Pulmonary Rehabilitation

Performance Improvement

MIT 502

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1. Executive Summary

Pulmonary Rehabilitation (PR) is a department operating under the umbrella of New Hanover Regional Medical Center (NHRMC), located in Wilmington, North Carolina. PR is primarily an out-patient facility and serves the needs of patients who struggle with shortness of breath related to chronic lung disease. Upon physician referral, PR offers a 10 week, three times weekly exercise and education program. Medicare refers to this initial phase as Phase II and covers 80% of the cost of the program. PR is responsible for full documentation according to Medicare guidelines. Upon completion of the 10 week Phase II program, patients may enroll in the Maintenance program, for continuing exercise and support. As this portion of the program is not covered by insurance, little supporting documentation is required.

Prior to January 2006, PR shared an exercise space with Cardiac Rehabilitation, which meant that exercise was on one floor, office space on another. This required daily moving of patients and supplies. In January 2006 the existing office space was expanded and the PR staff and patients moved into a small, centrally located facility on the ground floor. The smaller space required for an extended day and an increase in the number of exercise sessions offered in order to accommodate the patient volume. With the new schedule, patients arrive throughout the entire work day, leaving little time for completion of office tasks assigned and required for Medicare documentation.

Six viable solutions became apparent and include: (1) assigning tasks related to job discipline, (2) utilize volunteers for secretarial duties, (3) daily team meeting to determine office needs, (4) assign one employee to maintenance duties and rotate with another staff member for patient care during maintenance times, (5) reduce staffing to 2 staff member during maintenance and (6) move the check-in area closer to the exercise gym.

The six solutions can be implemented in two phases, all with no dollar expense. The training of the volunteers will require staff time and direction in order to implement successfully.

Each solution, as implemented, will be monitored via surveys and direct observation for successful completion according to the project goals and NHRMC's mission and vision statements. Long term success will be measured as office tasks are successfully completed among the staff members.

2. Perceptual Analysis

Pulmonary Rehabilitation is an outpatient service of New Hanover County Medical Center. Individuals, who have been diagnosed with a chronic lung disease and referred by their physician, enroll for a 10 week education and exercise program, attending three times weekly, in an attempt to improve their strength and endurance and reduce their shortness of breath with daily activities. Phase II of the program is the beginning phase and is supported by Medicare and most major insurances, requiring constant documentation. Upon completion of the 10 week program, patients may choose to continue their exercise in the self-pay Maintenance program, attending 2 or 3 days weekly, or exercise at home. As this portion of the program is not covered by insurance, little supporting documentation is required.

Pulmonary Rehabilitation has an office space located on the ground floor of the hospital. Prior to January 2006, this space was also used for patient arrival and check-in. Exercise sessions were conducted in Cardiac Rehab which is located on the 2nd floor. This involved daily moving of patients, charts, personnel and equipment. Everyone enrolled is limited by shortness of breath, many on supplemental oxygen, and the trip upstairs was often a difficult one. Those unable to make the trip were transported by wheelchair.

In January 2006 the existing office space on the ground floor was expanded, allowing for a small gym area, classroom, weight and warm-up room, in addition to remodeling of the office spaces. Patients no longer have to travel upstairs to exercise, everything is centrally located. However, the entire space is small, the gym area containing only 10 pieces of equipment.

Limited exercise space requires that in order to accommodate the same number of patients, exercise sessions must be conducted throughout the day, for only 10 may exercise at any one given time. The workday was expanded on Monday, Wednesday and Fridays in order to allow for a maximum number of sessions. Tuesdays and Thursdays were less popular and the work day was reduced in order to not exceed a 40 hour work week. A comparison of the daily schedule is listed below.

Pulmonary Rehabilitation Daily Schedule				
Prior to January 2006			After January 2006	
MWF	TTH		MWF	TTH
		7 AM		
		8 AM		
		9 AM		
		10 AM		
		11 AM		
		12 PM		
		1 PM		
		2 PM		
		3 PM		
		4 PM		
		5 PM		

Phase II Maintenance Office Closed

All Phase II patient information must be continually documented, reported to physicians and maintained in an ongoing database. The schedule as listed above for after January 2006, allows for an increase in patient times, however, leaves no time for the required paperwork. The staff of 5.3 FTE's must trade off and balance patient care, which is of the utmost priority, with completing the necessary desk work. Phase II patients require the most monitoring and the highest staff to patient ratio, therefore most of the paperwork is currently completed during the maintenance time slots.

Multiple schedules to allow each staff member to complete their assigned tasks have been unsuccessfully adopted in recent months. Each staff member completed a questionnaire regarding the current department condition and scheduling issues. Inadequate time, staff productivity along with varying abilities and workloads distributed among staff members are listed as possible reasons for poor performance.

Staff Member	What's Working in the New Space	What's Not Working in the New Space
A	• **More Phase II patients seen each week** • **Increased number of Phase II referrals** • Easier access for patients • New Medical Director	• **Staff responsibilities unclear (No clear schedule as to who should be where at any given time)** • **EP needed in gym during every Phase II class**
B	• Gym schedule for patients • Shorter education classes	• **Scheduling of employee's gym time and office time**

	• New Medical Director	• **Referral process** • **Double/superfluous charting** • Lack of staffing • Gym too small • Need more Phase II classes
C	• Facility more attractive • Able to watch for patients coming and going	• **Need better communication amongst employees** • Little space for equipment, crowded • Must call for cardiac personnel to come downstairs for cardiac related issues
D	• **As professionals, should be able to flex to changing needs of patients and schedule**	• **Workloads among staff members vary** • **Various abilities among staff members** • **Staff not always considerate of others, remaining in office when not necessary**
E	• Attractive space without traveling upstairs	• Rigid time schedule for maintenance members • **Frequently, poor communication between staff members regarding schedule. Staff often "disappear"** • **Varying abilities and requirements from individual staff members** • Too small, too crowded, no space allowed for growth

Sponsors of this change initiative would include hospital administration and management teams. Minor schedule changes would not impact the sponsors; however, any changes to the existing space would need approval. The Pulmonary Rehabilitation staff is both the champions and stakeholders of this performance improvement initiative. The staff recognizes and is keenly aware of the need, having initiated this reactive process. The lack of adequate time to complete paper and computer tasks has directly affected the interaction among the staff and the confinements of the small space, however centrally located, have led to recent friction. First priority is patient care, however, everyone benefits when individual needs and concerns are directly addressed.

3. Performance Analysis

Mission statement: *New Hanover Regional Medical Center is a team-centered, value-focused, teaching provider of quality health care to all in need of its services.*

Vision statement: *New Hanover Regional Medical Center is striving to be the best provider of comprehensive health care services rendered with value, dignity and respect.*

	What Is Happening	What Should Be Happening
Organizational Systems		
Structure:	• Small office/gym space • 25-30 Phase II patients • 75 Maintenance patients • Program staff: o 4 Respiratory therapists, including Program Coordinator o 1 Exercise Physiologist o 1 Nurse (8-10 hr week)	• Larger space to allow for program growth and to provide quality patient care • Full time nurse • Volunteer for secretarial duties
Decisions:	• **Formally:** Group input with management approval; AACVPR guidance • **Informally:** Poor communication between staff members regarding need for office time. Staff often "disappear" leaving patient care areas	• Team-centered environment, with values placed on good quality patient care • Individually scheduled office time and ability to flex, requesting addition time if needed
Financial:	• Supported by Medicare • Not a direct money making hospital program	• Financially sound department; reduce hospital expenses by reducing patient hospitalizations
Clients/Needs:	• Exercise, education and support program for chronic lung population • Frequent staff conflicts distribution of workloads and adequate time to complete	• Provide quality patient care as related to hospital mission and vision statement • Cohesive supportive staff completing patient documentation efficiently and accurately
Management:		
Techniques Empowerment:	• Program Coordinator to Department Manager, then up the chain of command through hospital administration • Staff empowered to discuss issues and initiate new projects/opportunities • Recent dissatisfaction with hospital wide performance appraisals resulting in employee dissatisfaction	• Program staff and management working together to provide quality patient care • Staff continues to improve departmental services as they arise and serve patient population according to department and hospital mission • Continue to strive to improve job satisfaction and employee productivity

Physical and Technical: **Work Environment:** **Tools/Supplies:**	• Newly remodeled, however, small working environment; space small for volume of people it serves • Work schedule since Jan 2006 allows little time for office related activities • Tools and supplies currently available to perform tasks	• Expanded space needed in order to grow program and adequately serve patient population • Sufficient office time for each employee to complete assigned tasks • Adequate tools and supplies available to complete assigned tasks in order to meet program/Medicare requirements
Human and Social: **Organizational Culture:** **Team Performance:**	• Frequent conflict amongst staff regarding coverage of patient areas and need for office time • Staff members have varying duties, abilities and desires to improve and perform assigned tasks • Workloads vary among staff members	• Cohesive team oriented approach to improve staff working environment • Evenly divided and supported workloads, with all staff members performing at optimum levels

What Is Happening

Organizational Systems:

Pulmonary Rehabilitation (PR) currently occupies ground floor space located within New Hanover Regional Medical Center (NHRMC) in Wilmington, NC. Two entrances/exits allow access to the space through an internal hallway or a direct connection to the outside, resulting in easy access from the parking lots. The space is composed of 5 rooms which include (1) program coordinator office/treatment room, (2) classroom, (3) warm-up, free weight area, (4) office area for remaining four staff members and (5) a gym area. There is also a small check-in area with lockers for patient belongings. The program is staffed by 4 respiratory therapists, including the program coordinator, 1 exercise physiologist and a part-time nurse (12 hrs/week). Nurses from cardiac rehabilitation are utilized as needed during other hours. The program coordinator reports directly to the department manager of cardiac services.

Phase II of Pulmonary Rehabilitation is supported by Medicare, which provides the framework for daily operations and documentation regarding Phase II patient care. The American Association for Cardiac and Pulmonary Rehabilitation (AACVPR) works to provide guidance and support for

programs throughout the county in the continuing effort to provide services in compliance with Medicare guidelines. The North Carolina chapter of the AACVPR is active within the state to provide updated information regarding changes in Medicare requirements as particularly related to North Carolina. The program within New Hanover Regional Medical Center currently has the capacity to accommodate 30 Phase II patients on a 3x weekly, MWF schedule. Patients are referred to the program by one of nine physicians in the Wilmington area specializing in pulmonary medicine or by their primary physician. Eight to ten referrals are currently received each week. Patients enter as space allows (there is currently a 4-5 week waiting period due to space related issues) and they graduate upon successful completion of the program guidelines, usually within 10 weeks.

The Maintenance program allows patients who graduate from the 10 week Phase II program to continue their exercise in a safe and monitored environment. It is a self-pay program, is not covered by insurance, and therefore does not have any documented rules or requirements for operation. Each program can design and implement as space and staff allow. The program at NHRMC has approximately 75 patients exercising on either a MWF or TTH schedule, as patients request and space allows. The spaces available for exercise for this patient population are very limited due to the small environment.

All staff members are professionally credentialed individuals. Routine decisions regarding the daily operations are generally addressed and implemented by the team, with input and approval from upper management as needed.

However, daily coverage decisions, who is where and why, are left up to the staff members in attendance each day. The areas, as listed above, are small and the rooms situated in such a way that it is difficult to visualize what's going on in one room from another. This often results in staff members scrambling to cover a particular area, thinking erroneously that someone is there for check-in, for example, when often patients are sitting unattended.

Pulmonary Rehabilitation programs are not money making endeavors for hospitals. However, one of the program goals is to reduce the number of hospitalizations for this patient population, which often requires frequent admissions/re-admissions (often referred to as a revolving door). The cost of the 10 week program is substantially less than one hospital admission. Statistics obtained during 2005 showed an 83% reduction in hospital admissions for patients enrolled in the Phase II PR program at NHRMC. Considering the fact that an average hospital charge for an admission for chronic lung disease was $10,059 in 2002, effective pulmonary rehabilitation can potentially result in a significant indirect savings.

The primary clients served are the participants enrolled within the program. Their needs are vast as all have chronic lung disease, with shortness of breath frequently limiting their ability to perform daily activities. They have enrolled in the outpatient program in order to improve their ability to perform daily activities at home and remain independent. Many require supplemental oxygen and have other co-morbid conditions such as heart disease and diabetes, requiring frequent monitoring and close attention.

Other clients served include department staff members. Recent staff conflicts regarding distribution of workloads and insufficient time to complete the assigned tasks have resulted in minor conflicts, which ultimately affect the quality of patient care.

Management:

The staff of Pulmonary Rehabilitation is empowered to discuss issues and initiate new projects. Changes must be approved by the program Coordinator and/or Department Manager and upper administration, depending on the scope of the change. That sense of empowerment was however, reduced by last year's employee evaluations, conducted each August and September. The strict parameters of the evaluation process left many employees reporting dissatisfaction hospital wide.

Physical and Technical:

The newly remodeled working space is clean, attractive, and easily assessable. However, as the gym area is small and can only hold 10 pieces of equipment, only 10 patients can exercise at any given time. In order to accommodate the total patient population, the work day has been extended to bring in multiple classes of 10. The current MWF day has 3 Phase II classes and 5 maintenance classes and is filled to capacity. Staff office area was also remodeled. All staff members, with the exception of one, have computers on their desks in order to complete the necessary workloads. Two other computers are easily accessible within the department for that particular employee, who did not want a computer on her desk.

Human and Social:

The work schedule beginning January 2006 is entirely devoted to patient care due to the small physical environment as stated above. As a result, there have been conflicts recently regarding coverage of patient areas vs. the need for office time to complete assigned tasks. Staff members have varying duties, abilities and desires to improve and perform the necessary tasks. For example, below is a chart showing workload assignments of the five staff members.

Employee	Assigned Tasks
Respiratory Therapist A	• Program coordinator • Direct patient care duties 20% of daily routine • 80% management duties
Respiratory Therapist B	• Processes patient referrals and schedules new patients for orientation process. • Charts orientation information in electronic hospital chart • Charts daily attendance in computer
Respiratory Therapist C	• New chart assembly • Chart breakdown upon graduation • Chart audits • Follow-up phone calls to patients • Mails cards to patients for support • Retrieves mail • Charting and updating of education classes taught x 2 • One on one patient education regarding activities of daily living with charting
Respiratory Therapist D	• Entrance/exit 6 minute walks • Entrance/exit patient questionnaires and scoring • Walk information and questionnaire scores charted in Excel and electronic hospital chart • Update and maintain program database • Gym attendance and monthly static reports • Staff education coordinator • Charting and updating of education classes x 4
Exercise Physiologist E	• New patient requirements: o Fax 6 minute walk & telemetry reports o Exercise prescription o Ortho evaluation o Charting of one on one exercise interview o Create exercise folder o Fall precaution evaluations with charting • Determine daily changes in exercise prescriptions • Chart changes in electronic hospital chart • Charting and updating of education classes x 2 • Physician mid-term reports • Final report & charting • Home exercise prescriptions • Monthly education calendar • Minutes from practice council

It is difficult to obtain a true sense of the daily work requirements as many of these tasks are distributed across the 10 week patient enrollment period and time allocations are difficult to assign. For example, even though the list of assigned tasks for employee B looks small in comparison to others

listed, the referral process requires frequent phone calls to patients and physician offices which can be very time consuming. It is very important, however, to the continued growth and success of the program.

What Should Be Happening

Organizational Systems:

Chronic obstructive pulmonary disease is the 4th leading cause of death within the United States and the only one of the top four categories that is currently on the increase. Desired objectives of the Pulmonary Rehabilitation department of NHRMC should reflect the mission and vision statements of that institution and should be a *team-centered, value-focused, teaching provider of quality health care to all in need of its service and strive to be the best provider of comprehensive health care services rendered with value, dignity and respect.* Patient referrals from physician offices should be processed they are received, eliminating the waiting period for patients who are frequently anxious as to whether or not they will be physically able to "exercise." An expanded space, larger gym and classroom areas, would allow for program growth, increased number of patients exercising at any given time and continued service to the community of patients.

The patient population served by this program, generally have a number of comorbid conditions. A full time nurse, especially for Phase II patient times, would improve the safety and efficacy of the service offered.

Staff members should strive to offer quality health care services that reflect the mission and vision statements of NHRMC as listed above. The daily work schedule should provide adequate coverage of all areas at all times. Individually scheduled office time and staff ability to flex as needed, should improve the working environment and provide for patient and staff needs.

The PR department should be financially sound. Although not a direct "money maker," program statistics should be constantly collected and maintained by the staff in order to justify the indirect savings the department provides the hospital.

Management:

The staff and management of NHRMC and Pulmonary Rehabilitation should work together to provide quality patient care in line with the mission and vision statements. The staff should continue to improve the quality of services offered and expand those services to meet the growing needs of the patient population. This should ultimately improve job satisfaction and employee productivity.

Physical and Technical:

An expanded working environment should provide for program growth and adequately serve the ever growing patient population Sufficient office time is required for each employee to complete the assigned tasks in compliance with Medicare guidelines. Adequate tools and supplies should be available as needed.

Human and Social:

A cohesive team oriented approach, as line with the hospital mission statement, should provide for an effective and efficient staff working environment. Workloads should be evenly divided among staff members. Assigned tasks that are not within the scope of a respiratory or exercise physiology discipline, i.e., making charts, retrieving mail, should be assigned to a secretary or volunteer if possible.

Gap Analysis

	What Is Happening	What Should Be Happening	Gap
Organizational Systems			
Structure:	• Small office/gym space • 25-30 Phase II patients • 75 Maintenance patients • Program staff: o 4 Respiratory therapists, including Program Coordinator o 1 Exercise Physiologist o 1 Nurse (8-10 hr week)	• Larger space to allow for program growth and to provide quality patient care • Full time nurse • Volunteer for secretarial duties	• Lack of sufficient space • Lack of nursing coverage • Lack of personnel for secretarial type duties
Decisions:	• **Formally:** Group input with management approval; AACVPR guidance • **Informally:** Poor communication between staff members regarding need for office time. Staff often "disappear" leaving patient care areas	• Team-centered environment, with values placed on good quality patient care • Individually scheduled office time and ability to flex, requesting addition time if needed	• No gaps • Lack of scheduled time to complete office tasks
Financial:	• Supported by Medicare • Not a direct money making hospital program	• Financially sound department; reduce hospital expenses by reducing patient hospitalizations	• No gaps
Clients/Needs:	• Exercise, education and support program for chronic lung population • Frequent staff conflicts distribution of workloads and adequate time to complete	• Provide quality patient care as related to hospital mission and vision statement • Cohesive supportive staff completing patient documentation efficiently and accurately	• Lack of growth space for enlarging population • Lack of adequate schedule for completion of assigned office tasks

Management: **Techniques Empowerment:**	• Program Coordinator to Department Manager, then up the chain of command through hospital administration • Staff empowered to discuss issues and initiate new projects/opportunities • Recent dissatisfaction with hospital wide performance appraisals resulting in employee dissatisfaction	• Program staff and management working together to provide quality patient care • Staff continues to improve departmental services as they arise and serve patient population according to department and hospital mission • Continue to strive to improve job satisfaction and employee productivity	• No gaps • No gaps • Lack of reported employee satisfaction regarding performance evaluations
Physical and Technical: **Work Environment:** **Tools/Supplies:**	• Newly remodeled, however, small working environment; space small for volume of people it serves • Work schedule since Jan 2006 allows little time for office related activities • Tools and supplies currently available to perform tasks	• Expanded space needed in order to grow program and adequately serve patient population • Sufficient office time for each employee to complete assigned tasks • Adequate tools and supplies available to complete assigned tasks in order to meet program/Medicare requirements	• Lack of sufficient space • Lack of office schedule adopted by all staff • No gaps
Human and Social: **Organizational Culture:**	• Frequent conflict amongst staff regarding coverage of patient areas and need for office time	• Cohesive team oriented approach to improve staff working environment	• Lack of office schedule adopted by all staff to complete assigned tasks

Team Performance:	• Staff members have varying duties, abilities and desires to improve and perform assigned tasks • Workloads vary among staff members	• Evenly divided and supported workloads, with all staff members performing at optimum levels	• Lack of evenly divided and supported workloads among staff members

Possible Causes of Performance Deficits

Lack of Skills/Knowledge	Low Motivation/Incentives	Management/Environment
• Lack of evenly divided and supported workloads among staff members • Lack of personnel for secretarial type duties	• Lack of reported employee satisfaction regarding performance evaluations	• Lack of sufficient space • Lack of nursing coverage • Lack of scheduled time to complete office tasks • Lack of growth space for enlarging population • Lack of adequate schedule for completion of assigned office tasks • Lack of office schedule adopted by all staff

The Gap

Interviews and surveys with key NHRMC stakeholders have identified data as listed in the table above. The differences between "what is" and "what should be" produced performance gaps. Two of the environmental concerns focus on a lack of space, something which will not improve until pulmonary rehabilitation and hospital administration can justify the expense of a move and the location of more physical space. However, a lack of adequate space will limit pulmonary rehabilitation's growth and inhibit the department from being able to fully align itself with the goals of NHRMC, *to provide comprehensive health care services.*

The pulmonary rehabilitation staff is trained in emergencies, skills which are in a continual state of updating. A nurse is available from another service to further serve those needs. However, a full time nurse, especially during Phase II times, would improve the *quality of the service* offered to clients.

A recurring gap was identified regarding the need for sufficient office time to complete individually assigned tasks in the presence of full time patient care needs. The lack of evenly divided and supported workloads among staff members was also identified. The establishment of an office schedule which could be approved by all team members would reduce office tensions and align the department with the *team-centered* goal as support by NHRMC.

4. Performance Intervention Strategies

Requirements:

1. Functional
    - Enable staff members to complete assigned office tasks
    - Allow for scheduled time in which to complete the tasks
    - Divide work according to discipline (respiratory, exercise, secretarial)
2. Interface
    - Staff office needs must interface with patient care needs
    - Staff office needs must interface with other staff needs
3. Administrative
    - The office tasks assigned must meet Medicare guidelines.
    - The solution must include a cohesive, self-managed team approach
4. Financial
    - The solution must be implementable without adding staff

Performance Levels	Possible Interventions
Lack of Skills/Knowledge • Lack of evenly divided and supported workloads among staff members • Lack of personnel for secretarial type duties	• Provide clarity regarding expectations: Employee C – Paid as a respiratory therapist. Many job tasks secretarial in nature. Assign tasks more closely related to discipline. o Maintenance patients o Attendance • Computer training for Employee C • Utilize volunteers for secretarial duties currently assigned to Employee C o New chart skeletons o Chart audits o Chart break-down
Low Motivation/Incentives • Lack of reported employee satisfaction regarding performance evaluations	• Improve, at least departmentally, once schedule is approved by all
Management/Environment • Lack of sufficient space • Lack of growth space for enlarging population • Lack of nursing coverage • Lack of scheduled time to complete office tasks • Lack of adequate schedule for completion of assigned office tasks • Lack of office schedule adopted by all staff	• Unable to currently solve until numbers show substantial growth or maintenance group moves off-site. Continue to maintain data base regarding patient volumes. • Unable to improve until budget allows for additional staff. Maintain untoward events to document need for further coverage • Redesign work process: Maintenance times o Employee C put in charge of maintenance patients and responsible coverage times o Brief daily meeting to determine office needs, improving communication o Employee C + 1 other staff member (rotate) caring for maintenance patients in AM – allows other 2 to have office time o Reduce staffing to 2 staff members during maintenance times o Consolidate – move check-in area closer to gym space – can be done by one staff member, if necessary

Possible Interventions	Assign tasks related to job discipline	Computer training for Employee C	Utilize volunteers for secretarial duties	Daily team meeting to determine office needs	Rotate Employee C + one other for patient care	Reduce staffing to 2 staff members during maintenance	Move check-in area closer to gym space
Comprehensive understanding of solution	+	+	+	+	+	+	+
Carefully targeted	+	+	+	+	+	+	+
Sponsor-based & supported	+	+	+	+	+	+	+
Team approach	+	+	+	+	+	+	+
Cost sensitive	+	-	++	+	+	+	+
Align with organizational priorities	+	+	+	+	+	+	+
Investigated & weighed against options	+	+	+	+	0	+	+
Powerful	+	+	+	+	+	+	+
Sustainable	+	-	-	+	-	+	+
Take implementation into consideration	+	-	+	+	+	+	+
Iterative approach to design, dev and implementation	+	-	+	+	+	+	+

Possible Interventions:

1. **Assign tasks related to job discipline**

   All employees have office tasks assigned that are related to their discipline area (respiratory, nursing or exercise physiology) with the exception of Employee C, who performs many duties that are secretarial in nature. Current management states these duties have evolved over the years and are due to Employee C's lack of knowledge and motivation for learning computer skills. Other tasks, such as assuming lead responsibility for the maintenance patients and their monthly attendance stats, would fall within her scope of practice, speak to her strength in patient communication, while allowing additional office time for the other staff members.

2. Computer training for Employee C

Computer training for Employee C would be effective in improving work skills, make her a more valuable employee and improve her knowledge base. Several efforts have been made for one-on-one training. However, Employee C has absolutely no interest in learning computer related skills beyond checking basic e-mail. The option would not be very cost effective, would not be sustainable and would be difficult to implement.

3. Utilize volunteers for secretarial duties

Pulmonary Rehabilitation is fortunate to have several patient volunteers who have been with the department for some time and are capable of handling secretarial type duties currently performed by Employee C. In past years they were needed in the patient care area. However, with the schedule change in January and patients arriving all times of the day, there has been little for them to do. It is extremely cost effective for them to take over these tasks; however, one draw-back would be that as volunteers, their work schedule may not be regular.

Employee	Assigned Tasks	Changes in Tasks
Respiratory Therapist C	• New chart assembly	• Staff involved with new patient orientation will place information into skeleton charts assembled by volunteers
	• Chart breakdown upon graduation	• Volunteers to do
	• Chart audits	• Volunteers to do
	• Follow-up phone calls to patients	• No change in tasks
	• Mails cards to patients for support	• No change in tasks
	• Retrieves mail	• Volunteers to do
	• Charting and updating of education classes taught x 2	• No change in tasks
	• One on one patient education regarding activities of daily living with charting	• No change in tasks

4. Daily team meeting to determine office needs

Workloads vary from day to day among the staff members. A brief daily meeting to determine individual needs for office time would improve communication and improve department performance.

5. Rotate Employee C + one other for maintenance patient care

As stated above, Employee C has little desire for computer related tasks, however, has good communication skills with the patients, an important feature in pulmonary rehabilitation. Employee C can utilize those skills by becoming the lead therapist with the maintenance patients. As she is a .8 FTE, other staff members will be required to fill in during her absence.

6. Reduce staffing to 2 staff members during maintenance

The staff members are accustomed to attending to patients care needs, however, during maintenance times, all four staff members are not needed. Reducing the staff allocation to 2 members would allow the other 2 office time. This 2 on/2 off can be rotated according to an approved schedule and altered, depending upon need. As it is a small space, those in the office can be easily called upon should an emergency arise.

7. Move check-in area closer to gym space

Maintenance patients frequently enter the classroom for check-in. Although close to the entrance, this room is further away from the gym and the staff often are *too spread out* and visually cut-off from the other areas. This will be especially true if the staff during maintenance times is reduced to two.

Implementation Schedule

Phase I: (Less difficult to implement)

- Daily team meeting to determine office needs
- Reduce staffing to 2 staff members during maintenance times
- Move check-in area closer to gym space

Phase II: (More difficult to implement)

- Assign tasks related to job discipline
- Utilize volunteers for secretarial duties
- Rotate employee C + one other for patient care during maintenance times

Interventions listed in phase one can be implemented with little difficulty and quickly upon staff approval. Interventions in phase two will require training of the volunteers. Employee C will also require a more gradual change in her assigned tasks in order to be successful. All of the proposed interventions could be implemented without expense, except for computer training for employee C.

However, this training intervention comes with a high risk index, due to a lack of employee interest, and therefore has a low chance of implementation.

5. Feasibility Analysis

Risk Analysis

The proposed interventions have scored using a feasibility matrix (see Appendix A) to determine the likelihood of success if implemented. Nine considerations for each possible solution were given a risk and a risk weight value and their product yielded a risk index. The scale used is defined at the bottom of the chart With the exception of computer training for employee C, all other solutions scored within four points of each other, within a fairly low risk index and therefore feasible to implement. A brief explanation of each score is listed below:

1. Assign tasks related to job discipline
   - Risk index score of 12
   - May present barriers to implementation related to employee incentives/motivation.
   - Will affect the entire staff

2. Computer training for employee C
   - Risk index score of 71
   - Scored especially high in cost effectiveness, steps to implement, staff support and number of people and functions affected, primarily due to low motivation and potential need for repeat classes, mentoring and one-on-one training

3. Utilize volunteers for secretarial duties
   - Risk index score of 11
   - Cost effective as volunteers are already in place and do not increase the overall cost
   - Will require several steps to implement as each will need to be trained to complete the task.

4. Daily team meeting to determine office needs
   - Risk index score of 11
   - Barriers to implementation will mainly involve *consistently* initiating the brief meeting each morning.

5. Rotate employee C plus one other for maintenance times
   - Risk index score of 13
   - Highest score of the six solutions due to the change required from employee C

6. Reduce staffing to 2 staff members during maintenance times
   - Risk index score 9
   - Lowest scored solution
   - Requires little time or cost to implement and yields much benefit

7. Move check-in area closer to gym space
    - Risk index score of 11
    - Will affect the entire staff and the patients along with a number a functions, however, should improve the efficiency of the task

Projected Gains in Performance

The goal of implementing the above strategies in the pulmonary rehabilitation department is ultimately an improvement in daily and overall performance. The proposed solutions target each of the four performance levels:

1. Organizational systems

   The new, however smaller space, for pulmonary rehabilitation will remain in effect until patient volumes can significantly justify a larger space. However, improved work schedules and a focus on staff communication can improve efficiency and productivity.
2. Management

   The Pulmonary Rehabilitation team works well together in general and is fortunate to have a sense of empowerment. Any improvement in efficiency and communication will result in improved performance and job satisfaction.
3. Physical and Technical

   Again, the space allotted is unlikely to change. The work environment can be improved through schedule changes if adopted by all.
4. Human and Social

   A re-organization of workloads based on job skills, utilization of volunteers will improve team performance.

Implementation Costs and Resource Needs

Little cost is required for successful implementation of the above solutions, assuming computer training is discarded. Training of the volunteers will require time to be allocated by one or more staff member. However, the volunteers are already in place, are in need of things to do and are eager to take on new tasks. They can be trained individually and will use available staff as a resource for questions.

6. Evaluation Plan

Formative evaluation should be conducted during each of the two phases of implementation. The evaluation will include one-on-one small group meetings and random observations to determine if the implemented solutions are acceptable to the staff and are producing the desired results. Corrective action should be implemented if the evaluations reveal flaws in the proposed solutions and are not correcting the performance gap.

Summative evaluations will be conducted once all the proposed solutions have been implemented. This evaluation will be conducted by the management team. Qualitative data will be collected through the use of surveys and direct staff observation. The results will show the effectiveness of the interventions will be compiled in a written report and will be submitted to NHRMC administration. Results should be compared to the baseline information obtained at the beginning of the project in order to determine if the goals were achieved and that a shift in schedule and duties now allows for all office tasks to be completed 100% of the time.

All results will be reviewed by the management team to make sure that the project results are in line with the mission and visions statements of NHRMC in addition to aligning with the goals of PR.

The project goal is to close the performance gaps with solutions that relate to the requirements identified by NHRMC. They include:

Functional
- Enable staff members to complete assigned office tasks
- Allow for scheduled time in which to complete the tasks
- Divide work according to discipline (respiratory, exercise, secretarial)

Interface
- Staff office needs must interface with patient care needs
- Staff office needs must interface with other staff needs

Administrative
- The office tasks assigned must meet Medicare guidelines.
- The solution must include a cohesive, self-managed team approach

Financial
- The solution must be implementable without adding staff

Any solution, in order to be successful, must be adopted and valued by the stakeholders. The primary stakeholders in this project are the staff of pulmonary rehabilitation, the 5.3 FTE's who work in close proximity and depend upon each other for success and harmony within the department. The solutions will need to bring value and meaning to each department member.

Appendix A: Feasibility Decision Matrix

	Assign tasks related to job discipline			Computer training for Employee C			Utilize volunteers for secretarial duties			Daily team meeting to determine office needs			Rotate Employee C + one other for maintenance patient care			Reduce staffing to 2 staff members during maintenance			Move check-in area closer to gym space		
	R	**W**	**RI**	**R**	**W**	**RI**	**R**	**W**	**RI**	**R**	**W**	**RI**	**R**	**W**	**RI**	**R**	**W**	**RI**	**R**	**W**	**RI**
Cost effectiveness	1	1	1	3	5	15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Staff support	1	1	1	2	5	10	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1
Organizational change impact	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Barriers to implementation	2	1	2	3	1	3	1	1	1	2	1	2	2	1	2	1	1	1	1	1	1
# steps to implementation	1	1	1	3	5	15	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1
Available resources	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dependency on time/urgency	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
# functions affected	2	1	2	3	5	15	1	1	2	1	1	1	2	1	2	1	1	1	2	1	2
# people affected	2	1	2	2	5	10	1	1	1	2	1	2	2	1	2	1	1	1	2	1	2
Total			**12**			**71**			**11**			**11**			**13**			**9**			**11**

Legend			
R = Risk	Highly desirable/low risk = 1	Moderately desirable/moderate risk = 2	Not desired/high risk = 3
W = Risk Weight	High importance or value = 1	Moderate importance or value = 5	Low importance or value = 10
RI = Risk Index	RI = R x W (1 = optimal)		