

HOSPITAL CASE MANAGEMENT™

the monthly update on hospital-based care planning and critical paths

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Give outcomes managers responsibility for continuum-of-care issues

Free case managers to manage episodes of care

With many hospitals collapsing virtually all their quality-related departments into case management, some case managers worry that the added administrative workload could interfere with their ability to clinically manage patients. But now, some hospitals have found a solution they say eases the burden on case managers as well as allowing for more effective population-based management of patients along the continuum. The answer: giving outcomes managers responsibility for the “big picture” of cross-continuum care.

“The problem is that it’s hard for case managers to focus on the tasks of the day and get patients through episodes of care if they’re also trying to run teams and coordinate data,” says **Connie Rowe**, RN, CPHQ, director of quality, utilization, and risk management at Enloe Hospital in Chico, CA.

“There’s no question that case managers are overloaded,” agrees **Michael Newell**, RN, MSN, CCM, a managed care consultant in Merchantville, NJ, and author of *Using Nursing Case Management to Improve Outcomes*. “The expectations are too high and they have too many patients. They’re often doing what discharge planners, utilization review nurses, and quality improvement nurses do all rolled up into one. And there’s not the support infrastructure there to do all those things when the caseload is up to 30 patients or more.”

At Enloe, Rowe was aware of the danger of overloading her team when she and her colleagues were asked to assemble a case management department. At that time, the hospital still had separate staff for utilization review and discharge planning. “So the first thing we did was combine those two roles so those people were looking at the patient’s full episode of care together rather than separately,” Rowe says.

With that step accomplished, they turned their attention to the needs of their specific patient populations. In particular, they identified their high-volume and high-risk populations and used clinical nurse specialists or nurse educators from those areas to perform a separate function: outcomes management. Now, one outcomes manager is assigned to each of three

areas in the hospital: CV/pulmonary; hematology/oncology; and trauma, neuro, and ortho.

“Each of the three of us had worked in our specialty area for years,” says **Carol Butler**, RN, CCRN, outcomes manager for trauma, neuro, and ortho at Enloe. “For example, I was the charge nurse in the neuro/trauma intensive care unit. We were educators and had more of a specialized clinical focus.”

At Enloe, case managers focus more on the needs of individual patients, both clinically and financially. Butler notes that about half their time is spent on discharge planning. Outcomes managers, on the other hand, focus on the entire service line, Butler says. “We look at an entire population of patients,” she says. “And we get involved in the specific episodes if problems arise. In this facility, we’re used very much as clinical nurse specialists with a focus on structuring services in such a way that we can maximize resource utilization and keep our patient care quality as high as possible.”

The outcomes managers’ specific responsibilities differ according to specialty, but they’re all

involved on some level with coordinating patient care across the continuum. For example, one of the goals of the outcomes manager for hematology/oncology is to make sure her patients remain outpatients. Because Butler is responsible for trauma, most of her patients need acute care, but she’s also responsible for a brain attack program that monitors and tracks patients after the inpatient stay. Also, two of the outcomes managers have taken responsibility for tracking patients engaged in clinical trials at the hospital. “[Our responsibilities] are largely tailored to whatever’s going on with the population of patients at that time,” Butler says.

Particularly in areas of high managed care penetration, outcomes management has emerged as a role separate from but related to case management. In particular, the emergence of outcomes management has been driven by the need for hospitals to get a better handle on patient populations outside of hospital walls, says **Judy Homa-Lowry**, RN, MS, CPHQ, president of Homa-Lowry Healthcare Consulting in Canton, MI. Some experts claim it probably isn’t possible for one person to effectively manage individual patients in the acute care setting and at the same time maintain a continuum-based focus on an entire population of patients.

Others, however, say case managers haven’t been used enough when it comes to quality improvement. “Case managers are in an excellent position to see and hear all the quality problems as they unfold,” Newell says. “You don’t need to case-manage people who are doing just fine, who are going to blow right through their critical path or have an uneventful hospital stay.” Instead, case managers should be focusing on bringing outliers back under control. “If it’s a well-functioning case management program, then case managers are in an excellent position to collect the kind of data that can tell you how you’re doing on a day-to-day basis. So why not build in some kind of quality improvement/outcomes measurement program that can give you adequate feedback on how to tweak your program and improve your processes?”

However, at Grant/Riverside Methodist Hospitals, a hospital system in Columbus, OH, administrators believed the system’s disease management efforts required a role that “embraced research,” says **Carmela Hartline**, MS, RNC, director of disease management services and director of heart services. “We are a large research facility, but we didn’t have a separate research department.

KEY POINTS

- To ease the burden on already-overworked case managers, some hospitals are shifting responsibility for continuum-focused care to a new breed of outcomes managers. Some experts say it’s too much to expect case managers to be able to effectively manage individual cases in the acute care setting and maintain a broader focus on preadmission and postacute care as well.
- One model involves assigning one outcomes manager to each specific patient population identified as having high volume and high risk. Outcomes managers are drawn from the ranks of clinical nurse specialists and nurse educators. While case managers focus on the needs of individual patients and on discharge planning, outcomes managers focus on the entire service line.
- In another model, outcomes managers head up population-based work teams in partnership with physicians. Case managers serve on the teams as well and maintain responsibility for data collection. Outcomes managers analyze the data and present results to the work team to determine possible process improvements.

Description of CM Outcomes Management Duties

Outcomes Management provides clinical expertise to acute or chronically ill patients. The responsibilities include direct patient care, support of systems, education, research, and professional leadership. Understanding services to meet an *individual's health needs* using *communication* and available *resources* to promote *quality, cost-effective outcomes* throughout the continuum is essential.

Outcomes manager functions:

- Manages a complex patient caseload/coordinates interdisciplinary team.
- Performs patient assessment and management/revises plan of care with interdisciplinary team.
- Enhances the continuity of care by providing a smooth transition to the next level of care.
- Acts as resource, patient advocate, and communicator.
- Develops, implements, and evaluates clinical pathways.
- Tracks clinical/financial/functional outcomes data.
- Addresses clinical process improvement, performance improvement, and variance tracking.
- Collects, analyzes, and evaluates data to identify process improvement opportunities.
- Participates in clinical research projects.

Case Management is a *collaborative process*. Responsibilities include discharge planning, clinical understanding, utilization review, and process improvement. Coordinating *clinical* and *financial outcomes* of an assigned patient population in a timely, *cost-efficient* and effective manner during the acute phase of a patient's stay is essential.

Case manager functions:

- Performs unit-based collection and assessment of patient medical information on a concurrent basis for 100% of admissions for payer and interdisciplinary team.
- Identifies appropriateness of patient admissions and continuing stay.
- Communicates appropriate information to third-party payers.
- Identifies referrals to social services and coordinates activities related to discharge planning.
- Acts as resource for completing retrospective reviews as requested by centralized department.
- Acts as resource for processing third-party payer denials and appeals as requested by centralized department.
- Facilitates the Clinical Documentation Management Program.
- Educates doctors or office staff regarding insurance contract changes, direct admissions to SNF, admission criteria, admission reviews.

Source: Grant/Riverside Methodist Hospitals, Columbus, OH.

That responsibility remained within the service lines. But case management was not the [appropriate] role for that.”

Hartline and her colleagues took a long look at case management two years ago, when Grant Medical Center began merging with other hospitals in central Ohio. The purpose was to develop a cross-campus case management initiative with standardized responsibilities. **(For a list of case management and outcomes management responsibilities at Grant/Riverside Methodist, see box, above.)**

Out of the case management initiative, Hartline and her colleagues in heart services realized that they had “a huge void in following populations of patients,” she says. “Case managers geographically assigned to the unit rather than to physicians. But we needed a role that oversaw a whole population of patients — not just from a case management perspective but from a population/disease

management perspective. That’s why we developed the outcomes management role.”

As they conceptualized the outcomes management role, Hartline and her colleagues decided outcomes managers should be master’s-prepared and clinically astute. “They needed to be able to identify pathway variances, care for the patient, and communicate readily with the physician group,” she says. At that point, some of the case managers weren’t quite at that level of clinical expertise. “They were utilization review folks,” Hartline says.

Hartline says she requires an MS for outcomes managers because it lends credibility to the role. It also means candidates are more likely to have expertise in resource utilization. “Outcomes managers here look at the entire population of patients through the continuum — not just acute care,” Hartline says. “They look at the time prior to the patient getting here, while they’re here, and then

they do functional outcome follow-up after acute care.”

Meanwhile, case managers focus on following patients through the acute care setting. “They may have some precertification responsibilities, but they aren’t really responsible for pre- and postacute care.”

Although their roles and focus differ, case managers and outcomes managers work together on population-based teams. The teams are led by the outcomes manager and a physician, who coordinates the day-to-day care of the population. In addition, case managers, who work on the units every day, enter outlier data into a computer system called MIDAS. “They sometimes identify the variance, and then the outcomes managers follow it through,” Hartline says. The outcomes manager then communicates the data to a multidisciplinary work team and analyzes the information to determine possible process improvements or changes to a certain protocol or pathway.

But an outcomes manager at Grant/Riverside Methodist doesn’t just crunch data. She sees patients in the acute care setting and also takes responsibility for managing patients in the outpatient heart disease management clinic. “She provides that continuum of care all the way through, which gives great continuity,” Hartline says. “She knows the patients along with the cardiologists who are caring for them.”

To ensure that case managers and outcomes managers work effectively together, Hartline has work teams meet every month to discuss the patient population. Rowe has taken a similar approach at Enloe, where case managers and outcomes managers hold joint staff meetings. In addition, case managers often serve on “focus teams” facilitated by outcomes managers, and both participate in what Rowe calls discharge planning rounds.

“When we’re working on some of the quality improvement teams in the hospital, the outcomes managers are usually the facilitators of those teams, but the case managers are involved as well on a different level,” Rowe says.

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Increase coordination, effectiveness of CM

Medical center saves money while boosting staff

By **Alan Cudney**, Associate Premier Inc. Charlotte, NC

Many hospitals today are struggling to coordinate the functional responsibilities of utilization review, case management, discharge planning, and social services. Because these services often are directed through different departments, the result can be internal conflicts, overlapping responsibilities, and a lack of communication preventing a hospital from achieving truly integrated, coordinated case management services.

Leaders at Alamance Regional Medical Center (ARMC) in Burlington, NC, were concerned that their case management activities were not as effective as they could be. Frequent insurance denials and late discharges were part of their concern. Consultants at Premier Inc. were asked to explore opportunities for improvement at ARMC in the areas of utilization review, discharge planning, social services, and clinical pathways. Two departments were responsible for the majority of those activities: patient and family services, and utilization review.

The utilization review department was staffed by three full-time UR nurses and two part-time nurses. Because of the low staffing level, these nurses often were limited to interacting with third-party payers to get certifications and manage denials. Most of their time was spent on the phone talking with insurance providers. The department

was led by a director who also was responsible for clinical pathways. However, due to their time constraints, the UR nurses usually were not involved in the pathway activity.

The nurses in UR were aware that their roles as case managers were expanding. In their efforts to coordinate care for the patients, they began to perform discharge planning activities. However, a separate department at ARMC was responsible for discharge planning. That department, patient and family services, was staffed by three full-time social workers and one part-time social worker, plus an administrative specialist. This department was responsible for performing discharge planning and placement, as well as handling crises and adoptions.

Premier consultants performed a staffing analysis using Premier's Case Management Staffing Model. (See related story in *Hospital Case Management*, August 1998, pp. 152-156, 161.) This mathematical model allows an organization to compare its staffing levels with hospitals of similar patient volumes and acuity levels to determine an appropriate range of staffing. ARMC's staffing was at or below the low range of peer hospitals.

Premier also conducted interviews with staff and physicians. From this assessment, it became clear that interpersonal and professional conflicts prohibited the two departments from working

together to coordinate their patient responses. For instance, each department claimed responsibility for discharge planning. Because of departmental rivalry, there was limited communication and coordination between the two groups.

In August 1998, Premier's analysis led ARMC executives to merge the two departments under one director who could provide strong leadership. Working as one "care management" department, the staff could integrate work processes and capitalize on their existing resources. While the hospital recruited a permanent director, Premier provided an interim director to begin the merger process.

The interim director worked closely with the two previous department heads. These two staff members would remain in the new department, and together they brought more than 30 years combined experience. Their support for the changes was particularly valuable. A regular staff meeting was established in which all department members were encouraged to contribute their expertise to the change process. For the merged department to be successful, it was important to establish an environment of candor, trust, and collaboration.

Care teams ease merger

One of the first challenges was to create a process that would enable the two groups to work together effectively. Premier's interim director, in collaboration with the two former department heads, created "care teams," which were implemented in December 1998. The care teams provide a successful model for integrating two complementary disciplines such as social services and utilization review.

As the flowchart illustrates (see p. 66), the care team assigned a nurse case manager and a social worker to work as a team for a specific group of nursing units, such as orthopedics and med/surg. Their complementary skills work well together and help achieve the integration of care that hospitals strive for. The nurse looks at the patient from a clinical progression of activities (what must occur during the stay to achieve the best outcome) and an insurance perspective (how we can be sure this is reimbursed correctly). The social worker has a strong knowledge of what services are available in the community, in addition to his or her knowledge of counseling and crisis intervention.

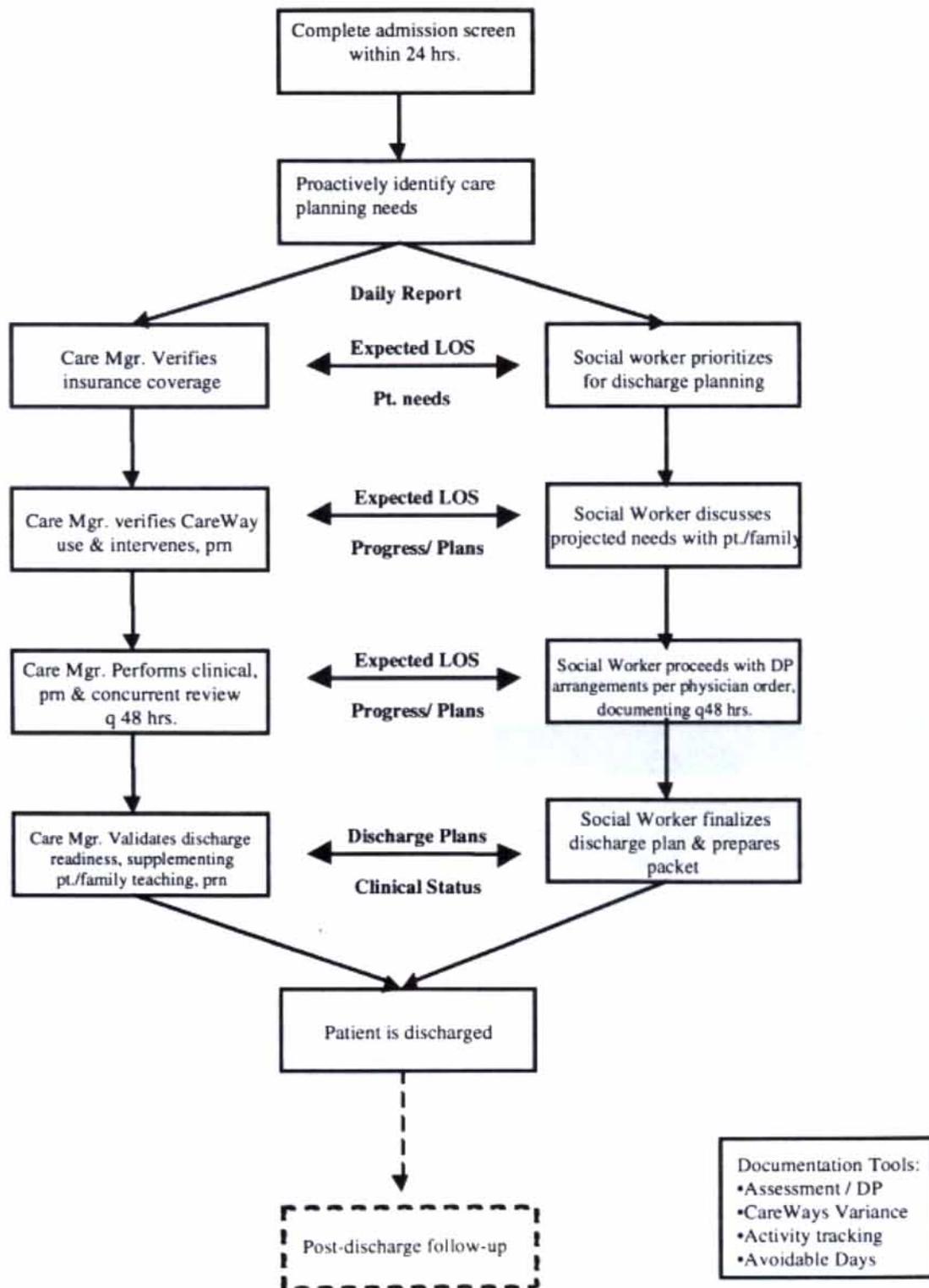
The Care Team model was structured to solve several problems. By beginning the assessment

KEY POINTS

- Concerned about insurance denials and late discharges, administrators at Alamance Regional Medical Center in Burlington, NC, chose to merge two of its departments — patient and family services, and utilization review — to create a case management department.
- The thought was that by working as one department, staff could integrate work processes and capitalize on their existing resources. Regular staff meetings were held to solicit input from members of both departments on the merger.
- Communication among staff improved greatly after implementation of an informal daily report in which the team members discuss their activities and perspectives for each patient to ensure that their efforts are coordinated. Team members also participate in more formal discharge planning meetings held in each unit.

(Continued on page 67)

Inpatient Care Management Flow



Source: Premier Inc., Charlotte, NC.

within 24 hours, the hospital was able to eliminate many delays. Previously, the family services staff had waited until the end of the patient's stay to begin discharge planning. This often resulted in a longer length of stay. With the new program, the social worker is able to identify and prioritize the patient's needs immediately and begin planning for those needs. The case manager is able to verify the patient's status on the clinical pathway, verify insurance coverage and approved length of stay, and monitor the patient's progress.

Communication is greatly improved with the implementation of an informal daily report, in which the team members discuss their activities and perspectives for each patient to ensure their efforts are coordinated. Team members also participate in a more formal discharge planning meeting held in each unit.

As noted earlier, the departments were understaffed as shown by the Premier staffing analysis. The merged department now was able to hire additional staff to achieve a staffing level that came closer to the benchmark of peer hospitals. This resulted in the creation of three care teams, plus the addition of weekend coverage and specialized staff assignments, such as one social worker dedicated to skilled nursing placements and the previous department head assigned housewide for the most difficult cases.

The results will be measured through a set of indicators currently being developed. Among other data, the hospital will collect information on:

- proportion of patients with excess lengths of stay;
- percentage of patients managed on clinical pathways;
- insurance denials;
- overall patient satisfaction.

Implementation of care teams at ARMC still is evolving, but this concept has provided a useful structure for merging two departments involved in coordination and planning of care. Working together in teams already has led to a noticeable increase in coordination between the two disciplines. In addition, relationships with physicians and floor nurses have been greatly improved as the team members work in conjunction with the unit's staff on a daily basis. Hospital executives believe their organization is closer to the goal of effective case management, resulting in integrated, coordinated care and improved patient outcomes.

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Ischemic stroke pathway relies on ED order sheets

Path computerization could standardize ED use

The second time was the charm for case managers at University Hospital-University of Colorado Health Sciences Center in Denver. The first time they tried to get an ischemic stroke pathway off the ground, it foundered because of a lack of physician support. The second time, however, case managers enlisted physician champions and secured the support of emergency department residents, steps that have helped facilitate the success of the current pathway.

In developing the pathway, it was thought that although ischemic stroke represents an individualized disease process, "there are some standard things you can do to help the patient along," says **Sharon Baker**, RN, MS, CNRN, a clinical nurse specialist/educator who was integral to the development of the pathway. "We felt that we could then decrease the length of stay if we could teach people what to do on specific days," she says. (See **sample page from the pathway, p. 68.**)

Another thing making ischemic stroke an attractive candidate for a pathway was that, at least in theory, much of the required care that traditionally had been performed in acute care could be delivered as effectively and in a more timely manner in an outpatient setting, says **Kim Pollmiller**, RN, MS, CNRN, clinical case manager for neurosciences at University Hospital.

One obvious difficulty inherent in managing stroke patients is predicting when they'll be coming. Because almost all strokes are admitted through the emergency department, the pathway process starts there. Preprinted physician order sheets and copies of the pathway are stocked in the emergency department and can be easily accessed when a stroke patient comes in. "When the neurology doctors get calls saying we have a patient down here who looks like a stroke, all the paperwork is right there in their hands instead of in some place where they'd have to physically go get it," Pollmiller says.

Although the system has generally worked well so far, Pollmiller acknowledges that because of the turnover in residents in the emergency department, the preprinted orders haven't been

(Continued on page 77)

University Hospital
4200 E. Ninth Ave.
Denver, CO 80262

UNIVERSITY HOSPITAL CLINICAL PATH

Diagnosis: **Ischemic Stroke (exclude hemorrhagic)** Diagnosis/DRG Code: 14
Procedure: _____ Procedure Code: _____

This protocol is a general outline and does not represent a professional care standard governing provider's obligations. Care is revised to meet the individual patient's needs.

Allergies: _____ _____ _____	Phase: 1 Length of Phase 24 hours	Phase: 2 Length of Phase: 2nd -4th day	Phase: 3 Length of Phase: 5-7th day
Tests	PT/PTT CBC, Platelets, Iytes, BUN, Creatine, Mg+2, Ca+2, Short Liver panel, Cholestrol, HDL, LDH, homocysteine Heme stools x 3 CT w/o contrast EKG MRI/MRA	PT/PTT/INR if on Heparin Ua, C&S when foley discontinued BUN, Creatine, Mg+2, HIV, VDRL Carotid studies Echocardiogram TEE/Spect Modified Barium Swallow Angiogram	PT/PTT/INR if Heparin/Coumadin
Treatments Interventions	Vital signs/Neuro signs q1-2 hours Mimimize external stimulation I/O Daily weights Anti-embolic stockings Cardiac monitor/tele Suction prn Secure airway /ET tube Assist with pulmonary toilet Pulse ox \geq 92% ABG if sat \leq 90% x1	Tele Vital signs q4 hours with neuro signs Bladder/bowel program Maintain respiratory status Pulse ox \geq 92%	Vital signs/Neuro signs q shift DC daily weights DC tele DC I/O Continue to monitor bowel/bladder program DC Oxygen if sat $>$ 90%
Medications	IV access x2 for anti hypertensives x3 Lytics/Maintenance IV IV fluid NaCl Heparin Antihypertensives TPA	MOM/Pericolace Heparin Protocol Begin Home anticoagulation BC IV	DC Heplock Monitor home prophylaxis

CRITICAL PATH NETWORK™

Pathway for same-day surgery

This issue of *Critical Path Network* spotlights two of the three pathways that together make up the "Ambulatory Surgical Clinical Pathway" currently in use at The Naval Hospital in Jacksonville, FL. Authors of the pathway are Brenda Baker, MNSc, FNP, RN, C; Bronwyn Fillion, BSN, RN; Kathleen Davitt, BS, RN, CPAN; and Linda Finnestad, BSN, RN. The two pathways that follow are "Same Day Surgery" and "Phase I PACU." Not included here is the one-page "Main Operating Room" pathway and the one-page "Daily/Monthly Variance Report," which is part of the PACU pathway.

For further information, contact Kathleen Davitt, Nursing Education, The Naval Hospital, 2080 Child St., Jacksonville, FL 32214. Telephone: (904) 542-9185. ■

Preop Date :		SAME DAY SURGERY SUBPATHWAY			PAGE 1		(Figure 1)
PRE OP PROCESS		Initials	PRE OP: DAY OF SURGERY	Initials	CUSTOMIZED SUBPATHWAY FOR SAME DAY SURGERY: ONE STOP SHOPPING		
Time Goal	No later than 24 hours prior to surgery	M NM NA	1 Hour	M NM NA			
Diagnostic Test	One Stop: Lab EKG RAD (xray in radiology) Peds - main lab	M NM NA	Additional labs EKG - abnormal findings	M NM NA	The Clinical Subpathway is a collaborative plan of care and is intended to serve as a guideline to enhance coordination and communication with respect to patient care, and may be revised to meet individualized care needs.		LEGEND FOR CLINICAL SUBPATHWAY: For each section circle the appropriate letter(s) M = Path Met NM = Path not Met NA = Not Application
Consult	-Anesthesia -PRN: Physical Therapy. Internal Med -Respiratory Therapy	M NM NA	Anesthesia as needed	M NM NA	ALDRETE MODIFIED POST-ANESTHETIC RECOVERY SCORE: Able to move 4 extremities voluntarily or on command 2 Able to move 2 extremities voluntarily or on command 1 ACTIVITY Unable to move extremities or on command 0 Able to breathe deeply and cough freely 2 Dyspnea, limited breathing or tachypnea 1 RESPIRATION Apneic or on mechanical ventilator 0 BP plus or minus 20% of pre-anesthetic level 2 BP plus or minus 20-49% of pre-anesthetic level 1 CIRCULATION BP plus or minus 50% of pre-anesthetic level 0 Fully awake 2 Arouseable on calling 1 CONSCIOUSNESS Not Responding 0 Able to maintain O2 saturation > 92% on room air 2 Needs O2 inhalation to maintain saturation >90% 1 O2 SATURATION O2 saturation < 90% even with O2 supplement 0 Dry and Clean 2 Wet but stationary or marked 1 DRESSING Growing area of wetness 0 Pain free 2 Mild pain handled by oral medication 1 PAIN Severe pain requiring parenteral medications 0 Able to standup and walk straight 2 Vertigo when erect 1 AMBULATION Dizziness when supine 0 Able to drink fluids 2 Nauseated 1 FASTING-FEEDING Nausea and vomiting 0 Has voided 2 Unable to void but comfortable 1 URINE OUTPUT Unable to void but uncomfortable 0 Used by Permission - Aldrete 1997		
Nursing/ Patient Education	One Stop Protocol Activated	M NM NA	Assessment: -Data Base - Knowledge deficits Addressed -Pre anesthetic activity -Orientation to unit -Ensure Chart completed -Initiate D/C plan	M NM			
Meds	Administered as ordered	M NM NA	Administered As Ordered	M NM NA			
Nutritional			Verify Compliance with NPO/diet orders	M NM NA			
Discharge:			Verify Escort availability	M NM NA			

SAME DAY SURGERY SUBPATHWAY

Surgery Date:

	Arrival to SDS Unit (Post Op)	Time:		Time:		Time:		Time:		Time:	Post D/C	
Time Goal		Initials	No later than 60"	Initials	No later than 90"	Initials	No later than 2 hours	Initial	No later than 3 hours	Initial	SDS Policy	Initial
Aldrete Modified PAR Score	Minimum Score of 9 from PACU	M NM NA	Minimum Score of: 14 Actual Score:	M NM NA	Minimum Score of: Locals -18 Actual Score:	M NM NA	Minimum Score of: 16 Actual Score:	M NM NA	Minimum Score of: 18 Actual Score:	M NM NA	Within 24 hours	M NM NA
Education	-Re-orientation to unit -Head of bed elevated -Side Rails up -Gurney locked -Call bell in reach	M NM NA			Locals: -medication instruction per pharmacy -Discharge instruction	M NM NA			- Medications instruction per Pharmacy - Discharge instruction	M NM NA	Callback form completed	M NM NA
Meds	Discharge Prescriptions to Pharmacy	M NM NA			Locals: Medication delivered to patient by Pharmacy	M NM NA			Medication delivered to patient by Pharmacy	M NM NA	Copy of Callback form to Out Patient record	M NM NA
D/C: Home, Con leave, Med hold, etc					Locals: Discharge - - Escort present - Copy of History & Physical, Out Patient note to Out Patient record	M NM NA			Discharge- - Escort present - CON leave - Copy of History & Physical, Out Patient note to Out Patient record	M NM NA		

Variance Explanation _____ Actual Discharge time: _____

Signature/Initials _____
 Signature/Initials _____
 Signature/Initials _____

Addressograph

PACU CLINICAL SUBPATHWAY

(Figure 3)

Patient Name: _____

Date: _____

Actual time:	Arrival to PACU Time: _____		Actual Time: _____		Actual Time: _____		Actual time: _____		Actual time: _____	
Time Goal	- 15 min before receiving pt OR Call: _____	M NM	First 5 min Projected Time: _____	M NM	> 15 min Projected time: _____	M NM	= 20 min Projected time: _____	M NM	> 30 min Projected Time: _____	M NM
Pt. Assessment / Pt care items	- Set up station area * O2 ready * Suction * Emesis basin - Report from OR room	M NM	- Est. Airway - Initial VS - Connect Monitors - Start O2 if ordered - Dermatome Level	M NM					Complete reassessment	M NM
Pain Management Assessment every 5 min, meds given?			- Narcotic given Y/N - Toradol: Y/N NPS/VAS < 4: Y/N	M NM	- Narcotic given Y/N - Toradol: Y/N NPS/VAS < 4: Y/N	M NM	- Narcotic given Y/N - Toradol: Y/N NPS/VAS < 4: Y/N	M NM	- Narcotic given Y/N - Toradol: Y/N NPS/VAS < 4: Y/N	M NM
PT Verification			-PT Identification -Verify PT paperwork	M NM	- Review Surgeon's Orders - Review H & P or Anesthesia Pre-op assessment - Review Anesthesia Orders and sign	M NM	- Fax orders to receiving inpatient unit - Record patient in PACU log	M NM NA		
Procedures			-Apply warming devices if needed Actual temp: _____	M NM NA	- Order X Rays, Labs, etc. in CHCS - Discontinue O2	M NM NA	-Obtain and send stat labs Actual Time: _____ Call for x ray Actual time: _____	M NM NA	- x ray complete Actual time: _____	M NM NA
Documentation			- Chart first vital signs and Aldrete Score	M NM	- Continue charting q 5min - write narrative note	M NM	- Continue charting q 5min	M NM	-Chart complete re Assessment - Call report to unit if pt meets DC criteria	M NM
Transportation	From OR room	M NM							- Transfer to receiving unit via bed/gurney according to protocol	M NM NA
Aldrete PAR Score 0 - 10					Locals: Minimum score > 9 Aldrete	M NM NA			Minimum score > 9 Aldrete	M NM
Variance: Comment:										
Legend for Clinical Path: For each section circle the appropriate letter(s) M= Path Met NM= Path not Met NA= Not Applicable			This Clinical Subpathway is a collaborative plan of care and is intended to serve as a guideline to enhance		coordination and communication with respect to patient care, and may be modified to meet individualized care needs.		Initials/Signature: _____ _____		IRR Initials/Signature: _____ _____	

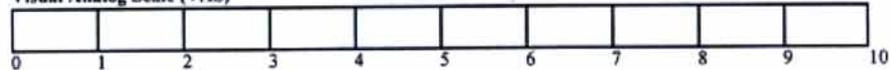
Page 2

PACU CLINICAL SUBPATHWAY

(Figure 3)

Actual Time:	Actual Time: _____		Actual Time: _____		Actual Time: _____		Actual Time: _____	
Time Goal:	> 60 min Projected time: _____		> 90 Min Projected Time: _____		> 120 min Projected Time: _____		Discharge to unit	
Patient Assessment Pt Care items	Complete Reassessment	M NM	Complete Reassessment	M NM	Complete Reassessment	M NM	Complete Reassessment every 30 min	M NM
Pain Management Assessment every 5 min, meds given?	- Narcotic given Y/N - Toradol: Y/N - NPS/VAS < 4: Y/N	M NM	- Narcotic given Y/N - Toradol: Y/N - NPS/VAS <4: Y/N	M NM	- Narcotic given Y/N - Toradol: Y/N - NPS/VAS < 4: Y/N	M NM	- Narcotic given Y/N - Toradol: Y/N NPS/VAS <4: Y/N	M NM
Procedures	Start Epidural pumps Actual: _____	M NM NA						
Documentation	- Report stat labs back to MO Actual Time: _____ - Chart Response - Call report to accepting RN if pt met D/C criteria -Chart complete reassessment	M NM NA	- Call Report to accepting RN if pt met D/C criteria	M NM NA	- Call report to accepting RN if pt met D/C criteria	M NM NA	-Call report to accepting RN if pt met D/C criteria	M NM
Transportation	- Transfer to receiving unit via bed/gurney according to protocol	M NM NA	- Transfer to receiving unit via bed/gurney according to protocol	M NM NA	- Transfer to receiving unit via bed/gurney according to protocol	M NM NA	- Transfer to receiving unit according to protocol	M NM NA
Aldrete PAR Score 0 - 10	- Minimum score > 9	M NM	- Minimum score > 9	M NM	- Minimum score > 9	M NM	- Minimum score > 9	M NM
Variance: Comment								

Visual Analog Scale (VAS)

No
Pain

Moderate

Worst
Pain

Non-verbal Pain Scale (NPS) (Campese, 1996, AORN 64 (6), 931-940)

Code	Word Scale	Nonverbal behaviors
0/1	No pain	Relaxed, calm expression
2/3	Slight or mild pain	Stressed, tense expression
5	Moderate pain	Guarded movement, grimacing
6/7	Severe Pain	Moaning, restless
10	Worst Pain	Crying out, increased intensity of above behaviors

Reassessment Legend:

Circulation Checks	Warming and Cooling Devices
Lungs	Pain, Location, Intensity
Temp	Level Of Consciousness
Bladder distention	IV Site Condition
Sensory dermatome Level	Condition of dressing
Urine Output	Drain Output

PATIENT EDUCATION

QUARTERLY

Educational handouts for my patients? No way!

How to overcome physician resistance

What do you do if physicians won't allow their patients to receive the standardized information for diagnosis-specific patient education? Provide a method for the physician to create personalized instructions, advises **Mary Wolcott**, RN, MSN, patient education coordinator at Methodist Hospital in Omaha, NE.

Every physician can create what the hospital calls a personal order set, which are instructions for a specific diagnosis. These instructions are entered into the computer, and physicians simply write instructions for the nurse to give the patient information from their personal order set.

When the nurse enters the doctor's name on the computer, a list of his or her personal order sets appear on the computer screen and the nurse prints off the correct one. "The physician has to order the special instructions. It is treated as a doctor's order," says Wolcott.

Certain policies for education have been established at Methodist Hospitals of Memphis (TN) that permit nurses to initiate certain education processes without a physician's order, says **Denise Thornton**, RN, MSN, CDE, patient education coordinator at the hospital system.

For example, if a patient is confused about diet, the dietitian can be called to educate the patient without the doctor's permission. In cancer care, all breast cancer patients are referred to a program called Reach to Recovery following surgery. If a physician does not want a referral to take place, he or she needs to write an order, says Thornton.

Also, on many high-volume diagnoses, pre-printed physician orders have been created. These orders might state that the patient will see a cardiac educator, receive education from a dietitian, and go to cardiac rehab, for example. The physician must sign the order to initiate the education process and at that time he or she can delete or change the information, says Thornton.

"We don't have any standardized orders; they are simply preprinted because that is almost the common practice of the physicians consistently with this particular diagnosis," explains Thornton.

While the obstetrics department at St. Joseph's Regional Medical Center in South Bend, IN, has standardized material, it is often tailored to what each physician wants his or her patient to know, says **Eileen Humes**, RN, BSN, LCCE, an obstetrics nurse. For example, each physician has an opinion on when a woman should come to the hospital when she is in labor.

If one physician does not want a standardized sheet given to a patient, speak to her in private to see how she would like the information given to the patient. By discussing the matter with the physician, you might be able to persuade her, says **Jo Wells**, MS, community education coordinator at St. Joseph's.

Educators must try to move patients from a stage where they are no longer just contemplating a behavior change but willing to take action. The same often is true for physicians, says **Susan Karlins**, MPH, director of health education of Santa Clara Family Health Plan and Valley Health Plan in San Jose, CA.

A patient education manager might have to work with a physician to discover and overcome the barrier. "Maybe they have thought about it but aren't sure that it won't interfere with their communication. Or maybe they had a bad experience where misinformation was given to their patient. Patient education managers must figure out the barrier of an individual provider," says Karlins.

A small pilot study showing the benefits of a handout to the patients might help persuade physicians, says Wolcott. Several years ago, when physicians refused to let nurses give their patients medication instruction sheets because they were fearful that patients would be given the wrong one, Wolcott did a two-month trial study in the emergency department.

The nurses gave the patients instructions on any medication they were sent home with from the emergency department. "We tracked the patient satisfaction with the medication instructions and came up with 98%," she says.

Wolcott was able to show the medical director that patients were satisfied and there had been no problem with patients receiving the wrong sheet. The medical director gave her permission to have the medical education committee, which includes a physician from every department, review the sheets for approval.

"If you really focus on patient satisfaction or patient comments, it is persuasive," says Wolcott.

For more information on overcoming physician barriers to patient education, contact:

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Denise Thornton, RN, MSN, CDE, patient education coordinator, Methodist Hospitals of Memphis, Methodist School of Nursing, 251 South Claybrook, Memphis, TN 38104. Telephone: (901) 726-8435. Fax: (901) 726-8638. ■

Answer: Upon hospital admission, each patient receives a handbook consisting of information that is mandated by law, says **Megan Finch**, RNC, MS, patient education coordinator at Union Hospital in Terre Haute, IN. The Patient Handbook contains legal materials only, such as advance directives and the patient's rights and responsibilities. Information on hospital operations, such as cafeteria hours or parking, is kept in a separate guest service book.

In addition to handing patients and family members the information in writing, a nurse reviews the materials with them, explaining that it is their responsibility to provide accurate information, participate in teaching sessions, and let health care workers know when they don't understand something, says Finch.

At Memorial Hospital of Sheridan (WY) County, patients will find a list of global rights and responsibilities in a folder next to their beds. The responsibilities they have for their ongoing health care needs specific to their diagnosis are given to them in writing. Also, a letter is included explaining that the patient and his or her family are the most important members of the care team.

It is important to solicit patients' aid in their own care rather than simply telling them it is their responsibility to follow instructions that can be adversarial, says **Janet Swift**, RN, BSN, patient education coordinator at Sheridan. "We tell them how to get the best out of their treatment, the best out of their stay," she explains.

Provide the proper tools

It's important to make sure patients have the knowledge and skills to carry out their responsibilities and set goals with the patient or family, depending on who is going to be providing care at home, says **Jean Wadnik**, MA, RNC, director of staff development and health education at Warren Hospital in Phillipsburg, NJ.

A teaching record prompts staff to cover all areas that must be addressed, and written materials reinforce teaching. For example, for each medication patients are taking, they receive a fact sheet and a small card on which to track the medications. They also receive information sheets on their diagnosis and a diagnosis-specific community resource sheet that lists agencies they can contact for additional information or to meet ongoing needs such as financial aid for equipment and supplies.

"In some cases, such as diabetes, we do outpatient follow-up because we can't complete the

Reader Questions

Give patients skills for responsible self-care

Patients must understand the role they play

Question: The Joint Commission requires that hospitals "make clear to patients and families what their responsibilities are regarding the patient's ongoing health care needs, and gives them the knowledge and skills they need to carry out their responsibilities." What do you teach patients about their responsibilities as far as their ongoing health care needs? What steps do you take to teach the skills they need to carry out these responsibilities?

teaching in the short time they are in the hospital,” says Wadnik.

At Union Hospital, preparation for discharge is a part of the daily teaching strategy so patients will be capable of self-care when they go home. Patients are taught something new each day so they will be able to take responsibility for their care upon discharge.

Each patient should be re-evaluated on discharge by asking him or her to either perform a task or verbally explain a concept such as how to take their medication, advises Finch. “If patients can’t demonstrate a skill, it is our responsibility to point out that we think they need some additional follow-up by a home care agency, visiting nurse association, or other community resource and offer to set it up,” says Finch.

For information on teaching patients the responsibilities they have for their ongoing health care needs, contact:

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It’s on paper, but do they understand it?

Simple testing gets written handouts on target

Don’t assume the education materials your staff wrote for the average national level are right for your facility. Patients’ reading levels vary widely from area to area; therefore, many patient education managers are evaluating their patient groups.

“We assumed that our population would fit into that national average range [seventh- and eighth-grade reading level], so we kept writing

right at that national average level,” says **Kathy Ordelt**, RN, CRRN, CPN, patient and family education coordinator at Egleston-Scottish Rite Children’s Healthcare System in Atlanta.

However, the hospital had never surveyed its population to be sure. Therefore, in 1998 staff in the education department decided to verify their hunch that the materials were written at the correct level. They purchased the Rapid Estimate of Adult Literacy in Medicine (REALM) test to help determine the reading level of the hospital’s patient population. **(For information on REALM, see the resources at the end of this article.)**

Educators at Medical University of South Carolina in Charleston also wanted to know the average reading level of its hospitalized patients. With South Carolina trailing the nation in literacy, providing educational materials patients could understand had been an ongoing problem.

“Educators need to be a lot more creative and they need more time to teach when you have patients who can’t read,” says **Margaret M. Duffy**, EdD, RN, CNN, CCM, clinical educator at Medical University. The REALM test helped them determine that 47% of the patients who come to the emergency department are not able to read the handouts.

Assessing the reading level of your patient population provides valuable information, agrees **Carol Maller**, MS, RN, CHES, patient education coordinator at the Veterans Medical Center in Albuquerque, NM. She worked on a project where about 300 patients were interviewed to evaluate literacy skills and determine the overall reading level of the medical center’s population. The Wide Range Achievement Test (WRAT) was used to evaluate literacy within the medical center’s patient population. **(For more information on WRAT, see the resources at the end of this article.)**

“We found that the average reading level of our patients was beginning seventh grade and that was valuable information as far as targeting print materials for the appropriate grade level,” says Maller.

Often, such projects reveal that written materials must be rewritten at a lower grade level, says **Mary Jean Kotch**, BSN, CRRN, patient education coordinator at John Heinz Institute of Rehabilitation Medicine in Wilkes-Barre, PA. High-frequency, interdisciplinary patient education materials were evaluated using the SMOG readability scale, introduced by McLaughlin.

During the nursing assessment, nurses ask patients what grade level they have completed. In reviewing more than 200 charts, the average grade level of these patients was 10.45, yet a handout on advance directives that all patients received was written at a 16th grade reading level.

Designing a project to assess the reading level of your patient population is not difficult. One drawback, however, is time. "Someone has to have the time to do the sampling," says Ordelt.

Following are the steps Ordelt and others took to assess the reading level of their patient population to improve written materials:

- **Determine patient sample.**

To verify that the average reading level of adults at Egleston-Scottish Rite was seventh or eighth grade, people were interviewed in every department except the emergency department. "We thought that the area [emergency department] was too high-stress to ask people to take tests," says Ordelt. Candidates were approached in the waiting rooms of such areas as clinics, day surgery, and even intensive care units.

Staff at Medical University of South Carolina targeted the emergency department because 40% of those patients are admitted to the hospital, and they determined that would give them a rough estimate of the reading level of the inpatient population.

- **Select an assessment tool.**

Before choosing a tool to assess the reading level of patients, Ordelt read several journal articles that discussed various methods. She wanted a tool that was inexpensive, easy to use, and did not take a lot of time to administer. She decided REALM fit those criteria.

Duffy was familiar with REALM because she had taught several nurses to use the tool. "We debated on whether to have the nurses use the tool with each patient, but they have to do so much already," says Duffy. The tool is available to use with individual patients but it is not mandatory.

- **Find a person to survey patient groups.**

An emergency department nurse conducted the readability tests at Medical University of South Carolina. She selected patients to interview who were not heavily stressed, conducting about six interviews throughout each 12-hour shift. The nurse conducted a sampling of 110 patients.

At Scottish Rite, a child life specialist intern conducted the REALM tests. "We did a sampling

of 50 adults and will repeat the sampling of 50 after the first of the year [in 1999]. We might do this every year," says Ordelt.

- **Make use of the information.**

As part of a performance improvement project, the patient education department at John Heinz Institute of Rehabilitation Medicine undertook the task of rewriting the advance directives brochure at a lower reading level. "The patient education department simplified the information and made a much more appealing brochure to read. We included pictures, increased the font size, and rewrote the copy to a 10.3 grade reading level," says Kotch.

For more information on assessing the reading level of your patient population, contact:

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REALM (Rapid Estimate of Adult Literacy in Medicine). This test consists of three separate lists of words that progress in difficulty. People are asked to read the lists to determine their reading level range. The kit costs \$10. Address inquiries to: Terry C. Davis, PhD, department of medicine and pediatrics, Louisiana State University Medical Center, 1501 Kings Highway, Shreveport, LA 71130. Telephone: (318) 675-5318. Fax: (318) 675-4319. Send no money; an invoice will be included with the order.

WRAT (Wide Range Achievement Test). This test consists of three components: reading, spelling, and arithmetic. It tests people's ability to pronounce printed words as well as their ability to count, read number symbols, and do computation. A starter set costs \$110, with additional aids available at varying prices. Scoring software, for example, is an additional \$99. Shipping and handling is 10% of the total price of domestic orders. Address inquiries to: Wide Range, 15 Ashley Place, Suite 1A, Wilmington, DE 19804-1314. Telephone: (800) 221-9728 or (302) 652-4990. Fax: (302) 652-1644. ■

(Continued from page 67)

used as consistently as she'd like. On the other hand, Pollmiller says, "The doctors are good about notifying Sharon or me when they admit a stroke. Whether it's a just voice mail over the weekend or a page during the week, they'll let us know that a patient is being admitted. Then the data process starts."

Much of Pollmiller's work with the stroke patients involves collecting and processing inpatient data. She tracks patients along the pathway to make sure services like the swallowing screen are being performed according to the time frame specified by the pathway. She also administers an assessment of a functional scale both at the time of admission and at discharge. In addition to measuring functional status, University Hospital also employs an informal severity-of-illness scale. Three months after discharge, Pollmiller follows up with patients to run through the health status questionnaire. Finally, the data are compiled in quarterly reports, which are distributed to and discussed by both case managers and the pathway's physician champions.

Length of stay for the pathway is from five to seven days depending on the severity of the stroke and what the patients' needs are. Work-ups typically are done within five days as long as the patient is medically stable. Patients are considered discharged when they move on to outpatient rehabilitation, a skilled nursing facility, or home. Although the pathway ends upon the patient's discharge from acute care, case managers maintain some involvement with the patient in terms of education. They also make themselves available for questions from rehabilitation staff.

In addition to the clinical pathway itself, Baker developed a pathway to educate patients about their condition. "I'm very active in the neuroscience community and had seen in other areas where they were looking at patient education pathways," she says. "I thought, why can't I do that for stroke patients?" After reviewing examples of patient pathways, Baker developed her own, which she then gave to the hospital's patient education specialist. The specialist adjusted the pathway's language to the appropriate reading level.

Other than development of the patient pathway, however, few revisions or additions to the pathway have been necessary, Pollmiller reports. That might change, however, in light of a new project now in the works at University Hospital: A pathway standardization committee has been developed for the

purpose of bringing all the hospital's pathways into conformity with a standard design.

Other changes under way include a move toward computerization. The hospital has just purchased a computer system from HBOC in Atlanta, which eventually will be used to store documentation for the pathway. The ultimate goal is to move to computerized pathways, Pollmiller says. "The stroke pathway has been involved in that [discussion]," she says. "But it's too difficult to trial in the system because the admissions aren't scheduled, and if the physicians don't start out with the preprinted orders, you can't backtrack." Under a fully automated system, that should be less of a problem, however: "If, for example, the physicians don't start the patient off with the paperwork, the computer still starts them off with the pathway," Pollmiller says. "Down the road, it'll be nice."

For more information, contact:

Kim Pollmiller, RN, MS, CNRN, clinical case manager for neurosciences; Sharon Baker RN, MS, CNRN, clinical nurse specialist/educator, University Hospital—University of Colorado Health Sciences Center, 4200 East Ninth Ave., Denver, CO 80262. Telephone: (303) 372-6470. ■

Pathways bring dramatic clinical results

CM department reduces costs, gains recognition

Physicians with Good Samaritan Health System in Kearney, NE, failed to see the need for clinical pathways until the system's director of care management proved they work. Now, physicians not only accept clinical pathways; they're asking her to create more.

"The department is relatively new. We started talking to physicians about pathways, and their response was very negative," says **Leigh Bertholf**, MS, RN, director of care management. "But we decided to make a commitment to show the clinical value of pathways and their ability to lower costs and length of stay."

Good Samaritan's first two pathways were for acute hip and knee replacement. The 10-member pathway team adapted the Clinical Value Compass, developed by Eugene Nelson, DSc, of Dartmouth University, to create its reporting profile for evaluating clinical pathways. "This

KEY POINTS

- Although physicians at Good Samaritan Health System in Kearney, NE, first offered stiff resistance to case managers' efforts to implement a clinical pathway program, efforts to educate the physicians about the benefits of pathways have led to a turn-around in which physicians now are asking the director of case management to create even more pathways.
- One key step in promoting the pathways was to create a reporting profile capable of evaluating clinical pathways. In addition, the hospital produced a video for each pathway that describes the patient's care from preadmission through discharge.
- Most significantly, case managers at Good Samaritan avoided creating an adversarial relationship with physicians in the system. They dodged charges of pathways being "cookbook medicine" by establishing a system in which pathways are not automatically applied; physicians have to write an order for a patient to be placed on a pathway.

was a crucial step in developing and promoting the pathways," says Bertholf. "You have to know what you want to report and what is of value and keep those things in mind as you develop your pathways. That data is the key to measuring pathway success."

Outcomes in the pathway profile include:

- number of cases by gender;
- average age of patients;
- average length of stay before and at end of reporting period;
- disposition of patients (home without home care, home with home care, subacute facility, other skilled facility) before and at end of reporting period;
- patient satisfaction;
- blood transaction summary;

- average procedure cost, prepathway and postpathway;
- average total charges, prepathway and postpathway;
- average distance ambulated on days two and three in patients discharged to home;
- average distance ambulated on days two and three in patients discharged to a skilled facility.

Education effort launched

Good Samaritan launched an education effort to explain the pathways to providers and patients. The team produced a video for each pathway to include in each patient's education packet. The video describes the patient's care from preadmission through hospital stay and skilled home care.

Team members visited rural skilled facilities to educate system providers on the pathways. To encourage participation, providers were offered free continuing education credit for attending the training sessions. "We did a lot of work to foster a relationship with our outlying providers," Bertholf says. "Our referral area includes a 200-mile radius between Lincoln, Nebraska, and Denver, Colorado. Many of our physicians were uncomfortable sending patients out to local rural areas for care. They didn't want to send very ill patients to unprepared providers." In addition, a team physical therapist visited each rural site to assess the physical therapy capabilities at outlying facilities.

"Nearly 46% of patients weren't ambulating according to pathway goals, and 26% were experiencing pain and nausea," she says. "We found that there was almost a perfect correlation between patients who didn't meet ambulatory goals and Demerol use. We didn't tell physicians to stop prescribing Demerol, we just showed them the data," Bertholf says, adding that Good Samaritan now uses morphine by pump for pain control in knee patients. "We've almost entirely eliminated the use of Demerol for pain. Patients

COMING IN FUTURE MONTHS

■ Information technology supports case management efforts at Staten Island, NY, health system

■ *Critical Path Network:* Innovative stroke path at University of Pennsylvania saves thousands per case

■ A two-part special report on the ethics of hospital-based case management

■ A newly developed pathway for lung volume reduction surgery

■ Building an infrastructure for a successful case management program

don't experience any delays due to pain, and they walk earlier. I also think our nurses are more aggressive about calling physicians for changes in pain medication if patients are uncomfortable. The pathways identified the relationship between pain and ambulation, and now nurses are much more proactive."

In the first reporting period for the knee pathway, the average total cost per patient dropped by almost \$2,000. In addition, average length of stay dropped eight days and patients ambulated earlier.

Improved pain control also helped raise patient satisfaction rates. "If I'm not in pain, I'm going to be happier," she says. "Patient satisfaction increased dramatically — nearly 10%."

Another major shift in standard practice resulting from the pathways was a dramatic reduction in blood usage. "We were wasting blood," Bertholf says. However, "our last blood use scoring showed we've dropped below blood bank guidelines since implementing the pathways," she notes.

One of the most gratifying rewards for the pathway team has been physician buy-in. "Six months before the pathways were implemented, physicians were trying to pass referendums to bar pathway use in the system," she says. "Now, we have physicians calling us and asking whether we can develop a pathway for a specific condition."

She attributes physician buy-in largely to the pathway team's efforts to avoid creating an adversarial relationship with system physicians. "Physicians have to write an order for pathways here. The pathways are not automatically applied," she says. "I think if you look at physician motivation, you realize that physicians only want to do the right thing for their patients. We kept pathway use optional, but by measuring and reporting the effectiveness of the pathways, we now have 99% physician compliance."

In addition, Bertholf has gained the respect of system executives. "I'm on the agenda of the leadership council and given 45 minutes to present the results of the pathways. To reduce skepticism and increase acceptance of the pathways, I document the source for each data element reported on the pathway profiles. I've gained a lot of recognition for the work of this department from the system's leadership."

For more information, contact Leigh Bertholf, MS, RN, director of care management, Good Samaritan Hospital, 10 E. 31st St., Kearney, NE 68847. Telephone: (308) 865-7100. ■

NEWS BRIEFS

Warfarin still underused in high-risk stroke patients

It costs about \$15,000 to prevent a stroke, and the average total cost of caring for a 65-year-old stroke patient in this country is \$100,000. Despite its cost-effectiveness, warfarin is used in only half of eligible patients, according to a new report.¹

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Editorial Questions

For questions or comments, call **Russ Underwood** at (803) 781-5153.

Among study participants not prescribed warfarin at discharge, 62% also were not prescribed aspirin. Elderly patients with an ischemic stroke associated with atrial fibrillation are at especially high risk for recurrent stroke, and the annual rate of recurrent stroke is higher than 10%. Warfarin has been shown to be highly effective in reducing this risk by two-thirds. The report's authors say there may be several reasons why warfarin is underused, including the misperception of hemorrhagic risk. To address the issue of underutilization of anticoagulation, the researchers suggest:

- integration of data from many different sources, including the results of new clinical trials and management guidelines;
- the use of simple, individualized reminders to change physician behavior — telephone or written follow-up;
- computer-based alerts to improve compliance with treatment guidelines.

Reference

1. Brass LM, Krumholz HM, Scinto JD, et al. Warfarin use following ischemic stroke among Medicare patients with atrial fibrillation. *Arch Intern Med* 1998; 158:2,093-2,100. ▼

Health care spending shows slowest increase in 40 years

Health care spending in the United States rose only 4.8% in 1997, the slowest increase in almost 40 years, according to a new report released by the Health Care Financing Administration (HCFA). HCFA reports that health care spending in 1997 totaled \$1.1 trillion, with per-person spending, on average, at just under \$4,000.

Longer-term HCFA estimates, however, predict that health care spending will grow more rapidly in the coming years.

The report by HCFA analysts shows that the gap between health spending paid for by public and private sources narrowed slightly in 1997, continuing a trend that began in 1990. Private funding paid for 53.6% of health care in 1997 (\$585.3 billion), down from 59.5% in 1990, while public programs, including Medicare and Medicaid, paid for 46.4% of health care in 1997, up from 40.5% in 1990.

The overall slowdown in health care spending has been driven largely by rapidly falling growth in private spending, which reached an all-time

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low growth rate of 2.3% in 1994. In addition, since 1994, the rate of spending from public funding sources — primarily Medicare and Medicaid — has slowed, contributing to lower overall spending growth.

Total Medicaid spending increased only 3.8% in 1997, to \$159.9 billion, the slowest growth since Medicaid's inception nearly 30 years ago. Preliminary data suggest the slowdown can be attributed to decreases in Medicaid enrollment in 1995, 1996, and 1997, as well as reductions in the rate of spending growth per enrollee.

Expenditures for hospital care accounted for 38% of personal health care spending and were the slowest-growing service, increasing only 2.9% to \$371 billion in 1997. Spending for physician services increased 4.4% in 1997, continuing a trend of single-digit growth started in 1992. ■

CE objectives

After reading each issue of *Hospital Case Management*, the nurse will be able to do the following:

- identify particular clinical, administrative, or regulatory issues related to the profession of case management;
- describe how those issues affect patients, case managers, hospitals, or the health care industry in general;
- cite practical solutions to problems associated with the issue, based on independent recommendations from clinicians at individual institutions or other authorities. ■