the left and a data table on the right. The floor plan shows a series of rooms numbered 501 through 533. Rooms 518, 519, 520, 521, 522, 523, 529, and 528 are highlighted in various colors (orange, blue, green) to indicate their current status.

The data table on the right provides a detailed view of the patient status for each room. The table has four columns: Status, Room, Time Left, and Staff.

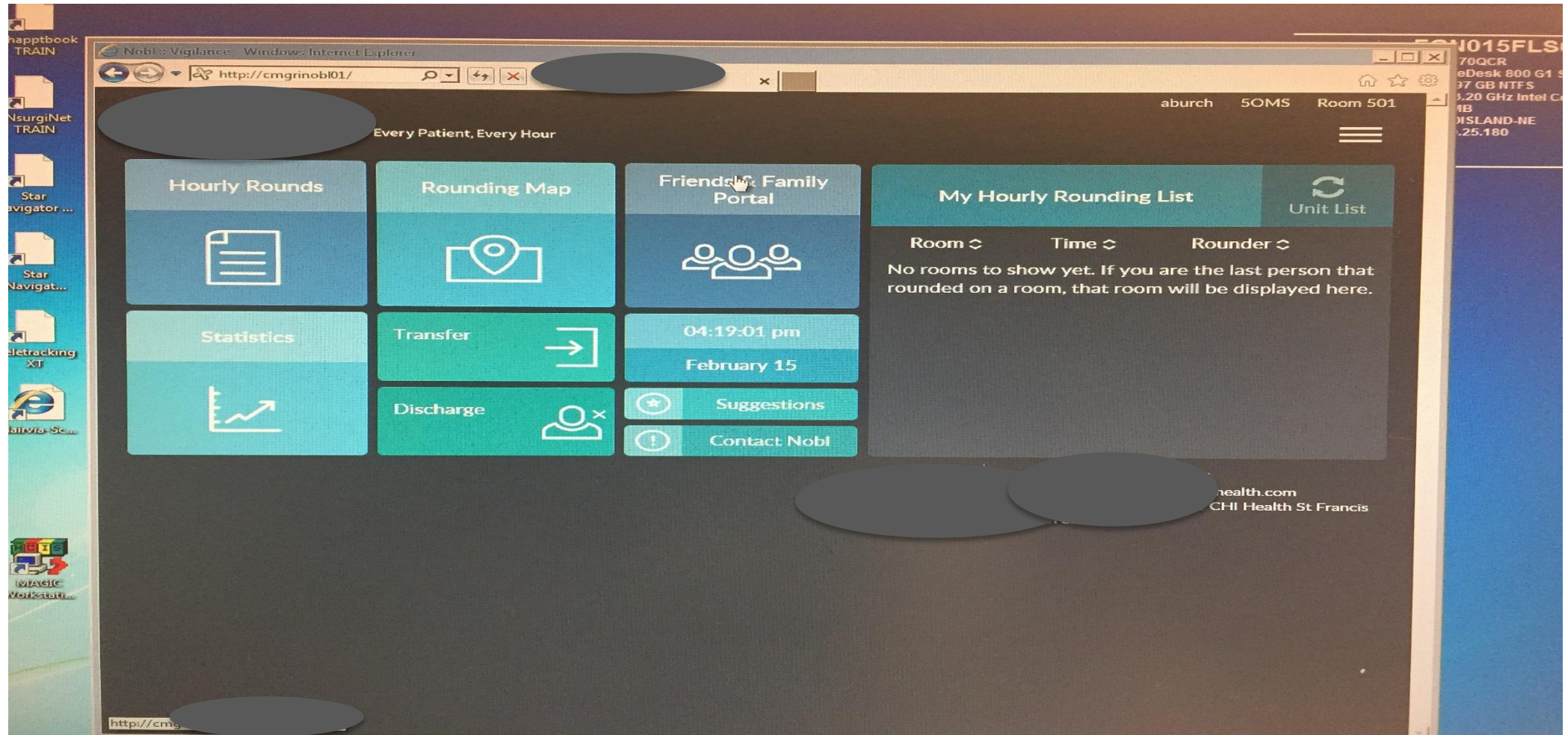
Status	Room	Time Left	Staff
OUT	512	-95 mins	Tiffany A
!	522	-48 mins	Kayla F
OUT	517	-40 mins	Holly P
!	519	-33 mins	Holly P
!	521	-17 mins	Lora M
L	531	-6 mins	Glenda S
✓	518	0 mins	Holly P
✓	520	5 mins	Holly P
✓	529	5 mins	Glenda S
✓	528	11 mins	Glenda S

The footer of the application includes the text "health.com" and "for CHI Health St Francis".

Tap and Go- essential!



First screen



First Round- Room Code

The screenshot shows a web browser window titled "Nobl: Vigilance Hour Round - Windows Internet Explorer". The address bar contains "http://cmgrinob01/vigilance/". The page content includes a header with "aburch SOMS Room 501" and "Room not active | Hourly Rounds". The main area is divided into "Hourly Rounding Tasks" and "Patient Comments". A modal dialog box is centered on the screen with the following text:

New Patient Rounding Reminder

1. Educate the patient about why we hourly round at our hospital.
2. Inform the patient and their family about the available Friends and Family Portal.

Active Room Code

40CW

<http://family.chihealthstfrancis.org/40CW>

Please note: The comments that you enter will be seen by the patient's friends and family. Meaningful comments will be appreciated.

Next

The background interface shows a list of tasks under "Hourly Rounding Tasks" including Pain, Personal Needs, Position, Additional Comfort Needs, Environmental Assessment, Bed Alarm, Complete All Tasks, Hand-Washing Procedure, Upon Entry, Upon Exit, and Complete All Tasks. The "Patient Comments" section includes a "Submit Hourly Round" button and a note: "If you are the last person that rounded at room will be displayed here." The footer of the page includes "th.com Health St Francis".

Fall Assessment- No Risk

The screenshot shows a web browser window displaying a fall assessment interface. A modal dialog box titled "Fall Risk Settings" is overlaid on the page. The dialog contains the following text and options:

Fall Risk Settings

Is this patient a high fall risk?
Let us help you remember to set the TABS monitor or bed alarm for high fall risk patients.

No. This patient is not a high fall risk.
 Yes. This patient is a high fall risk.

Buttons: Back, Done

The background interface includes sections for "Hourly Rounding Tasks" (Pain, Personal Needs, Position, Additional Comfort Needs, Environmental Assessment, Bed Alarm, Complete All Tasks) and "Hand-Washing Procedures" (Upon Entry, Upon Exit, Complete All Tasks). A "Submit Hourly Round" button is visible at the bottom. The browser address bar shows "http://cmgrinobl01/vigilance/".

Screen Changes

The screenshot displays a web application interface for 'Vigilance Hour Round' in a browser window. The browser address bar shows 'http://cmgrinobl01/vigilance/'. The page header includes the user 'aburch', '5OMS', and 'Room 501'. A status indicator says 'Room not active | Hourly Rounds'. The main content is divided into two columns. The left column contains two sections: 'Hourly Rounding Tasks' and 'Hand-Washing Procedures'. The right column contains 'Patient Comments' and a 'Submit Hourly Round' button. Several elements are highlighted with grey ovals: the browser address bar, the 'Every Patient, Every Hour' text, the 'Complete All Tasks' button, the 'Submit Hourly Round' button, and the footer text 'om health St Francis'.

Every Patient, Every Hour

Room not active | Hourly Rounds

Hourly Rounding Tasks

Pain	<input checked="" type="checkbox"/>
Personal Needs	<input checked="" type="checkbox"/>
Position	<input checked="" type="checkbox"/>
Additional Comfort Needs	<input checked="" type="checkbox"/>
Environmental Assessment	<input checked="" type="checkbox"/>
Bed Alarm	<input type="checkbox"/>
Complete All Tasks	

Hand-Washing Procedures

Upon Entry	<input checked="" type="checkbox"/>
Upon Exit	<input checked="" type="checkbox"/>
All Tasks Complete	

Patient Comments

Patient pain level assessed.
Patient is out of bed and sitting in their chair.

Room ⌵ Time ⌵ Rounder ⌵

No rooms to show yet. If you are the last person that rounded on a room, that room will be displayed here.

Submit Hourly Round

om health St Francis

Reminder

The screenshot shows a web browser window displaying a patient care interface. The browser address bar shows `http://cmgrinobl01/vigilance/`. The page header includes the text "Every Patient, Every Hour" and "Room not active | Hourly Rounds".

The main content area is divided into two columns:

- Hourly Rounding Tasks:** A list of tasks with checkboxes. The first four tasks (Pain, Personal Needs, Position, Additional Comfort Needs) are marked as complete with checkmarks. The remaining tasks (Environmental Assessment, Bed Alarm) are not checked.
- Hand-Washing Procedures:** A list of procedures with checkboxes. "Upon Entry" and "Upon Exit" are marked as complete with checkmarks.

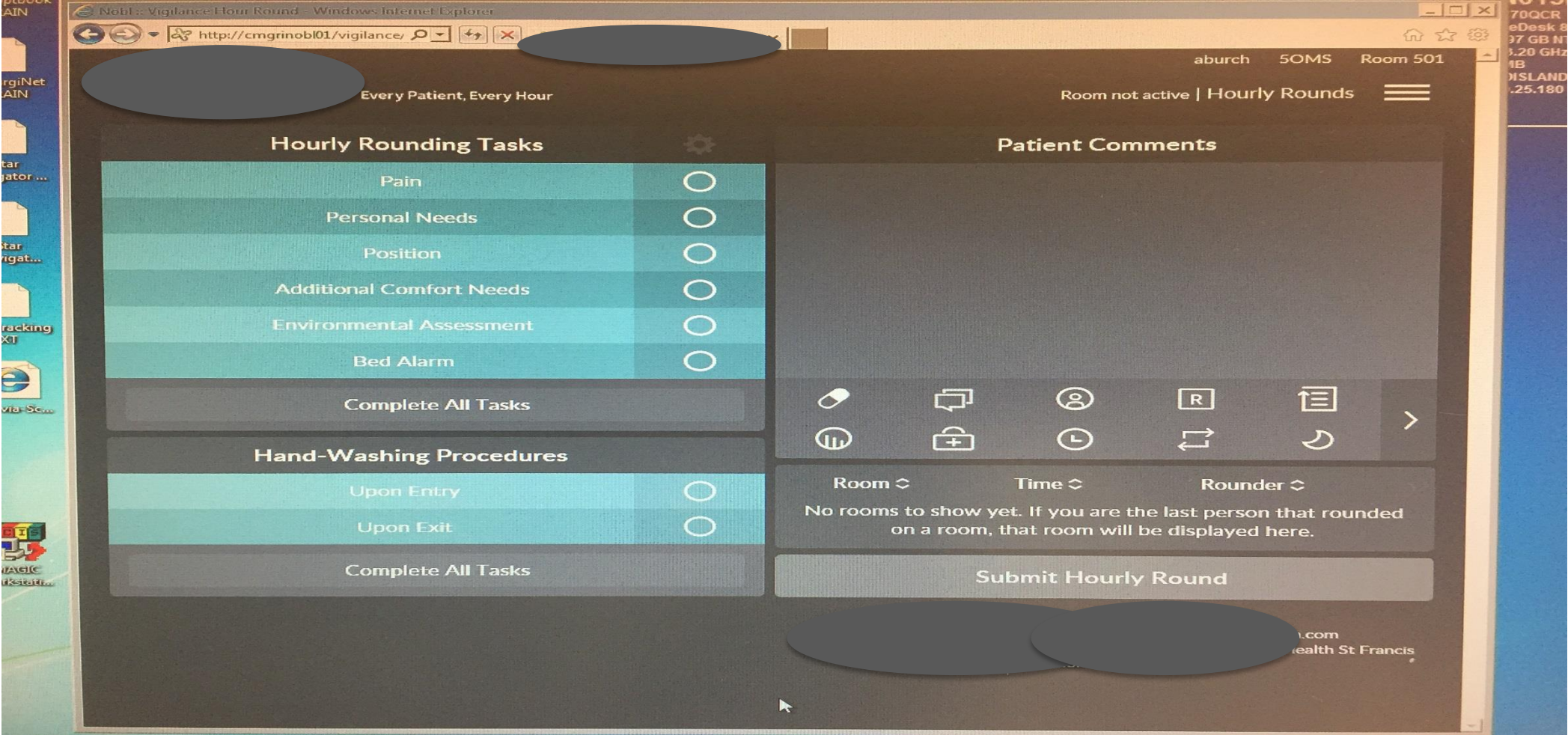
The right column contains "Patient Comments" with the text: "Patient pain level assessed. Patient is out of bed and sitting in their chair." Below this are icons for PT, RT, OT, and a message icon. At the bottom right, there is a "Submit Hourly Round" button and a message: "No rooms to show yet. If you are the last person that rounded on a room, that room will be displayed here."

A red and white warning modal box is overlaid in the center of the screen:

- Header:** A red bar with a white warning triangle icon and the text "This patient is a high fall risk."
- Body:** A white box with the text "Please ensure that either the TABS monitor or bed alarm is set."
- Footer:** A red button with the text "Okay, I've got it!"

At the bottom right of the page, the text ".com Health St Francis" is visible.

Rounding Screen



Icons Individualized to Unit

The screenshot displays a web application interface for patient care. The browser address bar shows the URL <http://cmgrinobl01/vigilance/>. The page header includes the user name 'aburch', the unit '5OMS', and the room number 'Room 501'. A status indicator shows 'Room not active | Hourly Rounds'. The main content area is divided into two columns. The left column contains 'Hourly Rounding Tasks' and 'Hand-Washing Procedures'. The right column contains 'Patient Comments' and a 'Submit Hourly Round' button. A notification bubble states 'Patient pain level assessed.'.

Task	Status
Pain	✓
Personal Needs	✓
Position	✓
Additional Comfort Needs	✓
Environmental Assessment	✓
Bed Alarm	○
Complete All Tasks	

Procedure	Status
Upon Entry	✓
Upon Exit	✓
All Tasks Complete	

Hourly Rounding Tasks

- Pain ✓
- Personal Needs ✓
- Position ✓
- Additional Comfort Needs ✓
- Environmental Assessment ✓
- Bed Alarm ○
- Complete All Tasks

Hand-Washing Procedures

- Upon Entry ✓
- Upon Exit ✓
- All Tasks Complete

Patient Comments

Room: Room 501 | Time: [dropdown] | Rounder: [dropdown]

No rooms to show yet. If you are the last person that rounded on a room, that room will be displayed here.

Submit Hourly Round

Notification: Patient pain level assessed.

Windows Internet Explorer
http://cmgrinobl01/vigilance/

aburch SOMS Room 501
Room not active | Hourly Rounds

Every Patient. Every Hour

Hourly Rounding Tasks

Pain	✓
Personal Needs	✓
Position	✓
Additional Comfort Needs	
Environmental Assessment	
Bed Alarm	
All Tasks Complete	

Hand-Washing Procedures

Upon Entry	
Upon Exit	
All Tasks Complete	

Patient Comments

Patient pain level assessed.
Patient is out of bed and sitting in their chair.

PT RT OT

Time ⌵ Rounder ⌵

Submit Hourly Round

CHI Health St Francis
Version 3.4.5

★
Checklist submitted for 501!

Superstar status achieved.
You have no rooms due.

Here's what's coming up...
Room 501 is due in 60 minutes.

Don't forget to wash your hands as you exit the room.

Okay, I've got it!

Discharge and Transfer

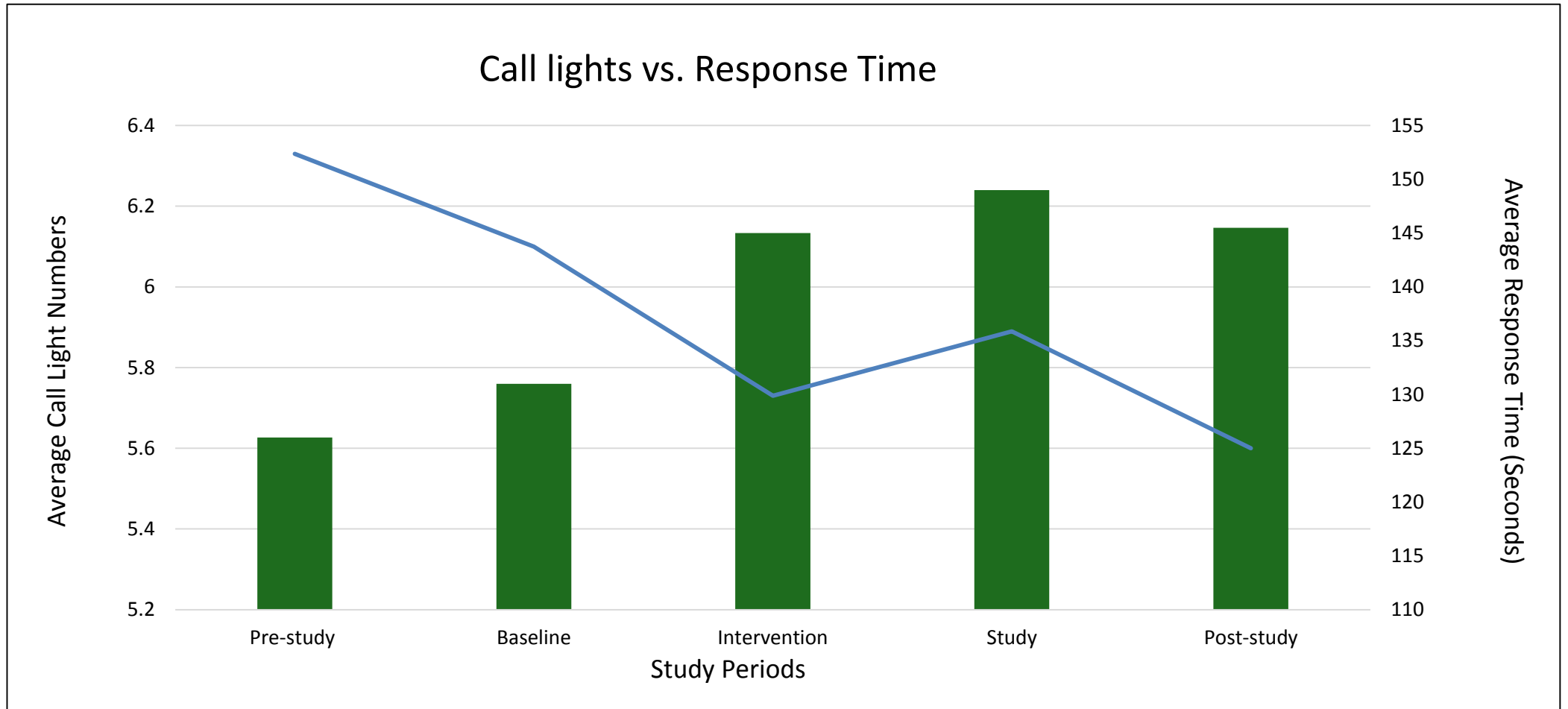
The screenshot shows a web browser window displaying a patient management interface. The browser address bar shows the URL `http://cmgrinob101/vigilance`. The interface includes several menu items: 'Hourly Rounds', 'Rounding Map', 'Friends & Family Portal', 'My Hourly Rounding List', 'Unit List', 'Statistics', 'Transfer', and 'Discharge'. A modal dialog box is open in the center, titled 'Want to discharge a patient?'. The dialog prompts the user to 'Please enter a room number.' and contains a search field with '501' entered. Below the search field, it shows 'Select Room (1 selected)' with a dropdown menu displaying 'Room #501 @ 50MS' and a checkmark. The dialog has 'Cancel' and 'Discharge' buttons. The background interface shows a table with columns for 'Room', 'Time', and 'Rounder', with values '501', '59mins', and 'aburch' respectively. The browser's taskbar and desktop icons are visible on the left side of the screen.

Data Analysis

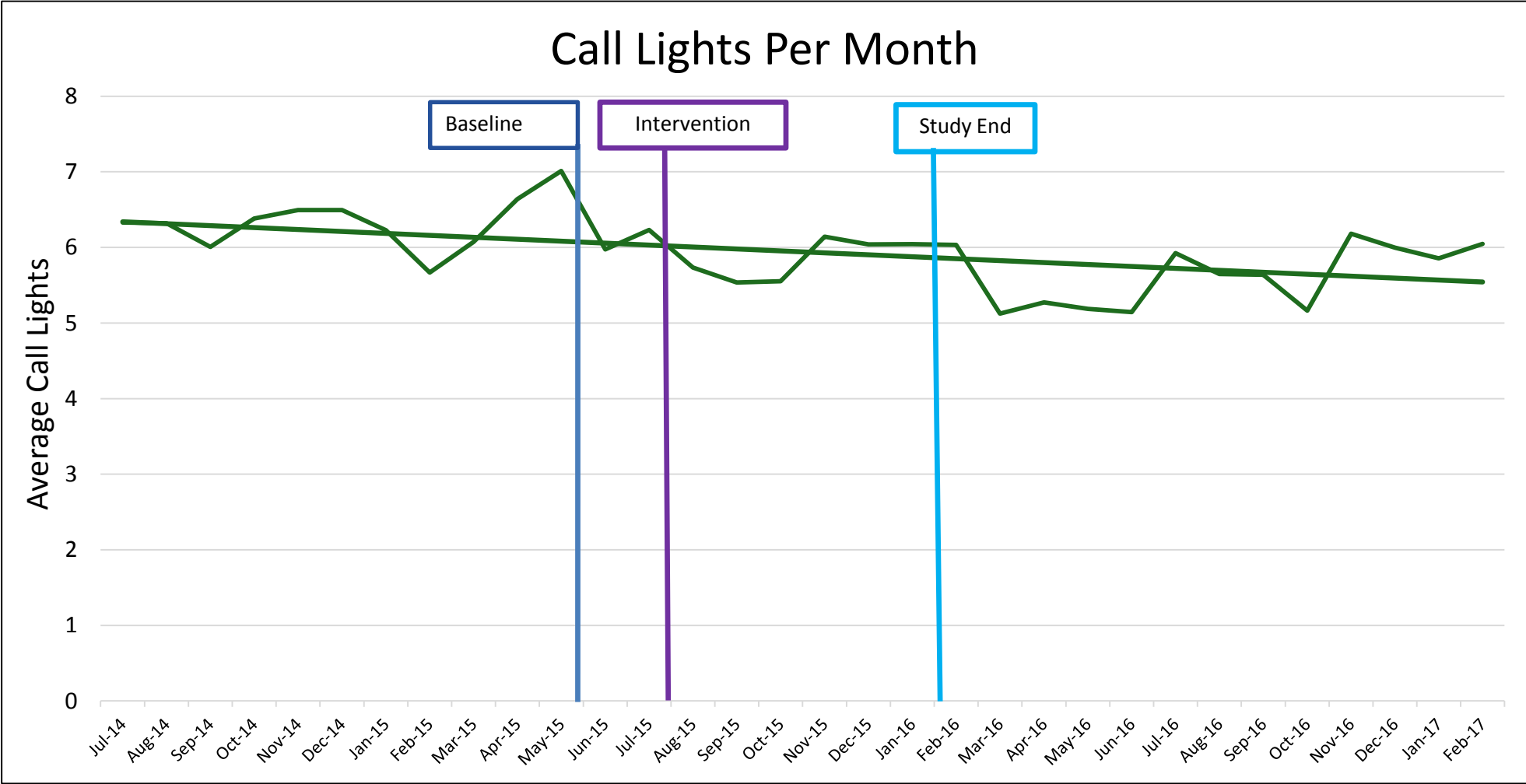
Day Shift Outcomes

Data	2 Months Before	6 Months After	Percent Change
Patients per Nurse	4.32	4.345	.6% increase
Total Call Lights	8.17/patient	7.87/patient	3.7% decrease (12.5% today)
Day RN Steps	8,415 steps/shift	8,502 steps/shift	1.1% increase
Day PCA Steps	11,108 steps/shift	13,013 steps/shift	14.7% increase
Day Charge RN Steps	7,480 steps/shift	8,727 steps/shift	14.3% increase

Call Light Outcomes



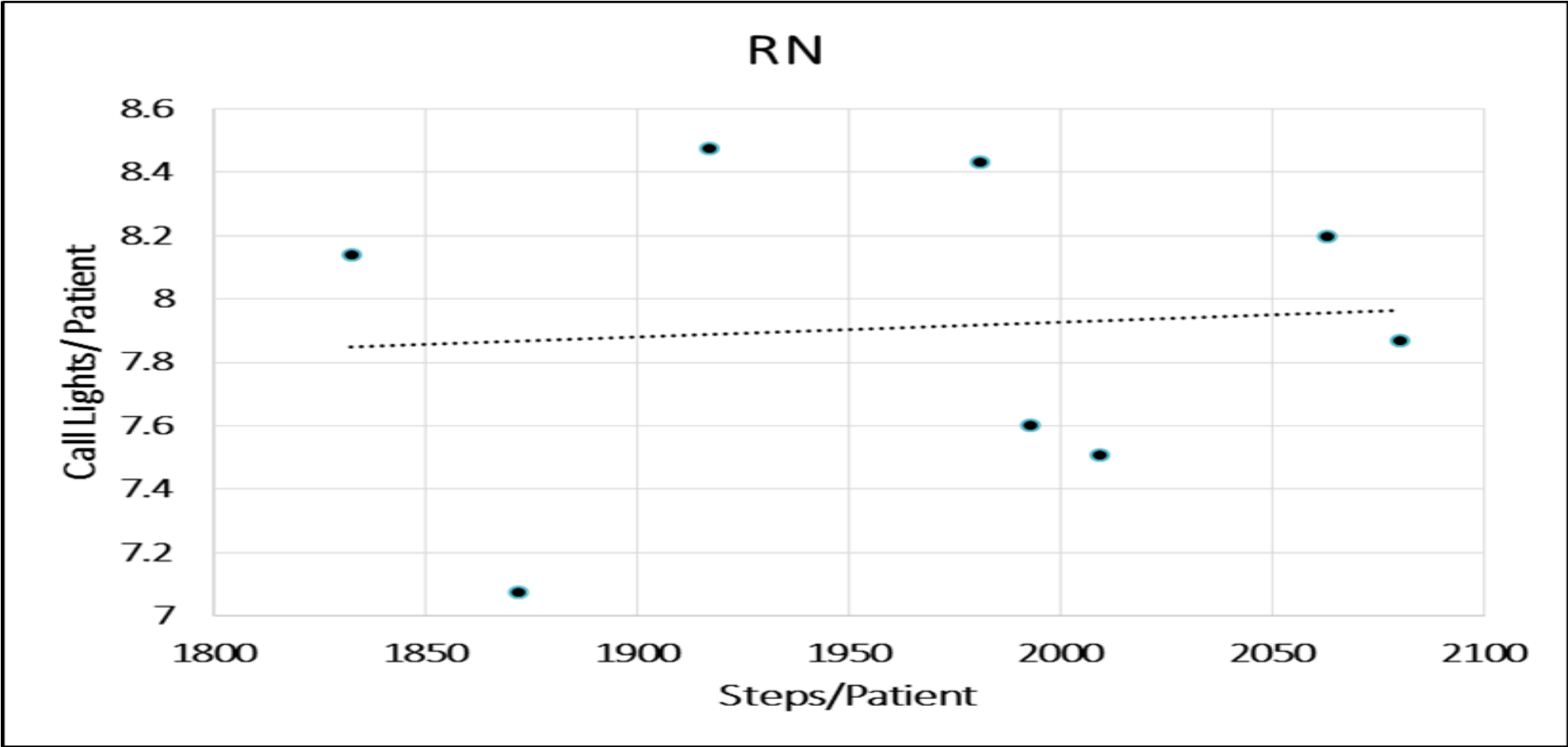
Call Lights Per Month



Average Patient Calls

Time Frame		Average Call Lights	Percent Change
Jan.2015-May.2015	5 months prior to study	6.32	N/A
Jun.2015-Jul.2015	2 months prior to intervention	6.1	3.5% decrease
Sep.2015-Feb.2016	6 months after intervention	5.89	6.8% decrease
Sep.2015-Aug.2016	1 year after intervention	5.64	10.8% decrease
Sep.2015-Jan.2017	After intervention to current	5.86	7.3% decrease

Call Lights versus RN Steps

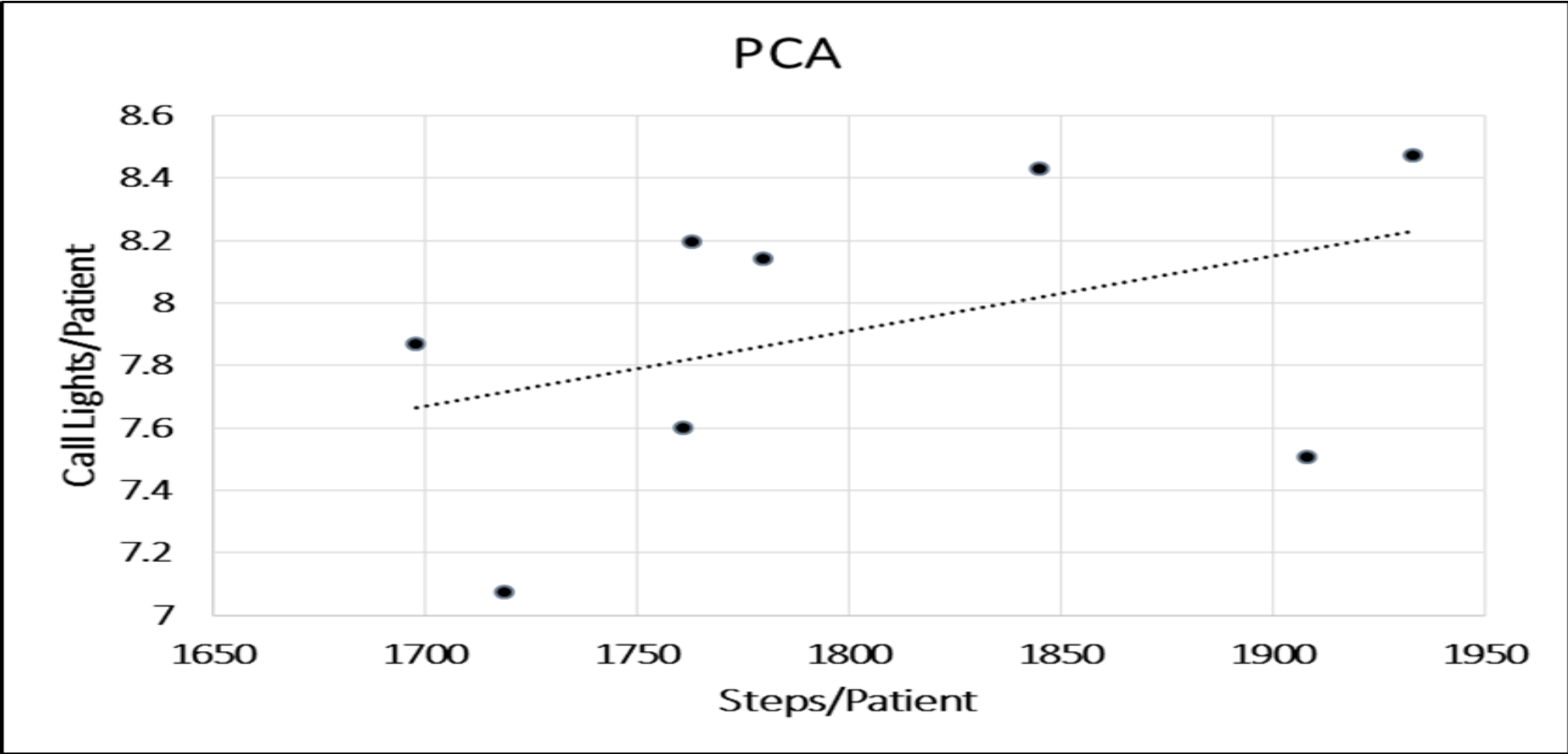


Jun. 2015-Jan. 2016

Correlation= 0.08 (no correlation)



Call Lights versus PCA Steps

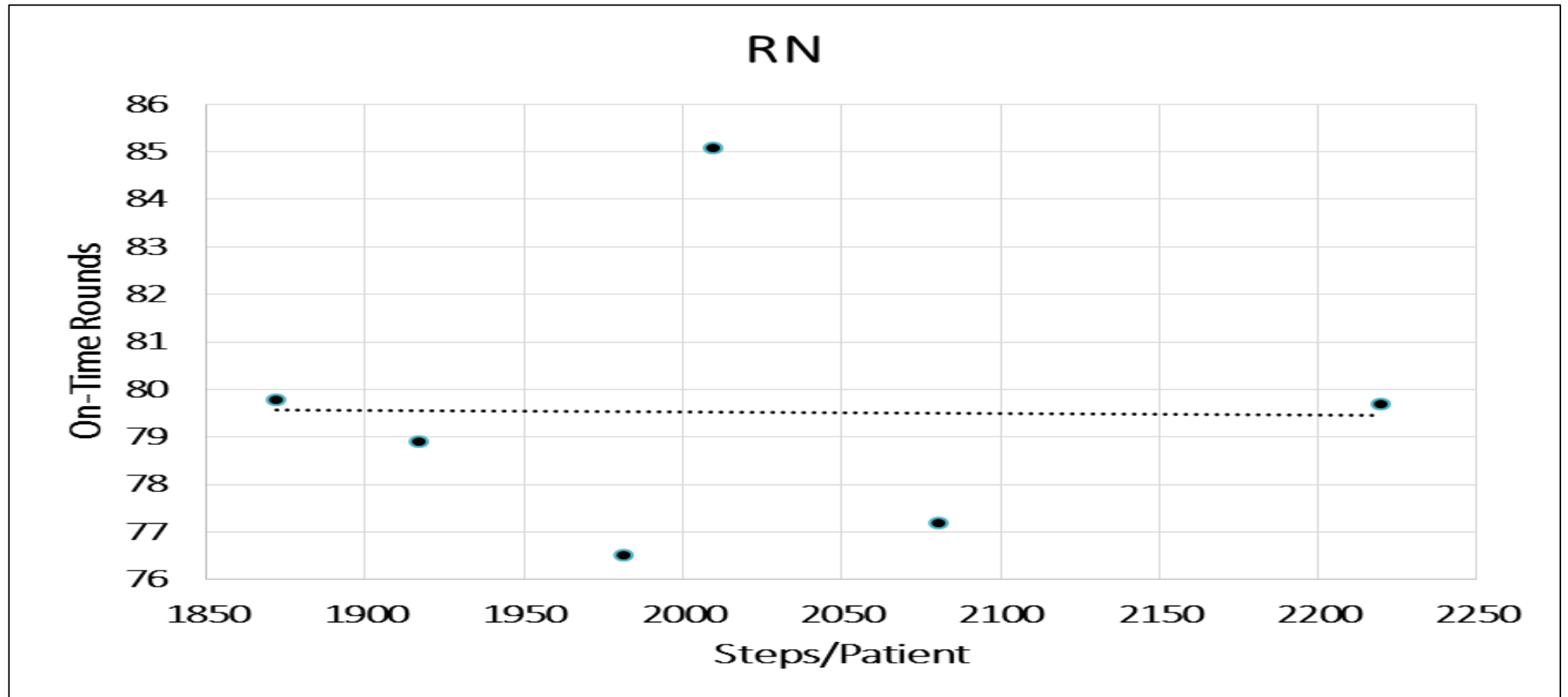


Jun. 2015-Jan. 2016

Correlation= 0.42 (low correlation)



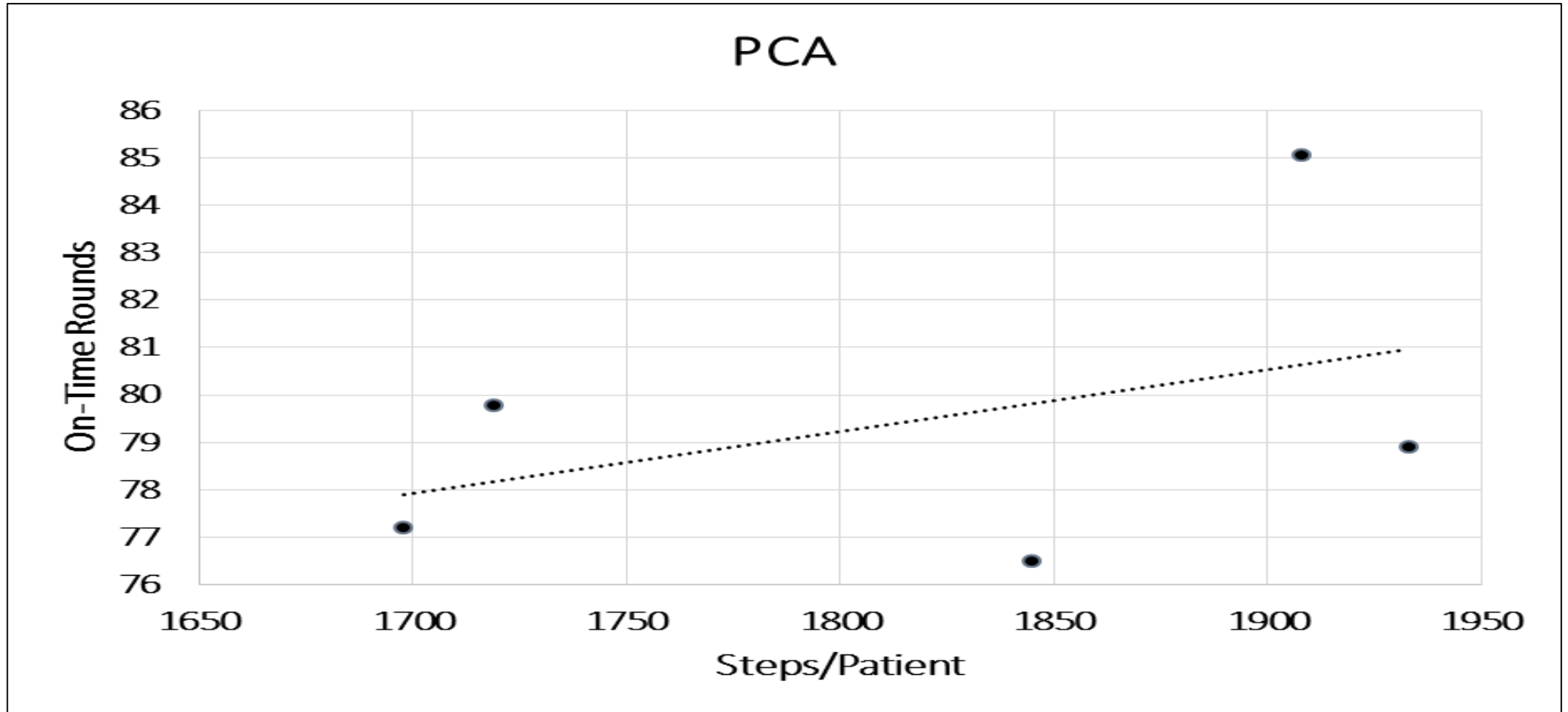
On-Time Rounds versus RN Steps



Sep. 2015-Feb. 2016

Correlation= 0.04 (no correlation)

On-Time Rounds versus PCA Steps



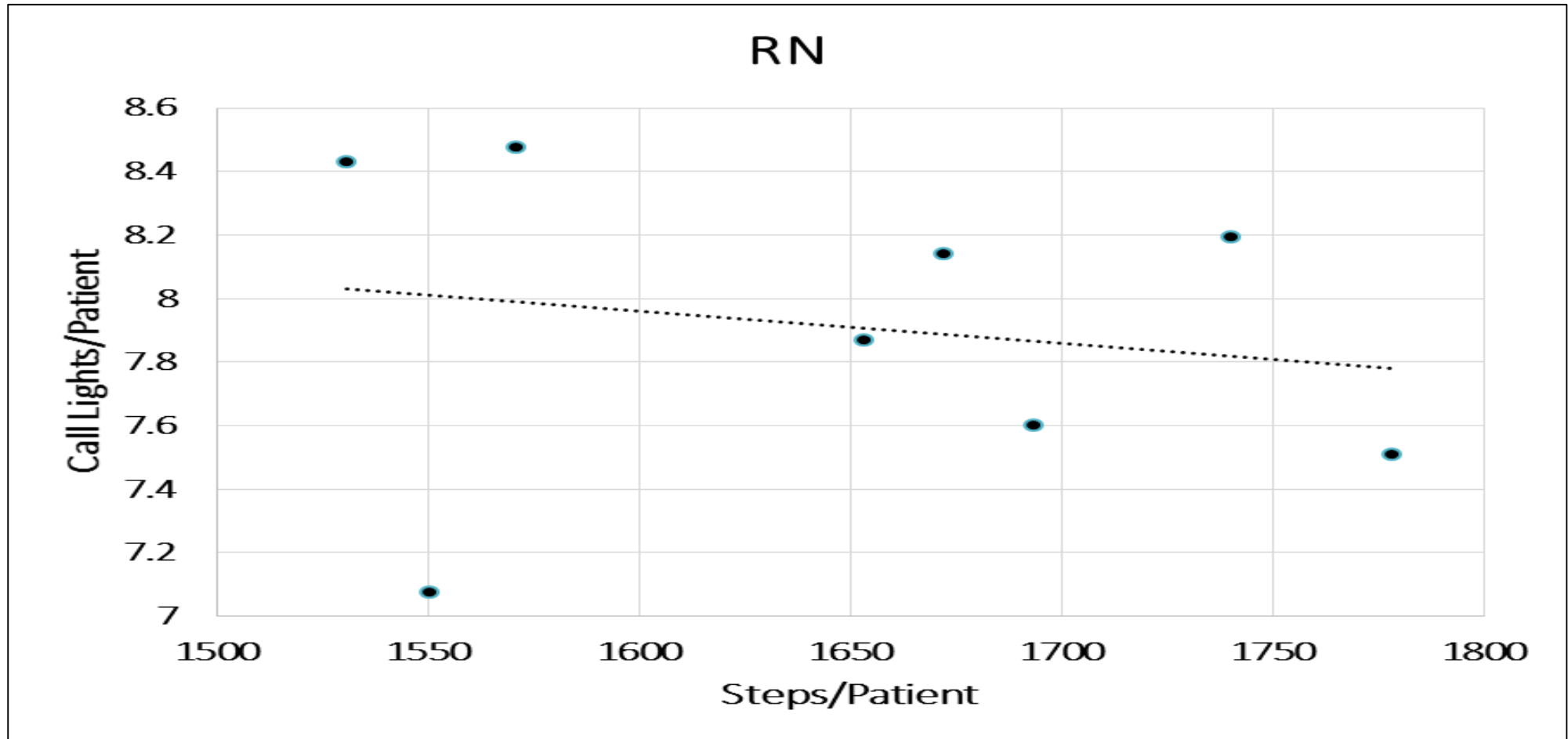
Sep. 2015-Feb. 2016

Correlation= 0.12 (no correlation)

Night Shift Outcomes

Data	2 Months Before	6 Months After	Percent Change
Patients per Nurse	4.6	4.55	1.1% decrease
Total Call Lights	8.17/patient	7.87/patient	3.7% decrease (12.5% today)
Night RN Steps	7,571 steps/shift	7,062 steps/shift	6.8% decrease
Night PCA Steps (6 hour shift)	4,640 steps/shift	4,660 steps/shift	.5% increase

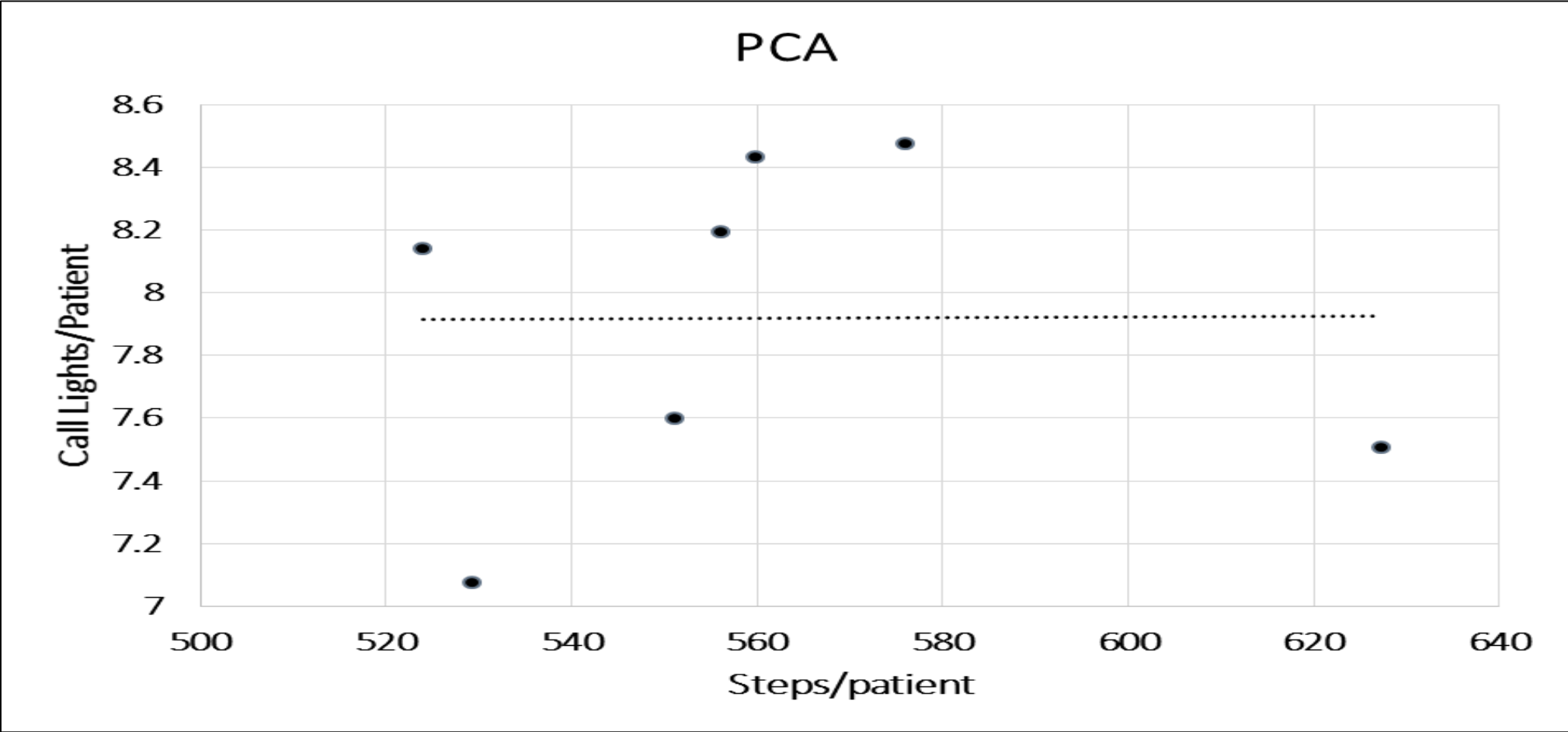
Call Lights versus RN Steps



Jun. 2015-Jan. 2016

Correlation= -0.18 (no correlation)

Call Lights versus PCA Steps

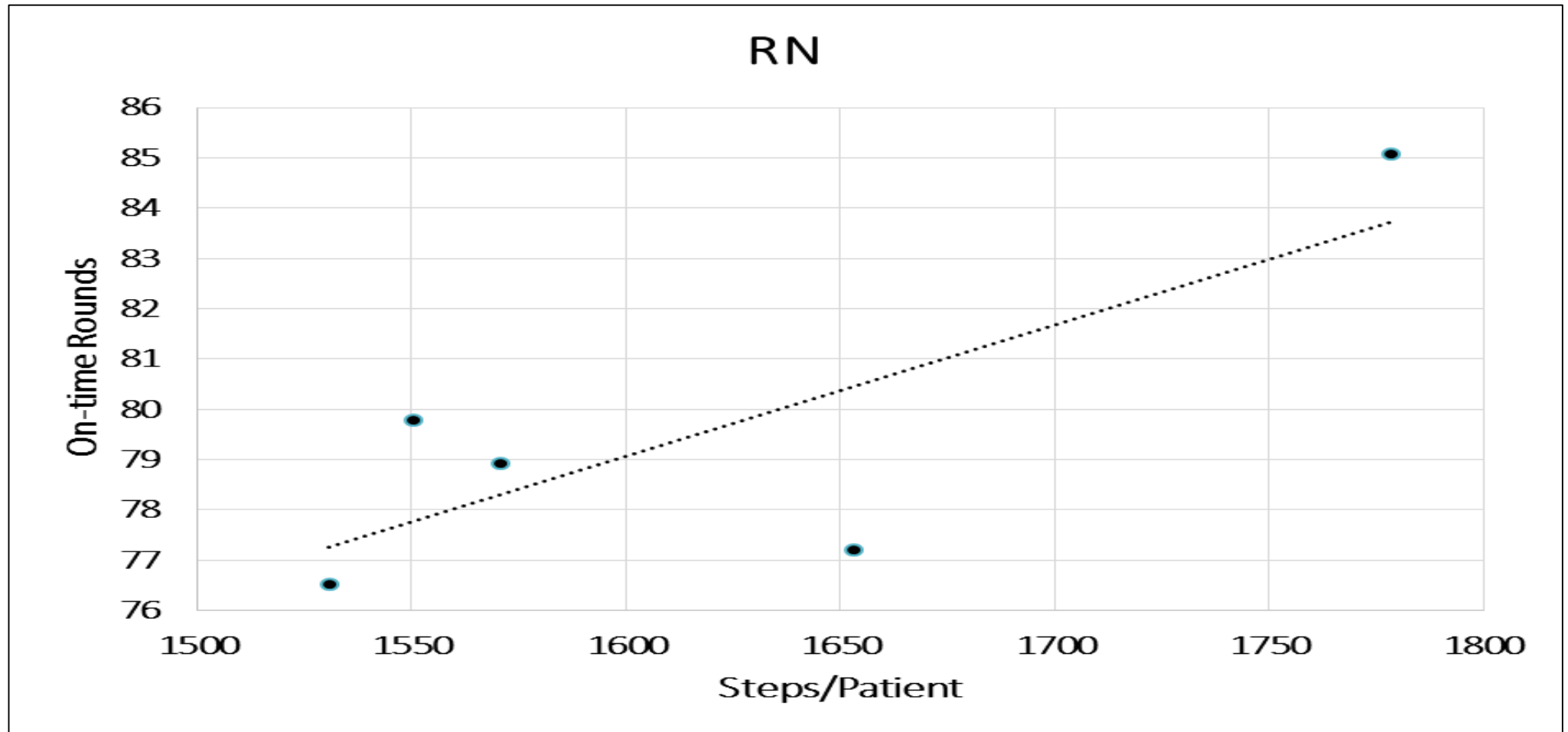


Jun. 2015-Jan. 2016

Correlation= 0.01 (no correlation)



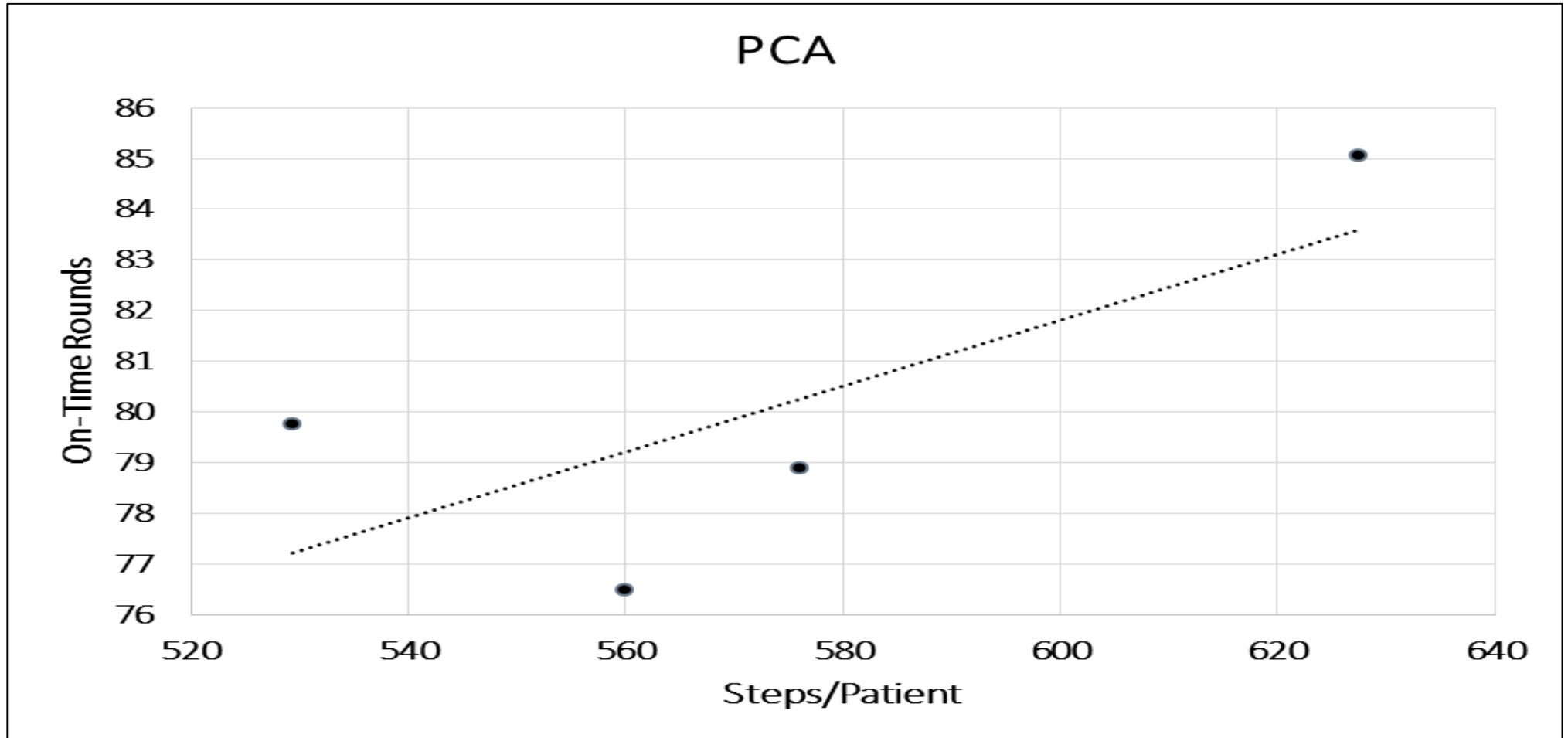
On-Time Rounds versus RN Steps



Sep. 2015-Jan. 2016

Correlation= 0.78 (strong correlation)

On-Time Rounds versus PCA Steps

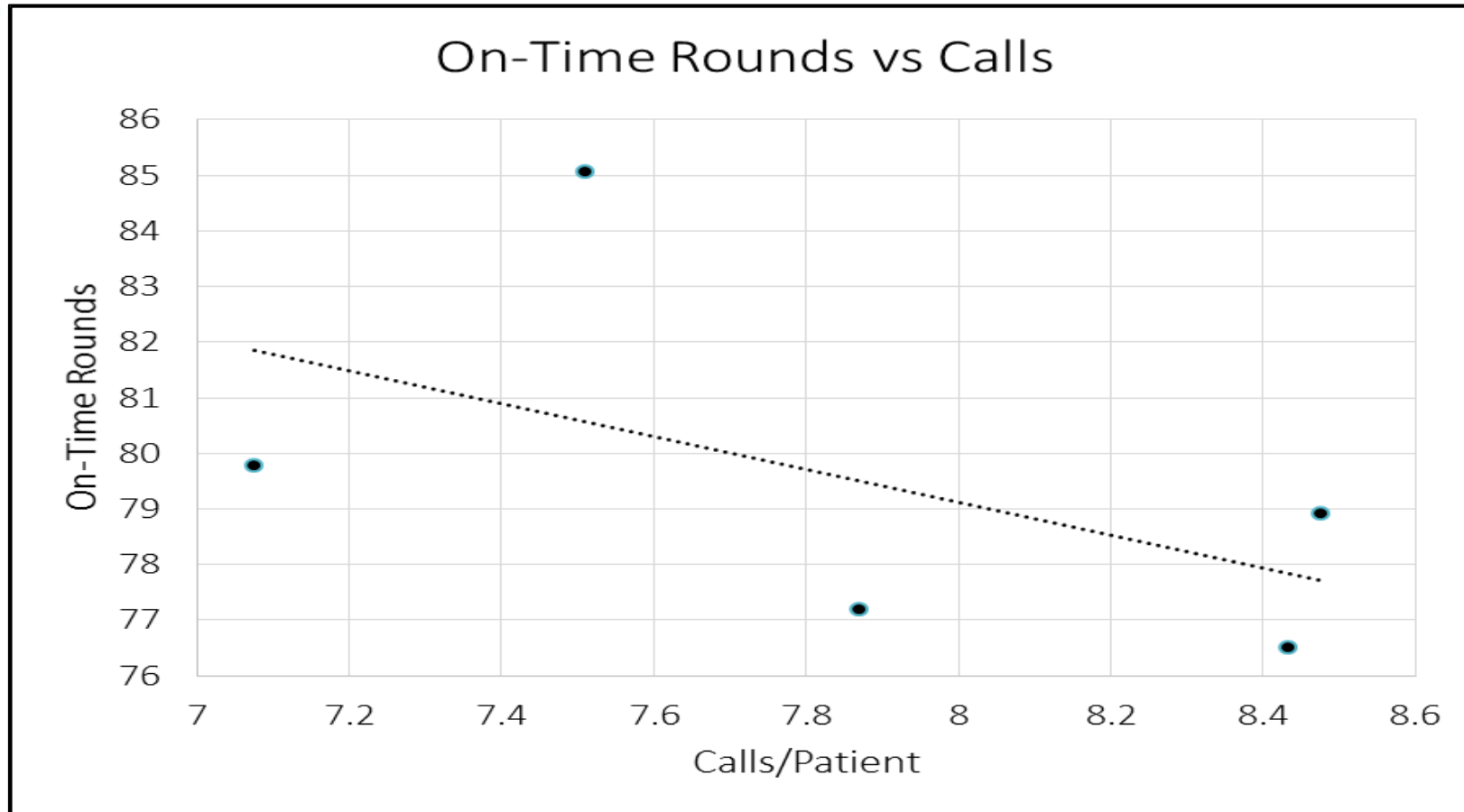


Sep. 2015-Jan. 2016

Correlation= 0.73 (strong correlation)

So- how did this affect patient safety and satisfaction?

Initial Overall On-Time Rounds and Calls



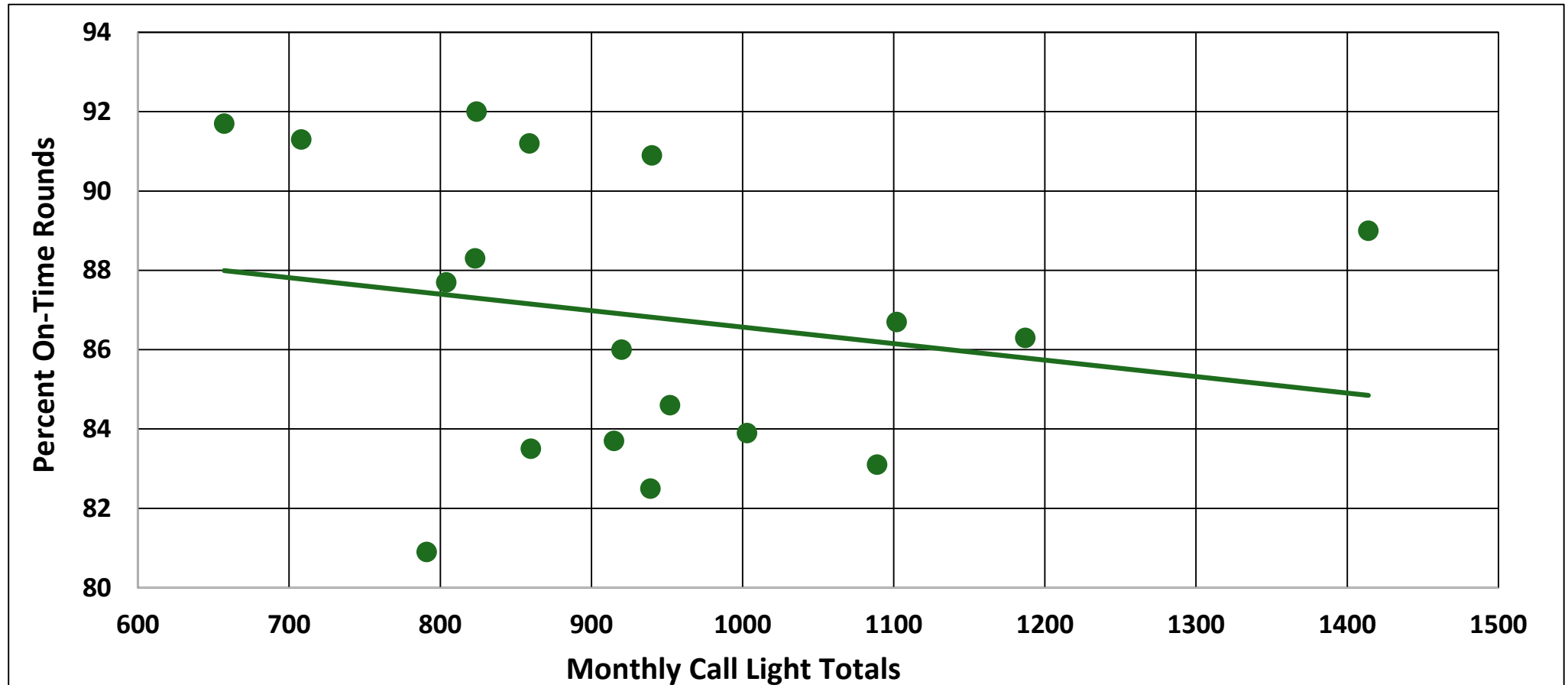
↑
As the unit's percent of On-Time
Rounds gets closer to 100%

↓
Call lights go down

Sep. 2015-Jan. 2016

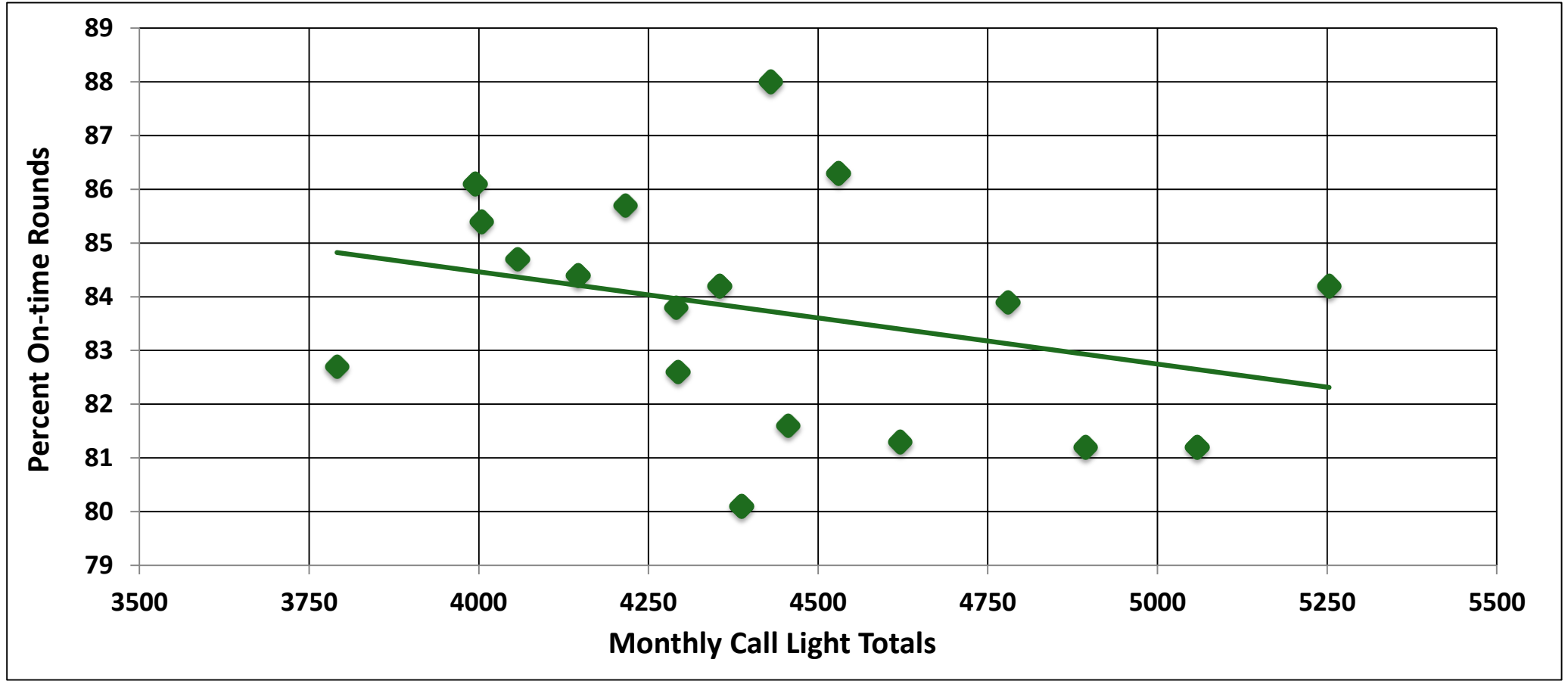
Correlation= -0.52 (moderate correlation)

Post-Intervention Overall On-Time Rounds and Calls



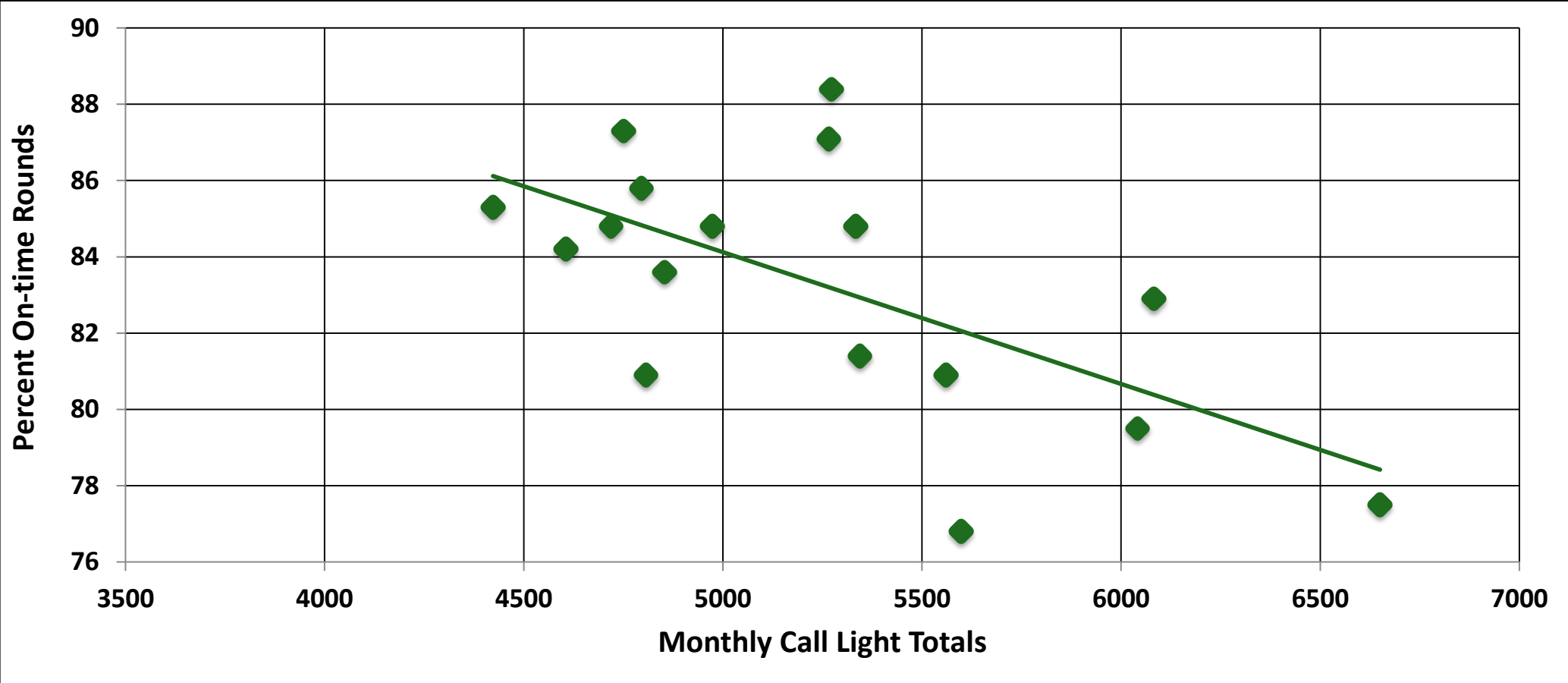
Correlation= -0.3756 (moderate correlation)

Post-Intervention 5th Floor On-Time Rounds and Calls



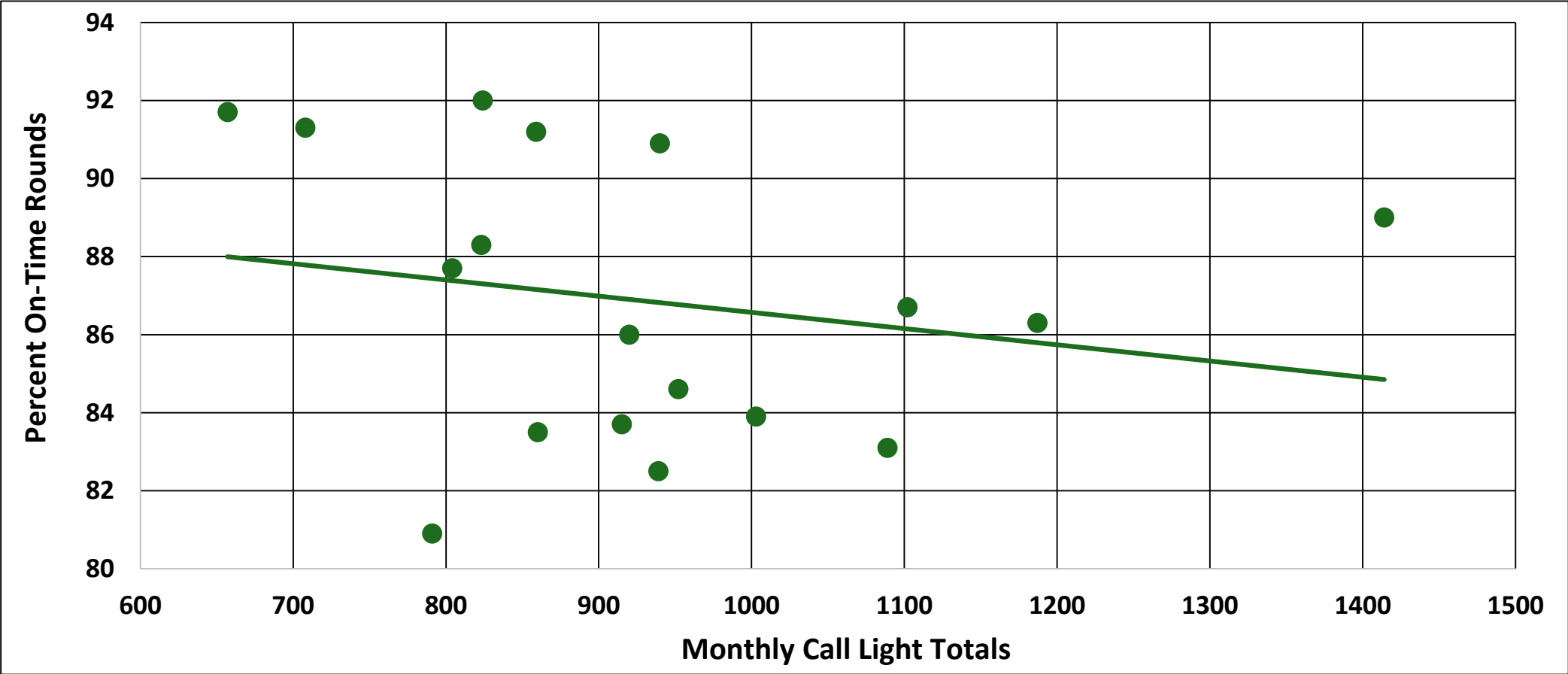
Correlation= $-.3108$ (moderate correlation)

Post-Intervention 4th Floor On-Time Rounds and Calls



Correlation= -0.6897 (strong correlation)

Post-Intervention IRU On-Time Rounds and Calls



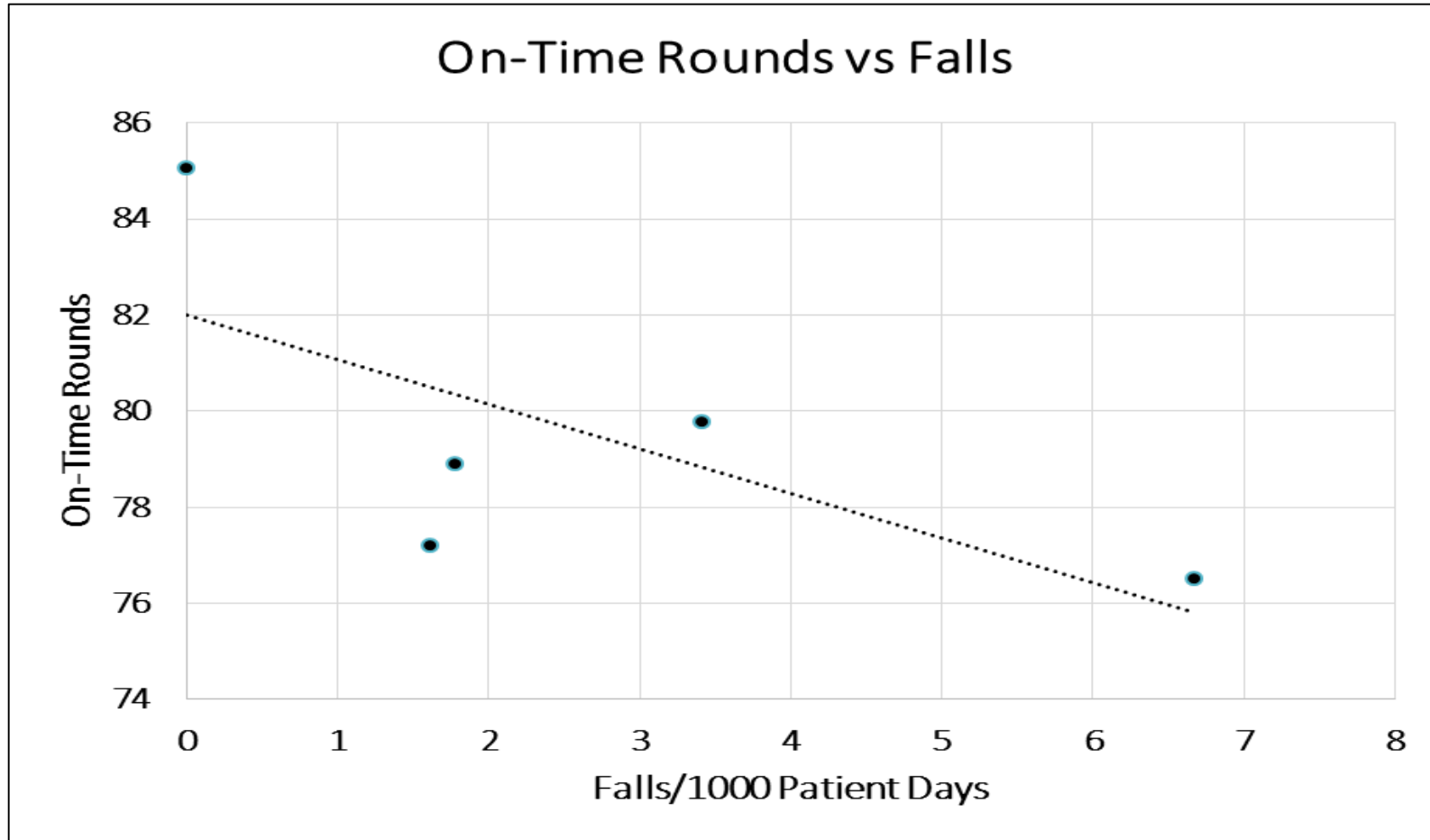
Correlation= -0.2098 (low correlation)



Patient Falls per 1000 Patient Days

Time Frame		Fall Rate	Percent Change
Jan.2015-May.2015	5 months prior to study	2.99	N/A
Jun.2015-Jul.2015	2 months prior to intervention	3.98	33.11% increase
Sep.2015-Feb.2016	6 months after intervention	2.62	34.17% decrease
Sep.2015-Aug.2016	1 year after intervention	3.34	16.08% decrease
Sep.2015-Jan.2017	After intervention to current	3.35	15.83% decrease

Initial Overall On-Time Rounds and Falls



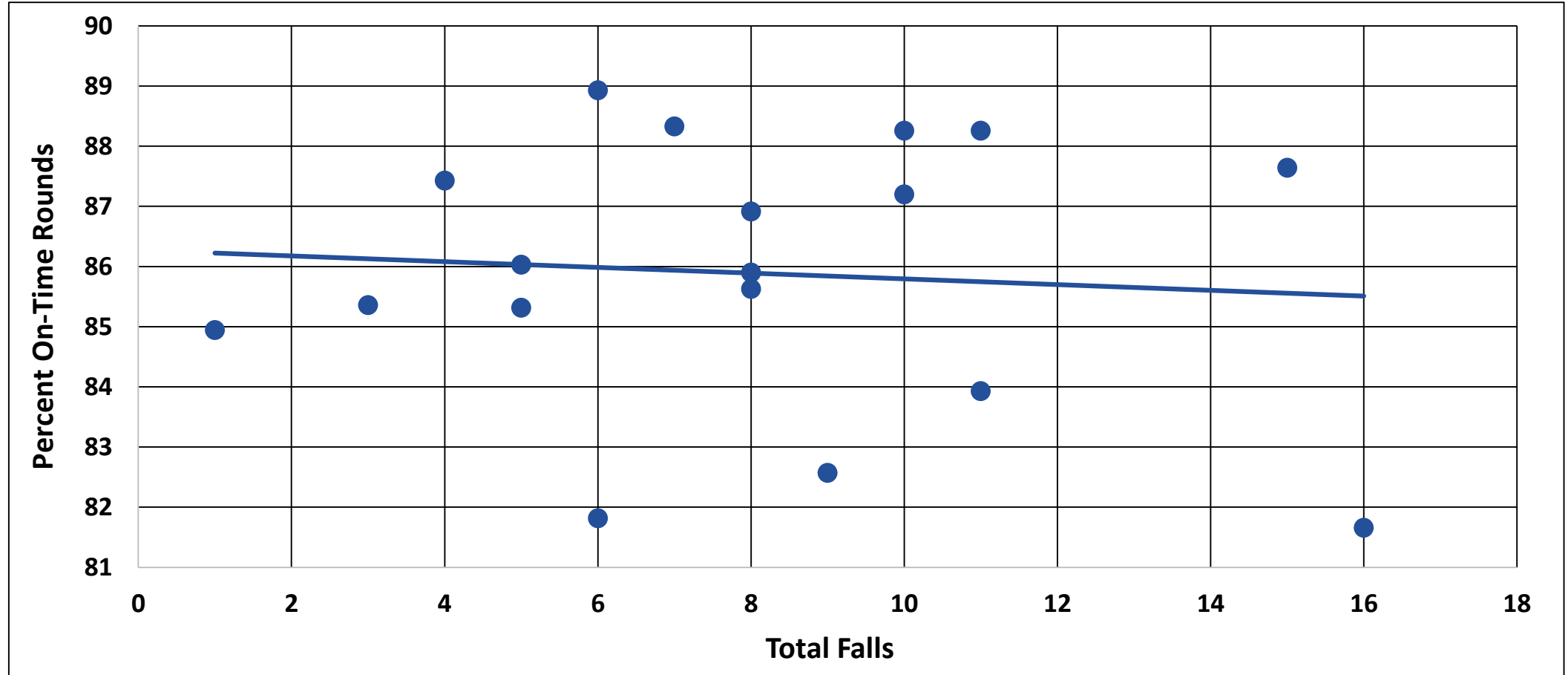
↑
As the unit's percent of On-Time
Rounds gets closer to 100%

↓
Falls decrease

Sep. 2015 – Jan. 2016

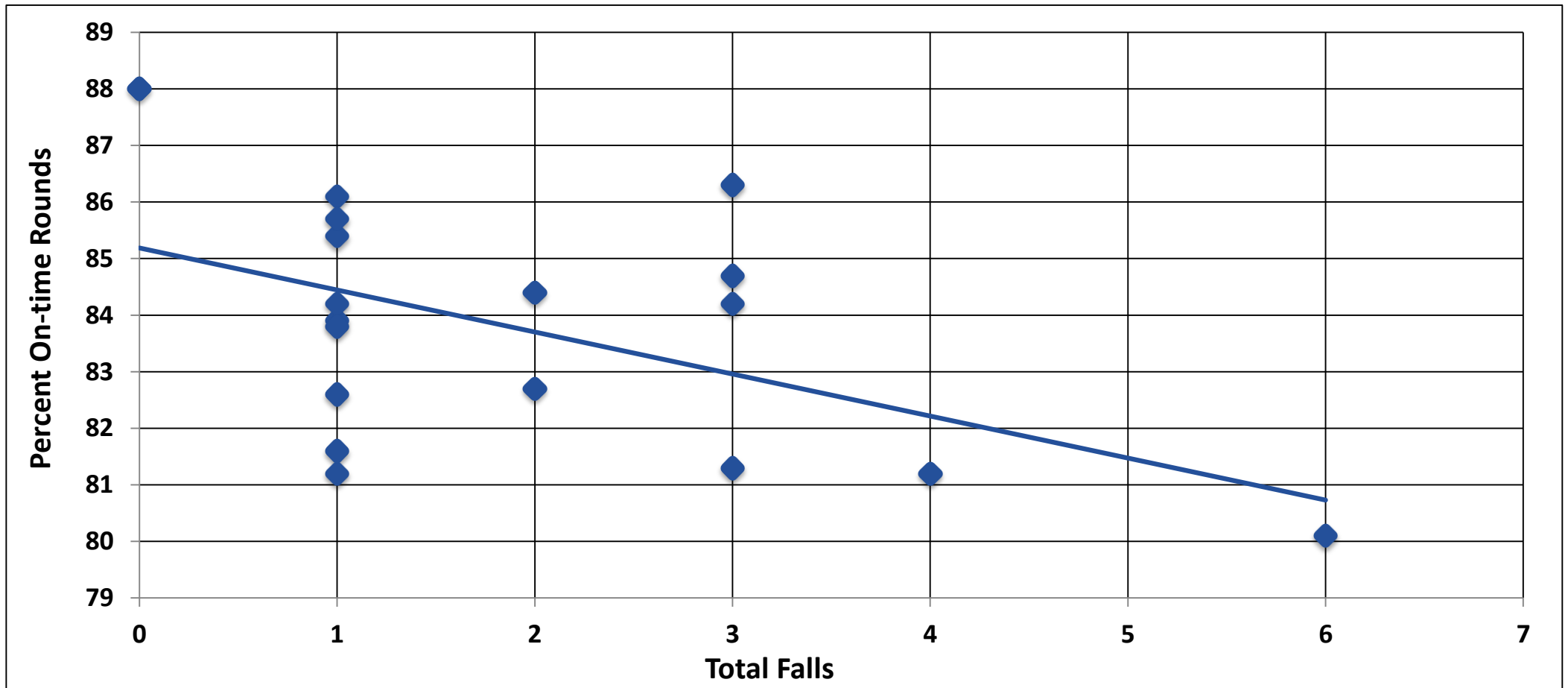
Correlation= -0.69 (strong correlation)

Post-Intervention Overall On-Time Rounds and Falls



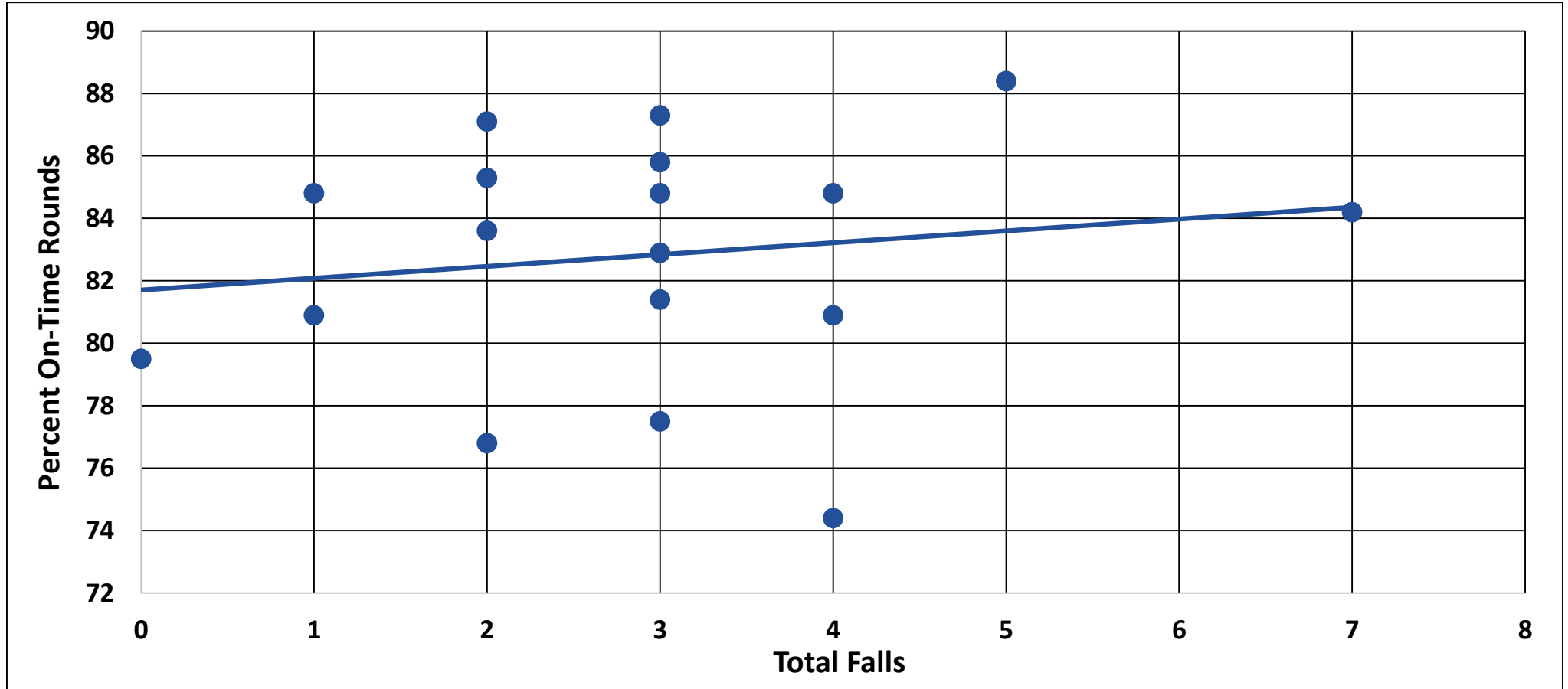
Correlation= -0.0826 (no correlation)

Post-Intervention 5th floor On-Time Rounds and Falls



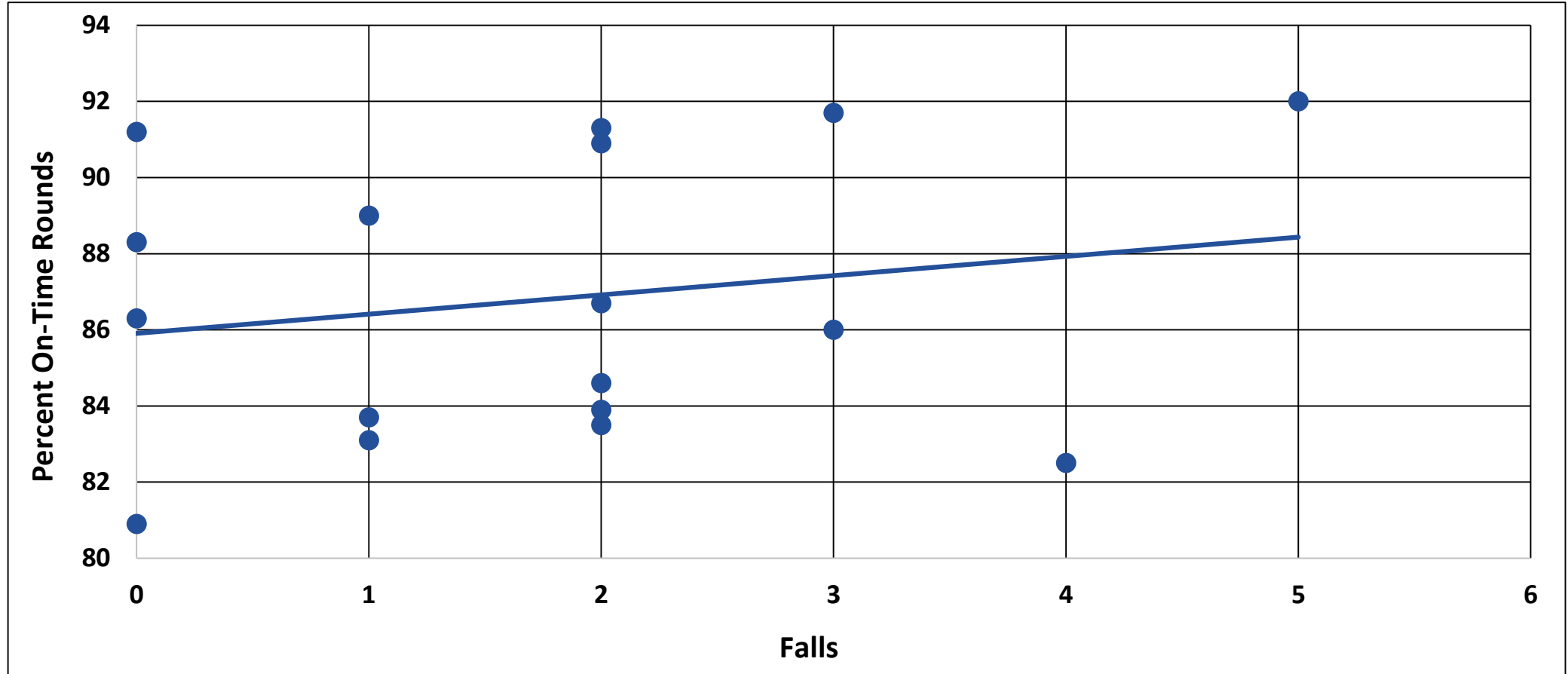
Correlation= -0.5123 (strong correlation)

Post-Intervention 4th Floor On-Time Rounds and Falls



Correlation= 0.1572 (no correlation)

Post-Implementation IRU On-Time Rounds and Falls

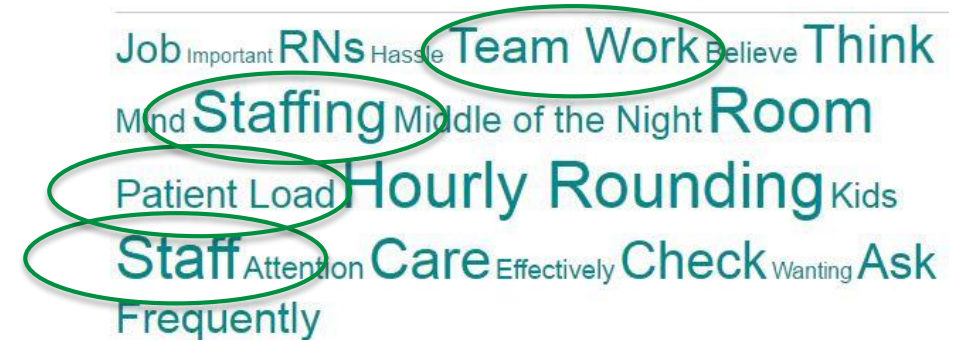


Correlation= 0.1879 (no correlation)

Hourly Rounding Perceptions, Barriers, and Solutions Survey

Verbatim Comments

- Barriers



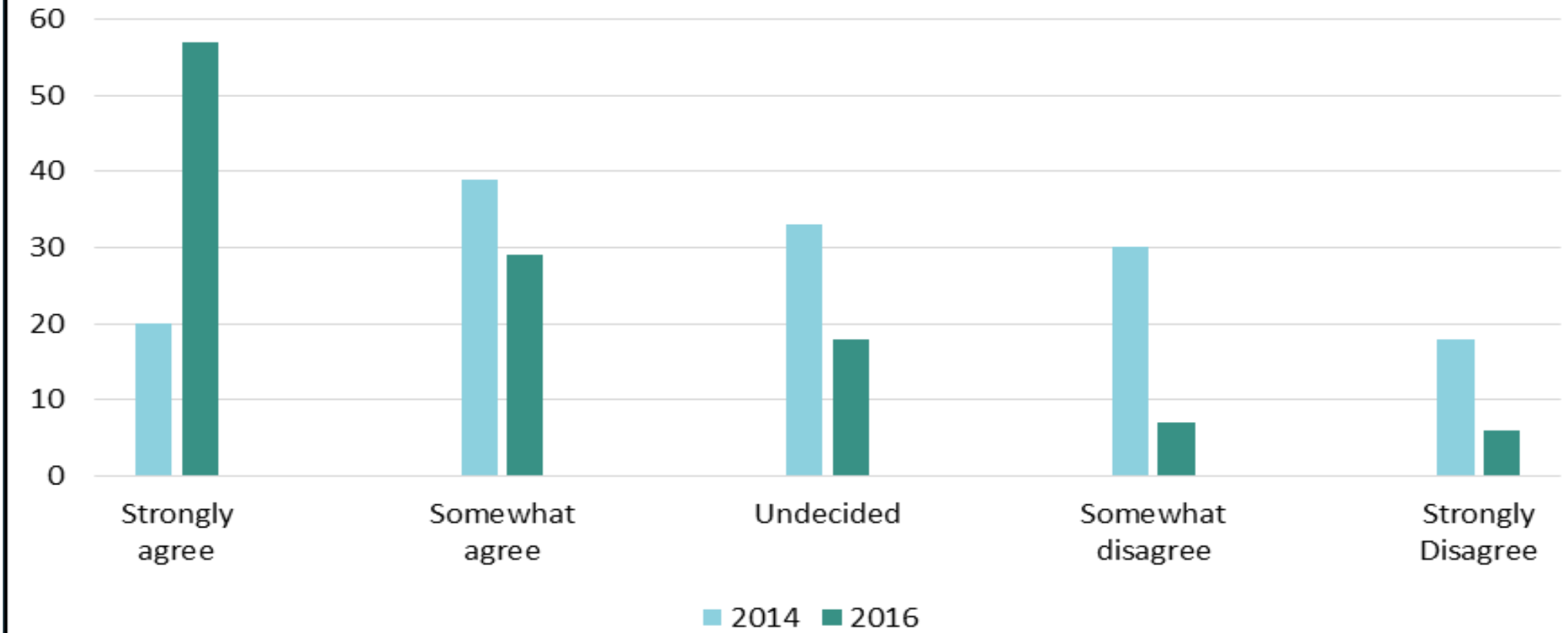
- Solutions



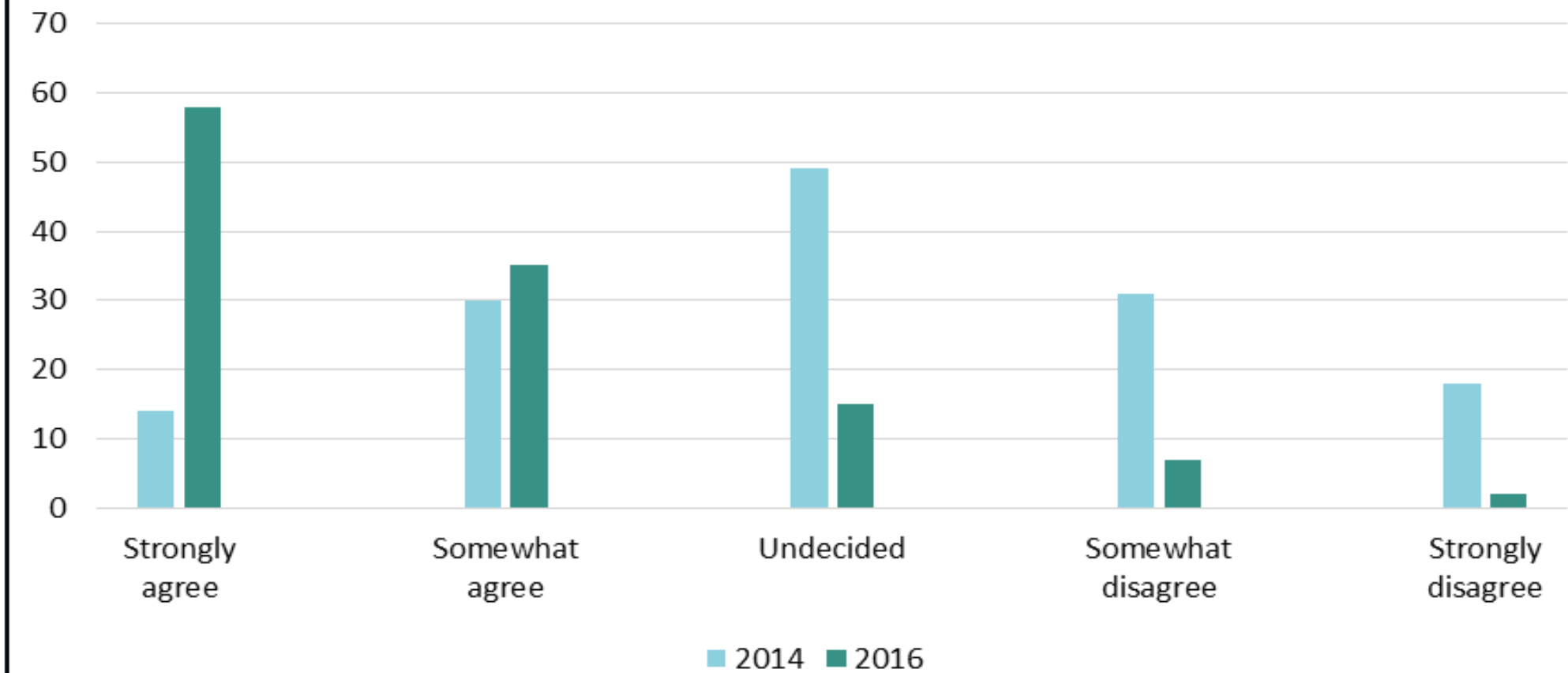
Hourly Rounding Survey

- 2 questions applicable to electronic tool
 - Having a computerized tool would make HR more convenient to complete
 - There is a good way to determine if HR is being done
- 3 questions added for vendor
 - I feel that I am more efficient with the use of HR
 - I feel that when I HR I decrease return visits to the patient room each hour
 - I feel that I walk less with proper HR

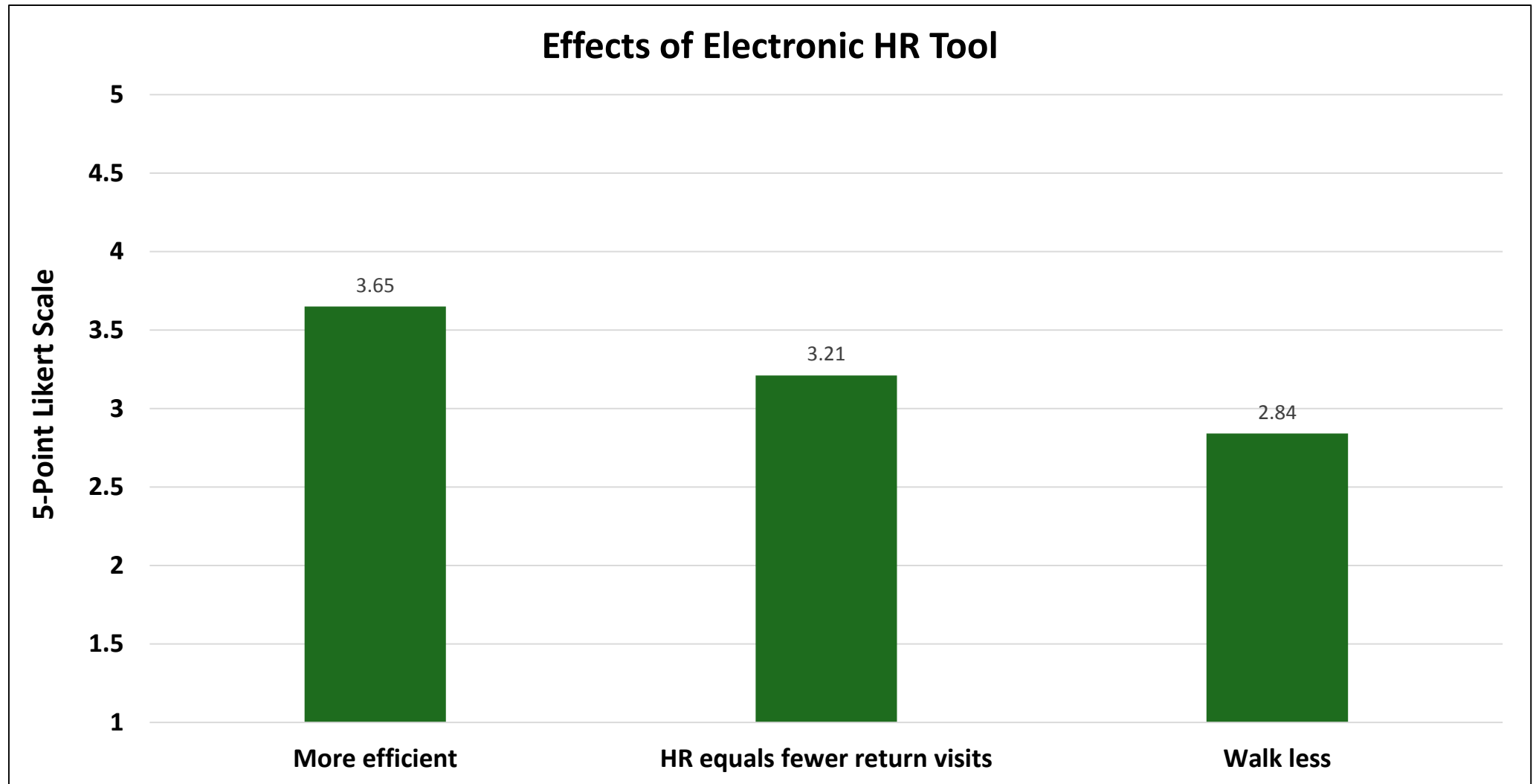
Computerized tool makes HR more convenient



Good way to determine HR done



Effects of Electronic HR Tool



Significant Outcomes

- Higher on-time rounds = fewer lights per patient
- Higher on-time rounds = fewer patient falls on the orthopedic unit
- Reduced call lights ≠ higher or lower walking steps
- Higher or lower on-time rounding percentage ≠ higher or lower day shift steps
- Higher on-time rounding percentage = =higher night shift steps
- Staff **strongly agrees** having an electronic documentation tool
 - ✓ = HR **more convenient** to complete
 - ✓ = **easier** to determine that HR is being completed

Special Thanks

- Beth Bartlett, MSN, RN, CENP, Vice President of Patient Care Services, CHI Health St. Francis
- Katie Hottovy, Director of Client Services for Nobl, for project and data assistance
- Dr. Brenda Bergman-Evans, PhD, CHI Health, for initial data analysis
- Natasha Quinones, BSN, RN for initial research assistance

Questions?