

CLINICAL CASE MANAGEMENT PRACTICE

“I think one’s feelings waste themselves in words; they ought all to be distilled into actions which bring results.”

—Florence Nightingale

Case managers focus on care coordination, financial management, and resource utilization to yield cost-effective outcomes that are patient-centric, safe, and provided in the least restrictive setting. When case management is practiced in this manner, costs are contained and patients, families, and stakeholders are viewed as essential members of the team. Case management is a fluid and dynamic practice that is most effective when it changes and adapts with the challenges of the healthcare system. Stewardship of the healthcare dollars, safe transitions of care, evaluating patient adherence, and consistent stakeholder communication are critical interventions that case managers employ, while maintaining a primary and consistent focus on quality of care and patient self-determination.

Case management is not a new concept. It traces its history back to the early 1900s, when it simply functioned as a means of providing care and containing healthcare costs. In the 1920s, the practice found its roots in the fields of psychiatry and social work, and focused on long-term chronic illnesses that were managed within the community. Case management processes were also used by visiting and public health nurses in the 1930s, when making house calls was a common practice. Throughout the next 50 years, case management remained essentially in the community. The mid-1980s saw the introduction of prospective payment system (PPS) case management, which became widespread within the acute and post-acute settings (Cesta, Tahan, & Fink, 2002). Case managers are found across the continuum of care and serve as advocates for patients and their families navigating the complex healthcare system. Their multifaceted roles ensure that patients receive high-quality care in the least restrictive settings for the most cost-effective price in an organized and coordinated manner. Today, case managers are the vital link in a complex healthcare system that is often unfamiliar and confusing.

The practice of case management is designed to formulate a plan that enables the patient to move smoothly through the healthcare system. To achieve this, case managers work closely with many stakeholders: patients, their family members, their caregivers, the healthcare team, payers, and communities.

Case management is not a profession unto itself but a practice that encompasses many disciplines. Nursing is the predominant field of the practice of case management, while social workers and other healthcare professionals combine to make up a mix of dynamic professionals with a central goal—to focus the system and facilitate the delivery of care. The discipline of nursing focuses on the whole person, which is a key case management concept. The broad training and skills that nurses acquire allow them to assess patients' needs and work collaboratively with all involved in their patients' care. It is important to remember that no single discipline owns the practice of case management. Therefore, it is essential that each individual involved in the practice follow his or her governing state's Practice Act as dictated by his or her respective discipline.

Case Simulation: *A nurse case manager, working telephonically with a patient located in another state, is aware of the Nurse Practice Act in his or her state as well as the Nurse Practice Act for the state in which the patient is located.*

NURSING CASE MANAGEMENT CONCEPTS

Definitions

Many of the leading professional organizations have adopted definitions of case management, including the National Association of Social Workers (NASW), the American Board for Occupational Health Nurses (ABOHN), and the Association of Rehabilitation Nurses (ARN). Each definition is slightly different, but similar in context. As the practice of case management continues to mature, one definition uniting the practice will hopefully evolve. Until that time, the following are two descriptions used to define the practice of case management.

The approved definition of nursing case management by the American Nurses Credentialing Center (ANCC) states:

Nursing Case Management is a dynamic and systematic collaborative approach to providing and coordinating healthcare services to a defined population. It is a participative process to identify and facilitate options and services for meeting individuals' health needs, while decreasing fragmentation and duplication of care, and enhancing quality, cost-effective clinical outcomes. The framework for nursing case management includes five components: assessment, planning, implementation, evaluation, and interaction. (Llewelyn & Leonard, 2009, p. 12)

The Case Management Society of America (CMSA) supports a multidisciplinary role for case management, rather than focusing on case management as a function of one specific discipline. The definition of case management, updated in 2010 and published in the CMSA's *Standards of Practice for Case Management*, is:

Case management is a collaborative process of assessment, planning, facilitation, care coordination, evaluation and advocacy for options and services to meet an individual's and family's comprehensive health needs through communication and available resources to promote quality cost-effective outcomes. (CMSA, 2010, p. 8)

The philosophy of case management is that all individuals are eligible for case management services regardless of age, culture, or ability to pay for service. Yet, it is important to realize that not everyone requires case management. Applying an accepted business principle—the Pareto principle or the 80/20 rule—to health care, it is estimated that 80% of all healthcare resources are utilized by 20% of the population. This rule basically states that 80% of the “outcomes” come from 20% of the “inputs.” (McDonough, 2011)

This ratio reveals the population most appropriate for case management services. For case management to succeed, early risk identification, using proven indicators, and the stratification of the group according to these indicators is critical so that appropriate interventions and resources are utilized.

Case management is a voluntary service, so gaining permission from, and establishing trust with the patient, family, and caregivers is critical. To achieve positive outcomes, the cooperation of the patient, family, and caregiver is needed to ensure adherence with the plan of care. Today, a key aspect of effective nursing case management is the ability to assess an individual's knowledge, motivation, and attitude toward care in order to influence adherence.

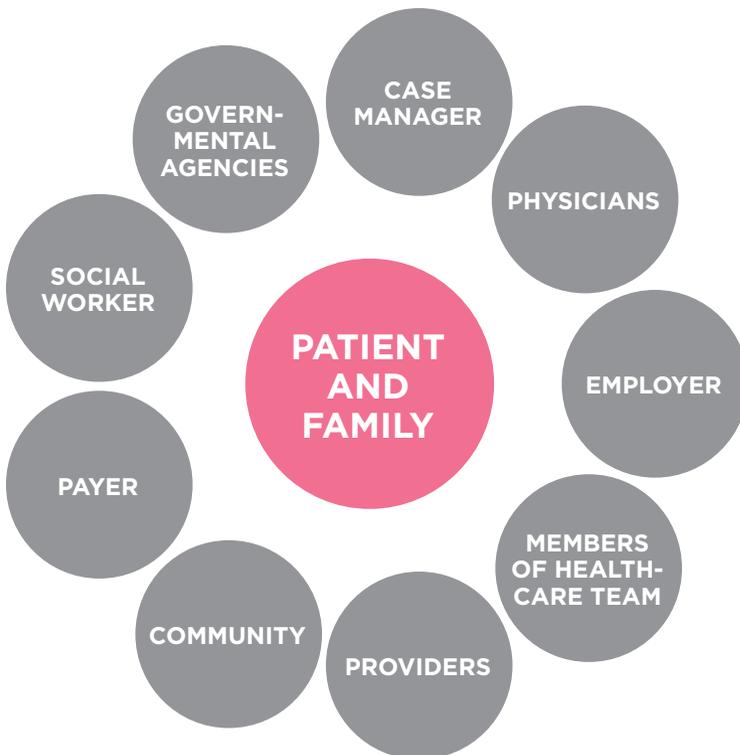
NURSING CASE MANAGEMENT CONCEPTS: ROLES AND FUNCTIONS

The nurse case manager's clinical expertise and holistic approach are the vital connections between the individual patient, the provider, the payer, and the community (see Figure 2-1). Clinical expertise and integrated care management are vital connections between stakeholders: patient, family, and caregiver; interdisciplinary team; payers; and communities. Those who enter the practice need to demonstrate competency in many areas. The Case Management Society of America's *Standards of Practice* describe them as:

- ▶ “Assessment of health and psychosocial needs, including health literacy, and development of a case management plan collaboratively with all stakeholders
- ▶ Planning with all stakeholders to maximize healthcare responses, quality, and cost-effective outcomes
- ▶ Facilitating communication and coordination among stakeholders, involving the patient in the decision-making process in order to minimize service fragmentation
- ▶ Educating the patient and all stakeholders on treatment options, community resources, insurance benefits, and psychosocial concerns so that timely and informed decisions can be made
- ▶ Empowering the patient to problem solve by exploring care options and alternative plans, when necessary, to achieve desired outcome
- ▶ Encouraging the appropriate use of healthcare services and striving to improve the quality of care and maintain cost-effectiveness on a case-by-case basis
- ▶ Assisting the client in safe transitions of care to the next most appropriate level
- ▶ Striving to promote patient self-advocacy and self-determination
- ▶ Advocating for both the patient and stakeholders, to facilitate positive outcomes. However, if a conflict arises, the patient must be the priority.” (CMSA, 2010)

It is essential that the nurse case manager be astute in the nursing process and acquire keen assessment skills, be clinically competent, and be able to identify patients at risk and their actual and potential health problems. The role of change agent is vital for a nurse case manager because planning, facilitating, and collaborating on a plan of care may require all the involved parties to be open to many possibilities. The nurse case manager's leadership abilities ensure that the healthcare team works collaboratively in meeting the needs of the patient, family, and caregivers. Proactively monitoring responses to care and treatment, and recommending changes to the plan of care, are critical to produce effective outcomes. Finally, excellent communication skills must be employed to articulate the case management plan and expected outcomes.

FIGURE 2-1.
HEALTHCARE TEAM



Standards of Practice

Each profession establishes its own standards of practice. Members of these professions—the professionals—are assumed to have extensive theoretical knowledge and possess skills based on knowledge that they are able to apply in practice. Members of professions organize professional bodies, which are intended to enhance the status of their membership and have carefully controlled entrance requirements. Professions have extensive periods of education and testing for competence. Before being admitted to membership of a professional body, there is usually a requirement to pass prescribed examinations based on theoretical knowledge. In addition to examinations, there is usually a requirement for periods of institutionalized training where aspiring professionals acquire specified practical experience in a trainee role before being recognized as a full member of the professional body. Mandatory continuing education, through professional development, updates the professional's skills and knowledge. Licensed practitioners have a code of professional conduct, or ethics, and disciplinary actions are taken for those who infringe upon the code.

Professions are self-regulating and independent from government. They tend to be policed and regulated by senior, respected practitioners and the most highly qualified members of the profession. Professionals are autonomous and mobile; standardization of professional training and procedures enhances this mobility. In addition, professionals have a commitment to public service and altruism.

The American Nurses Association (ANA) is the professional organization for nurses and sets the standards of practice for nurses. *Nursing: Scope and Standards of Practice*, published by the ANA (2010), articulates the who, what, when, where, why, and how of nursing practice. This document discusses the scope and prospects of practice and delineates practice and professional performance standards as well as their measurement criteria. There are 16 ANA Standards of Practice; this document is available at www.nursingworld.org.

Professional Excellence and Competence

In the early 1980s, when the practice of case management was becoming widespread in various settings throughout the care continuum, there were no standards of practice, no certifications, and no formal policies explaining what case management was. Nurses, social workers, and vocational specialists who made up the practice used their professional skills and intuition to find their way instead.

Those early pioneers said that case management was accomplished by treating patients in the same ways they would want their families to be treated. The competencies of this “Golden Rule,” that is, “do unto others,” included clinical experience, compassion, empathy, personal relationship skills, and common sense. The goal was then as it is now—to ensure that patients received safe care, at the right time, in the right place, and for the most cost-effective price.

In 1990, those early leaders formed the Case Management Society of America (CMSA). CMSA is dedicated to the support and development of case management practice through educational forums, networking opportunities, and legislative involvement. Unique in its composition as an international organization, CMSA's success and strength is its structure as a member-driven society (CMSA, 2012).

Case management leaders began to explore how one could validate one's expertise. By networking with the organizations that provided certifications in the areas of disability management and vocational care, the group set up the first certification for case managers and developed both the exam and the established criteria by which professionals would be measured in order to determine whether they were qualified to sit for the examination. The first certification examination was given in 1993 by the Commission for Case Management Certification. Since that time, other certifying bodies have established case management certification examinations. Organizations, such as the American Nurses Credentialing Center and others, challenge nurses who are engaged in the practice of case management to test their knowledge. As a result of the process of certification, the practice of case management has gained credibility throughout the healthcare industry and among employers, practitioners, government officials, the military healthcare system, consumers, payers, and other stakeholders.

In 1995, CMSA was the first organization to develop the *Standards of Practice*. The standards allowed those in the practice to demonstrate to physicians, payers, legislators, and other members of the healthcare team exactly what the practice of case management was about (CMSA, 2010). The case management *Standards of Practice* make it possible for hospitals, managed care organizations, and independent case managers to build policies and procedures that ensure their organizations are compliant with the requirements established by licensing bodies and accreditation organizations.

With standards of practice in place and a credential to validate professionals in the practice, case management has spread throughout every aspect of the healthcare system. In order to sustain the practice, organizations recruit professionals into the field from various disciplines. As a result, training programs needed to educate those coming from various clinical settings on their roles as case managers have evolved.

Case management is a multidisciplinary practice, yet the majority of practicing case managers are nurses. The initial training of those new to the practice includes the history of the practice, introduction to the case management *Standards of Practice*, and an overview of the job description and training in the organization's policies and procedures. In addition, a new case manager needs to be familiar with the *Code of Professional Conduct*, as well as the laws and regulatory statutes that affect case management practice. The orientation, continuing education, and staff training allows professionals with diverse clinical expertise to unite under the case management umbrella and forge a common bond, while still maintaining their individual professional identities.

Preceptorship and Mentorship

The core components of the practice of case management are the same across all settings. Yet each setting has its own rules and regulatory issues that case managers must be aware of and follow. For example, case managers who practice in the hospital setting come in contact with a variety of payers' policies, regulations, and legislation to which they must adhere. Those who work in managed care organizations must be aware of the various benefits plans offered and the regulations that accompany these plans in the states where they are offered. Those in workers' compensation must follow the specific laws and regulations set forth by each state. To ensure case management professionals understand the nuances of their practice, organization policies and procedures, and are trained and informed, preceptorship and mentoring programs are an integral part of most orientation programs.

Mentoring and preceptorship programs are two of the more commonly used role-modeling programs designed to sustain the learning and professional growth of nurses and to promote the overall quality of the practice settings. Many aspects of mentoring and preceptorship are similar. Both approaches depend upon effective one-on-one role-modeling; self-directed learning; a safe environment for reflection and practice; and the acts of advising, counseling, guiding, advocating, recognizing strengths, and providing constructive feedback (*Advanced Mentoring Healthcare*, 2008).

Preceptors offer staff development, training, technical assistance, and quality control through the development of an individualized tutorial relationship with each case manager. It is a unique program of professional growth and development designed for each case manager being supervised. Preceptors are generally experienced case managers who provide support and guidance to new members of the team. Preceptors work closely with students ("preceptees") on an ongoing basis to plan the orientation and to review clinical practice and learning experiences that may arise. This enhances the preceptee's awareness of various scenarios while the preceptor monitors the preceptee's progress and provides feedback on performance in order to help with the transition and integration into the organization. Preceptorships tend to focus on a formal process for helping the new professional acquire beginning-practice competencies through direct supervision over a limited period of time.

Mentoring is either informal or formal and usually focuses on broader learning and career development, as well as personal and professional growth, through a consultative approach over a longer time. Professionals may engage in several mentoring experiences over their professional careers. The length of the relationship ranges from months to years and is determined by the time required for the mentee to achieve his or her objectives. A mentoring relationship differs from preceptorship because it is

- ▶ Less instructional,
- ▶ Focused less on supervision and assessment of performance, and
- ▶ Focused more on positively influencing behavior through role-modeling and guidance.

Functions of good mentors include

- ▶ Demonstrating role expertise and promoting role socialization;
- ▶ Providing a vision by role-modeling and offering direction for career development;
- ▶ Providing a reflective practice that enables the mentee to determine how and why decisions are made and how these decisions influence positive outcomes;
- ▶ Sharing values and customs;
- ▶ Providing support and structure, which involves listening, befriending the mentee, expressing positive expectations, and helping the mentee to make the experience rewarding;
- ▶ Setting high standards and demanding a high level of performance;
- ▶ Empowering the mentee to reach autonomy that comes from competency, self-confidence, and responsibility; and
- ▶ Opening doors and facilitating important contacts through networking (Busen & Engebretson, 1999).

To have a robust leadership in the future, senior management must be involved in the mentoring programs of their primary professionals. In addition to mentoring, another approach used to develop leaders is to highlight career ladder programs, with case management as a clinical system management option. Through outreach efforts, today's case managers look for potential leaders to promote. Once identified, these individuals should be supported through

- ▶ Mentoring relationships,
- ▶ Leadership skill-building,
- ▶ Educational programs based on the latest leadership evidence, and
- ▶ Safe opportunities to hone their skills through volunteer leadership experiences in professional societies and within their own communities and employment settings (Forcible Figures: J. Bowman, 2008).

In the book *The Extraordinary Leader: Turning Good Managers Into Great Leaders*, John H. Zenger and Joseph Folkman (2002) offer the following insight into leadership development: "Good does not equal great—and your organization needs you to be great." Organizations need to invest in identifying strong internal candidates and provide opportunities for them to become extraordinary.

Staff Development

The primary purpose of staff development is to support the learning needs of the professionals who work within an organization by providing opportunities for the acquisition of new knowledge, skills, and behaviors in view of advancing technologies, changing healthcare delivery systems, expanding roles, and case management research. These opportunities include continuing education, formal and informal inservices, coaching, and consulting.

Staff Training Programs

Orientation and ongoing training programs help ensure that staff are kept up-to-date and have the knowledge and resources to provide quality services to those with whom they work. Staff training may vary by profession and organization type. Examples of training include obtaining continuing education credits in a relevant field, attending meetings or conferences related to job functions, and participating in employer-sponsored programs on job function performance and clinical competencies.

Staff training programs include:

- ▶ Initial orientation or training for all staff before assuming assigned roles and responsibilities
- ▶ Ongoing training, at a minimum annually, to maintain professional competency
- ▶ Training in accreditation standards as appropriate to job functions
- ▶ Training in state and regulatory requirements related to job functions
- ▶ Training on conflict of interest and confidentiality responsibilities
- ▶ Training on identification and prevention of fraud and abuse, as appropriate to job functions
- ▶ Training of staff for work that is delegated and the oversight required according to their job functions

All training should be documented and maintained for licensure bodies, accreditation organizations, and the individual's professional personnel file. For those professionals who are independent, the same standard applies, except that the costs for those activities are paid for by the professional.

Self-Evaluation and Peer Review

To be effective leaders, case management professionals need to have finely tuned skills. These include having up-to-date clinical skills; psychosocial skills in order to be able to recognize and understand barriers to adherence that patients display; business skills to understand the business of health care; and personal skills, such as insight into financial management. They need to be able to communicate the outcomes they achieve to various stakeholders to validate their place as an integral member of the healthcare team. Achieving these skills requires professionals to adopt a mindset that commits them to continual learning. To do this, they need to budget time and dollars to achieve their professional education competencies and goals.

Case managers need to take an active role in their professional development activities. They need to take time to self-evaluate in order to understand gaps in their expertise, and take steps to close those gaps and meet their ongoing professional goals. Results of self-evaluation often result in the motivation that professionals need to go back to school to obtain advanced degrees, learn new skills, move into new positions, or even to change jobs so that they stay fresh and creative.

Most organizations maintain formal assessment programs for individual staff members, such as annual performance appraisals and ongoing audits of their work. The annual performance appraisal is also a good time to review the current status of licensure and certifications, review the status of annual and ongoing continuing education for professional competency, and discuss goals that the professional should consider pursuing as part of the professional development process.

PROFESSIONAL ACTIVITIES

Today, most states and territories require licensed healthcare professionals to take part in mandatory continuing education (CE). States require that licensed professionals obtain a specific number of credits within a specific time frame. In addition, states may require a certain amount of hours devoted to specific topics, such as infection control or HIV/AIDs training, and may mandate continuing education for professionals who work less than a given number of hours per year (Medscape, 2011).

Each professional must be aware of the continuing education requirements for the states in which he or she is licensed. Each professional must keep his or her own records and produce those records if audited. If a licensed professional is audited and is unable to produce the required materials per the states' requirements, penalties and loss of license are possible.

In addition to licensure requirements, certified healthcare professionals must comply with the specific requirements of certifying bodies. Compliance with certification, and recertification, criteria is the nurse case manager's responsibility. Most certifying bodies allow professionals to maintain their certifications by participating in continuing education programs and demonstrating compliance by maintaining certificates of completion within a specific time frame. Professionals have the option to retake a certification examination, but most professionals opt to attain the required continuing education.

Continuing education activities are an important part of each nurse case manager's professional development, and with licensure, most certifications specify what types of programs are acceptable. Case managers can and should attend programs and take courses that are directly related to the practice of care management. This gives professionals a broad choice of the type of continuing education credits they earn to improve their individual practice.

Most people obtain continuing education credits by attending conferences or professional organizations' local, state, and national meetings; or through professional journals, webinars, or other social media. As a result of advances in technology, many time-pressed professionals turn to online CE programs.

Through experience, professionals realize that sharing information is important to the practice of case management. Examples of venues for sharing expertise include writing to professional journals, speaking at conferences, or being part of developing programs that assist others in their professional development.

Experienced case managers can also participate in research projects. Research is the means of enhancing the body of knowledge to elevate the practice of case management to a recognized profession. Case managers who participate in, and contribute to, the field of research as advanced practice professionals ensure that the practice moves forward. As the practice of case management continues to evolve and mature, it is important that those with expertise in the area of research use research methodologies to refine and validate the practice.

Lastly, professional organizations provide important professional growth opportunities for case managers. CMSA is the largest professional organization dedicated to meeting the needs of case managers. It offers a variety of online education and professional development tools, located in the Educational Resource Library and the CMSA Toolbox at www.cmsa.org. The American Nurses Association (www.nursingworld.org) is the professional association for nurses, with the American Nurses Credentialing Center (ANCC), as its certification arm, providing a wealth of information for professionals seeking certification in a variety of specialties. ANCC's Web site is www.nursecredentialing.org.

Professional organizations provide practitioners the opportunity to be a part of a powerful network of case managers who value the practice and work together to advance it. As part of a professional network, case managers are provided with timely and relevant information about the practice that gives them the ability to be up-to-date with current standards, which allows them to practice safely. In addition, participation in professional organizations provides practitioners with a unified voice and the power to advance the practice of case management.

STANDARDS OF CARE

Standards of care provide minimal as well as optimal parameters from which to measure the quality of health care. Each professional group can refer to its own standards as the benchmark for professional performance in the discipline.

Standards of care help with operationalization of patient care processes by providing a baseline for the quality of care delivered to the patient. An example would be a standard that was universally accepted regarding the care of a patient with chest pain. This standard would allow professionals across the country to have an accepted way to systematically treat those patients who suffer from chest pain. Nurse case managers rely on clinical standards or guidelines to ensure that interventions

- ▶ Are based on scientific, sound consistent practice,
- ▶ Optimize the management of limited resources, and
- ▶ Decrease variations in care.

Examples of standards of care are those set by the American Heart Association (www.americanheart.org), American Diabetes Association (www.diabetes.org), and the American Cancer Society (www.cancer.org).

Frequently, standards of care focus on a particular discipline. This gives the professional involved in the treatment a standard by which to practice. (See CMSA, 2010.)

CLINICAL GUIDELINES

Clinical guidelines or clinical practice guidelines are defined as systematically developed statements that assist the practitioner, healthcare team, and patient in making decisions about appropriate health care for specific clinical circumstances. Clinical guidelines or clinical practice guidelines are used in the healthcare industry to ensure that clinical interventions are less variable; are based on sound, consistent practice; and optimize the management of limited resources. The literature tells us that the time lapse between introduction of a new clinical guideline and adoption by practitioners is about 17 years. Therefore, it may become necessary for a case manager to repeatedly remind providers about the guidelines, but guidelines are just that—guidelines. They are not regulations or legislation. They are tools case managers use to improve the quality of care provided while controlling costs. They are evidence-based or practice-based, patient-specific, and user-friendly.

Most professional organizations have developed guidelines for practice and care delivery specific for interests, such as the American Academy of Pediatrics, which has 96 guidelines; American Academy of Allergy Asthma and Immunology; American Academy of Child and Adolescent Psychiatry; National Association of Pediatric Nurse Practitioners; American Academy of Dermatology; American Academy of Family Physicians; American Academy of Pediatric Dentistry; American College of Chest Physicians; American College of Emergency Physicians; and the like. Many of these guidelines detail the disease categories, the clinical scope, the target population, the interventions, the measures, and the desired outcomes.

The U.S. Preventive Services Task Force (USPSTF) is an independent panel of experts in primary care and prevention that systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. Sponsored since 1998 by the Agency for Healthcare Research and Quality (AHRQ), the task force is the leading independent panel of private-sector experts in prevention and primary care. Its pocket guide covers all USPSTF recommendations, organized for quick reference and easy searching, from 2002 through 2010 (USPSTF, 2011).

Most case management and utilization management systems have guidelines and algorithms built into their case management software. Two of the most popular sets of clinical guidelines are Milliman and InterQual, which are clinical decision-making support tools. Further content on these clinical guidelines is discussed in Chapter 3.

Several organizations have developed Web sites that case managers, healthcare professionals, and the general public can access when they need information on clinical guidelines. Case managers can use these sites to gather information that will assist them to more fully understand a patient's diagnosis and treatment options. Examples of these sites are The National Guideline Clearinghouse™ (NGC) and the W. K. Kellogg Health Science Library. NGC is a public resource sponsored by the AHRQ in partnership with the American Medical Association and the American Association of Health Plans. The Web site to access the clearinghouse is www.guideline.gov. The W. K. Kellogg Health Science Library (www.library.dal.ca/kellogg) contains guidelines derived from evidence-based medicine.

CLINICAL PATHWAYS, CARE PRACTICE, AND CARE MAPS

Although closely related to clinical practice guidelines, pathways more directly target the specific process and sequence of care, frequently plotting out the expected course of an illness or procedure with associated prompts for appropriate interventions. Also known as clinical pathways and care maps, pathways are generally multidisciplinary by design and incorporate the responsibilities of physicians and nurses with those of ancillary medical providers, including pharmacists, physical therapists, and social workers. They are comprehensive algorithms designed to manage the care of patients from the time they enter the system until they are returned to their optimal level of functioning (Klainberg, Holzemer, Leonard, & Arnold, 1998). They are regularly developed at the point of care and may, in some cases, incorporate or even replace traditional chart documentation. In addition, pathways are often evidence-based and may even be integrated with locally or nationally developed clinical practice guidelines. Most pathways, however, are locally developed and are most frequently implemented at the level of the hospital or medical center as part of a cost-containment or quality-assurance initiative.

Clinical pathways are structured, multidisciplinary plans of care designed to support the implementation of clinical guidelines and protocols. They are designed to support clinical management, clinical and nonclinical resource management, clinical audit, and financial management. They provide detailed guidance for each stage in the management of a patient with a specific condition over a given time period, and include progress and outcome details.

Clinical pathways aim to improve the continuity and coordination of care across different disciplines and service lines. They can be viewed as algorithms in as much as they offer a flow chart format of the decisions to be made and the care to be provided for a given patient or patient group for a given condition in a stepwise sequence.

Clinical pathways have four main components: a time line, the categories of care or activities and their interventions, intermediate and long-term outcome criteria, and variance tracking. They differ from practice guidelines, protocols, and algorithms in that they are utilized by a multidisciplinary team and focus on the quality and coordination of care.

The case manager uses these tools as a way to proactively identify problems, determine where the problems arose, and gather data that objectively provide information on how improvements to care or processes can be made. The case manager objectively sees how the patient is doing as a result of the use of clinical pathways, since the case manager has a broad view of the process. The case manager does this by continually assessing whether the patient is meeting the expected goals of the pathway. If goals are not achieved, the case manager documents this as a variance.

Variance

Variances can occur at any time throughout the course of treatment. Variances occur when the patient does not progress as outlined according to the clinical pathway. Further discussion on variance tracking is found in Chapter 4. Variances are usually classified according to who or what caused the variance—the patient, individual clinical or healthcare professionals, or a fault in the system. When variances to the clinical pathway occur, documentation shows that the variance occurred and what was done to correct the variance. If variances are a result of complex causes, an interdisciplinary case consultation can convene to discuss the events. The meeting focuses on determining whether the pathway is realistic for the individual patient as well as whether the variance can be resolved.

Many times, issues arise that were not known when the pathway was implemented, or the patient's condition may have changed since the pathway was started. A patient who is on a fractured hip pathway may develop variances when a comorbid condition, such as hypertension, complicates the treatment. In this case, the treatment would focus on treating the hypertension, since uncontrolled hypertension is life-threatening. The pathway for the treatment of the hip would be suspended until the hypertension was controlled, and a hypertension clinical pathway might be implemented. Once this is accomplished, the patient's care can return to the hip pathway. Often, care for both conditions, or any others, can proceed simultaneously.

Algorithms

Algorithms are systematic procedures that follow a logical progression according to additional information received or a patient's response to an intervention to reach a solution for a specific problem. Like protocols, algorithms are a series of treatment steps, each of which is defined by the clinical response of the patient to the preceding step. However, unlike protocols, algorithms are research-based and have scientific support data. One of the most recognized uses of algorithms is in advanced cardiac life support. Professionals use a specific algorithm that relates to specific cardiac rhythms. Corresponding treatment is designed to interrupt an abnormal rhythm in an attempt to normalize the rhythm. The use of algorithms helps to standardize emergency treatment, both inside the healthcare setting and in the community, to provide treatment in an organized and efficient manner and to achieve successful outcomes.

Decision Trees

Decision trees are used to select the best course of action in situations in which there are no clear decisions. Many businesses use decision trees to help them estimate how to determine inventories. An example is a manufacturing company that must decide how much inventory to build before knowing precisely what the demand will be. In the legal field, an example is a person who must choose between accepting an out-of-court settlement or risk the outcome of a trial. In health care, professionals must also make decisions without complete information. Decision-tree programs allow for the available information to be input into a program that systematically factors all variables so that a decision can be made. Many IT systems feature decision trees as part of standard software.

Case Simulation: *Two nurses are working in the postop unit of a hospital. One nurse follows the clinical pathway developed for the care of patients who have had abdominal surgery; the other does not follow the established clinical pathway but documents her own care plan. The first nurse knows that pathways are care plans that detail the essential steps in the care of patients with a specific clinical problem and describe the expected progress of the patient; they exist for dozens of conditions or procedures. She performs each intervention at the prescribed time, as the patient tolerates. The second nurse, following her intuition instead of a pathway, tries to develop a care plan with her patient's input, which presents particular challenges when the patient is unconscious, semiconscious, woozy, or experiencing pain. The first nurse is able to begin her work with the patient even in his unconscious condition; she turns him, braces his abdomen with pillows, and checks all vital signs, medications, and so on. The second nurse is still assessing and documenting her care plan.*

The result of this scenario was that the patient who was being cared for by the nurse following the unit's clinical pathway was transferred to a stepdown unit within the pathway's time line. The second patient being cared for by the second nurse creating her own care plan did not progress as well and was not ready to be transferred to the stepdown unit during this nurse's shift. This delayed transfer resulted in a backup in the OR schedule because of the lack of a postop bed. The end result was that the first patient's recovery was quicker, his transition between units smoother, and he was happier. This adherence to the clinical pathway also resulted in savings for the hospital.

Critical pathways or care maps are being implemented in a broad range of patients with many different diseases. Although cost savings can and should be evaluated with the critical pathway, improving guideline compliance and overall quality of care is the primary focus. Clinical protocols can and should be used to decrease variation in care, improve guideline compliance, and potentially improve overall quality of patient care. Practitioners and administrators should work together to incorporate clinical protocols and critical pathways, which may result in improved quality and reduced costs.

SCREENING TOOLS

The general concept of case management and care coordination is to educate people about how to improve their health status, to prevent or manage chronic illness, to improve quality of life, and to better control healthcare costs. To do this, healthcare professionals must understand how people view their own health status, comply with prescribed regimens, perform activities of daily living, and perceive quality of life. As a result, health plans and providers must seek valid methods of assessing health status of specific populations and respond to the need to identify at-risk members, to require clinical outcomes accountability, and to focus on population health management.

Health assessment screening tools can be useful in gathering this information. Health assessment screening tools allow providers to proactively evaluate a patient's perception of his or her health status, whether or not the patient understands the information given about a disease or injury, and the ongoing prognosis. After information has been given to a patient regarding a particular treatment or condition, a health assessment screening tool enables the practitioner to evaluate whether the patient understands and can apply the information, to maximize patient compliance. Should the screening tool show that the patient did not understand the information well enough to self-manage and achieve optimal results, referral to case management is indicated for reinforcement and monitoring of the patient's compliance and outcomes over time.

Health assessment screening tools are an effective means to evaluate risk and outcomes. However, they cannot be used to evaluate the implementation of interventions. The methods by which health assessment screening tools are implemented and used should be understood by the case manager, as well as by any member of the healthcare team using a health assessment screening tool.

Screening tools can be descriptive, predictive, or evaluative. A descriptive assessment tool collects data about the characteristics of a population to identify and implement health prevention in areas of greatest need.

Predictive tools are used to infer what may happen in a particular population, in particular disease conditions, or because of certain lifestyle behaviors. A predictive screening tool demonstrates factors among smokers, for example. Results show that smokers tend to develop more respiratory infections and chronic bronchitis than nonsmokers and recover from surgery more slowly.

Evaluative tools are survey tools that measure and weigh the effectiveness of a particular medical intervention or process. An example is a screening tool to measure outcomes of diabetic teaching to a population identified by a managed care organization using a disease management model (Ringel, 1998).

When developing screening tools, an interdisciplinary team that includes physicians is needed. The focus is on establishing and maintaining a streamlined process to make periodic health assessments a routine part of the care process, in both the inpatient and ambulatory settings. The most common screening tool used by providers and managed care organizations is the SF-36 Measurement Model.

The SF-36 is a multipurpose, short-form health survey with only 36 questions. It has been proven to be reliable and valid. It yields an eight-scale profile of functional health and well-being scores, as well as psychometrically based physical and mental health summary measures and a preference-based health utility index. It is a generic measure, as opposed to one that targets a specific age, disease, or treatment group. Accordingly, the SF-36 has proven useful in surveys of general and specific populations, comparing the relative burden of diseases, and in differentiating the health benefits produced by a wide range of different treatments.

The taxonomy has three levels: items, eight scales that aggregate between 2 and 10 items each, and two summary measures that aggregate scales. All but 1 of the 36 items (self-reported health transition) are used to score the eight SF-36 scales. Each item is used in scoring only one scale. The eight scales are hypothesized to form two distinct higher-ordered clusters because of the physical and mental health variance that they have in common (QualityMetric, 2012). The SF-12 measures general health status using the eight-scale profile, as seen in the SF-36. Results are expressed in two scores: the Physical Component Score and the Mental Component Summary (QualityMetric, 2012).

The Patient Activation Measure (PAM) is a 13-item tool that assesses patient knowledge, skill, and confidence for self-care. Scores range from 0 to 52, and a lower score indicates that the patient is less likely to have basic knowledge about his or her condition, treatment, or self-care. A PAM score can also predict healthcare outcomes, including medication adherence, ER use, and hospitalization (Insignia Health, 2012).

Health risk assessments (HRAs) can also be very effective in identifying patients who could benefit from aggressive outreach and interventions. HRAs evaluate a patient's perception of his or her current state of health. In addition, they are able to analyze results to determine whether or not the patient has an increased likelihood of seeking care. HRAs are able to predict not only future healthcare costs, but also the likelihood of progression toward illness or worsening of condition.

There are many such tools. Following is a list of some HRAs that case managers might find helpful in their daily work.

▶ **For angina:**

- ▶ Rose Questionnaire Seattle Angina Questionnaire

▶ **For arthritis:**

- ▶ Arthritis Impact Measurement Scales (AIMS)

▶ **For cancer:**

- ▶ Functional Living Index-Cancer

▶ **For mental status:**

- ▶ Basis-32
- ▶ Hopkins Symptom Checklist-25
- ▶ Mini-Mental State Examination

▶ **For pain:**

- ▶ McGill Pain Questionnaire
- ▶ MOS Pain Measures

▶ **For depression:**

- ▶ Patient Health Questionnaire 9
- ▶ Beck Depression Inventory

▶ **For attention-deficit hyperactivity disorder:**

- ▶ Vanderbilt Assessment Scale for Attention Deficit/Hyperactivity Disorder

▶ **For anxiety**

- ▶ Beck Anxiety Inventory

NURSING CASE MANAGEMENT PROCESSES

The case management process is an adapted version of the nursing process. Both are similar in that they identify a plan of care for patients by assessing needs, planning and implementing care, and evaluating outcomes. The difference is that the nursing process is applied to the care of every patient by all nurses in any care setting, whereas the case management process is used by case managers in the patient care delivery model and is applied only to a select group of patients who meet specific predetermined criteria.

TABLE 2-1.
COMPARISON OF THE NURSING PROCESS AND THE CASE MANAGEMENT PROCESS

CORE FUNCTIONS OF THE NURSING PROCESS	CORE FUNCTIONS OF THE CASE MANAGEMENT PROCESS
Assessment	Assessment
Diagnosis	n/a
Planning	Planning
Implementation	Implementation
n/a	Coordination and Interaction
Monitoring and Evaluation	Monitoring and Evaluation
n/a	Outcomes

Adapted from *The Case Manager's Survival Guide: Winning Strategies for Clinical Practice*, by T. G. Cesta, H. A. Tahan, and L. A. Fink, 2002, St. Louis, MO, Mosby.

Assessment

Assessment is the first essential function of the case management process. It is an organized, multidimensional progression by which the nurse case manager gathers and analyzes in-depth information in an attempt to understand the patient's physical, psychological, psychosocial, cognitive, functional, developmental, economic, cultural, spiritual, and lifestyle needs. To perform this task, the nurse case manager collects essential information from relevant sources, including the patient; his or her family; other healthcare professionals or institutions that have provided care; professional caregivers; employers; and public health, school, and military records. As a result of strict laws regarding confidentiality, nurse case managers should obtain a signed release from the patient and applicable family members prior to gathering the pertinent information.

An in-depth evaluation of the information provides valuable insight regarding the patient's history, as well as how the healthcare system has met his or her needs. Often, over- or underutilization of services becomes evident through this investigatory process. In addition, many patients use the healthcare system in inappropriate ways. As a result, services do not always match the true needs of the patient. It is the role of the nurse case manager to uncover any concerns about care.

Case Simulation: *A patient with multiple chronic conditions has repeat admissions to the hospital. In order to understand the needs of the patient, the nurse case manager embarks on a comprehensive assessment that considers medical history, medications taken, previous hospitalizations, diagnostic tests and results, evaluations from specialists, and input from current providers, as well as the patient and his family. The information the nurse case manager collects during the assessment phase provides the team with the most up-to-date information before beginning an evaluation of the current condition, identifying unmet needs, clarifying and determining realistic goals, and deciding on a plan of care.*

A complete and comprehensive assessment is critical to building a successful case management plan. Developing keen assessment skills is important if the nurse case manager is to make an accurate assessment of the patient's status and gain a better understanding of how the patient is dealing with his or her condition. Gathering this information allows the case manager to better assess the patient's needs and communicate these needs with the treatment team involved.

Physical and Clinical Issues of Assessment

The primary objective of the case management process is to ensure appropriate, high-quality care for at-risk individuals in a timely and cost-effective manner by providing services that are individualized, holistic, and meant to enhance self-care throughout the continuum. The tactics implemented to achieve the process objective include

- ▶ Helping the patient and his or her family achieve optimum function
- ▶ Coordinating the delivery of care
- ▶ Decreasing fragmentation and ensuring appropriate use of resources
- ▶ Enhancing the quality of life for the individual patient and his or her family
- ▶ Improving and facilitating interdisciplinary communication and planning
- ▶ Helping to strengthen the family unit when injury and illness strike through support, empowerment, and effective and efficient care coordination
- ▶ Maximizing the health of patients by increasing healthcare education that promotes wellness
- ▶ Proactively identifying problems and needs, and implementing services that provide appropriate, high-quality care to meet the individualized needs of the patient and his or her family.

Nurse case managers work in various settings throughout the continuum of care. Traditionally, organizations that have implemented case management systems have created their own models that correlate to the organizations' operations. In addition, these organizations can target case management to specific patient populations, communities, or departments. Examples include children, the elderly, and those with mental illness, or specific areas, such as the emergency department, to assist patients with appropriate access to the healthcare system.

Psychosocial Issues of Assessment

Another aspect of the nurse case manager's assessment focuses on psychosocial issues that impact a patient's life. Some questions a case manager can ask to gain insight include:

- ▶ What are the family dynamics?
- ▶ Is the patient a child, mother, or father, or is the patient single or a widow or widower?
- ▶ What is the patient's educational level?
- ▶ Is the patient a citizen of the United States?
- ▶ If no, when did he or she arrive in the United States?
- ▶ What is the patient's primary spoken language?
- ▶ Is the patient an active member of his or her community?
- ▶ Does the patient feel that he or she has a social network in place?
- ▶ Does the patient work, or is he or she retired or disabled?
- ▶ Does the patient have any hobbies?
- ▶ What is his or her spiritual affiliation?

The answers to these and other similar questions shed light on the life of the patient and allow the nurse case manager to assess whether the patient will need assistance with providing self-care or has the necessary support to fight the challenges of a catastrophic or chronic condition. In addition, the answers also provide insight into any possible literacy issues that might hinder patient education. The answers provide important clues for better understanding the patient and family dynamics, and should play a part in the patient assessment.

Case Simulation: *Two patients in the midst of a similar healthcare crisis reveal very different social, economic, and financial dynamics and, therefore, very different needs. Patient one is a father of two. He has a supportive family, has been working for the same employer for 15 years, and is an active member of his community and church. Patient number two is a divorced mother of three children. She works two jobs just to get by, has no local family to speak of, and relies on neighbors for after-school care. The assessment reveals that she has significantly more needs and requires more support.*

Developmental Issues of Assessment

Nurse case managers need to understand growth and development patterns of their patients. This is especially true for the nurse case manager who specializes in pediatrics. Understanding normal growth and development patterns is necessary to ensure that the care provided is illness- and age-specific. To understand the developmental patterns of children and better prepare to address issues that may arise when children experience health challenges, case managers should take time to review the work of three pediatric theorists. These theorists provide insight into the stages of growth and development by age group.

- ▶ Jean Piaget (1896–1980) was a cognitive theorist who addressed children’s abilities by age group to synthesize and analyze information. Piaget’s theory can help the nurse case manager understand why reasoning with young children about the need for a procedure is not possible. Instead, encouraging parents and caregivers to support and comfort children during and after procedures may prove more effective.

Case Simulation: *When educating the mother of a 5-year-old with cystic fibrosis about performing chest percussions, the case manager would not tell the mother to give the child a choice of when to do the therapy. Instead, comforting the child and spending time doing something he or she likes after therapy is a better way to approach the child’s expected resistance.*

- ▶ Erik Erickson (1902–1994) focused on children’s social environments. His work helps case managers to understand peer pressure felt by children, which may make them noncompliant with medication or treatment regimes.

Case Simulation: *An adolescent who is newly diagnosed with diabetes is having high blood sugars and admits to hating the foods she has to eat because of her diabetes. The nurse case manager realizes that teenagers want to “fit in,” so following a diabetic diet is a challenge. Understanding and acknowledging peer pressure, the nurse case manager consults with a nutritionist to provide a diet that allows some flexibility when the teenager is out with friends. By doing this, the case manager provides a way for the teen to “fit in” without compromising her health.*

- ▶ B. F. Skinner (1904–1990) focused on behavior. His research with monkeys proved the effectiveness of a reward system for appropriate behavior. Bargaining is an effective tool that works when dealing with school-age children who are rewarded with special favors or favorite television shows when they comply with treatments.

Case Simulation: *A child with a chronic illness might feel less important than his peers. Rewarding him for taking his medication or doing his exercises daily is a way to boost his self-esteem, while at the same time helping him learn how to manage his illness.*

Financial Issues of Assessment

The United States spends more on health per capita than any other country. Projected healthcare spending for 2012 in the United States will reach \$3.1 trillion, or 17.1% of the gross national product (Henry J. Kaiser Family Foundation, 2012). For case management to successfully help control escalating healthcare costs, early identification of at-risk populations is essential. In cases of sudden catastrophic illness or injury, early referral to case management services is important to ensure that the patient is admitted to the appropriate facility and moves through the system in a coordinated manner that will meet his or her medical needs. For those who suffer from chronic illness or progressive disease, the need for case management services is determined by how the patient and the family are handling their specific challenges. Screening tools provide the healthcare team with information about the patient's perception of his or her illness. This information helps with early identification of those patients who need help improving their health status, thus avoiding or minimizing potentially costly problems.

Case Simulation: *A patient with diabetes who is seen in the emergency department (ED) several times for problems related to dizziness and blurred vision is referred to the ED case manager on his most recent visit. The case manager takes the time to talk to the patient about the reasons for his frequent visits, to review lab results, and to discuss the clinical picture with both the ED physician and the patient—all in an effort to gain a better understanding of how the patient is managing his illness. The nurse case manager learns that the patient does not have a primary care physician because he has no health insurance because he lost his job. As a result of taking the time to talk with the patient, the case manager can assist him with access to appropriate resources that will result in decreased fragmentation of care, improved quality of care, and reduced costs associated with misuse of resources.*

As part of the process of assessment, the nurse case manager reviews available benefits, including those for services and products, for the patient and his family. This requires the case manager to have a working knowledge of various reimbursement systems. Plans can vary from commercial managed care plans, such as health maintenance organization (HMO) and preferred provider organization (PPO) plans, to traditional indemnity plans in which there is no network of providers and much greater financial risk. Likewise, patients may have Medicare with special rider policies to supplement their coverage. Since Medicaid plans vary from state to state, the hospital case manager might negotiate discharge planning for two Medicaid patients with vastly different postacute benefits and available resources. Patients also may enter the healthcare system through the workers' compensation system, which requires constant communication with the primary care physician, nurse case manager, claims adjuster, and employer. Taking the time to become familiar with the various reimbursement systems is important because each has very specific reimbursement guidelines. These are covered in greater detail in Chapter 3.

Planning

The next essential function for the nursing case management process is planning. Planning is the process by which the nurse case manager develops a patient-centered, evidence-based, interdisciplinary plan of care based upon complete analysis of data. The nurse case manager collaborates with the patient, family, caregivers, healthcare team, payer, and other stakeholders, as needed, to develop an individualized plan of care. This comprehensive plan is focused, action-oriented, time-specific, evidence-based, measurable, attainable, fiscally responsible, and interdisciplinary. The nurse case management plan contains short- and long-term, patient-centered goals that are reviewed and updated as the patient moves through the continuum of care. Its goal is to provide high-quality care that meets the needs of the patient in the most cost-effective manner. The plan prioritizes the needs of the patient and strives to meet those immediate needs, while moving the patient through the continuum of care in the least restrictive settings.

Depending on the timelines of the case management plan, it can start in one setting and continue in another. Ideally, the same nurse case manager follows the patient from one setting to the next. However, in reality, moving to each level of care may result in a new case manager.

***Case Simulation:** A patient making the transition from the acute care setting to a rehabilitation facility and then back home with the support of home health care has four case managers coordinating her care—the acute care nurse case manager, the rehabilitation case manager, the home health case manager, and the payer case manager. The case manager responsible for transferring the patient from one setting to the next ensures that detailed information is provided regarding what was done, what the future plan is, and why the transfer is taking place. Documentation presenting the rationale for the transfer is important to ensure a safe and effective transition of care.*

A key question that the nurse case manager should ask and be able to answer is: “What is the clinical evidence that allows this patient to move safely from one setting to the other?” The answer to this question provides the rationale for the transfer. Specific rules apply to the transfer of patients from one setting to another, so it is important that all case managers be aware of the policies and follow them to guard against inappropriate transfers.

The case manager works collaboratively with the treatment team to develop the plan of care and then obtains approval for the plan from the treating physician, the patient, the family, and the payer. Depending on the payer source, the case manager may need to obtain authorization for the plan of care prior to implementation, a step that should be considered at the planning phase. Authorization is especially important in the area of workers’ compensation, as well as with some commercial managed care organizations. It is important that the nurse case manager be aware of the cost of the plan that is being constructed to ensure that it cost-effectively meets that patient’s needs. If funding is not available but the services are needed, the nurse case manager works to gain approval or negotiates with the payer to see how to utilize the benefits to meet the needs of the patient.

The nurse case manager must recognize that denial of payment for services from the payer is not the final word. As an advocate for the patient, the case manager must look at what is medically necessary and strive to find resources to safely ensure that those services are provided. This may mean asking for an exception to the benefit plan, utilizing community resources, or extending the patient's stay in the current setting. A safe and appropriate discharge is essential to any case management plan.

Finally, it is important that the plan of care be documented; it is a dynamic document that is referred to on an ongoing basis.

Implementation

Implementation is the third essential function in the case management process. It is the execution of the specific case management activities and interventions that lead to accomplishing the goals set forth in the plan of care. Implementation includes proactive activities such as intervening, delegating, facilitating, goal-setting, and communicating. Once the plan is developed and approved by the treating physician, the payer, and the patient and family, it is implemented by the nurse case manager. Using negotiation skills, the nurse case manager works to ensure that services begin in a coordinated manner among the various providers, the patient, and the family. Through careful planning, knowledge of resources, and appropriate communication, duplication of services is avoided and fragmentation is reduced. The end result: the patient receives care that is appropriate, timely, and cost-effective.

The ability of the nurse case manager to implement and coordinate a successful plan of care is influenced by his or her level of education, training, and clinical expertise. For example, an advanced practice nurse has the specialized skills, knowledge, and ability to effect change, use critical thinking, promote patient and family autonomy, build positive relationships, and understand and interpret research for enhanced decision-making. Using these skill sets when implementing challenging plans of care is essential to successful outcomes.

Goal-Setting

It is important for the nurse case manager to formulate goals in concert with the patient, family, and caregiver. Setting goals gives the plan of care structure and a means to measure and report outcomes in an organized manner. Goals should be patient-focused, measurable, attainable, relevant, and time-orientated. The patient, as well as the family, should take part in the development of short- and long-term goals. By working closely with the patient and his or her family, the case manager gains an understanding of the needs of the patient, the diagnosis, and the treatment plan, as well as insight into the patient's lifestyle, personal habits, attitudes, and well-being.

An important goal the nurse case manager strives to achieve is adherence to the plan of care. Adherence is pivotal to achieving desired health outcomes. The effectiveness of the case management process is based upon the linkages between interventions, adherence, and outcomes.

Negotiating

Effective case managers are skillful negotiators. The basic skill for a successful negotiation is the ability to build solid relationships among all parties involved. The level of trust, knowledge, and flexibility of those involved in the negotiation process influences the success of any negotiation. When the nurse case manager takes the time to understand what motivates the individual members of the patient care team, which includes the patient and his or her family, negotiations are more likely to succeed.

Managed care has decreased the need for price negotiations because of provider contracts that are set up in advance. Today, the nurse case manager is viewed as the negotiator of care rather than the negotiator of costs. This broader view allows the case manager to consider the entire process, rather than focus solely on costs. As part of the plan development, the nurse case manager is obligated to ensure that the services and products put into place are medically necessary, priced appropriately, and delivered with high-quality service.

Case Simulation: *A transplant patient requires costly medication for life. The nurse case manager negotiated with three network vendors for the lowest possible price. The savings generated by the negotiated lower rate is reported as cost savings. These cost savings allow for the more effective use of benefit dollars, thereby meeting the patient's needs over a longer period of time.*

Contracting

For managed care to effectively manage risk within an organization's network, providers and vendors who can adequately provide services to meet the healthcare needs of the members are selected. Several factors are taken into consideration when a managed care plan develops its provider network, such as the demographic and geographic makeup of its members. Providers seeking to join a managed care organization's network must meet certain criteria and standards. Standards are set by the managed care network, by a state legislative agency if the state mandates that managed care networks exist, or by an accreditation organization. These requirements are necessary to ensure that the providers in the network follow the standards set by the managed care organization and by imposed legislation. Policies and procedures are usually reviewed on an annual basis when provider contracts are renewed. Once a contract is signed and the provider is credentialed, the provider can begin to serve members in the managed care organization.

For example, acute care hospitals, home care agencies, and durable medical equipment (DME) companies might require accreditation by The Joint Commission before ever being considered as a network provider. During the credentialing phase, the provider must supply documentation of review by The Joint Commission. This information is important because the managed care organization is responsible for selecting providers who can offer high-quality care for their members.

Finally, providers who join a managed care network must agree to the reimbursement rate—usually based on capitation—that the organization offers. The provider is paid a fixed fee, which cannot be altered despite how often the provider's services are accessed.

Coordination and Interaction

Coordination and interaction are essential and inherent to all phases of the case management process. These components consist of organizing, securing, integrating, and modifying the resources necessary to accomplish the goals set forth in the case management plan. As part of this process, the nurse case manager must be aware of the cost of both current and recommended care in order to ensure that suggested interventions are cost-effective. When possible, community resources are used. The nurse case manager is cognizant of and compliant with regulations, standards, and legislation at the local, state, and national levels. Essential competency skills for the nurse case manager who coordinates an individualized plan of care are effective communication, collaboration, assertiveness, and cooperation with all parties.

As mentioned earlier, coordinating a safe and effective plan of care is critical to the success of the plan. The case manager must verify that the patient and the family understand the plan of care and that the various contracted providers understand their roles in the process. The nurse case manager validates that interventions are consistent with the established plan of care and that the plan is implemented in a safe and timely manner. The case manager who initiates the plan, if not following the case through the continuum of care, should make a follow-up call to be certain that all aspects of the plan are in place. By proactively addressing problems regarding the plan, the case manager can intervene early to make changes as needed. If problems are found, the case manager assesses the situation and develops measures to address it.

In many cases, once the patient leaves a specific setting, such as the hospital, interaction with the nurse case manager ends. In other cases, however, a new case manager may take over. It's important to understand that a smooth transition is possible when communication and collaboration occur among all parties. The patient and the family should receive instructions about how to follow up if they have questions or concerns about any aspect of the plan of care. Documentation of all case management activities is the final detail in this process.

Collaboration

Collaboration is an essential skill that the nurse case manager uses to unite the members of the healthcare team and others who are integral to designing a plan of care for an individual patient. Collaboration by the case manager fosters consistency, which reduces fragmentation and duplication of services. Effective collaboration ensures patient and provider satisfaction, an important outcome that all healthcare organizations strive to achieve. The timely delivery and sensitive handling of information by the nurse case manager are essential to ensuring patient confidentiality and relevant decision-making. When pertinent information is communicated to providers in a timely manner, the nurse case manager ensures that decisions are made with full information, thus decreasing duplication of services.

Consultation and Referrals

Consultation is the act of conferring with another individual in order to gain an opinion or advice. One person usually consults with another because the second person is considered an expert who can give professional advice or services. Consultation is a large part of the fact-finding and assessment stage in case management. However, consultation with other members of the healthcare team continues throughout all phases of the case management process and is one of the defining factors to create a holistic, objective, and effective plan of care.

Once the referral process is completed, the nurse case manager employs his or her clinical skills in a comprehensive, fact-finding assessment process. It is the nurse case manager's responsibility to conduct a thorough and objective evaluation of the patient's current status, including medical, financial, psychological, social, and vocational aspects. To accomplish this, the nurse case manager needs to collaborate with the family, physicians, and other members of the healthcare team, as well as the payer and employer (if any). Understanding the unique aspects of each member of the team is important.

Case management has improved the delivery of health care by encouraging the team to work together instead of in silos. The following three examples illustrate how members of the healthcare team collaborate to meet the needs of the patient.

- ▶ **The physician:** The key decision-maker regarding the patient's treatment plan, and often the most important consultant to the clinical case manager, is the physician. Although the physician is responsible for diagnosing and treating the patient, he or she relies on the input and suggestions from the case manager and other members of the healthcare team on how to best meet the patient's needs. The nurse case manager, who has a unique relationship with the patient and the family, provides valuable insight that can assist all in developing an effective and efficient plan of care.

A nurse case manager who has developed a positive relationship with a physician is in an advantageous position to facilitate the patient's case management care plan by

- ▶ Suggesting potential alternatives to the treatment plan that can enhance quality of care while lowering costs;
- ▶ Arranging out-of-benefit resources covered by the payer based on a letter of medical necessity from the physician and supporting documentation;
- ▶ Initiating a discussion between the payer's medical director and the patient's physician, which can result in better care for the patient;
- ▶ Enlisting the physician in problem-solving on a current or future difficult case; or
- ▶ Using the physician as an informational resource or an actual referral source for other cases.

- ▶ **The pharmacist:** Another key member of the healthcare team is the pharmacist. The increased role that pharmacy and drug management play in healthcare delivery makes it essential for the nurse case manager to consult regularly with pharmacists. Biological and technological advances in medicine continue to escalate the use of high-cost medications in the treatment of complicated conditions. With this comes an increase in the incidence of drug interactions, drug sensitivity, drug overdose, and polypharmacy. Polypharmacy is a critical issue among many patients with complex chronic conditions, and pharmacists are in a key position to curb or eliminate this potentially dangerous situation.

Pharmacists can assist the case manager in understanding the various prescribing habits of physicians or help strategize an approach with the patient's physician when attempting to suggest a potential alternative drug intervention. Pharmacists are excellent resources for those cases in which the patient is prescribed a battery of drugs, and the nurse case manager is engaged in educating the patient, which requires knowledge of drugs' indications, side effects, and so forth. Pharmacists are great allies for the case manager dealing with a noncompliant or nonadherent patient. They can assist in monitoring the patient's medication compliance, as well as offer education and support resources to the patient to increase compliance. Pharmacists are also an excellent source of information for the patient and a vital link in establishing a relationship with the patient that is built upon trust.

- ▶ **The clinical nurse:** As highly skilled clinicians, nurses are excellent consultants and good sources of information for the case manager. Staff nurses are reliable historians when dealing with a patient in an acute care setting, rehabilitation facility, or long-term-care facility. They
 - ▶ Report on a patient's physical, mental, and behavioral status;
 - ▶ Provide insight into family dynamics;
 - ▶ Assess the patient's ongoing responsiveness to the treatment plan; and
 - ▶ Are trained to view the patient holistically, much as the nurse case manager is, making them a valuable resource to the clinical case manager.

Often, bedside nurses care for a particular patient because of their expertise in that patient's specific disease or injury. Therefore, they are also excellent sources of information pertaining to the patient's diagnosis and prognosis.

Collaboration among all members of the healthcare team occurs in a variety of ways and through a variety of venues—by ongoing one-on-one telephone communication or shared teleconference calls, by providing written narrative reports to all parties, by sharing charting and documentation that is e-mailed for review and group comment, and through face-to-face meetings. Confidentiality issues regarding the patient's right to privacy arise with each of these communication methods, and the nurse case manager must be aware of policies and procedures that address who, what, when, and how a patient's medical information is shared.

Acute care case managers have the greatest advantage in collaborating with the interdisciplinary team, especially when they engage in regularly scheduled team staffing meeting or rounds. Clinical rounds and staff meetings engage all members of the healthcare team and allow sharing of information about the patient's response to treatment.

Communication Skills

Interpersonal communication: Verbal and written communication skills are essential for nurse case managers. As the professional at the center of the team, the nurse case manager must interpret complex, detailed clinical and financial information, and disseminate that information—both orally and in written form—to others who need to know. To be successful, the nurse case manager takes a vast amount of information and summarizes it, without distortion or imposing personal judgment. When talking to other healthcare professionals, the case manager must be prepared with concise questions that help providers understand what is being asked and, therefore, provide information to that explains or clarifies the patient's condition.

A popular expression that nurse case managers should keep in mind is: *your emergency is not my emergency*. With this in mind, the nurse case manager must respect the time of others when requesting information. In addition to demands on other people's time, the nurse case manager, who talks with a variety of people, ranging from highly educated professionals to laypersons, should consider the educational level of the person with whom he or she is communicating. Effective communication with ethnically diverse populations may require the use of interpreter or translation services. Another essential communication skill is the ability to listen. The case manager learns a great deal by listening and observing those with whom he or she interacts.

Information is also obtained and transmitted in written form. Often, the nurse case manager composes letters to be mailed, faxed, or sent via e-mail to treating physicians or providers, requesting information to help clarify or update the plan of care, or offering details of a revised treatment plan. The effective nurse case manager must be aware of patient privacy legislation and how it applies to all forms of communication and needs to comply appropriately.

Accurate documentation is an essential form of communication to describe outcomes and improve the process of case management. Written documentation is viewed as the permanent record that specifies, summarizes, analyzes, and synthesizes verbal and nonverbal data that support the work and time that a nurse case manager gives to each patient.

Critical thinking and problem-solving: As nurse case managers increase their presence in the healthcare system, the need for critical thinking and the ability to problem-solve become more crucial. To achieve effective outcomes in today's healthcare environment, the nurse case manager must have skills that ensure problem identification in a proactive manner, and timely resolution. An organized approach uses the following strategies to ensure effective problem-solving:

- ▶ Identify the issue
- ▶ Understand each party's issue
- ▶ List possible solutions
- ▶ Evaluate the outcomes
- ▶ Select an option or options
- ▶ Agree on contingencies, monitoring, and evaluation (Hicks, 2007).

The traits needed by nurse case managers to critically think and problem-solve include excellent communication skills, organizational skills, flexibility, and creativity. By using critical thinking skills, the case manager is able to identify problems, investigate solutions, and work to ensure that a timely resolution occurs to maintain continuity of care.

As healthcare professionals, nurse case managers are required to interact with patients and families during very personal and stressful times. Astute case managers have the opportunity to use their expertise to recognize potential conflicts and put measures in place that address and resolve conflicts in a way that is agreeable to all. To resolve conflicts, the nurse case manager must be able to encourage and maintain open communication and facilitate a positive flow of ideas among all parties with whom interactions occur.

Case Simulation: *A workers' compensation nurse case manager's main goal is to assist an injured worker in returning to gainful employment. In accomplishing this goal, the case manager interacts with the employer, the injured worker, and the treating physician. On a visit with the patient to the treating physician, the case manager learns that the injured worker, who is a tree trimmer, is able to return to work but with restrictions of only working 4 hours a day. The case manager calls the employer to update him regarding the treating physician's plan of care, but the employer says that he cannot use someone who can only work 4 hours because this would put hardship on the rest of the staff. To resolve this conflict, the nurse case manager explains to the employer the benefits that he will derive from bringing the employee back to work. The employer remembers he has a drawer filled with addresses of potential clients that he has not had time to contact. The case manager works with the employer and helps him formulate a plan to bring the injured worker back to work to build a database of potential clients. The nurse case manager takes this opportunity to explain to the employer that bringing this employee back to work may keep the company's future workers' compensation rates from increasing. Also, morale will be improved when other workers see that the employer is willing to accommodate an employee who was injured. Finally, the nurse case manager reminds the employer that the injured worker, who is being paid whether he works or not, will be more productive to the employer by being at work. The case manager discusses the duties with the injured worker, and he happily returns to work; he was tired of sitting at home and glad that his employer found something he could do while he continued to heal.*

In this situation, the case manager showed a positive outcome by using negotiating skills to offset a potential conflict. It was a win for the employer, who was able to have someone who could assist him in the development of a database of potential clients that would hopefully expand his business, and a win for the injured worker, who was able to return to work within his restrictions. The case manager stayed involved to assist with any problems and to communicate the patient's progress to the treating physicians. The case manager documented the information in the injured worker's file, showing that the injured worker returned to work following the physician's instructions and that the employer safely accommodated him in the work setting. The nurse case manager showed a successful outcome and reported cost savings on the claim with an early return to work and a decrease in lost time.

Monitoring and Evaluation

The final essential concepts in the case management process, aside from outcomes, are monitoring and evaluation. To ensure that the plan of care is meeting the established goals, the nurse case manager monitors the plan of care on a continuing basis by gathering information from the providers involved to show that the plan implemented is effectively meeting goals. Proactive monitoring of the plan ensures that the patient is making progress toward the desired outcomes. If progress is not being made, modifications or changes to the plan in its entirety, or in specific components, are made as needed.

Evaluation provides the nurse case manager an opportunity to improve the plan of care if it is not meeting the goals or if the patient is not making progress. The evaluation is part of the continuous quality improvement process that organizations and accreditation bodies require. In addition, the evaluation process gives the nurse case manager time to review providers to ensure that all contracted services are consistent with the organization's standards. The evaluation process gives the case manager the opportunity to review the achievement of specific goals outlined in the plan of care and the chance to demonstrate the importance of his or her role in the case.

Outcomes Measurement

Once an individualized plan of care is crafted, the nurse case manager is responsible for initiating the interventions and monitoring the plan's effectiveness. Specifying goals at the onset of care planning allows the nurse case manager to evaluate the effectiveness of those goals as a result of the nurse case manager's involvement.

From a global view, evaluation of outcomes is an integral part of the quality improvement process. All information about outcomes—successful or not—should be reported. This information allows providers and practitioners to focus on systems' structures and to make changes as needed to improve both systems and individualized practice.

With the development and implementation of information systems, decision-makers can analyze large amounts of data. This allows them to choose a course of action that has the highest expectation of favorable results, in terms of both clinical and financial impacts. Through careful evaluation of the data, changes, procedures, and policies can be reviewed and adjusted as needed, thereby improving systems.

Patient Adherence to Plan of Care

Adherence to a plan of care implies a relationship in which the patient and his or her healthcare providers come to a consensus on the most appropriate treatment that he or she can and will follow. The World Health Organization defines adherence as:

the extent to which a person's behavior—taking medications, following a diet and/or executing lifestyle changes—corresponds with agreed recommendations from a health care provider. The consequence of nonadherence to the plan of care can result in a decrease in quality of life as well as unnecessary increases in avoidable health care cost. (Sabate, 2003, p. 3)

An important goal among nurse case managers is to work with their patients toward adherence to the prescribed plan of care. A case manager tackles this by taking the time to listen to the patient and to understand the goals and barriers that lead to nonadherence. Often, obstacles to adherence can be overcome. Once these problems are identified, the case manager can work with the patient to remove the barriers. Taking the time to educate the patient regarding the purpose of the treatment and the intended outcomes is important, as is learning what motivates the patient to better adhere to the treatment.

Services

Case managers receive referrals from various sources. These include integrated delivery systems, insurance company in-house triage systems, outside insurance adjusters, third-party administrators, acute and postacute healthcare facilities, social service agencies, attorneys, employers, federal systems, other healthcare professionals, and patients and their families. Because of this, how case managers initiate interventions varies greatly.

The way in which a nurse case manager approaches a new case is greatly influenced by the referral source and the payer system. Issues such as insurance policy limits, available coverage, eligibility for benefits, available funds, and other fiscal issues are considered when determining a plan of care. Yet it is the case manager's responsibility to exercise fiscal responsibility when accepting a referral, receiving a patient into a facility, or arranging a discharge.

Case Simulation: *An acute care facility has a clear financial advantage in keeping a patient. However, the case manager knows that the patient could receive high-quality care with a less intensive level of service, such as a subacute facility or even in the patient's home. The case manager, aware of her responsibility, recommends discharge to the appropriate service location, regardless of financial incentives. Another patient who has exceeded the benefits under his health plan continues to require services in a healthcare facility. Rather than close the case, the case manager explores and identifies appropriate community services, and arranges the patient's transfer once a new plan is implemented.*

Pathophysiology

To help individuals better cope with chronic illness, nurse case managers must understand the pathophysiological and psychological aspects of the disease process so that they can encourage patients and families to make positive behavioral changes and learn self-management skills that will allow them to more readily adapt to their conditions. When patients are empowered to self-manage, adherence to the plan of care increases, techniques are used to better manage complications, and disability is minimized.

Once an individual is identified as having been diagnosed with a chronic illness, a multidisciplinary team of experts constructs a proactive program to address the diverse needs of the patient. These experts work closely with the patient's physician or nurse practitioner because he or she is legally licensed to diagnose and treat the patient and, therefore, is the most appropriate provider to determine the treatment plan.

Case Simulation: *A respiratory therapist case manager monitors and educates an asthma patient, who started on a new routine of using a peak flow meter. She explains that the meter, which measures lung capacity and functional levels, can help the patient better manage activities and self-adjust medications to fit his physical and functional requirements. She shows the patient how to accurately read the meter and be cognizant of alerts to conditions that require immediate medical attention, such as an upper respiratory infection that can trigger an acute episode of wheezing. Early identification of asthma triggers allows the patient to adjust medications to control attacks. By developing a routine of regularly measuring peak flows, the patient has learned to recognize whether preventive measures are working or if he needs to seek medical attention.*

The outcomes that this particular asthma disease management program can claim just through this singular proactive education are

- ▶ Improved patient and provider satisfaction,
- ▶ Improved clinical status,
- ▶ Improved functional status,
- ▶ Appropriate use of healthcare resources,
- ▶ Decreases in lost time at work or school, and
- ▶ Decreases in healthcare spending on reactive care.

Psychosocial Conditions

Chronic diseases take patients and families through periods of good health mixed with periods of sickness. During these times, patients experience a variety of emotions that can often complicate care. To support and empower patients and families to develop coping strategies, case managers are aware that each person reacts and handles problems in his or her own way. Listening to patients and family members about how they are coping is a vital skill for case managers. Understanding the impact a chronic illness or catastrophic injury has on family dynamics is also important.

Relaying this information to other members of the healthcare team in an effort to help them understand the challenges and stressors that affect the patient is an important function of the nurse case manager. Being sensitive to the range of emotions that patients experience (e.g., denial, confusion, fear, avoidance, anger, grief, guilt) allows the nurse case manager to better understand why the patient and family act in a particular way (National Institutes of Health, 1996).

Providing support to the patient and family during these times is essential. This may entail referral to social services, guidance on how to sign up for community support groups, or recommendations for online support programs. The objective is that the patient and his and her family become aware of the various options available to them.

CMAG and IM-CAG

Two tools that are useful for pathophysiological and psychological assessment are the Case Management Adherence Guidelines (CMAG) and the INTERMED-Complexity Assessment Grid (IM-CAG). CMAG is a comprehensive model based on patient information, motivation, and behavior skill needs. It provides a comprehensive approach to addressing issues relating to chronic therapies (CMSA, 2006–2007). These guidelines are available for medication adherence and disease-specific guidelines on cardiometabolic risk, chronic obstructive pulmonary disease, deep venous thrombosis, and diabetes.

IM-CAG is a valid, electronic tool designed to provide a picture of risks and vulnerabilities of complex patients with actionable interventions. A core component of the IM-CAG training program is the ability to assist patients with complexity and aid them in receiving integrated physical and mental health services without cross-disciplinary “hand-offs.” Failure to treat depression can prevent proper treatment of other medical conditions because the depressed patient lacks the motivation or desire to improve his or her health (Karthal, Perez, Cohen, 2010). IM-CAG has four domains—behavioral, social, biological, and health system—with three time frames: historical, current, and anticipated. Scoring is based on the patient’s vulnerability and need for action. More information on CMAG and IM-CAG can be found at www.cmsa.org.

Evidence-Based Practice

Evidence-based practice (EBP) is a thoughtful integration of the best available evidence, coupled with clinical expertise. As such, it enables health practitioners of all disciplines to address healthcare questions with an evaluative and qualitative approach. EBP allows the practitioner to assess current and past research, clinical guidelines, and other information resources in order to identify relevant literature while differentiating between high- and low-quality findings. The practice of EBP includes five fundamental steps:

Step 1: Formulating a well-built question

Step 2: Identifying articles and other evidence-based resources that answer the question

Step 3: Critically appraising the evidence to assess its validity

Step 4: Applying the evidence

Step 5: Reevaluating the application of evidence and areas for improvement (Schmidt & Brown, 2008)

Why Evidence-Based Practice?

From a policy perspective: In 1997, the Agency for Health Care Policy and Research (AHCPR), now known as the Agency for Healthcare Research and Quality (AHRQ), launched its initiative to promote evidence-based practice in everyday care through establishment of 14 Evidence-based Practice Centers (EPCs). The EPCs develop evidence reports and technology assessments on topics relevant to clinical, social science and behavioral, economic, and other healthcare organization and delivery issues—specifically those that are common, expensive, significant, or a combination of these for the Medicare and Medicaid populations. With this program, AHRQ became a “science partner” with private and public organizations in their efforts to improve the quality, effectiveness, and appropriateness of health care by synthesizing the evidence and facilitating the translation of evidence-based research findings. Topics are nominated by nonfederal partners such as professional societies, health plans, insurers, employers, and patient groups (AHRQ, 2011).

Three factors have influenced the development of EBP:

- ▶ An explosion of literature: For example, there are more than 7,800 articles relevant to family practice published monthly (Alper, Hand, et al., 2004).
- ▶ Unmet information needs among practitioners: For every three patients seen, two questions are generated. Because of a lack of time, lack of information resources, and poor researching skills, only 30% of these questions get answered during the patient’s visit (Covell, Uman, & Manning, 1985).
- ▶ Slow or delayed implementation: Research findings are often delayed in being implemented into clinical practice. It takes an average of 17 years for clinical research to be fully integrated into everyday practice (Balas & Boren, 2000). Consider back- versus stomach-sleeping for infants. Prior to the early 1990s, it was recommended that infants sleep on their stomachs despite evidence available in the 1970s that stomach-sleeping contributed to sudden infant death syndrome (Gilbert, Salanti, & Harden, & See, 2005).

Therefore, it is clear why evidence-based practice has become a significant process for managing quality. The idea of EBP for nursing has grown out of the evidence-based medicine movement. Nurse case managers can use it to integrate their individual clinical expertise with the best available external clinical evidence from research. At its best, evidence-based practice gives the case manager the necessary tools to help enhance clinical effectiveness and affect the delivery of health care based on the integration of research, clinical guidelines, and outcomes' assessments into clinical practice.

Case Simulation: *A 52-year-old man with a history of knee pain from osteoarthritis of the joint visits his provider's office and mentions that a coworker has suggested electrical nerve stimulation—also known as TENS (transcutaneous electrical nerve stimulation)—to relieve his symptoms. The provider needs to find some solid evidence that TENS has been used successfully to relieve knee pain. The provider must first formulate a well-built question: What effect, if any, does TENS have on chronic knee pain? The provider must then identify articles and other evidence-based resources that answer the question. The provider also needs to critically appraise the evidence to assess its validity. Did it come from a credible source? Did the studies conducted show significant, valid evidence? Next the provider applies the evidence. If he found that his patient met criteria similar to that for patients in the studies' target populations, he could write a prescription for the service. After the recommended period of time for application of TENS, he would reevaluate the patient to determine the effectiveness of the treatment.*

Many different resources can help case managers research evidence-based health care. Textbooks, handbooks, databases, and articles are available online. Two popular Web sites are Ovid CINAHL (www.ebscohost.com/cinahl) and MEDLINE (www.MEDLINE.com). Case managers also need to know how to critically look at research articles to determine their validity and appropriateness. The American Academy of Family Physicians (AAFP; www.aafp.org/online/en/home.html) is a useful resource for finding critical appraisals of research articles. Journals that publish critiques of original research articles can help case managers judge the quality of original research, too. Examples of these journals include the ACP Journal Club Collection and BMJ Guidelines (www.bmj.com). Both journals look for original research and systematic reviews that may be of widespread importance to clinicians. Each presents a brief review of the research or systematic review.

Without EBP, case managers may see inadequate care, significant variations in practice, an increase in healthcare costs, and an increase in morbidity and mortality. It is imperative that case managers employ best practices for high-quality outcomes and cost-effective care.

Integrated Case Management

Today's health care is fragmented. Thus, one of the greatest challenges for patients with chronic medical conditions and concurrent mental health needs, often those with the highest health service use, is to receive coordinated care and assistance that will stabilize medical and mental health symptoms while also addressing social and health system factors that contribute to poor outcomes. This is aggravated by the fact that case managers with medical backgrounds do not feel competent to assist with mental health needs, and those with mental health backgrounds do not feel competent to deal with medical needs (CMSA, 2010). Integrated case management (ICM) is a comprehensive, advanced care management program that incorporates all medical management functions—utilization management, case management, disease management, triage, and prevention and wellness—to manage and deploy resources to optimize clinical, quality, and financial outcomes. ICM goes beyond traditional case and disease management in that it:

- ▶ Is proactive, collaborative, and patient-centric
- ▶ Is multidisciplinary across all settings
- ▶ Focuses on improved health status and quality of care
- ▶ Streamlines processes and improves resource management
- ▶ Enhances communication and documentation
- ▶ Coordinates and reduces clinical and administrative efforts
- ▶ Redesigns and shares services among departments and organizations
- ▶ Strives for internal and external customer satisfaction
- ▶ Is a core business (functionally and structurally)

Essential Functions of a Integrated Case Management (ICM) System

The general functionality of ICM is that it is a patient-centric, easily accessible, and navigable system. A complete patient profile may be viewed from one location across different diseases and for all care programs and activities. The ability to modify or add disease and condition protocols, care plans, and alerts and reminders is an advantage for care management. ICM facilitates communication and collaboration among the interdisciplinary teams and providers. The point-of-care functions include a patient summary screen that can be customized; a current and complete display of previous care and outcomes; and prebuilt and user-developed documentation tools, templates, and workflows. Decision support is available through access to guidelines and protocols plus the ability to add or change them. Patient self-management captures data about self-care behaviors, and ICM will provide tracking and documentation to the patient. Population management is accomplished using standard formats that can be customized, tracking population and provider panels as well as accommodating different medical conditions. In addition, there are initiatives to track and improve patient health. Finally, the ICM reporting function produces both standard and ad hoc reports at an individual and aggregate level. The reporting function also monitors quality and tracks outcomes.

Potential Risk Factors and Barriers to the Nurse Case Management (NCM) Process

A variety of challenges may occur during the NCM process. These are described as patient, practitioner, and system-level risk factors and barriers. Patient barriers may include:

- ▶ Poor attitude
- ▶ Memory deficits
- ▶ Language
- ▶ Literacy
- ▶ Cultural beliefs
- ▶ Alternative health beliefs
- ▶ Poor support
- ▶ Pride
- ▶ Denial
- ▶ Fear or embarrassment
- ▶ Side effects
- ▶ Religious beliefs
- ▶ Inability to “see” results of drug therapy
- ▶ Lack of choices
- ▶ Cost

How do we address patient risk factors and barriers? Identify strategies and tools to assist in resolution, such as motivational interviewing techniques, utilizing a readiness ruler, a Modified Morisky Scale to educate patients regarding adherence, a My Medication List (National Transitions of Care Coalition, 2009), and the Patient’s Bill of Rights during transitions of care.

Provider barriers and risk factors can include the following:

- ▶ Practitioners may not know the patient, family, or caregiver.
- ▶ Practitioners may not be familiar with patient’s, family’s, or caregiver’s preferences for care.
- ▶ Practitioners often are not familiar with the operations of the settings where they transfer patients.
- ▶ Sending and receiving practitioners may not communicate critical information.
- ▶ Practitioners have no accountability.

What actions are useful to case managers when facing provider risk factors and barriers? Start with a shift from the “discharge concept” to “transfer with continuous management.” Many nurse case managers are familiar with the statement “discharge begins at admission”; therefore, transfer planning begins upon or even before admission, during the assessment and planning process. Identify actual or potential barriers early to employ case manager interventions such as community resource referrals. Include the patient’s, family’s, and caregiver’s preferences in the nurse case management plan and alert the provider or practitioner about the support system. Ask the question, “How will you care for yourself when you get home or leave the hospital, rehabilitation facility, or nursing home?” Who is available to assist the patient with activities of daily living and instrumental activities of daily living? There may be a home health aide for personal care with skilled home health visits, but what about shopping, laundry, preparing meals, and transportation? Achieving a safe transition of care is paramount for the nurse case manager. Finally, collaborate with practitioners and providers across settings and levels of care to formulate and execute a common care plan.

System barriers and risk factors are related to healthcare facilities and our healthcare delivery system. Nurse case managers are confronted daily with system barriers as they navigate a fragmented structure to enable patients to transition from one level of care to another. These system barriers include:

- ▶ Systems remain in silos
- ▶ Communications between practitioners and facilities that are poor or nonexistent
- ▶ Care coordinators or points of contact that are not identified
- ▶ A lack of accountability on the sending or receiving end of a transition (Coleman, 2003)

How do nurse case managers address these barriers in a fragmented healthcare system? Preferably, healthcare facilities would have interoperable information systems. There are health systems with electronic health records (EHR) and even in this setting, there can be difficulties when the inpatient EHR software is not integrated with the outpatient EHR. Sharing health records is essential for a smooth referral and transition of care. This should be managed via discharge software, encrypted e-mail, a fax with HIPAA statement cover sheet, or even in person, with a hand-off of the health record to the receiving facility. Care plans with common data elements and standardized outcome measures promote understanding of the expected goals and reduce confusion regarding key data, such as demographics and payer information. Administrative buy-in promotes smooth, seamless transfers because the expectations are set by facility management. Informed decision-making allows the patient, family, and caregiver to exercise their autonomy, as opposed to an informed consent process, in which they are instructed in a plan.

Case Simulation: *Mr. Garza has heart failure, diabetes, and hypertension. He sees a PCP, cardiologist, and endocrinologist. His prescription list includes more than six medications, plus three over-the-counter medications, prescribed by his various providers. He has Medicare, receives Social Security income, and has a small pension. Mrs. Garza calls the hospital nurse case manager after her husband's most recent cardiology hospitalization, asking if he should continue to take the same medications as before and the new ones. The nurse case manager reviews the discharge instructions and the medication reconciliation document and discovers that two of the medications were rewritten with brand-name labels, but Mrs. Garza asked about them using the generic names. When contacting Mr. and Mrs. Garza, the nurse case manager clarifies the discharge medication list, instructs the patient and his wife which prescriptions to fill, and explains the different labels for the same medications. The Garzas express their appreciation because they budget for their medications and have expressed concern regarding the costs for the brand-name medications. The nurse case manager contacts the outpatient pharmacy that Mr. Garza uses and gives a verbal order for the generic equivalent medication after receiving substitute prescriptions from the discharging provider. Following the conversation with the pharmacy, the nurse case*

manager contacts the PCP and endocrinology clinics to alert them to Mr. Garza's hospitalization and sends the discharge summary, via fax, to the clinics. Included in the fax is the medication reconciliation document with a reminder to review it at each patient visit. Documentation for this activity includes the patient and family contact, record review, case management interventions, and the patient and family response.

Communicating, collaborating, and facilitating with stakeholders is critical for a successful case manager plan and outcomes; high-quality care; cost-effective outcomes; and patient, family, and caregiver satisfaction. An effective stakeholder team communicates all case management activities in a timely manner and ensures collaboration among team members. The stakeholder team is prepared to continually problem-solve and employs effective conflict resolution techniques, thus enabling them to work productively toward a common goal and in the patient's best interest.

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