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# Outcomes: The Key to the Future

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All providers of health care will be under significant pressure to demonstrate efficacy of treatment. Clinical outcomes is an ever increasing tool in the measurement of efficacy and the demonstration of quality improvement. The challenge to chiropractic will be to continue to establish itself as a cost-effective form of treatment, producing desired outcomes using valid scientific and credible measurement instruments. Outcomes measurement will be a critical factor if the profession is to establish itself in the managed care market. This was echoed in a recent article in Topics, Clinical Chiropractic titled "Chiropractic Health Care: The Second Century Begins":

" ... chiropractic will be pushed by insurers, employers, workers' compensation programs, and managed care plans to demonstrate successful clinical outcomes using cost-efficient care methods."

As with any sound business, managed care organizations (MCOs) and third-party payors want to pay the least for the most. The first wave of managed care had one objective -- cost reduction. In those geographic regions that were significantly penetrated by managed care, chiropractors witnessed declining revenues, increased paperwork, shrinking patient populations, and economic and political barriers. The industry buzzword was "cost-effective" care, although little attention was given to the second part of the word --

"effective." Care was contracted for and purchased by enrollees solely on the issue of cost. Managed care has squeezed the health care dollar about as far as it can, and we are now seeing the beginning of the end of this first wave strategy. There is a slow but definite shift towards balancing cost with quality. The current trend is to push for quality of care with greater patient satisfaction, while keeping an eye on cost.

The second wave of managed care will drive providers to meet higher standards of credentialing, patient satisfaction and accountability for outcomes. The chiropractic profession has for years defined its success and its existence on the premise that "We get people better faster, cheaper with greater patient satisfaction." In the new era of accountability, anecdotal evidence alone will not satisfy the increasing demands of payors. Measured outcomes will "talk" and all others will "walk."

If the chiropractic profession seizes the opportunity to work towards producing measurable outcomes, it will be poised to make significant advancements into the managed care market. However, this fact is no secret to other providers. The orthopedic, osteopathic and physical therapy communities are rapidly working towards producing outcome data for musculoskeletal conditions, particularly back pain. Can chiropractic afford to be left behind in this race? Payors are going to demand outcome data to track quality of care, satisfaction of their employees/enrollees, and the most cost-effective therapeutic intervention.

Consider this quote from a recently published physical therapy journal:

> "The key to their survival, experts say, is for rehabilitation facilities to change their way of doing things. They must begin to develop ways to measure outcomes for patients, then use that information to create a competitive strategy, just as corporations have been doing for years."

The starting gun has fired and the race is on. If chiropractic is going to compete in the managed care market to its fullest potential, we must look towards building a national database that will initiate a profession-wide outcomes measurement based on sound data and scientific methodology. At the very least, each of us must track outcomes and position individual practices in the forefront of the local market.

## What Is an Outcome and How Is it Measured?

An outcome can simply be defined as a measured result of a therapeutic intervention or lack thereof. What is measured will be directly related to the condition or illness that is being managed. In the instance of back or neck pain, the key areas of focus should be on the pain level and functional status of the patient, as well as the patient’s satisfaction with care. An outcome measurement system in a doctor’s office should have

standardized data collection, valid data capture tools and a centralized database that has the ability to perform data analysis with report capabilities.

The literature is replete with instruments capable of measuring outcomes, just look at how studies were designed and the results measured. In the area of low back function, the Revised Oswestry Low Back Pain Index [1,2,3] is most often used, but there are several different types of functional patient self-assessment forms for back pain: choose one and be consistent with it. For assessing outcomes for cervical spine syndromes, the Neck Disability Index (NDI) [4] is most commonly used. Pain is generally measured by the Visual Analog Scale (VAS) [5], which again is a patient self-assessment questionnaire that rates perceived pain on a scale of 1 to 10, with 10 being unbearable. Although these are patient self- assessment questionnaires, their reliability has been established in the literature.

Performing a functional capacity evaluation (FCE), physical capacity evaluation (PCE), or a quantitative FCE (QFCE)6 would entail a comprehensive examination and, in some instances, expensive equipment. Therefore, making this level of assessment is impractical in a busy clinical setting. Actual measurement of functional capacity by examination is more appropriate in a research setting.

When data is collected, it should be done in a consistent manner. The data should be collected when the patient enters the office, and at the completion of care. To gain the most information, outcomes should be captured every two to four weeks. This will allow the doctor to more accurately monitor the patient's progress and aid in clinical decision-making. Although the most common forms of outcomes measurement are patient self-assessment questionnaires, the doctor should also perform regular periodic examinations and compare the objective data with the reported status of the patient.

Patient satisfaction questionnaires that evaluate the treatment are an essential part of the overall outcome, and MCOs are increasingly sensitive to patient satisfaction. Additionally, for the purpose of continual quality improvement (CQI) within the office, questionnaires can also be used to measure the patient's perception of the office, staff and the doctor.

Once the data is collected from the patient, store the information in a database that can be looked at in a variety of ways. It then can be used for analytical purposes. Raw data may not give the needed answers; you must use the data and get the information out of it. For example, keep track of the number of patients seen each day, the dollar amount of services provided, and the revenues for that day. This raw data is of little use until it is manipulated, compared and analyzed. For example, if the total charges were divided by the

number of visits, a calculation of the average daily charge can be made. Once the data is plotted on a graph, it can be analyzed for trends or patterns. This information will give an understanding of performance and direction of the practice.

Outcomes can be categorized by diagnosis alone or sub-categorized by variables such as co-morbidities, complicating factors, social or work history, severity of pain and a host of other discriminating factors. Software programs are designed to create a relational database in order that the data can be "sliced and diced" to look at information in a variety of ways. There are several software programs currently available to measure and analyze collected data. Once the patient information and outcome data is entered, the program will generate reports on patient progress. The doctor can look at his effectiveness in the management of different conditions and track quality of care over time. Some software programs can produce the forms necessary to collect the data as well as the mailing labels used to send out patient satisfaction questionnaires.

## How to Use This Information

Clinical Implications:

- Aids in the clinical decision making process. By monitoring the progression of the patient, treatment plans can be more accurately devised. Enables the doctor to establish that the patient has reached the maximum therapeutic benefit.
- Documents necessity of care.
- By determining the success rate of treatment for various conditions, the doctor can better inform the patient and gain consent to care.
- Gives doctor continual feedback regarding the quality of care and functions as a quality assessment (QA) tool.

Practice Development Implications:

- Allows doctors to market themselves more effectively to MCOs and purchasers of health care.
- Establishes credibility with the medical community and can facilitate referrals.
- Builds patient confidence and compliance.
- Improve and facilitate reimbursement by documenting necessity of care.
- May be used for re-credentialing by some MCOs.

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