STRATEGY

The Need for Comprehensive Patient Therapeutic and Preventative Compliance

By Richard B. Smith

There is a greater need today, than ever in health care, for improving the health, healing, and wellbeing of people, patients, families, organizations, and communities in America. Chronic health conditions and diseases are responsible for seven out of ten deaths each year and yet they are among the most preventable, most common, and most costly of health challenges we face. Caring for patients with heart disease, obesity, diabetes, cancer, arthritis, stroke, and asthma accounts for over 85% of our nation's health-care expenses. The Centers for Disease Control and Prevention reports about half of American adults have at least one chronic disease and nearly one-third of them have multiple conditions.

Because many chronic diseases share several of the same causes, there are similar preventative and therapeutic interventions and strategies that avert disease, lessen the severity of disease, reduce risk behaviors, and support healthy choices and behaviors. Clearly, prevention is most preferable to healing; the emphasis in health care should be on preserving the health and wellbeing of people, families, and communities by *preventing disease*. However, with the steady increase of disease in America, the emphasis is not as much on prevention as it is on *healing disease* or *managing disease* so as to lessen its severity and further prevent complications and comorbidities.

While prevention is concerned with maintaining health and wellbeing and healing is concerned with regaining health and wellbeing, both prevention and healing require people and patients to be active in and responsible for their health; prevention and healing require people and patients to make healthy choices and take healthy actions. This article is about choices and actions that bring about patient therapeutic and preventative compliance.

In simplifying the language of this article, people and patients are collectively referred to as patients except in cases where it is appropriate to create the distinction; physicians and healthcare providers are collectively referred to as providers.

The Nature of Compliance

Therapeutic compliance is the commitment and actions patients take to heal their disease whereas preventative compliance is the commitment and actions people take to avoid or avert disease. Prevention and healing require patients to have a *desire*, first, for preventing and healing disease and, second, for making healthy choices and taking healthy actions in the *belief* those actions will produce outcomes of health and healing. Of course, there is no absolute certainty in attaining such outcomes; there are only the intentions and expectations patients have in their commitment and actions for being compliant.

Compliance is defined as patients following instructions and recommendations and taking actions consistent with those instructions and recommendations. Physicians, nurses, therapists, and healthcare professionals are the experts who specify instructions and recommendations in defining regimens of prevention and care. Instructions are best defined as the absolute directions and orders that must be followed for prevention or healing whereas recommendations are the suggestions and advice offered as additional or optional proposals for further enhancing health and healing during regimens of prevention and care. Instructions and recommendations may address additional and continuing clinical and therapeutic care; self-care and home care; the use of medications, pharmaceuticals, healthcare products, devices, and equipment; diet, nutrition, supplements, and hydration; physical activity, exercise, rest, and relaxation; stress management, decision-making, counseling, behavioral modification, and lifestyle choices; and more.

The conditions for compliance, whether it is preventative or therapeutic in nature, require people and patients to be wanting and willing to participate in their regimens of prevention and care; able to carefully listen and observe, comprehend and understand, and learn their regimen; agree to and accept the instructions and recommendations of their regimen; and be able to demonstrate confidence and skill in taking actions consistent with their instructions and recommendations.

Situations, circumstances, and events, however, usually occur while patients are engaged in prevention or healing so as to thwart or impede their compliance and progress. These barriers and behaviors are the reasons why most patients are either non-compliant or somewhat compliant. According to McKesson, Annals of Internal Medicine, and The Atlantic Monthly Group, 75% - 80% patients are non-compliant in one or more ways in their failure to comply with prescribed treatment regimens. Their “occurrence” or experience of situations, circumstances, and events they encounter affect patient sensitivities and discernments; patients develop perceptions, attitudes, values, and beliefs that may engender emotional obstacles, struggles, and weaknesses and may further trigger feelings of impossibility, hopelessness, and defeat.

As such, there is a great need for strategies and interventions that engage, activate, and support patients in their choices, commitments, and actions for health, healing, and wellbeing.

The Universals of Compliance

In assessing the strategies and interventions of patient therapeutic and preventative compliance, several similarities in approaches and tactics suggest there is value in integrating, developing, and producing programs and services, products and support, which would effectively address and advance compliance for prevention, healing, and managing disease. For example, there are universal similarities in the *components of compliance* like the need for resolute self-care, good nutrition and hydration, sound exercise and an active lifestyle, and more. There are also similarities in the *conditions of compliance* as well as in the *continuum of compliance* from being engaged and activated to being persistent and what it takes to achieve those levels of health performance. There are commonalities in managing and measuring compliance in the same way there are universals in the barriers and behaviors of people and patients; there are fundamental processes people and patients go through in making choices and taking actions consistent with their intentions and motivations.

The most common similarity in compliance for prevention, healing, and managing disease is that compliance is all about the body and mind, the condition of physical and mental being. In their reflection and consideration, patients make choices based on perceptions, attitudes, values, beliefs, and desires. Consistent with their choices, they intend to take actions to care for and nurture their bodies and minds. Compliance is about patients actually taking those actions, doing what they intend to do, to transform the condition of their physical and mental being. Beginning in the mind as *desire* and *belief*, compliance transforms patient desire and belief into *choice* and *action* into *outcomes* and *fulfillment*.

Patient desire, belief, and choice reside in the realm of concept and are, as such, intangible and abstract. Taking action brings the realm of concept into the realm of physical reality affecting the body and generating tangible and realistic outcomes. In experiencing a transformation of body and mind, the outcomes gotten from therapeutic and preventative compliance contribute ultimately to patient fulfillment, a feeling of satisfaction and contentment which resides in the realm of concept like desire, belief, and choice.

In adopting health behaviors, patient compliance is the transformation of patient ways of thinking and feeling into patient ways of being and doing. Transformation moves patients from their realms of concept into new realms of reality as they adopt health behaviors and take healthy actions. And although taking healthy actions is the very nature of compliance, compliance *cannot exist* without patient desires, beliefs, and choices. What's more, compliance *cannot persist* for engendering longstanding optimal outcomes without patient fulfillment.

Accordingly, patient therapeutic and preventative compliance involves understanding individual patient needs, wants, and desires; intentions and motivations; attitudes, perceptions, values, and beliefs; patient experiences, involvement, enthusiasm, and willingness; patient approval, appreciation, acceptance, and agreement; and patient satisfaction and contentment. What's more, patient compliance involves having an understanding for individual patient feelings, reasoning, and decision-making processes that are only understood in having quality patient communications and relationships. Compliance also involves having an appreciation for the patient's occurring world; that is to say, how patients perceive themselves and their life in their condition and circumstances including their perceptions of their diagnosis, disease, care plan, and care.

The strategies and interventions for patient therapeutic and preventative compliance cannot just encourage patients to make healthy choices and take healthy actions in the expectation of achieving optimal outcomes; they must address the complex nature of compliance and the complex nature of human behavior with all their diverse qualities and dynamics. Making compliance happen requires comprehensive approaches that address the problems and challenges, barriers and behaviors, of the patient and healthcare provider alike, with the promise of improved patient involvement, persistence, satisfaction, and outcomes. As such, there must be a commitment to compliance by the patient and healthcare professional based on the overall, expected delivered value of prevention and healing. For if prevention and healing are truly important to both the patient and provider, there is a comprehensive need for compliance. In the final analysis, however, the only predictable thing about compliance is that people and patients and healthcare providers are unpredictable.

A Comprehensive Approach to Compliance

Clearly, patient therapeutic and preventative compliance requires a comprehensive approach to improving patient engagement, activation, and persistence in the expectation of achieving optimal patient outcomes and satisfaction. As noted, healthcare professionals require a comprehensive understanding of compliance and an appreciation of human behavior related to patient perceptions and experiences of health, healing, and wellbeing. They also require an understanding of the principles of patient management as well as strategies, tactics, technologies, and tools to help bring about compliance successfully. This

comprehensive approach must address the needs of physicians, providers, payors, and other professionals as well as the needs of patients for making compliance happen. Accordingly, two integrated, mutually reinforcing approaches are required: one for patient compliance, addressing the many complex needs of patients relative to their care and self-care and one for patient management addressing the needs of healthcare providers for planning, organizing, and directing the patient in their care.

Patient Compliance

THE COMPONENTS OF COMPLIANCE

The comprehensive approach to patient compliance centers on the care plan and the *components of compliance*. The care plan, or care pathway, establishes treatment therapy for the patient whereas it can be either complex or simple according to doctor's orders and desired outcomes. Notwithstanding, all care plans are designs for health and healing requiring patients to take action consistent with its orders; patients must be compliant with their care plans. The *components of compliance* identify five obvious and not-so-obvious elements of every care plan. Guided by physicians, providers, and healthcare professionals, *patient direction* is at the heart of the care plan for patients to observe, understand, and follow. *Patient direction* is comprised of two distinct forms of supervision: instructions *and* recommendations. Instructions are best described as orders and directions whereas recommendations are suggestions and advice. Doctors' orders must be obeyed whereas suggestions may or may not be observed and followed. Accordingly, patient instructions are absolute directives of the care plan for creating and sustaining patient health and healing while patient recommendations are optional proposals for increasing and furthering patient health and healing. And although it is, to some extent, important to distinguish instructions from recommendations, both provide the worthy, valuable benefits of health, healing, and wellbeing for patients. Comprehending and following instructions and recommendations is only part of compliance; it is equally important the patient takes actions consistent with those instructions and recommendations. Compliance occurs in taking the right actions.

As the second element of the care plan, *patient needs* is involved with the products that patients are ordered or advised to use during their care for their health and healing. Those products might include medications and prescription drugs, healthcare and personal care products, medical devices and appliances, and healthcare equipment. In addition to delineating patient products in the care plan, *patient needs* is also involved in providing product information to patients for helping them to understand indications, contraindications, instructions for use, dosing, warnings, precautions, adverse reactions, and more. Similarly, *patient needs* involves patient instructions and product demonstrations as well as patient information for filling prescriptions and ordering products, using and applying them, storing and maintaining them, and refilling, reordering, and replacing them.

Patient care is the third element of the care plan that focuses on *continuing* care. It is concerned with extending, developing, and increasing the care of the patient with follow-up and check-up appointments, tests, examinations, and screenings as well as other treatments, therapies, and interventions. Accordingly, continuing *patient care* involves ongoing visits and association with the primary care physician or provider. Yet, continuing *patient care* may also involve secondary care with specialists, therapists, and other healthcare professionals; tertiary care; ambulatory care; home care; assisted or custodial care for managing activities of daily living; palliative care; and self-care.

The fourth element of the care plan emphasizes *patient health* by focusing first on patient nutrition and hydration and second on patient activity, exercise, and rest. Exercise and diet are frequently presented as recommendations or suggestions in therapeutic settings and presented as instructions and orders in prevention settings. In any case, patient nutrition and hydration include planning and directing diets and menus; monitoring and measuring nutritional intake and uptake through blood, urine, and saliva tests; and managing hydration and nutraceuticals: dietary supplements, herbal products, and isolated nutrients. Patient activity and exercise for *patient health* involve planning and directing physical activities and activities of daily living;

supervising therapeutic exercise programs; providing regimens for fitness, aerobics, yoga, calisthenics, resistance training, and other forms. Patient health also involves specifying rest, sleep, relaxation, the avoidance of certain activities; it may also involve proposing massage therapy, meditation, and other forms of mental, spiritual, and physical practices, as appropriate. Typically, *patient health* needs some form of patient education, information, and training for patient participation in nutrition and activities and frequently requires nutritionists and dieticians, trainers and coaches, and other professionals to support the patient. In addition, *patient health* requires various forms of monitoring, measuring, and managing nutritional and physical activities.

Patient wellbeing, the fifth element of the care plan, centers on the need for continuing patient communication, information, and education. Ongoing dialogue is critical to compliance for following the care pathway. What's more, *patient wellbeing* focuses attention on patient comfort, safety, security, and welfare by appraising patient choices, habits, behaviors, and lifestyles. Accordingly, *patient wellbeing* requires patient coaches and counselors to help patients, people, and families modify behaviors and harmful habits, address obsessions and addictions, improve decision-making abilities, and enhance patient lifestyles by making healthy choices and taking healthy actions. To that end, patient responsibility, resilience, confidence, and commitment, as components of *patient wellbeing*, are critical to the care plan.

As we see, *patient direction* is at the heart of the care plan providing necessary instructions and recommendations that speak to *patient needs* and continuing *patient care* along with *patient health* and *patient wellbeing*. Together, the elements of the care plan, called the *components of compliance*, work to advance health, healing, and wellbeing.

THE CONTINUUM OF COMPLIANCE

The comprehensive approach to patient compliance requires a process, more like a progression, for helping patients to make healthy choices and take healthy actions throughout their therapy. The *continuum of compliance* is a series of patient choices and actions that gradually advance the patient through the three phases of compliance. The first phase, called *patient engagement*, is composed of three early stages of compliance: patient awareness and attention, interest, and involvement. *Patient engagement* begins with creating *patient awareness* and introduction to the diagnosis and disease as well as the signs, sensations, and symptoms of the disease. It brings into consideration the complications and comorbidities of the disease, the risks and rewards, the need for compliance and the consequences of non-compliance; and the changes of lifestyle and quality of life. It continues with *patient attention* to the conditions and concerns of the disease which may involve pain, anxiety, fear, and a host of other emotional and physical matters and so, as a result, the patient is potentially present to the meaning and the effect of the disease. *Patient engagement* continues then with *patient interest* in understanding the treatment options and learning more about the disease as well as an interest in gaining further information while looking to establish quality communications and valued relationships among all stakeholders. It brings attention to the patient's condition and its effect on the patient and their family, friends, loved ones, and caregivers. In addition to awareness, *patient engagement* also focuses on *patient interest* in knowing and valuing treatment options and working with physicians and healthcare professionals in choosing and developing a treatment regimen; in agreeing with the care plan; and in expressing their belief and desire in complying. *Patient involvement* follows *patient interest* in that the patient not only agrees with the care plan but also accepts it; patients express their "wanting and willing" for treatment. Moreover, *patient engagement* pursues patient approval and appreciation for the care, care plan, and care team; they like, believe, and trust the care. It also looks to achieve patient understanding, mindfulness, and confidence. Finally, *patient engagement* prepares the patient for following the instructions and recommendations of the care plan.

The second phase of compliance is *patient activation*. These are the three middle stages of compliance that focus on patient preparation and participation, action, and patient assessment. *Patient participation* provides information and education to the patient regarding the care plan. It is involved in teaching and training the patient and demonstrating techniques and ways of performing functions and in examining the patient; it emphasizes patient involvement in understanding, learning, and demonstrating competence for carrying out their care plan instructions and recommendations. It also points out the need for patient knowledge in managing their role and responsibilities in their self-care; their ability to solve problems, make choices, ask for assistance and support, and take actions. In determining confidence and competence, patient ability and skill are as decisive for patient compliance as are patient conviction and sureness. Part of *patient participation* also involves preparation. *Patient activation* has the patient prepare for treatment by filling prescriptions; ordering product, devices, appliances, and equipment; arranging home care services and clinical and personal support; preparing, organizing, or retrofitting the patient residence; actively participating in the training, education, and planning for the care plan; and scheduling and making appointments for the continuance of care, check-ups, follow-ups, examinations, tests, screenings, and other therapies and care. Following participation and preparation, the next stage is taking action. *Patient action* is all about following the instructions and recommendations of the care plan and taking actions consistent with those instructions and recommendations. In *patient evaluation*, the last stage of *patient activation*, patients and providers assess initial results of therapy and how patients are adapting to the instructions and recommendations and adopting changes in behaviors and lifestyle. *Patient evaluation* focuses on patient experiences and perceptions; concerns, challenges, and questions; and patient performance and probability for continuing care. It also focuses on provider and therapy barriers as well as external and internal patient barriers. *Patient evaluation* is critical to assessing the instructions, recommendations, and actions taken in relation to what the patient was taught and expected to accomplish in their continuing care. It is critical to determining if there are any changes in patient signs, sensations, and symptoms and any unwanted side effects, adverse reactions, discomfort, or pain and if there is any need for adjusting, correcting, or changing the instructions and recommendations, medications and drugs, products or devices.

The third phase is *patient persistence*. The later three stages of compliance deal with *patient commitment* as well as *ongoing patient engagement* and *ongoing patient activation*; that is, the patient continues to make healthy choices and take healthy actions consistent with following the instructions and recommendations of their care plan. *Patient commitment* emphasizes the need for patient reliability, responsibility, and dedication to their care, care plan, and self-care. It is realized through patient performance and outcomes because the patient commits to making those healthy choices and taking those healthy actions. *Patient commitment* also focuses on communication for patients being resilient and coachable in dealing with barriers and behaviors; the patient commits to staying in communication, to staying in therapy, and to dealing powerfully with breakdowns, setbacks, and lapses. *Ongoing patient engagement*, the next stage of *patient persistence*, emphasizes ongoing communication for patients staying *aware and present* to their condition; their signs, sensations, and symptoms; and potential complications and comorbidities. It also emphasizes communication for patients remaining interested and involved in managing and healing their disease; for sustaining their desire and belief in their care and self-care; and for knowing and acknowledging the care and commitment of others. With *Ongoing patient activation*, the last stage of *patient persistence*, it emphasizes ongoing patient participation and preparedness for managing their care plan, refilling their prescriptions; repurchasing healthcare products and devices; and continuing arrangements for secondary care, assisted care, home care, and other services. It focuses on patient ongoing action; tracking and reporting activities, performance, and outcomes plus ongoing monitoring and measuring of patient experiences and perceptions; concerns, challenges, and questions. With measurement, continuous quality improvement is possible for enhancing therapeutic and preventative compliance through completion. Finally, *patient persistence* may require additional patient engagement and activation should the patient's care plan change based on new, additional, or revised instructions and recommendations. Quality patient communications and relationships, ongoing information and education, and

patient motivation and support are essential to *patient persistence* for achieving long-term commitments to prevention and healing.

Although *patient persistence* comprises the later stages of patient therapeutic compliance, persistence in preventative compliance is a lifetime behavior of continually and endlessly making healthy choices and taking healthy actions. Likewise, persistence in therapeutic compliance is also a lifetime behavior for chronic disease management especially in preventing further complications and comorbidities. For acute illnesses like having fractured a bone or having the flu, *patient persistence* is predictably limited by the duration of the therapy, medication, and patient healing along with the patient's commitment to be compliant. Patient therapeutic compliance programs offer minimal value to patients, physicians, providers, payors, and other healthcare professionals for many acute illnesses unless there are serious potential risks for patient complications and comorbidities. With patient therapeutic compliance programs and acute illnesses, there are thresholds of delivered value for healthcare professionals based on diminishing clinical and economic returns relative to their levels of investing resources, time, and money to manage that compliance.

THE CONDITIONS OF COMPLIANCE

Patient therapeutic and preventative compliance requires patients, in their self-care, to actively participate throughout the *continuum of compliance* from engagement to activation and throughout persistence. The comprehensive approach to patient compliance requires an understanding of the *conditions of compliance* that must always be present with patients for compliance to occur. Both patients and healthcare providers generate *conditions of compliance*. With patients, the first condition necessary for compliance is *patient cognizance*. Patients must comprehend and understand their diagnosis and disease, its complications and comorbidities, and the need for their compliance as well as the consequences of non-compliance. They must also recognize and know the signs, sensations, and symptoms of their disease. What's more, patients need to understand their needs, wants, and desires for their life and wellbeing. Strong patient desire is important for being intentional, motivated, and compliant. Without cognizance, patients do not understand nor do they appreciate that which is essential to their health and healing; often they go into resignation and denial.

The second patient condition, *patient being*, is a matter of patient thoughts and feelings; patient ways of being are patient states of mind. Because ways of being are affective and directive over behaviors, patients need to understand that their ways of being − like being a victim, being ineffective, or being powerless − affect their ability to generate health and healing. By creating possibilities, patients develop ways of being intentional, excited, and energized; they acquire ways of being powerful, responsible, and committed. Without being, patients cannot engage, participate, take action, or persist. The most important way of being, when it comes to patient therapeutic and preventative compliance, is being related. *Patient relatedness* is essential to compliance; we will address patient relatedness and what it means in greater detail later in this commentary. The third patient condition, *patient belief*, is the conviction and confidence, certainty and trust, patients must have in their care, care plan, care team, and self-care. Patients imagine optimal outcomes and trust they will achieve them. Accordingly, patients must believe in health and healing, believe in their treatment and therapy, believe in those who are providing the care, and, above all, believe in themselves. Like desire, strong *patient belief* is important for being intentional, motivated, and compliant. Without belief, patients cannot develop self-efficacy; they have neither self-assurance nor self-reliance for being compliant.

The fourth patient condition, *patient ability*, naturally and understandably follows belief. *Patient ability* is the capacity to learn and remember instructions and recommendations and perform the right actions consistent with them. *Patient ability* is also the capacity to adopt new practices and adapt to new ways of being and, in doing so, develop new health behaviors. With *patient ability*, patients are proficient in solving their problems and competent in making decisions; they are able to ask for help and

gain assistance when they need it. Without the skill, aptitude, and ability to take actions consistent with their instructions and recommendations, patients cannot comply. The fifth patient condition is *patient choice*. In making the appropriate healthy choices, patients must agree with and freely accept the care, care plan, care team, and their self-care. They must like, believe in, and trust their treatment. Just as important, too, patients must have a deep desire for health and healing coupled with personal resilience, drive, and purpose. Patients every day choose and choose again and again throughout their treatment. Choice is essential to taking action and being compliant. In choosing, patients make healthy choices to take healthy actions. Without choice, there is no action; inaction means non-compliance.

The sixth patient condition, *patient action*, is defined as following instructions and recommendations and taking actions consistent with those instructions and recommendations. Patients take action or they don't. When patients make excuses, justify, rationalize, or lay blame for their inaction, they need to reassess their wants and needs, desires and beliefs, motives and intentions. Patients also need to evaluate their ways of being and understand the consequences of non-compliance. Without action, patients risk complications, comorbidities, and quite possibly death. In all, there are six *conditions of compliance* that must be present in patients for compliance to occur; they are patient understanding and being, patient belief and ability, patient choice and action. In addition, there are six more *conditions of compliance* that providers must generate for compliance to occur; they are ongoing communication and relationships, ongoing information and education, and motivation and support.

The first provider condition, *ongoing communication*, is critical to compliance. Besides establishing and nourishing relationships, communication advances patient information, education, motivation, and support. Perhaps more importantly, communication engenders understanding for individual patient needs, wants, and desires; intentions and motivations; attitudes, perceptions, values, and beliefs; patient involvement, enthusiasm, and willingness; patient approval, appreciation, acceptance, and agreement; and patient satisfaction and contentment. Communication creates awareness, knowledge, and insight for patient outcomes and expectations as well as patient challenges, concerns, and questions. Without communication, there is no connection, relationship, and ongoing dialogue for health, healing, and wellbeing. *Ongoing relationships*, the second provider condition, is important to compliance in that patients and providers create mutual appreciation, understanding, responsibility, and respect. In their agreement and acceptance for the relationship, patients and providers commit to care and compliance. This is one form of patient relatedness, patients having backgrounds of relatedness with providers and providers having backgrounds of relatedness with patients. Patient relatedness involves more than relationships which we will discuss later. For now, having access and staying in communication are basics for relations. Patients and providers express their appreciation for the relationship as well as their belief and trust in the care plan. Both have the experience of being listened to and really heard; both have the experience that what they say makes a difference. Without relationship there is no opportunity for communicating and creating patient health and healing.

The third provider condition is *ongoing information* which deals with patient information and clinical information. First, *ongoing information*, regarding the patient, involves progress reports, examination and test results, patient signs, sensations and symptoms, and more. It is information and data that providers need, on an ongoing basis, to better manage patient care and advance outcomes. Second, ongoing clinical information is essential to patients providing news and information regarding disease and treatments, recommendations for diet and exercise, tips and tidbits, additional services, support organizations, patient programs, and other assistance, care, and encouragement. Without ongoing clinical information, patients do not remain present to their disease and care plan; they neglect or forget their instructions and recommendations, and they lose interest, involvement, and connection. *Ongoing education* is like ongoing clinical information. As the fourth provider condition, it keeps patients actively involved and interested with continuing education, training, and demonstration. What's more, *ongoing education* is important to ensuring continuing compliance; it requires patient examination of patient confidence, knowledge,

practices, and skills. *Ongoing education* must provide refresher material on patient use and application of drugs and medications, healthcare and personal care products and devices, and appliances and equipment. Without *ongoing education*, there is no venue for updating, adjusting, and changing instructions and recommendations based on patient reports and results. Moreover, there is no potential for enhancing patient knowledge, experience, and skill.

Ongoing motivation is the fifth provider condition for ensuring patient compliance. Providers create conditions to influence patients and have them take action by presencing them to their needs, wants, and desires and presencing them to the benefits and advantages of health, energy, vitality. Encouraging patient interest and involvement with that which has meaning, relevance, and value for patients, providers continually reinforce the reasons for patients to take action. They inspire patients by recreating their intentions and addressing their ways of being. *Ongoing motivation* moves and inspires; it enthuses and encourages through a commitment to patient health and healing rather than an attachment to a result. Without *ongoing motivation*, there are no possibilities and opportunities for patients; they cannot envision a future of health and healing and see a pathway to obtaining it. Patients must be acknowledged for their participation, performance, and progress; they must be recognized, appreciated, and respected for their courage and work. The sixth provider condition is *ongoing support*; it offers patient additional programs, services, and other assistance, reinforcement, and backing for achieving compliance. Often additional communication, information, education, and support strengthen patient compliance while it also bolsters patient-provider relations. More importantly, *ongoing support* is a resource for patients addressing their concerns and challenges, barriers and behaviors. It is like a safety net. *Ongoing support* includes provider follow-up through communication, provider answers to patient questions and anxieties, and provider assurances and encouragement. Without *ongoing support*, patients may experience feelings of being ignored, neglected, and forgotten. Continuous provider support is critical to compliance and relationships as are ongoing patient communication, motivation, information, and education. Together, these provider conditions, along with the patient conditions, work to enhance the potential for patient therapeutic and preventative compliance. Without these conditions, compliance cannot occur.

THE CONTRIBUTORS TO COMPLIANCE

Patient therapeutic and preventative compliance requires various participants, stakeholders, and *contributors to compliance*. They have an interest in patients making healthy choices and taking healthy actions from their clinical, economic, or patient satisfaction interests and they all are involved in managing and / or delivering care. Accordingly, *contributors to compliance* have different roles, rules, and responsibilities in caring for, serving, supporting, and managing patients. The care plan defines the need for care and those who contribute to the care, meaning the care team comprised of healthcare workers and those providing diagnostic and ancillary services, and those who manage the care, and those who finance and underwrite the care. Accordingly, all the contributors are concerned with achieving quality clinical, economic, and patient satisfaction outcomes. There are four categories of contributors. The first category, *healthcare providers*, is comprised of primary care physicians and healthcare professionals who are responsible for the care plan and its instructions and recommendations. The second category, *patients*, is comprised of the people for whom care is being provided; they are referred to as patients, clients, participants, members, and employees, to name a few. The second category also includes the people who might support patient care; they are family, neighbors, friends, and other personal patient advocates.

The third category is comprised of the members of the *healthcare team*. They include secondary and tertiary caregivers, physician assistants, nurses, aides, pharmacists, and healthcare product specialists. The care team also includes educators, therapists, coaches, counselors, trainers, dieticians, and other diagnostic and ancillary service professionals. The fourth category, *healthcare professionals*, is comprised of provider organization management, payors, care managers, patient navigators, discharge planners, social workers, and other healthcare professionals. Since healthcare providers establish the care

plan, they, *de facto*, inaugurate the care team and establish their roles, defined by their expertise, and their responsibilities through the requirements and expectations of the plan. Providers expect to manage the patient with the assistance of care team members and, as such, providers require care team members to consistently communicate patient information and share data from patient interactions, evaluations, examinations, tests, and screenings. Providers must communicate to care team members their intentions, treatment goals, planned interventions, medication management, arranged clinical and community services, coordination of services and care, and their expected outcomes and prognosis. Providers must also communicate with the people who will educate and train their patients as well as the other professionals who will support them as to their intentions and expectations for developing patient knowledge, experience, skills, and health behaviors.

In establishing the care team, providers instruct and advise patients. Their roles and responsibilities are critical to help ensure patient compliance. In many respects, patient roles and responsibilities are similar to provider roles and responsibilities. For providers and patients, they must engage in quality communications and develop positive, productive relations. They must be related. Likewise, providers and patients must listen carefully to each other and learn from each other. Where providers must explain and teach patients what they need to know, patients must be able to recall, retain, and remember that knowledge. Patients need to be teachable and coachable; providers need to be accessible and responsive. In view of that, both providers and patients should be mutually interested and involved in the same way they should be mutually responsible and committed. Finally, providers must encourage patients and acknowledge participation, performance, and progress; patients must follow instructions accurately and take actions consistent with them.

A COMPREHENSIVE, INTEGRATED APPROACH

As we can appreciate, a comprehensive approach to patient therapeutic and preventative compliance requires healthcare providers to develop patient ability and confidence to follow instructions and recommendations by expanding their knowledge, experience, and skills through ongoing communications, relationships, education, instruction, demonstration, and other teaching and supportive means. Providers need to develop patient ability and confidence with reassurance and reinforcement of their mutual agreement and commitment as well as patient acceptance, trust, and belief in the care, care plan, and self-care. Clearly, patient knowledge, experience, skill, and confidence are required for patient therapeutic and preventative compliance. Moreover, a comprehensive approach to patient compliance also requires healthcare providers to thoroughly, meticulously develop care plans for patients based on what they know about their patients and provide applicable corresponding instructions and recommendations for the continuance of care and self-care. Part of the care plan must include any methods and procedures patients must adopt along with drugs and medications, products and devices, technologies and tools, programs and services, information and support, patients need to advance their care.

For compliance to occur, patients require all we have discussed in the *components of compliance*, *continuum of compliance*, and the *conditions of compliance* from their provider and other *contributors to compliance*. Patients require quality communications and relationships; patient information, news, and education; and patient services to assist in scheduling and reminding patients about check-ups, follow-ups, examinations, tests, and screenings. Beyond that, patients also require services to assist in tracking, monitoring, and reporting their conditions, progress, and results; patient services to assist in filling, ordering, refilling, and replacing products and prescriptions; and patient services to assist in managing and arranging continuing clinical care, secondary and tertiary care, assisted care, home care, self-care, and other therapies; and any other pertinent patient support and programs. As previously mentioned, patients also require services and quality programs for nutrition, exercise, rest, stress management, behavior modification, counseling and coaching, activities for daily living, companionship, decision-making, lifestyle choices, and others. In addition to programs, patients require products that support choices and actions, communicate and connect, monitor and measure conditions and progress, and enhance participation and

satisfaction. Patients also require services that help with managing their conditions, services to help connect patients to peers and professionals, along with coaching for clinical, nutritional, physical activity, behavioral, and personal development. In short, the patient needs a total quality, comprehensive and integrated solution designed for their individual and personal needs, wants, and desires and that solution is made available through a variety of communication and connectivity channels including phone, print, internet, mobile, social media, emails, texts, and wearables.

A comprehensive approach works to achieve compliance if it is based on the *components of compliance* within the *continuum of compliance* with the *contributors of compliance* establishing ideal *conditions of compliance* by using a variety of technologies and tools as well as patient programs, services, products, and support.

Patient Management

THE COMPONENTS OF MANAGEMENT

Not only does a comprehensive approach to patient compliance address the needs of patients, it also addresses the needs of physicians, providers, payors, and other professionals for managing patients. Accordingly, there are two integrated, mutually reinforcing approaches as mentioned previously: one for patient compliance and this one for patient management.

Patient management in therapeutic and preventative compliance involves four rudimentary management functions for planning, organizing, directing, and controlling patient compliance. Healthcare providers may instinctively know these functions yet they may not necessarily and completely appreciate them or fully use them. Good patient management requires providers to use them; great patient management requires providers to understand their value for encouraging compliance and to use them to their fullest purpose for assuring compliance by creating comprehensive planning, excellent organization, first-rate direction, and quality control. What's more, great patient management also requires exceptional leadership − not just being the one in charge and determining a care plan − but being the one who sets direction, guides decisions, creates opportunities for others to create health and healing, and supports patient needs, wants, and desires.

The first function of management, *planning*, is absolutely essential to patient care, costs, compliance, and outcomes. Following diagnosis and evaluation of the patient, planning consists of assessing treatment options and developing a comprehensive care plan for the patient. To that end, comprehensive care planning involves projecting outcomes and prognoses, establishing measureable treatment goals, and determining symptom management as we know. Comprehensive care planning involves planning interventions and identifying care members responsible for each intervention and forming care teams. Comprehensive care planning also involves planning other resources including patient services, programs, products, and support appropriate for the patient care plan; that means planning and arranging resources for continuing care, secondary and tertiary care, other specialized care, and home care or assisted care, as necessary, plus patient therapies, counseling, and coaching. It also means helping patients prepare their residences, resources, and routines for the demands of their care. To that end, there must be planning for the procurement and use of patient medications and drugs plus other healthcare and personal care products, medical devices, appliances, and equipment like patient room needs and daily living aids. Accordingly, the comprehensive care plan involves managing medications and medical products. Finally, care planning may consist of arranging resources for nutritional recommendations, patient activities, exercise, rest, relaxation, and continuing patient education and information.

Planning involves methods for managing outside resources and their programs, services, and support, and how these resources will be directed, coordinated, and integrated. What's more, *planning* involves creating guidelines, procedures, and expectations with outside resources for ongoing communication, information, and reports. Besides planning the care plan and

its constituent parts and planning outside resources, *planning* equally involves making provisions for patient education and information; that is, planning and determining best methods and educators for instructing, training, and demonstrating that which patients need to know and examining them afterwards for their comprehension, capability, and confidence. And lastly, *planning* requires conversations with patients for preparing them for change in lifestyle and quality of life and understanding patient challenges, questions, and concerns. *Planning* demands, too, other kinds of conversations for understanding patient needs, wants, desires, and beliefs; patient agreement and acceptance, patient knowledge, experience, skills, and self-efficacy; and patient appreciation, approval, belief, and trust in the care, care plan, care team, and their self-care.

The second function of management is about *organizing* the care team and other resources, arranging them so that the care plan is integrated with the delivery of care; the delivery of services, therapies, programs, and support; the delivery of patient and professional education; and the care team. An important part of integrating the delivery of care with the care plan is *organizing* and scheduling patient check-up and follow-up appointments and other appointments with secondary and tertiary care providers and other resources for supplementary patient interventions. In addition, there is also the need to organize and schedule appointments for patient examinations, tests, and screenings necessary for compliance; the National Committee for Quality Assurance through their Health Effectiveness Data and Information Set Measures outline various examinations, tests, and measures for managing patients with chronic illness. Besides organizing the clinical care team of healthcare professionals, it is also important to organize a social team of resources helping patients deal with their disease and the changes it brings to life; they include social workers, discharge planners, care managers, and others. And, it is important to organize patient educators, coaches, counselors, and other support. *Organizing* for patient compliance involves managing patient instruction, training, and demonstration as well as patient examination to validate their comprehension, capability, and confidence; it also involves *organizing* resources for ongoing patient education and information. Finally, *organizing* involves understanding the patient's beliefs and desires, perceptions and expectations, by arranging for patient assessments and / or surveys so as to ensure appropriate resources are effective and valuable for achieving compliance.

Directing, the third function of patient management, is essential to patient care and compliance since it is concerned with providing direction and leadership for delivering care, service, and support to patients. As such, direction is supervision and guidance for patients and providers to take action and produce results. Direction is critical to achieving compliance; it requires an approach of inviting patients to take action rather than ordering them − since nobody likes to be told what to do − or making a request of them and encouraging patients to take actions consistent with the instructions and recommendations of the care plan to produce results. With healthcare professionals, it is the same. Directions call for healthcare professionals to provide care, services, and support consistent with the interventions outlined in the care plan. Following direction, the fourth function of management, *controlling*, is managing through monitoring and measuring patient performance, productivity, and effectiveness. Control offers healthcare providers the opportunity to assess, acknowledge, and adjust patient behaviors for making healthy choices and taking healthy actions. Control also offers physicians, providers, payors, and other healthcare professionals the opportunity for continuous quality improvement. By monitoring and measuring patient progress, healthcare providers can plan, organize, and redirect, as necessary, the care, care plan, care team, and self-care to achieve improved outcomes. Control provides opportunities for addressing patient barriers and behaviors with other different or modified patient management strategies and tactics, technologies and tools. Patient management is essential to patient care, costs, and compliance in achieving optimal patient outcomes.

LEADERSHIP IN MANAGEMENT

In complement to the management functions, patient management in therapeutic and preventative compliance requires leadership in planning and organizing patient care and most noticeably in directing patient care. Providers must prepare

comprehensive care plans and plan the care, the resources, services, and patient support. They must organize other resources and people as well as products, equipment, and other resources. Leadership involves guidance and direction, conviction and confidence, in the care, care plan, care team, and self-care. Leadership originates in healthcare provider experience and expertise, knowledge and knowhow, competency and capability. Patients look to providers for leadership in the advice and assistance they provide. What's more, leaders create opportunities for people to be successful. Patients what to be successful in their self-care.

THE MEASURES OF COMPLIANCE

Patient therapeutic and preventative compliance requires a universal system of *compliance measurement*. With such a system, providers have a common language and understanding of compliance and they have a convenient way to categorize patients, not just sorting the compliant from the non-compliant patients, but defining various levels of engagement and action. And by defining levels of compliance, providers can more accurately address the various behaviors of compliance and non-compliance helping patients make healthier choices and take healthier actions. One way of defining levels of compliance and non-compliance is on a linear, zero-to-one-hundred scale that on the low end, beginning with zero, is a state of non-compliance and ending on the high end, with one hundred, is a state of absolute compliance. Obviously, then, patients can be defined on this one-hundred-and-one-point scale but it is not very practical since we tend to define patients as either compliant or non-compliant with little distinction to the extent of patient behavior; and although the matter of compliance or non-compliance suggests an either-or situation, that either-or measurement does not acknowledge the various circumstances, conditions, events, and experiences patients encounter in their choices and actions. Because there are no patients who are completely compliant and no patients who are completely non-compliant, there must be some distinct levels of compliance and non-compliance without making compliance measurement complicated to understand and use by all healthcare professionals. Take the example of a patient who may follow instructions accurately and take actions consistently but may not follow one of the recommendations suggested by the patient's provider. How would that provider distinguish their patient? Do the choices and behaviors of this patient define compliance or non-compliance? Take another example of a patient who follows instructions and recommendations but is unable to remember to take medications at precise intervals. How would that patient's provider distinguish their behavior? Does the inability of this patient define compliance or non-compliance? There are indeed circumstances and conditions that affect patient compliance as there are experiences and behaviors.

Patient compliance and non-compliance necessitate a universal system of measurement with basic categories or levels of compliance and levels of non-compliance. The levels of compliance, accordingly, are identified as patients who are highly compliant, patients who are compliant, and patients who are somewhat compliant. More specifically, *highly compliant patients* are patients who are fully engaged and active in their health and healing whereas *compliant patients* are patients who are usually engaged and active. *Somewhat compliant patients* are patients who are slightly engaged and, to some extent, active. If we were to place these three levels of compliance on the zero-to-one-hundred-point scale, *highly compliant patients* place in the range of eighty to one hundred, *compliant patients* place in sixty to eighty, and somewhat compliant patients place in forty to sixty. Three levels of compliance create a clear understanding of patient engagement and activity. And yet, if providers want to create an even higher degree of specificity, it is possible then to further classify patients within the twenty-point scale of each level. For example, a *somewhat compliant patient* in the range of forty to sixty may be further defined with a patient rating of perhaps fifty-four or fifty-five suggesting this patient could become a *compliant patient* if one or two recommendations or actions were also followed. This suggests to providers that *somewhat compliant patients* are patients who can be *compliant patients* by providing some additional resources and support. If, however, a *compliant patient* had a patient rating of perhaps seventy-two or seventy-three, it suggests the patient is probably doing their personal best in reaching their level of compliance. By providing some additional resources and support, it will not likely change the patient in becoming a

highly compliant patient. Creating a higher degree of specificity is a choice providers have in defining and helping patient compliance. Patients on the higher end of the scale are *highly compliant patients* and *compliant patients*; these patients are good patients to manage and usually do not require additional attention and support beyond that which is usual in their care. Patients on the middle of the scale are somewhat compliant patients who may require additional attention and support.

The levels of non-compliance are identified as patients who are non-compliant and want to be compliant and yet are unable and patients who are non-compliant and do not want to be compliant. Here, these two divisions of non-compliant patients create interesting dynamics for healthcare providers. *Non-compliant patients who want to be compliant* deal with either one or two sets of barriers. One set where barriers prevent patients from being able to follow instructions and recommendations and, a second set of barriers that prevent patients from being able to take actions consistent with instructions and recommendations. These patients choose to be compliant but some circumstance, condition, event, or experience thwarts them from being compliant. In knowing this about *non-compliant patients who want to be compliant*, providers can choose to address these barriers and come to the aid of their patients. Providers can provide additional attention and patient support helping *non-compliant patients who want to be compliant* become *somewhat compliant patients* and, in the *continuum of compliance*, perhaps become *compliant patients* or *highly compliant patients*. Of course, it is all in the knowing since patients may claim they want to be compliant even when their claims are inconsistent with their actions, desires, and beliefs. *Non-compliant patients who do not want to be compliant* are very different patients since they choose not to follow instructions and recommendations and they choose not to take actions. *Non-compliant patients who do not want to be compliant* are dealing with the complexities of their thoughts and feelings in their decision-making processes whether they are aware or unaware of them. *Non-compliant patients who do not want to be compliant* are people who, in all likelihood, sought medical care but do not now want the benefits of care and are now not willing to follow instructions and take actions. These patients are overcome with intense beliefs and attitudes about care and self-care; following care plan instructions or any other instructions; listening to caregivers or obeying authority; liking, trusting, and believing in themselves and others; and other challenging considerations. Moreover, these patients could also be overwhelmed with strong perceptions and weak values such as valuing life, family, and health and, as a result, patient beliefs, attitudes, perceptions and values eradicate patient desires and beliefs for health and healing. Sometimes, *non-compliant patients who do not want to be compliant* get so absorbed with disempowering conversations they recall dispiriting memories that they also eliminate patient faith, hopes, and desires. The barriers *non-compliant patients* encounter in their mind can be incapacitating for them and exasperating for providers. In these instances, providers can choose to work with patients to discover the barriers and behaviors that stop patients. If we were to place these two categories of non-compliance on the zero-to-one-hundred scale, *noncompliant patients who want to be compliant* place in the range of twenty to forty whereas *non-compliant patients who do not want to be compliant* place in zero to twenty.

In total, five categories for measuring compliance and non-compliance make this tool simple and easy to use, yet the implications can be great especially in identifying patients in categories as to their level of compliance or non-compliance and being able to make decisions as to which patients require additional services and support. In addition to assessing patient compliance and non-compliance, *compliance measurement* references patient agreement and acceptance, patient wanting and willing, patient comprehension and capability, patient belief and desire, and patient like and trust. These references contribute to understanding patient levels of engagement and activity and are valuable indicators for predicting the potential for patient commitment and persistence.

Compliance measurement is a powerful instrument for providers in managing patients. Not only does it give providers a reference baseline for patient choice and activity, *compliance measurement* offers opportunities for monitoring patients along the *continuum of compliance* assessing patient progress, changes in patient behavior, and patient relationship to their disease,

care, care plan, self-care, and care team. And, as mentioned, it offers opportunities for forecasting future behaviors. In addition to monitoring and measuring, *compliance measurement* also offers opportunities for continuous quality improvement with patients as well as providers. Since providers are responsible for results, as are patients, providers can evaluate patient performance and change the care, care plan, self-care, and, if necessary, the care team. Additionally, providers can plan, organize, and direct new patient education and motivation with the introduction of new or different medications, products, services, and support. Patients, in their responsibility for results, can recommit to the care, care plan, and self-care. Continuous quality improvement requires patients and providers to assess that which is missing and determine if that were put back into the care, care plan, and self-care, that it would make a difference for health and healing. As such, patients and providers must work together for acquiring new information and new education to expand their understanding and advance their levels of care, self-care, compliance, and outcomes.

Professional Education

Professional education and training is exceedingly recommended for healthcare providers helping to create an understanding for the nature of compliance and best methods, approaches, and strategies for managing patients and achieving therapeutic and preventative compliance. Professional education means recognizing and appreciating the components, continuum, and conditions of compliance as well as understanding how to coordinate and manage the participants, contributors, and other people involved with compliance. In addition, education also entails learning *compliance strategies and tactics*, *patient relations in compliance*, and *conversations for compliance*. The two most important educational programs in which all healthcare providers should consider, above all else, involve *barriers to compliance* and *patient choices in compliance*.

COMPLIANCE STRATEGIES AND TACTICS

Compliance strategies and tactics addresses, with providers, various topics related to the delivery of care and self-care, the care plan, and how to relate to the care team. Specifically, it addresses strategies for managing the patient through the continuum of care, its phases and stages, and managing the patient with their instructions and recommendations; their medications, healthcare products and other needs; their continuing care, and their recommendations for health and wellbeing. Moreover, *compliance strategies and tactics* offer the provider strategies for communication, information, and education as well as strategies that support patient motivation and relationships. All these strategies work to develop and sustain communication while enriching rapport among participants; they also work to enhance patient personal effectiveness and understanding for self-care.

With *compliance strategies and tactics*, providers learn other strategies for helping patients negotiate barriers to compliance by creating awareness and understanding for patient difficulties, obstacles, and obstructions they may encounter and strategies for helping patients take actions despite their uncertainties, reluctance, and concerns. Providers learn how patient obstacles engender patient thoughts and feelings and how obstructions trigger patient reactions influencing patient behaviors. Providers learn about strategies for facing barriers and, as appropriate, opposing, bypassing, or eliminating them. Learning about strategies for taking action also help providers assist patients in understanding how their concerns and considerations impede actions and that there are approaches that can help patients surmount their thoughts and feelings and powerfully take actions. Finally, providers discover strategies for assessing patients as well as monitoring, measuring, and managing them. These strategies support patients and providers in their understanding of patient interest, involvement, participation, and progress along the care pathway. Accordingly, assessment and measurement strategies offer opportunities for improving, adjusting, or changing the care and care plan in pursuit of continuous quality patient improvement.

For putting patient strategies into practice, providers rely largely on technologies, tools, and other tactics like products or programs, services or support, to assist them. In putting strategies into day-to-day practice, providers must take action and so there is an additional element besides technologies, tools, and tactics called timing. *Compliance strategies and tactics* edify the provider on various tactics including approaches that use one-on-one communication; smart and mobile technology; and other means of communication that may be less advanced; the various methods for implementing strategies with patients may include, print, online, mobile, phone, wearables, email, social media, SMS, PDFs, and other based on patient needs and abilities in using new technologies.

RELATIONS IN COMPLIANCE

Addressing the topic of patient relatedness for healthcare providers, *relations in compliance* deals with how patients connect, associate, and relate to people, things, circumstances, conditions, and experiences in life; it also deals with how patients relate to themselves. This commentary touched on patient relatedness earlier. Patient relatedness provides a window into patient beliefs, attitudes, perceptions, and values giving providers clues in how to relate with patients. Relating to things in life, *relations in compliance* is revealed in how patients think, speak, and behave and in how they express themselves, how they listen, how they respond, and how they engage with others. Providers learn that relations are critical to advancing care, costs, compliance, and outcomes.

With *relations in compliance*, providers gain insight into how patients relate to their diagnosis and how they relate to their disease; this information is critically important to achieving compliance. *Relations in compliance* also deals with how patients relate to their care, their self-care, care plan, and care team; how they are treated clinically and socially by caregivers. In knowing this information, providers are able to more effectively engage and activate patients for compliance while helping patients sustain their health and healing consistent with their care plan. Aside from that, the question of how patients relate to health and healing overall, not as they relate to their current illness but in a general sense, as well as the question of how patients relate to their life and wellbeing are also important for healthcare providers to know. Knowing this information through *relations in compliance*, providers are better able to understand patient motivations and intentions, beliefs and desires; providers are then able to appreciate those things that drive patient choice and action.

One final area of patient relatedness, important to compliance, is provider awareness for relationships patients have with their families, friends, healthcare providers, and other people who are assisting or associated with patients. Clearly, there are some points regarding patient relationships to consider. First, consider the patient's disease and its effect on others; second, consider the patient's treatment and its effect on others; the patient's care, especially if they provide that care. Consider also the patient's need for services and support and its effect on others, especially if the patient requires therapy, in or out of the home; or if the patient has appointments with other care givers; or if the patient needs assistance, transportation, or help with activities for daily living. Patients' thoughts and feelings about their disease, treatment, and care also affect others as do their choices and actions or inactions; they all undoubtedly influence relationships with other people. Providers should appreciate the relationships patients have with people in their circles because those relationships affect compliance. Patient relatedness is central to patient desire and belief and hence patient choice and action. It is about patients being related to their diagnosis, disease, and treatment. But, more importantly, it is also about themselves and their lives. If patients are not related to who they are and if they are not related to their lives, meaning the aspects of family, social, emotional, spiritual, financial, career, and recreation as well as personal health, education, growth, and other elements of life, they ordinarily will not make healthy choices and take healthy actions; they typically do not perceive the meaning, relevance, or value of healing for themselves or their lives and, as such, they would not be engaged. Patient relatedness is necessary to achieving patient compliance.

CONVERSATIONS FOR COMPLIANCE

Nothing in life is ever created or achieved without conversation. In fact, life is an ongoing conversation of conversations for fulfillment of our needs, wants, and desires. When we realize life is a conversation of conversations, we realize that life is created from conversations. Compliance is one of those conversations. Non-compliance is another. Patient therapeutic and preventative compliance is an important conversation to create with patients and people and as such an important educational topic for providers. As conversation, compliance is an expression of patient beliefs and desires for health and healing; patients and healthcare providers create these conversations every day. Compliance conversations are about patient choices conveying patient actions and patient actions conveying patient desires and beliefs. Of course there are the "other conversations" called non-compliance which are an expression of patient doubt, distrust, and disbelief as well as patient neglect, indifference, and irresponsibility. Patients create these kinds of conversations every day as well. As the conversation goes, so goes compliance. The point is not to simply create conversations with patients but create the right conversations that are essential to their life, health, healing, and wellbeing, conversations that advance patient relatedness, beliefs, and desires.

Conversations for compliance create compliance. With this educational program, providers learn about eight vital conversations or "speaking languages" for creating compliance. Providers learn about the *language of relation* and how it communicates, relates, and creates with patients; it establishes backgrounds of relatedness and the rules, protocols, and expectations for patient-provider communication. More importantly, the *language of relation* creates patient relatedness for patients with all that is important to them for achieving patient compliance. The *language of attention* and awareness helps providers understand the importance of presencing patients; helping them to be cognizant, connected, and related to their choices, habits, behaviors, and actions. The *language of attention* and awareness establishes patient comprehension and understanding, interest and involvement, in their disease, health, healing, and wellbeing. Advancing through the range of languages, the *language of information* teaches providers the significance of accurate and genuine, realistic and objective, communication with patients and the value of open and ongoing patient / provider sharing, reporting, representing, and feedback. In addition, *language of information* reinforces patient comprehension and understanding, as well as patient interest and involvement in their care. The *language of information* is obviously the source of clinical information supporting the *language of education*. Providers know the importance of education, knowledge and skill transfer, and development of patient experiences and yet ongoing, continuous education is extremely more important in sustaining patient engagement, activation, and persistence. The *language of education* prepares providers for highly effective patient instruction, demonstration, and coaching as well as patient response and feedback, evaluation and testing, monitoring and measuring. It also emphasizes the need to establish patient guidelines so that patients agree to be teachable and coachable: wanting the education and willing to use the education.

Besides creating communications for successfully engaging patients, *conversations for compliance* also supports patient participation and activation. Providers learn about the *language of promotion* and the *language of motivation*. Promotion advances patient understanding for health and healing as it also fulfills on specific patient needs, wants, and desires and promotes patient benefits and value of their health and healing. The *language of promotion* invites, requests, or mandates patient response, choice, and action. Motivation influences and inspires patients. Providers are taught how to encourage, engage, and activate patients by creating possibilities and opportunities in the context of patient meaning, relevance, and value and patient relatedness. With the *language of motivation*, providers develop an appreciation for the distinctions of positive, negative, and personal motivation, having a motive for taking action; they appreciate the difference between motivation and manipulation. And then there is the *language of negotiation* and the *language of transaction*. Providers learn about the *language of negotiation* and how it is enormously essential to compliance; it establishes and nurtures communications in the face of barriers and breakdowns, setbacks, and lapses. For providers, negotiation works to identify and help patients remove

barriers and address behaviors; it works to resolving patient problems and challenges; and it works to create possibilities and opportunities. The *language of negotiation* also works for mutual benefit and gain, understanding and agreement with providers and patients. The *language of transaction* helps providers understand the importance of having patients take actions and achieve results. Taking actions but not achieving results is unworkable and impractical. Transaction is seeing an action through to completion; it involves interaction between patients and providers, patients and their care plan, patients and their health and healing. It involves a form of exchange, as in a transaction, in that providers generate conversations with patients for adopting new behaviors and adapting new ways of living with their care and care plan. Patients comply; they give their attention and time to making choices and taking actions in exchange for health and healing. They suffer inconveniences and disruptions in the way they used to live in exchange for health and healing. The *language of transaction* produces patient transformation as patients take actions to transform their lives. Transaction in communications strengthens patient / provider conversations, connections, relatedness, and compliance.

COMPLIANCE BARRIERS AND BEHAVIORS

Compliance barriers and behaviors addresses, with providers, topics related to patient thoughts and feelings of experiences, circumstances, conditions, and events that constrain, obstruct, or thwart compliance. Providers learn about four groups of barriers; they are barriers related to healthcare providers, barriers related to patient therapies, barriers related to patient qualities, also called external barriers, and barriers related to patient thinking and reasoning, also called internal barriers. Providers acquire an appreciation for how barriers are "patient conversations" about thoughts and things and that barrier conversations affect human behaviors, thus barriers and behaviors. Patient conversations about barriers, at all times, affect patient choices and patient abilities and desires to take actions. What's more, patient conversations are often not realistic or complete representations of circumstances, conditions, or events, but rather some emotional responses to the circumstances, conditions, or events and, as such, these conversations engender patient misconceptions and illusions. Generally, new conversations creating new choices can overpower patient barrier conversations. Patients, with the support of providers and perhaps others, can always find ways of bypassing or overcoming barriers and by choosing to take action on the barrier or change the behavior, barriers are disabled. Patient compliance occurs in conversations for choosing and taking action.

Compliance barriers and behaviors offers providers insight into the various dimensions of patient barriers; with *provider barriers*, it presents those dimensions that influence patient perceptions and experiences that may in turn cause patient challenges and obstructions; provider barriers have communication, relationship, knowledge, time, and incentive dimensions that can thwart patient behaviors. Providers learn about communication and relationship dimensions as they relate to provider / patient viewpoints and how they can affect behaviors; they learn about knowledge and time dimensions also as they relate to provider knowledge, experience, skills, confidence, and the topic of time including wait-time, face-time, accessibility, and other time-related considerations. They also learn how incentive dimensions of *provider barriers* can also affect compliance based on provider enthusiasm, desire, and motivation.

Therapy barriers presents treatment dimensions that influence patient perceptions and experiences that may in turn induce challenges and obstructions; therapy barriers have therapy and care, treatment complexity, therapy duration, and changes in therapy dimensions as well as patient information and education and additional clinical dimensions that can thwart patient behaviors. With therapy and care and treatment complexity dimensions, providers learn about how treatment and treatment complexity influence patient experiences and perceptions of their disease, their care, and care plan as well as the ease or difficulty, convenience or inconvenience of self-care. Therapy duration dimensions comprise patient experiences and perceptions of the extent of treatments, therapies, and healing while additional clinical dimensions comprises patient feelings about continuing care and other doctor recommendations; these dimensions certainly affect behaviors. Providers also learn

about the effect of changes in therapies caused by providers or patients and what that can do to patient experiences and perceptions on behaviors. Finally, information and education dimensions deals with patient experiences and perceptions of the quality and delivery of information, education, training, and testing. If patients feel they do not understand or know about their disease, treatment, or other related topics, it affects behaviors.

Barriers related to patient qualities, or *external patient barriers*, is the segment of provider education that deals with patient traits, qualities, and features, or patient external dimensions, that may adversely influence patient compliance; they are communication, relationship, physiologic, and socio-economic or demographic dimensions and patient relation to disease, patient therapy, patient experience, and patient support dimensions. Providers learn about communication and relationship dimensions as they relate to patient / provider viewpoints which are different from provider / patient viewpoints. These two dimensions can adversely affect behaviors. Physiologic and demographic dimensions deal with patient age, gender, marital status, ethnicity, cultural and religious beliefs, language, education level, health literacy, finances, social status, physical make-up and exam, disabilities, abuses, addictions, and more. In each of these dimensions are the potential for affecting patient behaviors. Providers also learn about patient perceptions and relationships to disease and how they influence compliance as well as patient therapy and therapy experience dimensions including treatment effectiveness; treatment side effects or adverse reactions; complications and comorbidities; and severity of symptoms, sensations, pain, and discomfort. Finally, providers are taught about circumstantial and environmental barriers, barriers associated with activities of daily living, and others that involve additional treatment and care, personal assistance, and other patient concerns. *External patient barriers* are leading causes for challenging patient behaviors and gaining compliance.

And although provider, therapy, and external patient barriers are admittedly complex, *internal patient barriers* are so much more intricate and complicated because these barriers are in the minds of patients where conversations occur for compliance and non-compliance. In their thinking and feeling, patients process opinions, judgments, and beliefs; they originate perceptions, attitudes, and values. They too remember and recall past experiences, observations, and insights; they recall the beliefs, perceptions, attitudes, and values of others in shaping, changing, guiding, and swaying their own thoughts and feelings. In addition to recall and memory, patients are creative; they invent stories and conceive reasons, excuses, justifications, and validations for their thoughts and feelings. Patients assess, evaluate, process, and discern things in life; then they make choices and after that they either take action or they do not. The *internal patient dimensions* are indeed intricate and complicated. *Compliance barriers and behaviors* offers providers insight into internal patient dimensions defined as psychological, ontological, sentient, and self-efficacy dimensions. Provider education creates appreciation for *internal patient barriers* but does not intensely examine psychology or ontology but rather relates key principles of each study to patient choice, action, and compliance.

Psychological dimensions distinguish the thoughts, feelings, memory, and creativity of patients based on their beliefs, perceptions, attitudes, and values. What's more, it creates understanding for patient involvement, competence, intention, and decision relative to psychological dimensions of patients. It also creates understanding for patient choices, habits, behaviors, and lifestyles. Of importance to patient compliance are the topics of patient abuse and addiction plus patient norms in contrast with social norms and the influences of norms on patient relatedness, patient desires and beliefs, and patient choices and actions. *Ontological dimensions* differentiate patient occurrence from patient perception; it differentiates patient narratives from patient conversations. It seeks to create with providers an appreciation for patient possibility, patient ways of being, patient integrity, and ultimately patient transformation. The other two internal patient dimensions, somewhat different from but related to psychology and ontology, are sentient dimensions and self-efficacy dimensions. *Sentient dimensions* addresses patient awareness, attention, and ability for being present while *self-efficacy dimensions* addresses patient confidence,

assurance, reliance, and belief. Sentience is significant to compliance in that awareness and attention drive choices and actions whereas unawareness and inattention breed complacency and negligence. On the other hand, it is necessary to emphasize self-efficacy as it produces a sense of certainty and conviction in patients. Patient relatedness involves sureness, attentiveness, and thoughtfulness.

The education and training contained in *compliance barriers and behaviors* provide a comprehensive instruction and overview for the experiences, circumstances, conditions, and events that constrain, obstruct, or thwart patient compliance. It is one of many programs from which providers can benefit. Yet in addition to professional training and education and the components of patient management, a comprehensive approach to patient compliance also requires tools and technologies.

Technologies and Tools

COMPLIANCE TECHNOLOGIES

To assist in planning, organization, direction, and control, physicians, healthcare providers, payors, case managers, patient navigators, and other professionals need technologies to support patient management so they can cause compliance.

Healthcare providers require technology that monitors and tracks patient choices, actions, conditions, and progress. The technology must provide information to patients for drugs and medications, nutritional intake and uptake, exercise and activities, physical and mental states, and other relevant patient information and communication. The technology must provide patient reminders, prompts, and other care messages as well as scheduling capabilities for appointments and prescription fills for medications, drugs, and other products and devices. Accordingly, the technology must ensure total communication, connectivity, integration, and automated data sourcing; it must offer the ability to report, instruct, feedback, and recommend in real time as it must also offer the ability to automate communication, track patient touch points, make connections in all media that is appropriate, respond to patient needs, and ensure security and confidentiality. This technology, accordingly, must give providers the ability to monitor and measure patient self-care, examinations, screenings, and tests; perform assessments and analyses; and have reporting capabilities available to physicians and patients as well as provider organizations, care managers, navigators, payors, insurers, employers, government agencies, and others, as appropriate.

Patient management technology must absolutely furnish healthcare providers the ability to track communications, relationships, patient education and information, and provide ongoing instructions, recommendations, and support. It must provide secure access to the information for sharing, updating, and improving patient care and compliance. Finally, the technology needs to be accessible for clinical, financial, and management reviews through specific portals to manage patient care, progress, and compliance. These portals offer abilities for statistician tracking and reporting, data analysis, trends, and continuous quality improvement.

COMPLIANCE TOOLS

In implementing strategies, healthcare providers need tools in addition to technologies to support patient compliance. Tools enhance the quality of patient communications and relationships as well as the strategies and tactics for advancing care and compliance; they improve patient engagement, activation, and persistence. Healthcare professional tools must also help in enrolling patients into their care, in establishing points of reference to chart progress, in engaging and activating patients, in predicting patient compliance, and in measuring patient performance, compliance, and outcomes. In addition, tools must be used for creating awareness, interest, and understanding with patients for the components, conditions, contributors, and continuum of compliance as well as understanding, in advance of treatment, of patient barriers and behaviors. And there are

tools for patients to use in helping them communicate their thoughts and feelings, choices and actions, outcomes and satisfaction with healthcare professionals.

BENCHMARKING TOOL

Designed for providers to use with patients, the *benchmarking tool* helps providers perform patient assessments and helps patients perform self-evaluations. The tool incorporates a patient declaration for patients to assert their interest and involvement for compliance; a patient agreement for patients to promise their responsibility and commitment is also part of the tool. The overall value of the *benchmarking tool* is in initiating assessments, self-evaluations, declarations, and agreements with patients as well as being able to create future assessments and self-evaluations along the continuum of compliance for understanding performance and progress. Accordingly, the initial assessments and self-evaluations provide a foundation for communication, a benchmark for treatment, and a basis for comparative reviews. This tool establishes the point from which patients and providers can assess patient care and self-care and make changes or adjustments as required; it is also the point from which participation and improvement are measured and acknowledged. Patient declarations and agreements are reminders for providers and patients of patient acceptance and intentionality as these elements of the *benchmarking tool* likewise serve as a vehicle for patient recommitment as needed.

ENGAGEMENT ACTIVATION TOOL

The *engagement activation tool* is designed for providers to use with patients throughout the continuum of compliance. The tool addresses the engagement phase *and* the activation phase preparing patients for persistence. The tool addresses the development of patient awareness and attention, interest and involvement. It also addresses patient preparation and participation, activity and assessment. The *engagement activation tool* further addresses patient responsibility and commitment and ongoing engagement and activation. Besides including an overview of the continuum, the tool presents the rudiments for compliance which involve patient requirements for participation, performance, and progress. The *engagement activation tool* asserts that when patients take actions addressing their diseases for health and healing, these basics must be present.

The first rudiment involves *thought, intention, and planning* so that patients do what we want them to do to be compliant. Thought, intention, and planning are shared by patients and providers in establishing the care, self-care, care plan, and care team. The second rudiment involves *knowledge, experience, capability, and confidence* so that patients can be compliant. Knowledge and experience are shared with patients; capability and confidence are developed by patients. The third rudiment involves *processes, methods, and techniques* so that patients can take actions and be compliant. Processes, methods, and techniques are taught to patients and patients demonstrate their understanding and ability to perform. The fourth rudiment involves *prescription products* so that patients can take actions using medications and be compliant. Prescription products are the drugs, medications, healthcare products, and personal care products patients require for treatment and care. The fifth rudiment involves *technologies, instruments, and tools* so that patients can take actions using innovations and be compliant. Technologies, instruments, and tools are the devices, appliances, and equipment patients require, like prescription products, for treatment and care.

PREDICTIVE ANALYTIC TOOL

Designed for providers to calculate and forecast the potential for patient actions, the *predictive analytic tool* offers insight into patient thinking and ways of being as well as insight into patient choices, habits, and behaviors. The challenge has always been for providers and healthcare professionals in knowing with some certainty which patients were predictably going to be compliant and which patients were going to be non-compliant. Knowing offers an advantage to physicians, providers, payors, and other healthcare professionals for determining time and resources in managing patients.

Patients are unpredictable; they think, speak, behave, and act differently; they have different interest and involvement in health and healing; they process instructions and recommendations differently; that take actions differently; they have different opinions, judgments, beliefs, and perceptions; they have different attitudes and values in life. The *predictive analytics tool* provides an understanding of patient potential for taking actions, consistent with their choices, consistent with their desires and beliefs, consistent with their relatedness to themselves and their lives. The tool is a survey, in patient language, interpreting with highest levels of accuracy the psychometric traits of patients. By understanding patient orientation to detail, amiability, patience, and assertiveness, the tool evaluates patient emotion, initiative, adaptability, and behavior providing insight into predictive health behaviors. The *predictive analytics tool* offers a high level of statistical validity and is based on proprietary measurement technology for behavioral traits.

PATIENT MEASUREMENT TOOL

As discussed earlier in the measures for compliance, patient therapeutic and preventative compliance requires a universal system of compliance measurement. The *patient measurement tool*, designed for providers, creates a common language and understanding for compliance among healthcare professionals. It defines patients in general categories and yet allows for more specific measurements within each category for healthcare professionals who require more in-depth detail. The tool classifies patients, based on their levels of engagement and activity, as highly compliant, compliant, and somewhat compliant. The tool also classifies patients as non-compliant *who want to be compliant* but are unable to be compliant and non-compliant patients *who do not want to be compliant*. The *patient measurement tool* helps providers evaluate patient agreement and acceptance for health and healing; patient like and trust for the care, care plan, and caregivers; patient intentions and motivations; and patient desires and beliefs. The tool then provides insight into patient levels of engagement and activity giving providers opportunities to assist, support, and encourage patients and to lead them from being non-compliant to being somewhat compliant or from being somewhat compliant to being compliant.

PATIENT COMPLIANCE TOOL

Designed for providers, the *patient compliance tool* focuses on patient choice and the complex process of choosing. The tool, for sake of creating clarity and comprehension with providers, is a two part tool dealing with patient processing and patient choosing. The patient processing part of the *patient compliance tool* focuses on early and middle stages of processing information; the influences of psychology, ontology, and sentience being; and the origination of choice in knowledge, experience, and ability. The patient choosing part of the *patient compliance tool* focuses on later stages of processing specifically on interpretation and discernment, choice and decision; views of self-efficacy and confidence; patient evaluation and reconciliation of thoughts and feelings and opinions, judgments, and beliefs; patient motivation and intention; and patient choice in relation to action and inaction.

In the first part, the *patient compliance tool* moves through topics of patient awareness of disease, patient relation to physician evaluation of disease, patient preliminary comprehension of information, patient integration of information, patient processing of information, and patient development of knowledge for choices. In the second part, the *patient compliance tool* moves through the dynamics of patient choice, patient evaluation and reconciliation, patient motivation, patient intention, patient action and inaction, and if there is action, understanding the dynamic of patient initial action, patient / physician experience and evaluation of action, patient action and inaction again, and if there is sustained action, understanding patient action for persistence. In relating the *patient compliance tool* to the continuum of compliance, providers use the tool with patients to work through patient processing and patient choosing and the effect of taking action in the engagement, activation, and persistence stages of compliance.

PATIENT COMMUNICATION TOOL

Designed for patients to help them communicate with their healthcare providers, the *patient communication tool* focuses on patient needs, wants, and desires for health and healing, communication and relationship, and understanding instructions and recommendations. The tool is a series of pictograms and diagrams that convey thoughts and feelings patients want to express regarding patient conditions. The visual icons also attempt to convey patient beliefs, perceptions, attitudes, and values.

The *patient communication tool* addresses patient topics for understanding, communication, and feedback with physicians and patient care team members. Topics include comprehension for patient diagnosis and disease; patient instructions and recommendations; patient medications and drugs, products and devices; patient dose, use, applications, and care techniques; patient continuing care, assisted care, specialty care, and home care concerns; patient appointments for tests, examinations, and screenings; patient nutrition, activity, and exercise; patient wellbeing, behavior modification, and stress management. The *patient communication tool* also provides patients with communications for dealing with patient signs, sensations, symptoms, anxiety, and pain as well as patient concerns for wellbeing, quality of life, and their changes in life based on self-care schedules and routines. Finally, the *patient communication tool* provides communications for patient expression of their agreement and acceptance, their wanting and willing, their intentions and motivations, their like, trust, beliefs, and desires. The tool is important for providers in understanding and relating to patients while helping them achieve compliance, optimal outcomes, and full satisfaction in their care.

Making Compliance Happen

The subject of compliance is prodigious. There are technologies and tools, programs and services, strategies and tactics, education and information, patient monitoring and measuring, all encouraging and supporting patient healthy choices and behaviors. Still, therapeutic compliance in health care today is moderate to low among patients especially with chronic diseases; preventative compliance is also moderate to low among participants in weight management programs, exercise and activity programs, behavioral modification programs, stress management programs, and addiction recovery programs.

The problem is not necessarily the design and delivery of programs for health, healing, prevention, and wellbeing. The problem is typically identified as a gap, a gap between patient and provider, patient and care plan, patient and therapy, caused by the absence of relatedness. Relatedness is a matter of patients and program participants being aware and alert, associated and connected, interested and attentive, in themselves and their health and healing; in their diagnosis and disease; in their care, self-care, and care plan; and in their physicians, healthcare providers, nurses, teachers, coaches, trainers, nutritionists, and other people on the care team. In all fairness to patients and participants in programs, however, relatedness is also a matter of physicians and healthcare providers not being aware and alert as well, associated or connected, interested or attentive, in their patients' health and healing to bring about compliance.

Non-compliance is reaching epidemic proportions with people and patients because of an absence of relatedness. Healthcare professionals require a comprehensive, integrated approach to helping patients and themselves create backgrounds of relatedness to achieve compliance.

SEVEN PRINCIPLES TO HIGHLY-EFFECTIVE COMPLIANCE

Developed from exhaustive research of therapeutic and preventative compliance reference, papers, and studies for transforming behaviors, there are seven mutually reinforcing, interdependent principles for establishing relatedness and

attaining highly-effective compliance. The principles involve communication, education, technologies, tools, services, resources, and community.

FIRST PRINCIPLE: COMMUNICATION FOR RELATEDNESS

Establishing and sustaining communication is vital to building relations and being related. The first principle of establishing relatedness and attaining highly-effective compliance, *communications for relatedness*, is the source of patient-provider expression and exchange. It creates a dialogue of conversations and interactions for managing patient conditions, care, and compliance. It is filled with news, education, and information regarding patient diseases and treatments, patient services, programs, products, and support. Communication is at the center of relatedness and compliance and, as such, *communications for relatedness* involves a complex network of integrated communication channels that use technology and be managed with technology. The communication channels include print communications, internet, mobile technology, telephone, wearables, implantables, social media, small message services, emails, and others forms of expression and exchange. *Communications for relatedness* gives patients and providers connection and access to each other as well as means for having available the other six principles.

SECOND PRINCIPLE: EDUCATION FOR RELATEDNESS

Providing education and information is fundamental to managing and delivering patient care and attaining patient compliance. The second principle, *education for relatedness*, involves both patient education as well as provider education; education builds relations and contributes to being related. First, patient education works to develop patient knowledge, experience, skills, and confidence related to care, self-care, and the care plan. Patient education provides patient comprehension for the instructions and recommendations of their care plan along with the use and application of medications and drugs and healthcare products, personal products, devices, appliances, and equipment that they must use. What's more, patient nutrition, activities, exercise, stress management, behavioral modification, and other related topics are also part of patient education; patients must have instruction regarding all components of their care plan. Patients should also learn about the ins and outs of compliance and barriers to compliance as well as other associated matters. Second, *education for relatedness* offers provider comprehension for managing patients, developing patient strategies, and learning about the ins and outs of compliance too.

Provider education includes learning about the continuum and components of compliance, the contributors and conditions of compliance, strategies and tactics of compliance, conversations and relations for compliance, and barriers and measurements of compliance. Additional provider education may include learning about the components of patient management and leadership in management of which these build relations and backgrounds of relatedness.

THIRD PRINCIPLE: TECHNOLOGIES FOR RELATEDNESS

Developing and utilizing technologies is essential to patient / provider communications and relations, patient services and resources, developing community and tools, and maintaining ongoing education and information. The third principle of establishing relatedness and attaining highly-effective compliance, *technologies for relatedness*, promotes compliance and optimal outcomes in three ways. First, technology is used by healthcare professionals as a patient relation management system (PRM) tracking communication touchpoints. *Technologies for relatedness* offer providers the ability to track inbound and outbound communications no matter the channel or media: telephone, mobile devices, internet, and print. In this manner, providers follow patient interest and involvement, participation and persistence through their communications with others. Using this portion of the technology, providers can communicate directly, in person or through devices, and indirectly through devices and by using care managers and patient representatives. The patient relation management portion of technology is an excellent resource for ongoing patient news, education, information, recommendations, feedback, and support.

Second, technology is used as an integrated communication system for professionals on the care team. The communication system seamlessly connects the primary care physician and electronic medical records with other caregivers and care team members including case managers and patient navigators for purposes of conveying and sharing patient information; for tracking, monitoring, reporting, and measuring; for scheduling patient appointments and activities and following up with them; for accessing patient conditions, test results, performance, and progress; for automated data sourcing; and for trending, analysis, and reporting. This integrated communication system for professionals requires protection and security and must comply with communication and technology regulations of the Health Insurance Portability and Accountability Act (HIPAA) of 1996.

Third, technology is used by healthcare providers for patient management and education. Providers use the technology for fashioning comprehensive care plans and for designing care pathways; they also use it for organizing and directing resources required for care. Likewise, the technology is also valuable for developing and delivering patient information and educational programs and for patient demonstrations and patient videos; for professionals the technology is valuable for training and education.

FOURTH PRINCIPLE: TOOLS FOR RELATEDNESS

It is important to have the right tools, processes, and systems for managing and delivering patient care and for attaining patient compliance. The fourth principle, *tools for relatedness*, is all about tools that advance patient and provider performance, patient compliance, and relatedness. There are provider tools and patient tools. Provider tools help providers manage and support patients whereas patient tools help patients communicate and relate.

Provider tools include a *benchmarking tool*, for assessing patients, gaining agreement, and measuring participation and progress; an *engagement activation tool*, for apparently engaging and activating patients and gaining their commitment and compliance; and a *predictive analytic tool*, for measuring patient psychometric traits to determine potential level of compliance. Provider tools also include a *patient rating tool*, for measuring patient engagement and active participation; a *relational tool*, for evaluating patient relatedness to themselves, their health and healing, their circumstances, and their care, care plan, and caregivers; and a *barrier tool*, for determining patient internal and external barriers, therapy barriers, and provider barriers. Included with provider tools are tools for developing strategies, tactics, and communications. Provider *tools for relatedness* help providers educate, manage, and motivate patients; enhance communications and relations; and advance compliance and outcomes.

As mentioned, patient tools help patients communicate and relate; they include a *patient communication tool*, for full self-expression; a *patient satisfaction tool*, for reporting concerns, challenges, contentment, and fulfillment; and a *patient progress reporting tool*, for conveying patient experiences; signs, sensations, and symptoms; and patient vitality and energy.

FIFTH PRINCIPLE: SERVICES FOR RELATEDNESS

Supporting and serving patient needs is necessary to managing and delivering patient care. The fifth principle, *services for relatedness*, involves the services and support caregivers can provide for patients making their experience simple, easy, and convenient. That includes helping patients fill, refill, and obtain prescriptions; helping patients obtain healthcare products, devices, appliances, and equipment; helping patients schedule appointments for check-ups, follow-ups, examinations, tests, and screenings; coordinating patient activities associated with appointments; providing reminders, prompts, and alarms for following instructions or making appointments; helping patients adapt to new care routines; helping patients adopt new

behaviors; helping patients prepare their residences; and helping patients coordinate continuing care. *Services for relatedness* also helps patients with other concerns and challenges like dealing with activities for daily living, getting travel assistance, shopping, banking, and other patient support based on patient disabilities, injuries, and physical or emotional limitations.

SIXTH PRINCIPLE: RESOURCES FOR RELATEDNESS

The sixth principle of establishing relatedness and attaining highly-effective compliance is called *resources for relatedness*. This principle is closely related to the previous principle; it extends services to offer products, programs, and education that are related to the patient's disease state. For example, patients with diabetes are given access to products that specifically address the needs of diabetics in clinical and personal care, nutrition and diet, activities, exercise, and rest, and so forth. *Resources for relatedness* offers then nutritional products, diet plans, food services, personal care products, products for patient exercise and activities, clothing and shoes, and products for other needs.

Resources for relatedness also offers nutritional and wellbeing programs, exercise and patient activity programs, stress management programs, behavioral modification, and so forth as well as prevention programs related to the disease state to help patients lessen the potential for complications and comorbidities. What's more, *resources for relatedness* offer informational and educational programs, patient lessons, seminars, activities, and events for supporting patient needs. Lessons and educational programs touch on clinical, behavioral, psychological, social, financial, occupational, and ontological topics to name a few. The sixth principle helps the patient, with various resources, deal with patient needs as it helps to transition the patient into the person.

SEVENTH PRINCIPLE: COMMUNITY FOR RELATEDNESS

Coaching patients and helping them to feel emotionally good and feel like they belong is necessary for managing and delivering patient care and for attaining patient compliance. The seventh principle, *community for relatedness*, seeks to create *common unity* for patients and providers with other patients and other providers. There are two parts to community: patient coaching and patient connecting.

First, patient coaching provides ongoing lessons, teaching, and training as well as encouragement and accountability for clinical, nutritional, physical activity, behavioral, and lifestyle needs with instructors, trainers, dieticians, nutritionists, therapists, counselors, and coaches. Coaches initiate programs, provide the instruction and support. With *community for relatedness*, patients work with people rather than with programs. Coaches help patients be accountable; coaches help patients overcome barriers and behaviors; coaches help patients deal with disease and create a future for health, healing, and wellbeing.

Second, patient community provides ongoing connection and relationship with other patients as well as healthcare providers, nurses, physicians, nutritionists, exercise trainers, therapists, behavioral specialists and counselors, and personal development professionals. With *community for relatedness*, people and patients create conversations with others for sharing and learning, for mutual support and service, for commitment and accountability. Community connects people for creating belongingness and relatedness for advancing patient compliance.

All together, these seven mutually reinforcing, interdependent principles work to establish relatedness and attain highly-effective compliance. Through communication, education, and community patients and providers become partners in health and healing. With the help of technologies, tools, resources and services, patient and providers can create a comprehensive, integrated approach to therapeutic and preventative compliance.

The Outcomes of Compliance

The intention of this commentary is summarized in its title, understanding for the need of a comprehensive approach to patient therapeutic and preventative compliance. Together we have looked at the complex nature of therapeutic and preventative compliance.

Compliance has its inception in the care plan, it defines the *components of compliance*: the instructions and recommendations; drugs, medications, products, devices, and other equipment demanded for care; the requirements for continuing care; provider suggestions for changes or additions in patient nutrition, exercise, activities, stress management, behavioral modification, and lifestyle; and other support and services to advance patient health, healing, and wellbeing. Essential to the *continuum of compliance*, we see how patient acceptance and agreement for the care plan is fundament to patient engagement and activation with the anticipation of successfully completing the care plan through patient persistence. Achieving patient engagement, activation, and persistence require certain *conditions for compliance* to be present throughout the continuum. These conditions are inherent in the patient while other conditions must be generated by providers for the benefit and value they offer patients. In addition to these factors, the nature of compliance is all the more complex with the number of members involved in care who are *contributors to compliance* and are on the care team.

We looked into patient management for shaping compliance with how providers must be involved in planning the care; how providers must also be involved in organizing and directing the care plan and care team members; and how providers must monitor, measure, and manage patients for achieving optimal outcomes. Patient management demands compassion and care, guidance and leadership, in providers. It also demands exceptional patient education, instruction, and demonstration that really make a difference for patients and the people who ware assisting and supporting patients. We see, too, that professional education is critical to compliance; it is a large part of compliance in that providers should be familiar with patient strategies and tactics, patient conversations for compliance; patient barriers and behaviors and how to overcome them, and developing and nurturing patient relationships as well. Along with professional education, we also see the need for technology and tools for achieving compliance.

Technology plays a huge role in managing patients, managing information and data, and managing patient communication and education. It allows integration of services and communication with professionals; it allows tracking and reporting for providers and patients; it allows feedback, corrections, and improvements. Moreover, technology is important to maintaining relationships; following patient choices and activities; scheduling, reminding, and prompting patient actions; encouraging and acknowledging performance and progress; and keeping patients engaged and activated with providing ongoing information, education, communication, and motivation.

As part of patient management, we see the importance of tools for both patients and providers. Providers require tools for engaging, activating, and sustaining patients in their commitments. Some tools include tools for benchmarking patient performance and progress; tools for creating patient awareness, interest, involvement, and active participation; tools for determining in advance the likelihood of patient compliance; and tools for monitoring and measuring patient compliance. Add to that other tools for defining gaps in patient relatedness to their disease, care, care plan, and care team; and tools for appreciating the dynamics and influences of patient choice. For patients, technologies and tools largely communicate clinical information to patients and their providers for knowing or alerting patients to their condition. Other patient tools help patients communicate patient signs, sensations, symptoms, and experiences and still other tools help create understanding and relationships.

The nature of compliance is indeed prodigious and, accordingly, seven principles for gaining patient therapeutic and preventative compliance are important to attaining it. We know compliance originates in being related and that patient relatedness translates into patient desires and beliefs. And so, when patients become related to themselves, their life, their disease, and their care, that is to say, when patients truly comprehend and understand the meaning, relevance, and value of their health, healing, and wellbeing in their lives, patients transform their values and attitudes, perceptions and beliefs; they nurture thoughts and feelings for making healthy choices and taking healthy actions. The principles of compliance influence patient relatedness affecting not only patient desires and beliefs but patient thoughts and feelings for their choices and actions and, therefore, patient compliance.

In view of that, we recognize the value of *communication* for influencing relatedness and relationships through mutual comprehension and understanding, commitment and responsibility. And we certainly recognize the value of *education* for influencing relatedness by developing our knowledge and knowhow, experience and expertise, competency and capability, and self-confidence. Because patient *services* helps patients with scheduling and coordinating appointments, providing reminders and reports, and other assistance, there is value that influences relatedness. Likewise, patient *resources* engenders an experience of being related through products, programs, and ongoing information and education helping make care simple and easy while improving patient quality of life. What's more *technology* and *tools* offers remarkable value for creating relatedness. As the source of information, communication, and education, technology ensures engagement and activation; tools help with patient needs, wants, and desires; challenges and concerns; commitment and compliance. Finally we see the value of *community* for influencing relatedness. Community is being connect and being related; having common unity and support. Community creates possibility, reinforces desires and beliefs, encourages, and acknowledges. These principles of compliance - communication, education, technology, tools, services, resources, and community – influence patient relatedness and contribute to compliance.

Clearly, patient therapeutic and preventative compliance demands a comprehensive approach and a new source of care management for providers, first, to extend their effectiveness, reach, and control by supporting, educating, serving, and managing their patients and two, to achieve patient compliance by enhancing relatedness. This source must have capabilities for providing efficient patient communication and education, services and resources, as well as a valued community with highly effective technologies and tools. This source of care management must successfully and completely integrate the seven interrelated principles for compliance recognizing that this comprehensive approach to therapeutic and preventative compliance is not just about fixing a problem and achieving quality clinical and economic patient outcomes but transforming people's lives and their health, healing, and wellbeing in America.