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An Analysis and Prediction of a Patient-Focused Health Care Delivery System on the Practice of Physical Therapy

Stephen M. Rood

University of North Dakota

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AN ANALYSIS AND PREDICTION OF A PATIENT-FOCUSED
HEALTH CARE DELIVERY SYSTEM ON THE
PRACTICE OF PHYSICAL THERAPY

By

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An Independent Study submitted to
the Graduate Faculty of the
Department of Physical Therapy
School of Medicine
University of North Dakota
in partial fulfillment
of the requirements for
the degree of
Master of Physical Therapy

Grand Forks, North Dakota
May
1993
This Independent Study, submitted by Stephen M. Rood in partial fulfillment of the requirements for the Degree of Master of Physical Therapy from the University of North Dakota, has been read by the Chairperson of Physical Therapy under whom the work has been done and is hereby approved.

(Chairperson, Physical Therapy)
PERMISSION

Title An Analysis and Prediction of a Patient-Focused Health Care Delivery System on the Practice of Physical Therapy

Department Physical Therapy

Degree Master of Physical Therapy

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Signature

Date 6/93
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ACKNOWLEDGMENTS

I would like to express my sincere appreciation to my family for allowing the continuation of my educational development and for their support and love these last two years.

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A special thank you to the Medical Center Rehabilitation Hospital for their financial support and commitment as an institution in supporting continued education.

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ABSTRACT

The purpose of this independent study is to look at physical therapy's role within a new health care delivery system called patient-focused care (FCC). It supplies information on the status of our current health care industry and offers overwhelming support on requests for change. There is a comprehensive, comparative analysis of the current health care delivery system and that of the new experimental patient-focused health care delivery system. It offers a comparison of six major components in each model, such as physical structure, reporting structure, and process and procedures in job description, plans of care, scheduling, and cross training. Finally, it offers cautions and suggestions in the implementation of physical therapy within this new FCC model and makes a prediction of the effect it will have on the practice of physical therapy.
CHAPTER I
INTRODUCTION

This paper is an attempt to predict the effects that a patient-focused health care delivery system will have on the practice of physical therapy. At least ten hospitals across the country are currently experimenting with patient-focused care in an effort to improve quality, maximize staff productivity, and increase patient and physician satisfaction. The cross training of health care professionals and decentralization of basic medical services are two important features of patient-focused care. This organizational concept could substantially change the structure of hospitals, and particularly that of the allied health professions. It is clear that these programs will have a dramatic impact on how health care will be provided in the future. Physical therapists and other health care professionals will need to study the concept and stay actively involved in order to optimize the quality of care to patients.

Patient-focused care is an outgrowth of a concept known as "business process re-engineering" or "business integration." It has been implemented in manufacturing and in other service industries, such as banking and insurance, and has been seen as a way to maximize efficiency and increase customer satisfaction. Two of the most prominent names in the evolution of this structural management theory are Anderson Consulting, a Chicago-based firm

1
specializing in change management and systems integration, and Eastman-Kodak Company. Together they have developed a health care delivery model called World Class Health Care,\(^1\) known and used in hospitals as "patient-focused" or "focused" care. The basic philosophy of this approach is predicated on the delivery of efficient top-quality services, reduced operating costs, and increased customer satisfaction. To accomplish these goals, hospitals are reorganized into a series of mini-hospitals that are organized, supplied, and staffed according to shared or similar patient and physician needs.

Conversely, our present health care delivery system presents a structure of functional fragmentation, compartmentalization, and centralization. This has created a situation where patient care is only 20% of what is going on, with all the rest being noise and infrastructure.\(^2\) We have developed a system where we have convinced ourselves (and patients) that a one- or two-hour odyssey for a routine x-ray exam is "good service," and five-minute EKGs require nearly an hour's worth of scheduling, documentation, and transportation.\(^3\)

This independent study will discuss the status of the health industry, report on the requests for change, and thoroughly analyze our present-day hospital structure and patient delivery system. It will compare it to the experimental patient-focused health care delivery system, its hospital structure, and patient delivery system. It will evaluate the delivery of physical therapy services within both delivery models, and make a prediction on the effect focused care will have on the practice of physical therapy.
CHAPTER II

METHODOLOGY

A paucity of empirical research data relevant to focused care exists due to the newness of this concept. Primary sources involve hospital pilot projects implementing the patient-focused care. A variety of methods were used for information gathering on this subject. Articles which provided information on present hospital systems were gathered through Medline searches. These articles related to structure, compartmentalization, and customer satisfaction, pointing out the inefficiencies of our present-day facilities. Further search revealed articles promoting patient-focused care, and its advantages in hospital structure, decompartmentalization, and positive effects on customer service and satisfaction. Seminars, audio tapes, and personal telephone interviews with caregivers presently involved in patient-focused health care delivery systems were also used.

United Hospital in Grand Forks, North Dakota, has been accepted as a pilot project site for the implementation of patient-focused care. With hands-on experience and working in this pilot project, information will be acquired and supplied through working directly with the Coordinator of the patient-focused project at the hospital. Currently, this author will be actively involved in
implementing the patient-focused process in the physical therapy department at United.
CHAPTER III

LITERATURE SEARCH

Status of our Current Health Industry

Rarely does a day go by that we do not hear about the need for change in the health care industry. In the last Clinton/Bush election, health care was second only to the nation’s economy on the list of priorities.⁴ Between 1980 and 1990, general inflation rose 57%; expenditures under Part A of Medicare increased 160% and under Part B, 280%, spending under the Medicare programs nearly tripled from $37 billion to $108 billion.⁵

The cost of health care in the United States has become a national concern because the cost to industry of providing health care for employees has become so significant that it has hurt the ability of industry to be competitive in the world market. As an example, the cost for health care added to a car made in Japan is $600; in the United States, it is close to $1,200.

Approximately 10 years ago, at a hospital conference, a representative from the Joint Commission of Accreditation of Hospitals and Organization (JCAHO) stated sixth “The health care industry can now do more medically than we as a society can afford to pay for." At that time, the industry was changing from fee-for-service to prospective payment diagnostic related groupings (DRGs) in an effort to control health care costs. The JCAHO representative
indicated that medically we can perform a total knee arthroplasty on a hemophiliac patient at approximately $75,000. The average cost at that time was approximately $5,000 for a routine total knee. The question was "Can we afford this as a society?." He believed change was necessary, and change did come through the implementation of DRGs. A health care futurist predicted two years ago that the health industry would be faced with tremendous challenges called "white waters" for the next five to seven years, and there would be a need for major health care changes. "White waters" were defined as turbulent, unpredictable rough waters for health care.

At the present time, there are approximately 10,000 nursing homes in the United States, and by the time the baby boom generation become geriatrics, there will be a need for 19,000 nursing homes. Several years ago, Robert Jacobson, President of United Health Services, stated "The economic future of health care is like two freight trains heading towards each other on the same track" and predicted that if the health care industry was not able to manage their costs, Congress would do it for them. This has become a reality.

At a recent luncheon with the North Dakota State Tax Commissioner just prior to the Bush/Clinton presidential election, health care reform was predicted to be a reality. It was indicated that, if elected, Mr. Clinton would establish a health care reform within the first 100 days of taking office. This would include an assessment for health care provided each individual. It was believed that the State of North Dakota would move to a managed care system, and that
each state would be given so many health care dollars each year. It is further anticipated that there will be capping of health care costs, that more services would be made available to the elderly and disabled, and that a move to more primary and preventive care, with a slowing of price increases for prescription drugs would occur. More attention will also be paid to AIDS issues, and more investment will be made in medical research.

Requests for Change

The need for change and the shrinking dollars available for health care are being experienced by professions, such as physical therapy, through an increased number of denials for services by the different providers. There has been an establishment of different requirements as to how many days patients can be treated for each different diagnosis. The federal government is now moving toward a prospective payment system for physical therapy services provided in a variety of settings. All of this adds up to, and supports the need for, changes in the health care system. An increased number of articles are being published which criticize the traditional health care delivery system (as is) and believe that there must be movement toward a patient-focused health care delivery system (to be) as a reasonable approach which would allow hospitals to control costs, improve efficiency, and improve customer service.

The "as is" delivery of services is full of pitfalls and inefficiency. Recordkeeping, scheduling, transporting, supervising, attending meetings, tidying up, serving meals, and simply standing around idle, now consumes fully
84% of the typical hospital supportively value-added personnel activity. For every dollar spent on direct care, three to four dollars are spent waiting for it to happen, arranging to do it, and writing it down. Typical 500-bed hospitals have more than 500 job classifications, with an average of only six employees in each class. All of this leads to inflexibility of resources and obstacles in trying to restructure organizations. A number of processes have evolved because of specialization, and this has led to an inflexible work force that is incapable of handling the day-to-day high and low workloads. It is believed that a new approach to care giving is necessary in the health industry today, and that this will improve care, while dampening projected shortages of health care professional now and in the future.

No fewer than 105 personnel are involved in caring for a single stroke victim during an average six-day stay. During that period, the patient is shuttled more than eight miles between the Emergency Room, the bed, neurodiagnostics, cardiology, radiology, and the business offices, while the nurse caring for the patient spends 30% of her day on logistics, standing idle waiting for things to happen, and medical recording. It is believed that the hospital industry has lost its soul by processing administrators who are schooled in the rigors of break-even analysis and product line management.

One author believes that we have banished the word "services" from our vocabulary and that we now pedal products. It is believed that we need to create a new culture in our hospital system that would emphasize greater fiscal
responsibility, productivity, and orientation to patient needs. There is a general
discontent of caregivers throughout the industry, and unrest among
professionals in our present-day system.\textsuperscript{12} There is ongoing frustration with
regulations. The shift is from caregiving to paper shuffling, and schools for
health care professionals that once had 25 applicants per spot are now down to
1.6 candidates per admission.\textsuperscript{13}

Hospitals have tried to handle the economic dilemma by selling off
unrelated or unprofitable aspects of their businesses, downsizing, and
consolidating their diagnostic equipment. They contend that all of this has
helped, but the real problem is one of leadership and a need to change
behavior--from the top down.\textsuperscript{13} The health care industry, by and large, has
made thousands and thousands of basically sound decisions over the past 30
years. Unfortunately, they now add up to a mess that makes no sense. It is a
system that is out of touch with its customers' needs, and more than half of all
basic lab tests ordered are "stat" because hospital processes take too long.
There is a preoccupation with specialization that has created a tremendous
inflexibility in caring for patients--an infrastructure nightmare where clerks and
secretaries outnumber inpatients in a large hospital, and department head
meetings at large hospitals typically can have 60 to 100 people in attendance.
All of this has resulted in high quality clinical care, but there is a terrible price
being paid in terms of confusion, lack of continuity, impersonal care, and
financial costs.\textsuperscript{3}
There is a present challenge for health care executives to take a risk and make changes in their health care industry because "it is late in the day and we are drifting." Patient focused health care delivery system is being advocated as a needed change in the health care industry of today. Imagine a hospital organized specifically with one goal in mind: To serve the needs of the patients and physician. Gone will be the centralizing admitting departments, the central medical records function, phlebotomy, and numerous other functions. In place, the health care center that has admitting along with routine chemistry, hematology, diagnostic imaging, physical therapy, EKG, and social work all being performed in the same area--a mini-hospital, all on one floor, called a "patient-focused care center" (FCC).

Comparative Analysis

This FCC combines the modern principles of continuous quality improvement with old-fashioned customer service. It brings together all facilities and resources necessary to treat patients with related conditions together, resulting in greater focus on the patient and fewer barriers to improved services. It allows hospital professionals who previously spent most of their time in isolated departments to gather in a unit with direct contact with one another and their patients, as teams for day-to-day treatment. Non-value-added activities--patient travel, documentation, and writing--are reduced. Turn-around time for patient tests and procedures is shortened as caregivers follow a prescribed care path/road map which integrates the required care for each
patient and keeps an eye on quality measures, patient outcome, resource utilization, and length of stay. All of this presumably adds up to greater efficiency, higher quality of care, and shorter patient stays. Peter Drucker, a well-regarded writer on health care, says that\(^{10(p33)}\) "Well run companies do not repair a plant after 20 years, they tear it down no matter how good the structure is." This is a radical response and unthinkable for most hospitals, but a major overhaul is in order for our health care industry of today.

This paper will discuss and compare the "as is" and "to be" health care delivery systems in the following areas:

1. Physical Structure
2. Reporting Structure
3. Job Description
4. Plans of Care/Procedures
5. Scheduling
6. Cross-Training

The above-mentioned areas will be presented in a format of visual comparisons followed by comparative discussion.
As is conventional hospital structure is one of centralization with individual departments of physical therapy, occupational therapy, radiology, admitting, and others being located on different floors throughout the physical structure. While some patients with like diagnoses may be grouped in specific areas of the
hospital, this is not done to the extent that focused care centers advocate. It is
the regrouping of patients into larger, 60- to 80-bed areas called focused care
center (FCC) that gives the system its strength. Beds are assigned based on
common resource utilization needs and similar patient and physician
characteristics. There is a redeployment or decentralization of certain patient
care activities. Many traditional clinical support and administrative services are
decentralized and redeployed among FCCs. Certain services, such as
admitting, routine chemistry, hematology testing, and routine diagnostic
imaging, are provided in each focused care center. The example provided is
an FCC set up for surgical patients much like a mini-hospital. Frequently
performed services which are required for specific diagnoses are placed within
the FCC if there is a utilization need. The example given is a surgical FCC that
would include the following services: Pre-admit/admit, business reception,
physical therapy, occupational therapy, x-ray, and processing. As these
services are all frequently used in the treatment of surgical patients, it makes
sense to place them in the FCC unit.

Each hospital may have a number of FCC units that are designed
according to the hospital's services and mission. By focusing these services
around patients with similar needs, care teams will have most of everything
needed close at hand to care for the patients. The United Hospital has named
their project United Focused Care (UFC) and have established the following
focused care units within their hospital structure.
1. Surgical
2. Medical
3. Health and Family
4. Cardiology
5. Ambulatory Care

Through an analysis of resource utilization of physical therapy services for the different diagnostic categories, physical therapy will have a department on the surgical UFC unit and a smaller department with some modalities available in the medical UFC. The cost benefit and workload did not justify physical space on the other UFC units, but service to those areas will be handled through treatment of patients in the room, or patients will be transported to the resource-intensive Physical Therapy Department in the surgical unit.

**FCC Environment - Part I  FCC: Surgical**

<table>
<thead>
<tr>
<th>Test</th>
<th>Volume for FCC</th>
<th>Equipment</th>
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<tbody>
<tr>
<td>Exercise I</td>
<td>409185130</td>
<td>Cart's to carry PT Walking Accessories and weights etc.</td>
</tr>
<tr>
<td>Exercise II</td>
<td>409185140</td>
<td>1175 *</td>
</tr>
<tr>
<td>Gait Training</td>
<td>409185150</td>
<td>5326 *</td>
</tr>
<tr>
<td>Kinetec Leg Ex</td>
<td>409186150</td>
<td>1346</td>
</tr>
<tr>
<td>Hot packs</td>
<td>409185010</td>
<td>60</td>
</tr>
<tr>
<td>Infra Red</td>
<td>409185030</td>
<td>3</td>
</tr>
<tr>
<td>Contrast Packs</td>
<td>409185070</td>
<td>1</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>409185090</td>
<td>30</td>
</tr>
<tr>
<td>Massage I</td>
<td>409185110</td>
<td>35</td>
</tr>
<tr>
<td>Tilt Table</td>
<td>409185170</td>
<td>183</td>
</tr>
<tr>
<td>Jobst</td>
<td>409185190</td>
<td>49</td>
</tr>
<tr>
<td>Exercise 2 Cardiac</td>
<td>409185310</td>
<td>89</td>
</tr>
<tr>
<td>other Treatments</td>
<td></td>
<td></td>
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Assumptions, Issues, etc. (for above)

Some of the above treatments with the * can be crosstrained, most of the gait training & exercises on orthopedic surgical patients will need direct PT services to assure Quality CSP with short length of stay.

The Physical Therapist would need to work with patient first and then crosstrained staff could do these treatments under the direction of the Therapist. Criteria met for decentralizing are: Volume Justified, high % of patients receiving treatments, and low cost technology. (minimal cost for equipment) Steve said that the PT central department is located on third floor and if that floor is being considered for Surgical FCC they would only need carts with PT accessories & weights to go up and down floor to patient rooms.
Reporting Structure

As Is

Traditional Design
- Segmented processes/activity boundary
- Centralized services/functionality
- Hierarchical control and accountability
- Specialized simple jobs
- Individual orientation
- Independent work group
- Individual rewards/compensation

To Be

FCC Design
- Whole process/integrated across
- Redeployment services/functionality
- Delegated control and accountability
- Enlarged, multifunctional jobs
- Group orientation
- Interdependent teams
- Group rewards/compensation
Shifting from a traditional organization to the FCC design will require the development of new human resource strategies and the alignment of the human resource infrastructure to support the new processes and structure. Care teams provide patient treatment in the FCCs. Each team is comprised of a care coordinator or team leader and licensed and unlicensed individuals. Each team cares for groups of six to eight patients and follows them from admission to discharge. Members of the team are trained to deliver care across skills and discipline. Activities typically designated to care teams include patient transport, IV therapy, traditional nursing activities, and certain physical therapy and respiratory therapy functions. Under this structure, the patient is in the center of the framework with four teams interfacing, offering care to the patient. They are:

1. Admission team: established to handle large volumes of pre-admission assessments as well as coordination of admissions on the FCC.
3. Clinical team: physical therapy, laboratory, radiology, social work, pharmacy, occupational therapy.
4. Bedside caregiver: primary nurse and care associates together provide direct patient care, perform cross-trainable treatments. Primary nurse develops individual care plans according to critical paths/doctor's protocol and help direct the care associates in providing direct patient care.
The four teams and other FCC members will focus as cooperative self-directed teams for value-added care for the patient/family and coordination while optimizing resources for patient care.
Job Descriptions
As Is

Physical Therapy Department
Overview
The Physical Therapy staff will work as a team in giving direct care in their patients. Patients will be brought to the Department whenever possible and will be treated in the room only when necessary. Under the present structure, departments act autonomously in fulfilling their requirement in giving services to the patient. Physical therapy (PT), laboratory (lab), radiology, social work, pharmacy, and occupational therapy (OT). There is a team effort in communication with ancillary services to nursing with efforts to provide quality care.

Physical therapists work with individual nurses caring for patients, incorporating their patient assessment and appropriate therapy treatments or tests. Following departmental standards of care, staff therapists work with aides/orderlies specifically trained and under the direction of a physical therapist to complete treatments. There is no supervision of nursing care givers for the treatments of physical therapy other than requests for supplementary support for prescribed therapies on individual patients to be carried out in the room. Ancillary services normally do not become involved with basic patient care needs.

To Be

UNITED
FOCUSED CARE

High Level Job Profiles

Clinical Team
Overview
The Clinical Support Team will meet one of the prime objectives of UFC - bringing services closer to the patient. Wherever possible clinical services will be provided for the patient at the bedside or on the FCC. For the Surgical Focused Care Center, the Clinical Associates that will support the bedside or FCC delivery of care include: Physical Therapy (PT), Laboratory (Lab), Radiology, Social Work, Pharmacy and Occupational Therapy (OT). Restorative Communications among care providers will increase resulting in higher quality of care.

Clinical Associates will work with the Patient Care Coordinator and Bedside Teams to incorporate their patient assessment and appropriate therapies, treatments or tests into the individualized care plans. Each team member will be responsible for providing their specialized therapies, treatments or tests. A new key role for the Clinical Associates is responsibility for monitoring and supervising other care-providers that are responsible for providing cross-trainable therapies, treatments or tests. As needed, each team member will assist with basic patient care needs.

Clinical Associate - Physical Therapy
Overview
Direct and conduct assessment and treatment of patients with appropriate therapies. As a department, support and educate each other and interface and educate nursing as necessary.

Major Responsibilities
- Perform therapies
- Monitor therapies
- Train department aides and orderlies
- Daily direct hands-on treatment
- Provide therapeutic evaluations
- Maintain high standards of professional skill to continuing education
- Communicate and collaborate with physicians, nursing, and other care providers
- Adhere to professional standards
Physical therapists will have a greater role as consultants, will be responsible for cross-training, and will become an integral part of the FCC clinical team to improve communication between disciplines and direct caregivers in an effort to increase and bring about a higher quality of care. Many of the other major responsibilities will remain the same. There is a shifting of responsibility and reporting from the centralized Physical Therapy Department to the FCCs.
Plan of Care/Referral

Critical Path/Care Path

To Be

Total Knee Arthroplasty

<table>
<thead>
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<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE-ADMIT</td>
<td>ADMIT-DAY 1</td>
<td>Day 1</td>
<td>DAY 2</td>
<td>POST-DAY 1</td>
</tr>
</tbody>
</table>

**EXPECTED OUTCOME**
- Verbalizes fears/concerns about impending surgery (teaching sheet)

**ASSESSMENT**
- Doctors visit
  - Post-op VS (10/10), Q3H/4H/8H
  - CPM degree, increase
  - Check alignment ≤ 4H
  - Drop check ≤ 4H
  - OASIS check ≤ 4H
- Social service/physician/ADL
  - Review TKA teaching/pain
  - PCA teaching sheet
  - Give knee booklet

**TEACHING**
- Pre-op TKA teaching at pre-op visit
- PCA teaching sheet
- Knee booklet

**IMPLEMENTATION TREATMENTS**
- Hematoma
  - I.S. or HUH
  - Hemovac
  - IOD
  - CPM (1-2) 24H
  - TCO2 (0.5-1) 24H
- CPM: degrees, increase
  - Degrees BID until degrees
  - Traction
  - Remove CPM at right time as ordered
  - Check skin appearance ≤ 2H
- NURSING
  - Post-op: resume home meds
  - PCA sheet
  - DC anticoagulants
  - Home meds
  - NIV
  - PPC pain medications

**ACTIVITY**
- Pre-op center
  - Up all, I.d pre-op
  - Bedrest post-op
  - L.S. or HUH
  - Hemovac
  - IOD
  - CPM (1-2) 24H
  - TCO2 (0.5-1) 24H
  - CPM: degrees, increase
  - Degrees BID until degrees
  - Traction
  - Remove CPM at right time as ordered
  - Check skin appearance ≤ 2H
- NURSING
  - Post-op: resume home meds
  - PCA sheet
  - DC anticoagulants
  - Home meds

**PLAN OF CARE**
- Physical therapy goals
  - Maximize alignment in CPM
  - Satisfactory pain relief
  - Improve ROM
  - Maximize alignment
  - Increase CPM
  - Bedrest post-op
  - PCA sheet
  - Knee booklet

**SOURCE OF ORDER**
- Physician
  - Physical therapist
  - Radiology
  - Social services

**FREQUENCY OF EX. DAILY**
- Days: 1, 3, 5 for baseline and compare

**ADMIT DAY**
- Check alignment
- OASIS check ≤ 4H
- Home health nurse
- Social service/physician

**POST-OP DAY 1**
- Check alignment ≤ 4H
- OASIS check ≤ 4H
- Home health nurse
- Social service/physician

**POST-OP DAY 2**
- Check alignment ≤ 4H
- OASIS check ≤ 4H
- Home health nurse
- Social service/physician

**POST-OP DAY 3**
- Check alignment ≤ 4H
- OASIS check ≤ 4H
- Home health nurse
- Social service/physician

**POST-OP DAY 4**
- Check alignment ≤ 4H
- OASIS check ≤ 4H
- Home health nurse
- Social service/physician

**POST-OP DAY 5**
- Check alignment ≤ 4H
- OASIS check ≤ 4H
- Home health nurse
- Social service/physician

**POST-OP DAY 6**
- Check alignment ≤ 4H
- OASIS check ≤ 4H
- Home health nurse
- Social service/physician

**POST-OP DAY 7**
- Check alignment ≤ 4H
- OASIS check ≤ 4H
- Home health nurse
- Social service/physician

**POST-OP DAY 8**
- Check alignment ≤ 4H
- OASIS check ≤ 4H
- Home health nurse
- Social service/physician

**OUTCOMES**
- Maximize alignment in CPM
- Satisfactory pain relief
- Painless
- Alignment
- Increase CPM
- Bedrest post-op
- PCA
- Knee booklet
Care paths are diagnosis-specific treatment plans for patient care. They are developed by a multidisciplinary team which is a physician-directed group of caregivers who are focused on diagnostic categories of patients. They are considered road maps that guide the primary care team in providing day-to-day care throughout the patient's stay. Departmental plan of care/referrals are eliminated and certain features are incorporated into the care paths.¹,¹¹

Charting by exception is another component of this chain. As part of this process, team members note only differentiations from a predetermined standard protocol. Traditional progress reports are replaced by notes focused on exceptions to normal routines. Charting time is reduced according to some estimates by 50%.¹

Treatments/Scheduling

In a study performed at the United Hospital Physical Therapy Department in Grand Forks, North Dakota, observations were made on the successful and unsuccessful attempts in patient scheduling. The processing of transportation and treatments were analyzed. The following information is provided from that study.
Physical Therapy Observations

Physical Therapy Treatment provided in the Department:

- Patient is prepared for treatment by nursing staff
- Patient waits in hall for transporter
- Patient is transported back to room
- Patient receives treatment in Physical Therapy department
- Patient is transported to Physical Therapy department

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Physical Therapy (in patient room)
- Successful & Unsuccessful Attempts

- Patient Status:
  - D/C, ICU, already treated in dept.
- Nursing Related:
  - Bathing, nursing tasks being performed.
- Patient Unable:
  - Fatigue, failed, refused treatment.
- Dept. Related:
  - X-Ray, OT, or RT being performed.

Source: Ancillary Activity Analysis
Physical Therapy (in patient room) - Successful & Unsuccessful Attempts

- **Successful Attempts**:
  - 57%

- **Unsuccessful Attempts**:
  - 43%

**Patient Status**
- D/C, ICU, already treated in dept.
- Patient Unable: Fatigue, failed, refused treatment.
- Dept. Related: X-Ray, OT, or RT being performed.

**Nursing Related**
- Bathing, nursing tasks being performed.

**Dept. Related**
- 40%
- 23%

**Patient Unable**
- 23%

*Source: Auditors, Activity, Analysis*
This researcher designed another study on patient scheduling within the same Physical Therapy Department. Out of 7,084 patient visits to the department, results indicated that the average patient came to the department 29 minutes late, resulting in 1,325 non-compliances and an 18.83% non-compliance to the scheduling system. Computing the salary and fringe benefits of a physical therapist and one health care aide/orderly, the study concluded that there was a $33,621 price of nonconformance that indicated a significant cost-of-quality problem. A recent study in the same physical therapy department showed that patient scheduling utilized five to six staff, took 13 steps, 125 to 135 minutes to complete a patient treatment, and projects that in the UFC, there would be two to four staff involved, with two to five steps, and the time other than actual therapist-patient interaction, would be substantially less.

Cross-Training

The specialized hospital work force is simply too inflexible to handle the "feast or famine" workload. The traditional hospital organization is an elongated entanglement of conflicting constituencies making even the simplest procedure subject to bottle-neck and breakdowns. In a focused care center, a team of nurses, aides, and technicians are given sufficient cross-training so they can treat patients with similar diagnoses from admission to discharge. The model maximizes a caregiver's time because a smaller group of people have a wider range of responsibilities.
administered by the physical therapist with minimal cross-training or carryover to other caregivers. Some departments utilize restorative aides or physical therapist assistants to provide physical therapy activities, but these individuals are part of the physical therapy staff and report directly to the supervising physical therapist or director of the physical therapy department.

In an FCC, the clinical specialty departments are asked to list services and treatments that can be cross-trained to other care providers within the FCC. The physical therapist in an FCC continues to stay actively involved in patient treatment, and in traditional design, many departments have trained aides and orderlies to carry out services like hot packs, Jobst intermittent pressure, basic exercises, ambulation of patients, and assisting in transportation of patients. There is a variety of alignment of duties and responsibilities, depending upon the physical therapy department.

FCC design for cross-training will extend this training to the bedside caregivers. An example of cross-training from a physical therapy standpoint would be to train bedside caregivers in routine range of motion in the nonpathologically involved, allowing the walking of patients if there is no actual gait training required, and the instruction of simple exercises and functions not confined to physical therapy licensure, such as traction treatment or the use of continuous passive motion devices. These activities will be performed by care team members under the supervision and guidance of physical therapists. This relationship is intended to develop an improved continuity of care and
communication of information that is more difficult under traditional
departmental organizational structure.¹

The basic idea of an FCC is to allow cross-training to all caregivers in an
FCC, allowing them to provide 80-90% of the services their patients need.
Caregivers are drawn from a variety of backgrounds and cross-trained. Routine
care is provided by med techs, lab techs, and respiratory techs as well as
nurses. The caregivers truly "own" their patient. Continuity is maintained
across shifts and across days of stay. The bedside team performs even
mundane tasks such as linen changing, tray passing, and phlebotomy. Routine
ancillary services are performed for the convenience of patients and doctors
and are not dictated by central departments. Turnaround times are predicted to
outperform certain "stat" levels of services.¹¹ Cross-training includes traditional
bedside nursing, basic X-ray films, routine lab work, respiratory care, and
EKGs. As a result, patients seldom leave the unit, and almost never require
scheduling and major transportation. Consequently, patients no longer interact
with 55 employees; they interact with fewer than 15.¹¹
CHAPTER IV

RESULTS

Health care reform is a reality, and patient focused care will be a model that will be implemented in a number of hospitals. While some caregivers are excited about the opportunity to participate in a broader range of care, there is some fear as well. People wonder what focused care really means in the long term and also pride themselves on individual professions they have chosen and for which they have trained, and which they do not want to give up. According to proponents of patient-focused care, surrendering of professional expertise is not an inherent part of the process. When successfully executed and supported by hospital staff, focused care respects the individual professional’s knowledge and skills. It is trying to create a team environment and culture where knowledge and skill are valuable, along with team membership and the opportunity to provide a comprehensive set of skills. What patient-focused care hopes is that PTs will not just see themselves as a PT, but a PT who is a member of a care team.

Through the literature search, it is obvious that there are inefficiencies and a need for change in the health care industry. While patient-focused care is an approach requiring a macro restructuring of hospitals, it is being advocated as a change that will decrease hospital costs, improve processes and efficiency, as
well as customer satisfaction. There remains a multitude of questions and cautions in the implementation of this model.

Rearranging the physical structure in a hospital makes sense logistically for bringing services of high utilization closer to the patients. This certainly will decrease time necessary for carrying out procedures, and will significantly decrease transportation and travel time for patients and staff. From a physical therapy standpoint, it makes sense to initiate treatment bedside where proper training and instruction can be given in the patient's room, helping improve the level of independence within that environment. However, we cannot lose sight of the value of developing a camaraderie and the motivation that exists when patients are grouped together during exercise sessions. It is difficult to put in words the motivation that patients experience as they observe others with disabilities and diseases working through their exercises and ambulation, and how this can motivate the otherwise lethargic, uncooperative patient and maximize their potential. Physical therapy must stay involved to assure that a physical space is set aside in the FCC unit so that those active patients can benefit from a group environment.

The reporting structure advocated for patient-focused care is a significant change from the hierarchy design of conventional hospitals. The structure itself integrates administrator to bedside caregiver into interdependent teams, but each team is self-directed. It is an enhancement to team processes of conventional hospitals which are segmented, and definitely can have some
advantages in the coordination of services to patients. While this design asks for the professional ancillary department to be more integrated into a team, there cannot be a dilution or a decrease of networking with professional peers. It is necessary that professionals share continuing education experiences through inservices on a regular basis, and be allowed rotations through a patient-focused care center as part of the professional growth experience. It will give greater depth from a staffing standpoint and will be necessary for staffing of weekends, evenings, and holidays. The setting of quality standards and the evaluation of the physical therapy in an FCC unit will need to be thoroughly examined. All issues will need to be presented in order to obtain quality care and protection for patients, and to ensure value and growth for caregivers.

Peer review has been advocated as a mechanism for evaluating physical therapists, and is a mechanism that can work to improve care. The value of an experienced physical therapist should not be discounted, and must be utilized in the setting of quality standards and to ensure a valuable evaluation. A nurse does not have the foundation for evaluating the clinical skills of a physical therapist nor does a physical therapist have a foundation for evaluation the clinical or administrative skills of a nurse. It is reasonable to expect that part of an evaluation could come from team members of an FCC, and that their input on processes other than clinical may be valuable.
The job description of a physical therapist is essentially unchanged from a clinical standpoint. It requires a closer relationship as a member of the clinical support team, bringing treatment closer to the bedside when capable. There will be increased responsibility for cross-training and education, and a key responsibility will be to monitor and supervise other care providers who are responsible for providing the cross-trainable therapies and treatment. Overall, the physical therapist does take on a greater role as a consultant in this model.

An exciting product that is inherent to the success of patient-focused care is the plan of care (road map). This will require a major consumption of time and resources, but the time spent in the detail will have a great impact on the success and quality outcomes. The challenge for the physical therapist in the development of care plans will be the involvement and utilization of resources necessary to accomplish quality for individual diagnoses. We cannot afford an over-utilization of resources, and should move toward early intervention and adequate discharge planning. The plan of care becomes the foundation in patient-focused care. With a properly designed plan of care, charting by exception becomes an enhancement in the caregivers' ability to provide service to the patient. As a caregiver, this can be seen as a gift, enabling us to spend the time with the patient that has always been the goal, but one seldom attained because of documentation requirements.

The P.T. profession continues to experience a severe shortage; if attempts to develop more efficient and effective methods of providing physical therapy
are not found, the field is at risk. The job will be performed in some other way, and it may not be by a P.T. Cross-training puts the physical therapist in the role of a consultant. It also allows the therapist to carry out treatment for which he/she has been professionally trained. It also allows careful outlining of tasks and activities that can safely and professionally be carried out by other individuals. If physical therapists believe themselves as authorities and have the perception by hospital staff and administrators as authorities, then FCC can be an opportunity to expand the role as a professional, while having a greater impact on overall physical therapy utilization, and potentially increasing the profession's control of the quality of care. Cross-training needs to be processed with staff paying close attention to those activities or treatments that can be carried out by other caregivers, freeing up more time for the professional to concentrate on treatment and activities that will truly benefit the outcome of care.

There is a real fear of cross-training and the effects it will have on blurring of professional and nonprofessional roles. There is already activity in the legislatures looking at "loosening" up the licensure laws, making it easier for cross-training and attempting to expand services in rural areas which have been unable to obtain services. The educational approach necessary for cross-training to succeed will have to be ongoing and becomes difficult when there are more than a few people involved. Experiences in nursing homes indicate that there is better quality and outcomes when one or two individuals are cross-
trained to carry out such things as range of motion and simple exercise programs, as compared to training certified nurse's assistants (CNAs).

The major principles of patient-focused care are as follows:

1) Focused patient populations (grouping patients with similar diagnoses)
2) Redesign care from the patient’s perspective (defining patient’s requirements)
3) Simplify work processes (stopping non-value-added activities)
4) Broaden employee knowledge, skills, and abilities (cross-training)
5) Empowerment.

The outcomes are described as the following:

1) Greater continuity
2) Decreased waiting time
3) Increased direct care time
4) More individualized care
5) Caregivers know the patients better
6) Increased patient satisfaction.

Benefits to the employee are as follows:

1) Greater staff satisfaction (fewer opportunities for errors)
2) Knowing their patients better
3) More involvement in decision-making
4) Increased expanded knowledge and skill base.
Hospitals taking a progressive approach in patient-focused care will increase their level of direct care by 60 percent, while lowering their total personnel-related costs by as much as 40 percent.\cite{2} Another study indicates that 35 percent decreased cost to the industry can be accomplished through the creation of this new customer-driven organization.\cite{19} It is predicted that 29 percent of precious time and energy of a caregiver is spent in observation and documentation.\cite{2} All of this adds up to the opportunity and need for change in the health care industry. It is predicted that errors will be greatly reduced, staff, physician, and patient satisfaction levels will soar, and that there will be a tremendous commitment in cost and it must be recognized that there will be resistance in undertaking major operational restructuring projects of this magnitude.
CHAPTER V

CONCLUSION

Managed competition will be implemented in the health care industry under the Clinton Administration. Hospitals will need to position themselves to become cost competitive, or they will not survive. The operational restructuring into a patient-focused care unit offers answers to the soaring costs of health care and in simplifying the present health care delivery system. The advantages and opportunities explored in this paper would support a hospital's decision to move in this direction. The ability to control costs will be accomplished through expanding the role of caregivers, simplifying processes, and decreasing of non-value-added activities. Patient-focused care is a move back to old-fashioned customer service, empowering caregivers, and allowing them back on the work team by cross-training. It is also service-focused via an administrative leader who is responsible for all services and supplies provided in the center.

The physical therapy department will no longer be a centralized department and operate as a unit. It will become decentralized, and the role of the physical therapist will change significantly. Major responsibilities will be to work closely with the clinical team in each FCC unit. Physical therapists will continue to give direct services to patients, but will take a larger role as an evaluator, consultant,
and educator for cross-retraining to the bedside team. This will necessitate developing skills as an educator and will challenge each physical therapist to maximize his or her potential. This writer believes physical therapists will be practicing more as private practitioners, and will need to develop the skills and independent thinking that is required in that type of environment. They will be empowered to make changes in decisions like never before, and will have a significant increase in responsibilities. Middle managers (directors of physical therapy) will no longer exist as they are today. The roles and responsibilities of these individuals will change as this model evolves.

There is a potential for physical therapists to lose their identity through decentralization, but there appears to be an intent to retain the respect and value of the professional individual within the patient-focused teams. Routine skills not requiring a physical therapist will be cross-trained to other caregivers, and the physical therapist will find himself/herself evaluating and reevaluating, along with revising treatment programs more frequently than they have in the past. They will find themselves in a system that can potentially save them time, allowing increased hands-on patient care, and a greater emphasis of their use as a resource for other caregivers.

The quality of health care will in part be decided by society, and what society is willing to pay. One has to question whether quality will be adversely impacted by decreasing the emphasis on the professional. The physical therapy profession will be challenged as to whether it is going to lose its identity.
in this process, as to whether it can meet the challenges to maintain quality, and as to exactly how it fits in this new health care delivery system.
REFERENCES


6. JCAHO Representative. Personal communication (DRG Conference), June 28, 1983.

7. Kaiser LR, Ph.D., Associate Professor, Graduate Program in Health Administration, University of Colorado, Denver. Personal communication (Conference), March, 1988.

8. Jacobson RM, President, United Health Services, United Hospital, Grand Forks, North Dakota. Personal communication (Directors’ Meeting), October, 1991.


