PATIENT MANAGEMENT STRATEGY

Creating the Standard for Patient Compliance Measurements

Richard B. Smith

COMPLIANCE AND NONCOMPLIANCE

Patient compliance is a state of engagement, activation, and persistence in which the patient effectively and efficiently manages their health, healing, and wellbeing. For patient compliance to be effective and efficient, the patient must be interested and involved in their life and engaged in their care and care plan. Besides being engaged, the patient must also be moved to take actions consistent with their care plan and the patient must be determined, committed, and persistent in achieving optimal outcomes. In their engagement, activation, and persistence, the patient chooses to follow the care provider's instructions and recommendations according to their care plan and takes actions consistent with those instructions and recommendations.

In direct opposition to compliance, patient noncompliance is the result of adverse conditions, circumstances, or events, called patient barriers, which arise with the patient. Impeding patient choices and actions, these occurrences constrain, obstruct, or thwart their compliance. Besides the usual concerns associated with

unfavorable patient self-efficacy and self-confidence, noncompliance is often a matter of contrary patient thoughts and feelings, opinions and judgements, beliefs and viewpoints, attitudes and principles, regarding the patient's care, care plan, care provider, and care team as well as their own self-care. In essence, noncompliance arises with adverse patient perspectives, perceptions, and preferences which can occur any time for any number of reasons. Patient noncompliance happens. Understanding the reasons for patient noncompliance caused by patient barriers and knowing how to effectively and efficiently address those barriers are beyond the scope of this paper which is concerned with creating a standard for measuring patient compliance and noncompliance.

The nature of patient compliance is patient agreement and acceptance for their treatment and care; the patient is willing and wanting to follow instructions and recommendations and take actions consistent with those instructions and recommendations; and in their compliance, the patient is responsible, persistent, and committed. The patient begins their care as a compliant patient by seeking treatment from their care provider. If the patient didn't initially seek treatment, they wouldn't be a patient; people become patients by seeking care. At some time thereafter, however, the patient might become noncompliant in their adverse thoughts and feelings; in their adverse choices and beliefs about their care, care plan, care provider, care team, and self-care; in their lack of desire for health, healing, and wellbeing; in their lack of passion for life and love.

Adverse patient conditions, circumstances, and events happen; they give rise to patient noncompliance. In wanting to effectively and efficiently address patient noncompliance, the care provider and care team need a standard method of measurement to better manage patient care and compliance. Accordingly, the intention of this paper is to make a case for creating the standard measurement for patient compliance and noncompliance. In having a standard measurement, the intention then is also to encourage the application and use of universal measurements to distinguish the patient level of compliance for the value of making optimal patient management decisions.

STANDARDIZING COMPLIANCE MEASURES

Creating a standard of measurement for patient compliance and noncompliance is appropriate since compliance is not definitive; the patient is neither totally compliant nor noncompliant. There are levels of involvement and participation, degrees of adherence and resistance; there are acceptable and unacceptable, agreeable and disagreeable patient conditions, circumstances, actions, and events. Nothing about compliance or noncompliance is absolute. What's more, we cannot satisfactorily determine that which actually constitutes compliance and noncompliance since there is no standard for defining it and for measuring it. Accordingly, we must first define and distinguish patient compliance more precisely; it is not only a state of patient engagement, activation, and persistence but also a developing, ongoing continuum in which the patient effectively and efficiently manages their health, healing, and wellbeing.

During engagement, the patient is compliant in their awareness and interest in understanding their diagnosis, prognosis, and condition; in their involvement and planning of their care and treatment; in choosing their condition, compliance, and care. During activation, the patient is compliant in their preparation and participation for making their self-care happen; in learning their care plan; in following their instructions and recommendations; in taking actions consistent with those instructions and recommendations. The patient is also compliant during activation in making ongoing assessments of their experiences and outcomes. During

persistence, the patient is compliant in their commitment to the care plan; in their continuance and resilience regardless of the obstacles, obstructions, and difficulties they encounter; in being responsible and motivated; in their positive performance and progress; in their pursuit of continuous quality outcomes improvement. Patient compliance requires endless, uninterrupted persistence for health and wellbeing.

Second, we must define and distinguish patient instructions and recommendations. Patient instructions and recommendations, the essence of all care plans, provide understanding and purpose for care and treatment and the use of medications and healthcare products; they provide guidance and direction for the patient in the actions they need to take for being compliant. Patient instructions are care provider directions and orders which the patient *must follow* while patient recommendations are the advice and suggestions the patient *should follow* in anticipation of enhancing optimal outcomes and wellbeing.

By defining and distinguishing patient compliance and noncompliance in the context of the compliance continuum and by defining and distinguishing patient instructions and recommendations, we can monitor and measure patient activity or inactivity, patient participation and performance, and patient progress and results without a detailed knowledge of many of the specifics in their care plan. Accordingly, we can assess levels of patient interest and involvement, degrees of patient adherence and resistance, and we can assign an overall measurement to their compliance or noncompliance.

THE VALUE OF COMPLIANCE MEASURES

The advantages for standardizing measurements for patient compliance and noncompliance are numerous. As we know, standardizing healthcare procedures, methodologies, and resource utilization contribute to best practices and improved clinical, economic, business, and patient management and satisfaction outcomes. By standardizing measurements for patient compliance and noncompliance, they advance quality, cost-effective outcomes. Here's how.

First, standardized patient compliance measurements (SPCMs) provide consistency in terminology, meaning, and understanding for defining the basic levels of patient engagement, activation and persistence. Accordingly, healthcare professionals have a benchmark for patient participation and performance in their self-care as well as a benchmark for patient progress or regress. SPCMs offer healthcare professionals the ability to assess degrees of patient adherence, weigh comparative patient data, and determine patient activity or inactivity. Second, SPCMs provide healthcare professionals a uniform base for determining which patients to support, or not to support, based on patient participation, performance, and progress. Third, SPCMs provide a common base for determining what amounts of time, energy, finances, and resources to invest with patients and, fourth, SPCMs provide a consistent foundation for determining return on investment. Fifth, standardized patient compliance measurements provide healthcare professionals opportunities for continuous quality improvement for patient care and compliance, resource utilization, and professional practices.

In determining which patients get support, in determining an amount of applied resources, for example, the low compliant patient may require more programs, services, and support than the moderately compliant patient while healthcare professionals might determine not to apply any services or support to the resistant or intentionally noncompliant patient. In providing programs, services, and support, the aim is to help the patient

be more compliant; applied resources help advance the patient's degree of compliance to a higher level. Accordingly, healthcare professionals may not want to invest many resources, if any, in the moderately compliant or high compliant patient as the return on investment may not be as valuable and beneficial as the return on investment for the low compliant patient or the noncompliant patient who wants to be compliant, who needs additional programs, services, and support but is unable to be compliant without those resources.

In the final analysis, standardized patient compliance measurements, or SPCMs, offer the value of uniformity in monitoring, measuring, and managing the patient for quality, sustainable, reproducible results.

RESOURCES FOR ADVANCING COMPLIANCE

We talked about making investments in the patient with time, energy, finances, and resources to advance patient health, healing, and wellbeing and to extend patient compliance. Resources for advancing compliance include patient services and support, products and programs by healthcare professionals, educators, clinicians, case managers, social workers, and others to improve and increase engagement, activation, and persistence. The most important resource among all, however, involves communication; communication is vital to providing the patient with ongoing information, inspiration, and motivation as well as continuing education and training.

1. PATIENT COMMUNICATION

Clearly, patient communication is most valuable for patient compliance. In their conversations, the patient and care provider establish and, as appropriate, reestablish mutual intentions and commitment to care, treatment, and the care plan calling for the patient to be continuously engaged, active, committed, and persistent. Also as mentioned, communication involves ongoing education and training for patients as well as ongoing patient information, inspiration, and motivation. Besides one-on-one communication between the patient and care provider, texts, emails, helplines, online messages, faxes, print, broadcast, alternate channels, and other media are used to make valuable connections and relationships and to advance patient compliance.

2. PATIENT SERVICES

In addition to communication, patient services are also valuable for advancing patient compliance since services are, in many respects, relational; they establish patient connections. Patient services involve patient reminders and prompts as well as making patient schedules and appointments. What's more, patient services help the patient in filling and refilling prescriptions, purchasing and replenishing healthcare products, maintaining and operating devices, and so forth. Patient services also help in making arrangements for homecare services, social services, transportation services, and other assistance. Last but not least, patient services involve tracking and reporting patient activities, monitoring and measuring patient progress, and providing patient data, analyses, and evaluations for the patient and care provider to advance compliance.

3. PATIENT PRODUCTS

As we well know, patient products are valuable for patient treatment and care, but there are products that are also valuable for advancing patient compliance. Besides medication and drug prescriptions, other products may be appropriate for ensuring compliance including additional healthcare products, personal products, physician samples, medical devices, specialized equipment, instrumentation, and more. For example, medical devices might involve patient wearables or implantables that are designed to help improve drug delivery, monitor and

measure patient compliance and therapeutic levels, and track patient activity, exercise, nutrition, and hydration. Every so often, some medical equipment, devices, and instruments may be rented, loaned, or donated to the patient as appropriate in advancing their compliance.

4. PATIENT PROGRAMS

Patient programs provide patients with assistance in managing their treatment, following their care plan instructions, and adhering to their care provider's recommendations for exercise, activities, diet, nutrition, and changes in lifestyle. Often patient programs involve the support, services, and specialized assistance of therapists, nutritionists, trainers, coaches, counsellors, social workers, and other professionals helping the patient transform their thoughts and beliefs about their care, treatment, health, and healing; helping the patient modify adverse behaviors, habits, and obsessions; helping the patient address addictions and dependencies with rehabilitation and recovery. Additionally, patient programs advance compliance by providing patients other assistance in managing their activities of daily living, transportation, finances, food, housing, and other needs.

5. PATIENT SUPPORT

Although patient support provides ongoing communication with education, information, motivation, and news, it also provides additional support with patient care circles and care communities; patient access to clinical and social help; patient hotlines and helplines; patient tips and tidbits to advance compliance. Whereas care circles are comprised of close and immediate support like family members, friends, neighbors, clergy, and other close people, care communities are comprised of other patients with similar conditions as well clinicians, social workers, and other patient support. Besides care communities, circles, and other access, patient support can also include helping the patient plan and organize resources for their ongoing treatment and care and helping the patient prepare and retrofit their work place or residence appropriate to their needs.

The resources available to the healthcare professional for advancing patient compliance involve various patient services, products, programs, and support and yet the most important of all is communication. Everything in life and in health care is accomplished in conversation. Patient compliance and noncompliance should always be addressed with conversation that is open, forthright, nothing withheld. Patient opposing choices, inactivity, and noncompliance require the patient, care provider, care team, and others involved in the delivery of care to responsibly and respectfully address these challenges with powerful, productive, and fully self-expressed communication, exploring various methods and means of applying valuable programs, services, and support that will make a lasting and significant difference for the patient.

MANAGING THE NONCOMPLIANT PATIENT

As we know, managing patient noncompliance effectively and efficiently requires people and time as well as finances and resources. Prior to planning, organizing, directing and managing patient noncompliance, healthcare professionals need to assess the entire challenge of noncompliance relative to their organization and its effect on care, costs, and clinical outcomes. Healthcare professionals also need to evaluate their patient population and segment them; understand the potential challenges and possible successes associated with each segment; estimate the investment of time, people, finances, and resources for each segment; and determine an overall projected return on investment.

In managing the noncompliant patient, healthcare professionals need to plan the allocation of resources: the types of patient services, products, programs, and support to be used plus the budgets, timing, and staff who will communicate, implement, and ultimately manage the initiative. In the same way, not only do healthcare professionals need to organize resources and staff and define roles, rules, and responsibilities but they also need to direct the initiative by establishing goals and expectations, providing staff guidance and training, and instituting processes and best practices. Finally healthcare professionals need to put into place controls for monitoring, measuring, and managing clinical and compliance outcomes, economic and business outcomes, patient management and satisfaction outcomes plus they need to manage for continuous quality improvement.

To that end, SPCMs provide healthcare professionals, care providers, members of the care team, and others the means for achieving optimal outcomes and continuous quality improvement.

MEASURING PATIENT COMPLIANCE

Besides managing patients for compliance, achieving optimal outcomes, and establishing best practices and ideal resource utilization, standardized patient compliance helps decrease costs, risks, complications, and comorbidities while increasing preventative healthcare measures, patient opportunities, revenues, and savings.

Why measure? SPCMs specifically help identify and define patient compliance. Besides helping evaluate the effectiveness and efficacy of managing the noncompliant or low compliant patient, measures help healthcare professionals transform the noncompliant patient to being a low compliant patient and the low compliant patient to being a moderately compliant patient. Measures also help healthcare professionals determine if they want or need to invest resources in the noncompliant patient or the low compliant patient. As previously mentioned, SPCMs not only help determine the benefits and delivered value of assisting the patient in being compliant or being more compliant but they also help determine return on investment.

Lastly, SPCMs help healthcare professionals advance prevention two ways: first, by advancing measures for avoiding or obviating disease and, second, by advancing measures for preventing or forestalling further disease, by decreasing the possibility of additional complications and comorbidities with patients.

HOW TO MEASURE

Standardized patient compliance measures begin with understanding patient compliance and noncompliance as well as the factors that contribute to patient consideration and choice, action and inaction, using various forms of patient assessment and examination termed as *patient analytics*.

Patient analytics are determined three ways: first, by the patient's past experiences, performances, and progress and, although it is usually an accurate indicator, past is not always prologue; second, by the patient's present experiences, performances, and progress which are usually the most accurate indicators; and third, by prediction of the patient's future performance based on several different factors which will be discussed in further detail. In the final analysis, however, SPCMs do not ensure future performance. Whether patient analytics are derived from past, present, or future assessments and examinations, the most predictable thing about patients is that they are unpredictable.

Past patient analytics, *de facto*, are retrospective studies of patient compliance and noncompliance. Using measureable, quantitative data as well as observable, qualitative data, healthcare professionals assess patient experiences, performances, and progress from various sources including previous clinical and functional evaluations, patient examinations and interviews, diagnostic screenings and tests, patient charts, and other forms of history and documentation.

Although present patient analytics are also available from retrospective studies, they are usually derived with prospective studies of compliance and noncompliance by selecting patients prior to their engagement and activation rather than collecting data from past experiences, performances, and progress. For example, prospective studies might include patient research, questionnaires, and satisfaction surveys plus other sources of valuable information as well as care provider and care team member input. Both prospective and retrospective studies are useful and beneficial for collecting and understanding patient compliance and, to a certain extent, patient predilection for compliance.

Future patient analytics are predictive studies of patient compliance and noncompliance. There are various methods of forecasting patient compliance although no one method is guaranteed, certain, or even proven; rather, the combined use of methodologies offers sound possibilities for predicting patient choices and behaviors, action and inaction, compliance and noncompliance.

The most common method of predictive patient analytics arises out of psychometrics or the psychological measurement of patient behavioral characteristics and personality traits; patient attitudes, values, experience, and knowledge; plus patient skills and abilities; all to assess the developmental, motivational, behavioral, and interactive fit within a patient's perspective or background of self-care. Using scientific algorithms, psychometrics calibrates personality traits and their effect on patient predilection for compliance based on the patient's motivating needs, wants, and desires and the patient's essential behaviors. From these metrics and algorithms, there are certain traits that commonly contribute to patient healthy choices and behaviors.

Another method of predictive patient analytics is based on assessments of patient self-efficacy involving, first, patient intensity of belief in their ability to self-care and, second, patient extent of desire to reach their therapeutic goals of health, healing, and wellbeing. Self-efficacy involves patient confidence, competence, and capability exercising control over human experiences, behaviors, motivations, and impulses; influencing patient likelihood of attaining specific levels of behavioral performance. Besides patient confidence, competence, and capability, self-efficacy also involves self-esteem, responsibility, and reliability. Using patient self-efficacy assessments, certain individual beliefs and desires are recognized as positively affecting self-management of chronic disease; influencing patient predilection for compliance and for making healthy choices and taking healthy actions.

Based on assessments of the patient's background, another method of predictive patient analytics is the ACE (adverse childhood experiences) health appraisal. One of the largest investigations of childhood neglect, abuse, and family dysfunction, the ACE study correlates childhood adverse experiences with later-life health, healing, and wellbeing; it clearly establishes connections between adverse childhood experiences and disrupted neurodevelopment; social, emotional, and cognitive impairment; adoption of health-risk behaviors; inception

and development of disease, disability, and social problems including issues related to the lack of conformity and compliance; and early death. The ACE family history and health appraisal questionnaires provide valuable information identifying probable noncompliance and some of the barriers and behaviors that contribute to it.

Speaking of barriers and behaviors, another method of predictive patient analytics is a general assessment of the patient's background; not a clinical history or patient intake but a review, or actually an overview, of the patient determining probable patient communication and relationship barriers; patient identity, history, and status barriers; and patient physical, lifestyle, and circumstance barriers. For example, the general assessment determines patient issues that might possibly thwart compliance regarding their age, gender, education, and health literacy; their language, ethnicity, religion, customs, and culture; their financial, professional, or social status; their habits, adverse behaviors, and addictions; and so forth. All of these have been shown to be probable, likely barriers affecting healthy behaviors affecting patient compliance.

Another method of predictive patient analytics is an ontological assessment of the patient helping determine how the patient perceives, processes, and experiences their occurring world: not only their circumstances, situations, conditions, characteristics, incidents, and events in their life but also their disease, treatment, and care. Past patient experiences, positive and negative, good and bad, right and wrong, true or false, clearly have an impact on patient predilection for compliance, on patient engagement and activation as well as patient determination and persistence. Ontological assessments help determine patient ways of thinking and speaking, ways of living and being, and ways of behaving and acting. In addition, they help determine patient perspectives, perceptions, and preferences leading to commitment, choice, and compliance or noncompliance.

Although ontological assessments provide valuable understanding of the patient as do other forms of predictive analytics, the most predictable thing about patients, as we know, is that they are truly unpredictable. As such, it may be appropriate to utilize multiple methods of predictive patient analytics recognizing the time, costs, and resources required to collect and validate patient data. On average, a psychometric survey requires about fifteen minutes of patient time; a self-efficacy assessment requires about thirty minutes; an ACE health appraisal questionnaire requires about thirty minutes; a patient background assessment requires about forty-five minutes; and an ontological patient assessment requires about thirty minutes. In total, predictive analytics could take approximately two and a half hours plus the resources and costs of administering them, evaluating the information, and applying the data to the patient. Add to that the time, costs, and resources required for gathering additional patient information from retrospective and prospective studies. Healthcare professionals need to evaluate these matters and determine, as previously suggested, the return on their investment.

THE MEASURES

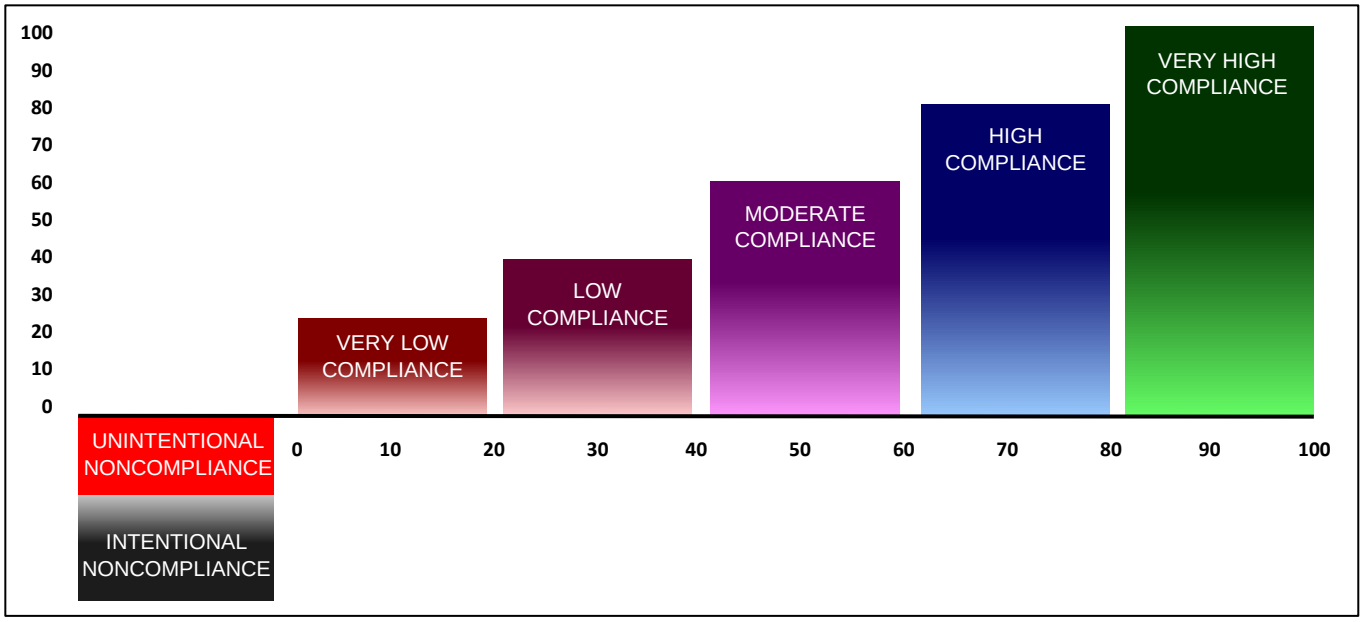
Patient compliance is not definitive; the patient is neither fully compliant nor completely noncompliant. Here's why. People become patients under the care of their care providers. As such, the patient is compliant up to some moment in time, whether that moment is a minute or several years later, when the patient decides not to follow some or all of their care provider's instructions and recommendations; when the patient decides against some aspect or all aspects of their care, treatment, care plan, care provider, care team, or self-care. In the same manner, the patient is never totally noncompliant unless or until the patient withdraws completely from their care provider's care and, as such, is no longer a noncompliant patient or even a patient.

It seems, then, that nothing about compliance or noncompliance is absolute; we know there are levels of patient involvement and participation, degrees of patient adherence and resistance. Accordingly, healthcare professionals need measures that define basic levels of involvement; that identify patient participation; they need a simple, easy standard scale to distinguish and define their patient population. Of their approximately twenty percent of compliant patients, which are low compliant, medium compliant, or high compliant patients and, of the approximately eighty percent of remaining noncompliant patients, which are intentionally noncompliant patients and which are unintentionally noncompliant patients who want to be compliant but are incapable or incompetent of being compliant?

In designing the scale for SPCMs, there are obviously distinctions or classifications of compliance and noncompliance. In descending order, patient compliance is classified as very high compliant patients, high compliant patients, moderately compliant patients, low compliant patients, and very low compliant patients. Patient noncompliance is classified as unintentionally noncompliant patients because the patient is incapable or incompetent of compliance and intentionally noncompliant patients because the patient has decided not to follow their care plan instructions and recommendations and take actions consistent with them.

1. VERY HIGH COMPLIANT PATIENTS

Very high compliant patients range from eighty to one hundred percent (80% - 100%) compliance. And although they might not be fully, one hundred percent compliant, very high compliant patients are the most compliant patients because they are highly engaged and highly active; they are consistent and persistent with their self-care. As such, very high compliant patients are committed to following their care plan instructions and recommendations and taking actions consistent with them. What's more, very high compliant patients are often very good at following instructions but might not always follow all their care plan recommendations.
As a reminder, patient instructions are defined as care provider directions and orders which the patient *must follow* while patient recommendations are defined as the advice and suggestions the patient *should follow* in anticipation of enhancing optimal outcomes and wellbeing.



2. HIGH COMPLIANT PATIENTS

High compliant patients range from sixty to eighty percent (60% - 80%) compliance. High compliant patients range from moderate compliance to high compliance because they are reasonably engaged and active and somewhat consistent and persistent in their self-care. High compliant patients are usually good at following their care plan instructions and usually follow one or more recommendations if they follow any at all.

3. MODERATELY COMPLIANT PATIENTS

Moderately compliant patients range from forty to sixty percent (40% - 60%) compliance. Moderately compliant patients range from low compliance to moderate compliance in that they are somewhat engaged and active although they inconsistent and minimally persistent in their self-care. Moderately compliant patients are somewhat good at following their care plan instructions but they usually do not follow recommendations.

4. LOW COMPLIANT PATIENTS

Low compliant patients range from twenty to forty percent (20% - 40%) compliance. Low compliant patients range from very low compliance to low compliance in that they are minimally engaged and occasionally active; they are not consistent and not persistent in their self-care. Low compliant patients are not good at following their care plan instructions and they rarely follow any recommendations.

5. VERY LOW COMPLIANT PATIENTS

Very low compliant patients range from zero to twenty percent (0% - 20%) compliance. Very low compliant patients range from being noncompliant to very low compliance in that they are minimally engaged and barely active; plus, they are neither consistent nor persistent in their self-care. Very low compliance patients scarcely follow their care plan instructions and they do not follow any recommendations.

Often low compliant and very low compliant patients are frustrated, discouraged, and resigned for a variety of reasons which we cannot go into as they are beyond the scope of this work. It is, however, important to distinguish this fact as an opportunity to transform low and very low compliance patients, with the help of appropriate programs, services, and support, and potentially increase their engagement, activation, persistence, and compliance.

6. UNINTENTIONALLY NONCOMPLIANT PATIENTS

Unintentionally noncompliant patients are usually patients who are unable or incapable of following instructions and recommendations and taking actions consistent with them. As such, unintentionally noncompliant patients are, more often than not, very engaged; they agree with and accept the care plan; they are willing and wanting to comply, and yet they are incapable or incompetent of taking action. Furthermore, unintentionally noncompliant patients also include previously compliant patients who have encountered adverse conditions, circumstances, or events in the past which constrained, thwarted, or impeded their compliance and yet they did not seek assistance or, if they did, they were unable to evade, reduce, or eliminate their barriers and ensuing behaviors.

This presents an opportunity, like the previous example, to address patient barriers and behaviors with unintentionally noncompliant patients and to address patient lack of confidence, competence, and capability in efforts to potentially improve and increase patient engagement, activation, and persistence with appropriate programs, services, and support.

7. INTENTIONALLY NONCOMPLIANT PATIENTS

Intentionally noncompliant patients, at some time during their treatment and care with their care provider, have decided not to follow care plan instructions and recommendations and take actions consistent with them. Noncompliant patients come to decisions like these to not be engaged and active in their self-care, to not pursue health and healing, to be at the effect of their condition, to suffer and be victim, for a variety of reasons which, as stated earlier, we cannot go into as those details are also beyond the scope of this work. What makes noncompliant patients challenging is that they often continue to actively seek care provider treatment but they do not actively participate in their own self-care. This can be a real challenge; healthcare professionals and care providers need to determine how to deal powerfully with these noncompliant patients.

In sum, standardized patient compliance measures, or SPCMs, distinguish five levels of patient compliance from very low and low compliance to moderate compliance to high and very high compliance and they distinguish patient noncompliance as intentional and unintentional. Should the healthcare professional, however, wish to further simplify compliance measures in meeting their individual needs, SPCMs are easily changeable to three levels of patient compliance from low compliance to moderate compliance to high compliance whereas low compliant patients range from zero to thirty percent (0% - 30%) compliance, moderately compliant patients range from thirty to seventy percent (30% - 70%) compliance, and high compliant patients range from seventy to one hundred percent (70% - 100%) compliance.

APPLYING THE MEASURES

By standardizing patient compliance measures, we distinguish patient levels of compliance and noncompliance and, as such, we form manageable segments of patients. These segments offer healthcare professionals valuable benefits; they offer the ability to focus on the patients offering the best opportunities for improving their compliance; they also offer the ability to determine the amount of time, energy, finances, and resources they would invest in those patient segments. In addition, patient segments offer healthcare professionals the ability to establish control groups for testing specific patient compliance programs, services, and support.

Distinguishing patient levels of compliance and noncompliance provide other advantages as well. For example, healthcare professionals can focus on low compliant patient segments providing patient programs, services, and support with the intention of improving their compliance and transforming those patients from low compliant patients to moderately compliant patients. Healthcare professionals can focus on other segments as well and selectively transform them. One patient segment in particular, unintentionally noncompliant patients, clearly deserves the attention of healthcare professionals, providing patient programs, services, and support, especially since those patients are very engaged and are willing and wanting to be compliant.

In contrast to helping patients improve their compliance, healthcare professionals can also choose not to focus on certain segments of patients. For example, they might choose not to apply time, energy, finances, and

resources on high compliant or very high compliant patients since the return on investment would be minimal at best. Then again, healthcare professionals might also choose not to apply resources against decidedly, intentionally noncompliant patients since that expenditure and exercise would be considered impractical, unproductive, and pointless. Finally, applying time, energy, finances, and resources on all patients regardless of their level of compliance or lack of compliance would also be impractical, unproductive, and pointless.

Finally, standardized patient compliance measures, or SPCMs, provide the healthcare professional a sensible foundation for managing the patient; for achieving effective and efficient patient compliance; for improving patient health, healing, and wellbeing; and for advancing quality clinical, economic, business, and patient satisfaction outcomes.