

OREGON BOARD OF CHIROPRACTIC EXAMINERS GUIDELINES*

Meridel I Gatterman, MA, DC, MEd.

Process Consultant

ABSTRACT: A three-tiered process to revise the current Oregon Practice and Utilization Guidelines is described. The focus of this process is patient-centered and evidence-based. The new guidelines will make recommendations to guide patients and practitioners in making appropriate health care decisions. Where strong evidence exists, standards of quality that address minimum competency will also be included. While guidelines are designed to be flexible and non-binding educational tools, standards of quality provide administrative tools on which to base peer review criteria. The strength of this process is that it is profession-initiated with broad representation and it differentiates guidelines from standards of quality. **INDEX TERMS:** MeSH: CHIROPRACTIC, STANDARDS; EVIDENCE-BASED; GUIDELINES; PATIENT-CENTERED CARE; OREGON; QUALITY ASSURANCE; HEALTH CARE.

* Paper presented to the Federation of Chiropractic Licensing Boards meeting in Seattle, Washington, 6 May 2000.

INTRODUCTION

The mission of the Oregon Board of Chiropractic Examiners (OBCE) is to protect and benefit the public health and safety, and promote quality in the chiropractic profession. It is in the spirit of this mission that the OBCE proposes the undertaking of revision of the Practice Guidelines for the State of Oregon. The proposed guidelines will not only directly benefit the patients of chiropractors in the State of Oregon, but the process by which these guidelines are developed provides a model for guideline development in general based both on best available evidence and clinical expertise. A large percentage of the guidelines content is material common to chiropractic practice throughout the world.

The patient-centered focus of the guidelines emphasizes the current thinking prevalent in integrative medicine in the new millennium. Evidence-based approaches built upon respect for

the clinical and patient-centered method of care give us both a challenge and an opportunity for raising the standard of chiropractic practice,¹ not just in Oregon, but also provide both content and a process for guideline development for the chiropractic profession worldwide.

Specific Aims

The specific aims of this project are to revise the current Oregon Chiropractic Practice and Utilization Guidelines, incorporating the most recent methodology for clinical practice guideline development. The focus of the new guidelines will be patient-centered and evidence-based with specific recommendations to guide patients and practitioners in making appropriate health decisions in addition to identifying standards of practice where strong evidence exists.

Specific Objectives

1. To develop patient-centered guidelines grounded on the best available evidence and structured consensus methods that provide a knowledge base for decision-making about appropriate health care for specific clinical circumstances.
2. To involve a broad range of representative chiropractors in the development of seed and nominal consensus statements validated further by chiropractors and external reviewers through a Delphi process.
3. To disseminate these patient-centered, evidence-based practice guidelines for use as educational tools.
4. To develop and disseminate a quick reference guide with summary points of prevention, diagnosis, and treatment/management as a ready reference for clinicians for use on a day-to-day basis (index to primary document).
5. To develop and disseminate a patient's guide that features those aspects of the guidelines that provide a knowledge base for the patient to be an active partner in care.
6. To establish a program for implementation of the guidelines in the State of Oregon.
7. To identify tools and methods to measure guideline compliance and quality assurance.
8. To identify self assessment instruments for use as educational tools to raise standards of quality.

Long-Term Goals

The long-term goals of practice guidelines are to improve the quality, effectiveness and appropriateness of chiropractic care for the promotion of patient health. Patient-centered, evidence-based guidelines bring science into the real world of clinical practice, including the interplay of social values. Guidelines translate evidence into knowledge that aids patient and practitioner decisions relative to the health of the patient. The overall objective of this project is to facilitate patient-centered quality decision-making based on the best available evidence useful to chiropractic practice throughout the world.

Need for Guidelines

Critics of alternative medicine, at worst, complain that current guidelines are not available for alternative therapy and are unlikely to be developed anytime soon,¹ or at best, limited, based largely on consensus of opinion.² Much of orthodox medical treatment, as well as chiropractic procedures, has not been subjected to empirical testing,^{3,4} and if the gold standard of orthodox care is the quality of evidence on which it is based, then much of medical practice qualifies as alternative medicine as well.⁴

Given that the ACHPR Guidelines for Acute Low Back Problems in Adults⁵ recommend manipulation as only one of two well documented methods of intervention safe and effective for this condition, and given that up to 95% of manipulation is performed by chiropractors,⁶ one must question the dismissal of chiropractic treatment of acute low back pain as lacking evidence.² A more recent meta-analysis also provides evidence that manipulation is more effective for chronic low back pain than usual care by the general practitioner, bed rest, analgesics, and massage.⁷ This is contrary to the emphasis on exercise that appears in the popular press,⁸ without benefit of the advantages of manipulation. Clinical trials supporting the effectiveness of manipulation also provide evidence for the manual treatment of headache, and cervical spine and neck pain.⁹⁻¹³ In addition to the strong evidence supporting the effectiveness of manipulation for non-specific spine-related conditions, there is also some evidence that suggests chiropractic care is more cost effective in the treatment of work-related low back problems because of shorter periods of disability and lower compensation costs.¹⁴⁻⁵ While this

provides evidence for treatment protocols for broadly specified back conditions, the broader range of clinical circumstances comprising chiropractic care requires guidelines if the chiropractic profession is to provide quality assurance. Western States Chiropractic College (WSCC) is currently developing condition-based protocols delineating clinical pathways for treatment of specific conditions.¹⁶ The need for evidence-based guidelines and standards for the variety of clinical circumstances that face chiropractic practitioners, not only condition-based protocols, provides the focus for this project.

Accountability is based on evidence that provides support for professional judgment, which assists patients and practitioners in making patient-centered health care decisions. Evidence-based guidelines can advance the art of chiropractic practice and strengthen the knowledge base of chiropractic science. Effective guidelines provide a foundation for instruments to evaluate practitioner and health system performance. Guidelines provide recommendations to help peer review evaluate quality, scope, and appropriateness of care. Accessibility of criteria used by peer review can be generated by guidelines and standards of quality on which care is reviewed.

CURRENT STATUS

Chiropractic Guidelines In North America

Interest in chiropractic practice and utilization guidelines gained momentum in the latter part of the 1980s. Prior to 1990 several states, including Ohio, Oregon and Washington, had begun guideline development. With the publication of Vear's book, *Chiropractic Standards of Practice and Quality of Care* in 1992,¹⁷ some issues surrounding guidelines for chiropractic practice became formalized as standards. Beginning with the Mercy Conference guidelines, published in 1993,¹⁸ practice guidelines for the chiropractic profession came into the national arena. Following directly on this publication, the Wyndham guidelines¹⁹ were published by a group of straight chiropractors dissatisfied with the Mercy proceedings. The Canadian Chiropractic Association also produced a set of guidelines²⁰ not dissimilar in content to the Mercy document, and similarly with a lack of systematic literature review by the consensus panel members. Neither the Mercy nor the Canadian Chiropractic Association guidelines have been updated. The process for both these sets of guidelines was based on consensus, relied heavily on the use of

authoritative theory and opinion, and lacked a systematic evaluation of supporting evidence. To be truly evidence-based, the best evidence available at the time the guidelines are being written must be available to all panel members writing the seed document, not just reviewed by a single "expert"²¹ to reduce the chance of bias.

Both nominal and Delphi consensus methods have been utilized in the development of guidelines.²² The nominal consensus process involves panel members who meet face-to-face, with agreement reached through a facilitated process. This involves a trained facilitator who ideally summarizes the issues and facilitates consensus without inserting a private agenda. The Delphi process seeks consensus through mailed responses and typically involves multiple rounds before consensus is achieved. A combination of both nominal and Delphi methods has also been employed by chiropractors to develop broader levels of representation in the consensus process.^{23,24}

Procedure-based low back treatment guidelines, significantly impacting the chiropractic profession, have also been developed on a national level. These include rating and consensus documents produced by the RAND Corporation^{25,26} and the Agency for Health Care Policy and Research.⁵ Both groups evaluated supporting evidence for the use of manipulation in the treatment of acute low back pain, concluding that it is both safe and effective. These studies have been embraced enthusiastically by some chiropractors, which has gained more mainstream recognition for this limited role for chiropractic practitioners.

Guidelines continue to be put forth nationally, for example by the Council on Chiropractic Practice (CCP)²⁷ and at the state level (Florida).²⁸ These are still largely based on consensus opinion. They lack a systematic review of the best available supporting evidence by panel members, and specific references, thus they fall short of the Institute of Medicine criteria for guideline development.²⁹ The CCP guidelines are designed specifically for vertebral subluxation practice, which is not inclusive or representative of the practice of chiropractic in the State of Oregon and many other jurisdictions.

The salient features in guideline development that have not been successfully addressed to date are:

- broad representation of guideline development
- systematic review of supporting evidence by expert panel members on which to base consensus outcome measures to determine the impact of published guidelines

Lack of broad involvement has led to resistance to adoption and compliance with published guidelines.^{30,31} Consensus based on expert clinical opinion without systematic review of existing evidence has potentially introduced bias, overlooked facts based on existing data and failed to provide evidence on which to base valid standards. Without tools and strategies to measure outcomes, the success of practice shortcomings must be addressed in future guidelines development.

Practice and Utilization Guidelines in Oregon

The current Oregon Chiropractic Practice and Utilization Guidelines³² were published in 1992 and subsequently adopted as administrative rules that designate them as the medically accepted standards for neuromuscular conditions and treatment. Developed through consensus without systematic review of the evidence, these guidelines were recognized in the North West as one of the most advanced documents at the time. Given the ten years that have elapsed since these guidelines were initiated, serious questions regarding their adequacy have been raised. In response to these questions, the OBCE, implementing the strategic planning process, appointed a steering committee comprised of doctors of chiropractic, representative of various constituencies in the State of Oregon. Initial members included Charles Simpson (chairman), John Cafferty, Thomas Dobson, Janet Fabricius, and Jack Peterson. Currently the steering committee is comprised of the following doctors of chiropractic: Chairman Charles Simpson (member of the OBCE), David Day (a subluxation-based practitioner), Thomas Dobson (initiator of the current guideline process), Janet Fabricius (medical director of a managed care organization), and Barry Kop (a broad-scope practitioner. Meridel Gatterman, with 11 years³² experience in guideline development at state,³² national¹⁸ and international levels,²⁰ serves as process consultant. She has been instrumental in the development of multi-level consensus, including both facilitated nominal and Delphi panels that considered chiropractic nomenclature,²³ and a patient-centered paradigm for both chiropractic³³ and complementary medicine.²⁴

The Multi-Panel Consensus Process

The multi-panel process currently being used moves from 5-7 member seed panels through a 9-15 member nominal panel, to 100-member Delphi panels. Seed panels include content experts who work on specific chapters. All seed panel members review the evidence for a single chapter and develop statements through a facilitated nominal process. The seed statements for all chapters are reviewed and refined by a single nominal panel that meets monthly. This larger nominal panel provides a second level of facilitated consensus that validates the seed statements for all chapters. Some members of the Delphi panels will review all chapters of the guidelines, while others will review one or more chapters.

The Need for Guidelines Revision

First and foremost, the need for practice guidelines is based on the perception of suboptimal care. Thus, the first step in exploring the role of practice guidelines is to determine if there is a problem for which guidelines are a solution. The ability of practice guidelines to improve the quality of care depends on the extent of suboptimal care at the outset. The steering committee utilized the following four approaches to assess the current status of the Oregon Chiropractic Practice and Utilization Guidelines, Volume I:

- survey of stakeholders
- focus groups and key person interviews
- expert reviews
- application of the Institute of Medicine (IOM) of the National Academy of Sciences’ provisional assessment instrument”

The survey responses, focus groups, key person interviews, and expert reviews all identified deficiencies in the 1991 guidelines and addressed areas of suboptimal care. Application of the IOM assessment instrument indicated that these guidelines fall short in most areas.

Areas that will be addressed first include: The Patient/Doctor Relationship, Imaging, Patient Safety, History Charting and Reporting, and Physical Examination. Areas that have been

identified as problematic include boundary issues involving patient/doctor relationship and charting.

Assessment of the Oregon Guidelines

The assessment of the 1991 Oregon Practice and Utilization Guidelines using the IOM “provisional assessment instrument” was conducted by two members of the steering committee, CAS and TPD. When held up to the scrutiny of this instrument, it was concluded that only in one area “clarity” do these guidelines approach satisfactory. Even this was disputed by claims managers from the Oregon Worker Compensation Division with such descriptors of the guidelines as “too vague and broad”, “too global”, “does not differentiate chiropractic adjusting from the variety of other treatment modalities,” and has a “huge hole left uncovered in the aspect of non-neuromusculoskeletal practice”. The steering committee concluded that the 1991 guidelines (derived primarily through consensus of expert opinion with little documentation of evidence) are in need of revision.

Subsequent to the Steering Committee Report, a second instrument became available in 1999. In an accompanying article, the variations in the quality of clinical practice guidelines in the peer-reviewed medical literature were reviewed, posing the question, “Are guidelines following guidelines?”³⁰ In attempting to answer this question, the authors developed a 25-item instrument to measure adherence to methodological standards for practice guideline development. The study concludes that ‘Guidelines published in the peer-reviewed medical literature during the past decade do not adhere to well established methodological standards.’ Application of previous instruments for evaluating guideline methodology when applied to current chiropractic guidelines substantiates this. The recent study noted that “While all areas of guideline development need improvement, greatest improvement is needed in the identification, evaluation, and synthesis of scientific evidence.” This applies equally to guidelines for the chiropractic profession. To strengthen the chiropractic guideline development process, this evaluation instrument has been applied to both current guidelines and the proposed guideline development process. It is acknowledged that the following proposed guidelines cannot satisfy all of the items 100%, because by design the study is not condition-specific. Inclusion of current

scientific evidence, however, coupled with broad professional consensus, can make the guidelines more accountable and credible, as well as patient-centered and evidence-based.

Definitions

The steering committee adopted the following definition of practice guidelines:

Practice guidelines are systematically developed statements to assist practitioners and patients in making appropriate health decisions.

This definition was adapted from the **Institute of Medicine Guide to Clinical Practice Guidelines**.³⁰ The guidelines steering committee, with consensus of the 15-member nominal consensus panel, has agreed to a document whose foundation is patient-centered, evidence-based care.

Patient-Centered, Evidence-Based Care

Patient-centered care puts the patient first, before cost-cutting by managed care, doctors egos, or financial gain. Patient-centered practice evaluates the individual patient's clinical state, predicament and preferences, and applies the most efficacious interventions to maximize the quality and quantity of life for that person.³⁴

Chiropractic practice has traditionally been patient-centered, with anthropological and sociological studies providing evidence and seed material for a patient-centered paradigm.³⁵⁻³⁷ Following evaluation of these studies, combined with the philosophical first principles of chiropractic, a patient-centered paradigm emerged.³³ Subsequent to identification, using qualitative methodology, a nominal panel comprised of chiropractic educators, researchers and practitioners validated a patient-centered paradigm through a nominal consensus process.³³ Based on this model, the following characteristics of a patient-centered paradigm were refined and agreed upon through the nominal consensus process:

- Recognition and facilitation of the innate organization and adaptation of the person

- Recognition that care should ideally focus on the total person
- Acknowledgment and respect for the patient’s values, beliefs, expectations and health care needs
- Promotion of the patient’s health through a preference for drugless, minimally invasive, and conservative care
- A proactive approach that encourages patients to take responsibility for their health
- The patient and patient-centered practitioner act as partners in decision-making, emphasizing clinically effective and economically appropriate care, based on various levels of evidence.

Evidence-Based Care

Evidence-based practice has been defined as “the conscientious, explicit And judicious use of the current best evidence in making decisions about the care of individual patients.” Evidence-based practice means “integrating individual clinical expertise with the best available external evidence from systematic research.” Sackett³⁴ emphasizes that “Good doctors use both individual clinical expertise, and the best available external evidence, and neither alone is enough. Without clinical expertise, practice risks becoming tyrannized by evidence, because even excellent external evidence may be inapplicable or inappropriate for an individual patient. Without current best evidence, practice risks rapidly becoming out of date, also to the detriment of the patient. Good doctors use both individual clinical expertise and the best available external evidence, and neither alone is enough.”

Evidence-based practice is not “cookbook practice.” It is also recognized that the best available evidence is not just limited to external evidence from randomized controlled trials, but also involves the individual clinicians expertise along with the consensus of leading chiropractic clinicians and researchers based on varying degrees of patient-centered clinical research. A thorough, unbiased literature review for evidence-based guidelines is crucial to successful guideline development.

Chiropractic Scope of Practice

Another factor basic to chiropractic practice guidelines development is scope of practice. Any guidelines developed for use in the State of Oregon are subject to the Oregon Statutes and scope of chiropractic practice. Giving a national perspective to guidelines development, the Association of Chiropractic Colleges (ACC) chiropractic paradigm will also serve as a foundation for the Oregon practice guidelines.³⁸ The ACC presidents defined the scope of practice of chiropractic within the chiropractic paradigm including:

- **Diagnosis.** Doctors of Chiropractic, as primary contact health care providers, employ the education, knowledge, diagnostic skill and clinical judgment necessary to determine appropriate chiropractic care and case management. Doctors of Chiropractic have access to diagnostic procedures and/or referral resources as required.
- **Case Management.** Doctors of Chiropractic establish a doctor/patient relationship and utilize adjustive and other clinical procedures unique to the chiropractic discipline. Doctors of Chiropractic may also use other conservative patient care procedures, and when appropriate, collaborate with and/or refer to other health care providers.
- **Health Promotion.** Doctors of Chiropractic advise and educate patients and communities in structural and spinal hygiene and healthful living practices. Since human function is neurologically integrated, Doctors of Chiropractic evaluate and facilitate biomechanical and neurobiological function and integrity through the use of appropriate conservative, diagnostic, and chiropractic procedures. It is the position of the ACC that direct access to chiropractic care is integral to everyone's health care regime.³⁸ Consistent with the current practice of chiropractic in the State of Oregon, the United States Department of Labor Occupational Outlook describes chiropractic as follows:

Chiropractors, also known as doctors of chiropractic or chiropractic physicians, diagnose and treat patients whose health problems are associated with the body's muscular, nervous and skeletal systems, especially the spine. Chiropractors believe interference with these systems impairs normal function and lowers resistance to disease. They also hold that spinal and vertebral dysfunctions alter many important body functions by affecting the nervous system, and that skeletal imbalance through joint or articular dysfunction especially the spine can cause pain.

The chiropractic approach to health care is holistic stressing the patients overall well being. It recognizes that many factors affect health, including exercise, diet, rest, environment and heredity. Chiropractic uses natural, drugless non-surgical health treatments and relies on the body’s inherent recuperative abilities. They also recommend lifestyle changes in eating, exercise, and sleeping habits, to their patients. When appropriate chiropractors consult with and refer patients to other health practitioners.³⁹

KEY ISSUES IN GUIDELINE DEVELOPMENT

Issues in guideline development include broad stakeholder representation, conflicts in terminology, and the proposed use of guidelines. Conflicts in terminology must be resolved. The proposed use of guidelines must be appropriately addressed and fully disclosed. A broad range of Oregon licentiates must be involved in the development process, not just a few like-minded “experts”.

Stakeholder Representation

Broad representation of stakeholders affected by practice guidelines is essential to both development and implementation. Participation by representatives of key affected groups increases the likelihood that: the best scientific evidence will be located and critically evaluated;

- practical problems with using the guidelines will be identified and addressed; and
- affected groups will see the guidelines as credible, acceptable, and will cooperate in implementing them.

Without representation of those affected by the guidelines, compliance with recommendations is impeded. Effective and meaningful guidelines require complete, explicit disclosure of evidence, process and participants.

Resolving Conflicts in Terminology

Four key terms related to clinical practice guidelines must be clear and consistent with customary professional and legislative usage, and socially and practically acceptable to important interests. The following definitions are adapted from the Institute of Medicine and used throughout this process:³⁰

1. **Practice Guidelines** are systematically developed statements to assist practitioners and patients in making appropriate health decisions.
2. **Peer Review Criteria** are systematically developed statements that can be used to assess the appropriateness of specific health care decisions, services and outcomes.
3. **Standards of Quality** are authoritative statements of:
 - a) minimum levels of acceptable performance or results (minimal competency),
 - b) excellent levels of performance or results, or
 - c) the range of acceptable performance or results.
4. **Performance Measures (provisional)** are methods or instruments to estimate or monitor the extent to which the actions of a health care practitioner conform to practice guidelines, peer review criteria, or standards of quality.

These four terms are not synonymous and should not be used interchangeably. The amount and quality of evidence are key factors differentiating guidelines from peer review criteria.

Use of Guidelines and Peer Review Criteria

Clinical practice guidelines are intended to assist practitioners and patients in making health care decisions. Use of guidelines must not be arbitrary or punitive. Both guidelines and peer review criteria, when improperly developed and/or applied, can undermine support for practice guidelines. Peer review criteria are linked to clinical practice guidelines, but rather than statements designed to assist practitioners and patients, peer review criteria are used to evaluate practitioner behavior and practice outcomes. The following principles are recommended for the constructive use of peer review criteria:

- Peer review criteria are identifiable elements of care used to evaluate

quality and appropriateness of care and must be based on a high level of evidence.

- Peer review criteria should be public with respect to their content and their development process.
- When criteria are used to assess quality of care, deny payment for specific services, or take similar steps, an appeals process must be provided that is free from unreasonable complexity, delay, or other barriers.
- Peer review should be carried out in the spirit of inquiry, with avoidance of accusation.
- Review organizations should provide constructive information and feedback to physicians and other clinicians with the aim of improving practice rather than punishing missteps.
- Review organizations should make their review activities as manageable and unobtrusive as possible.

To minimize negative effects from poor translation of otherwise good guidelines into review criteria, unduly stringent application of these criteria must be avoided.

Guideline Implementation and Evaluation

Implementation involves taking a set of practice guidelines, once developed, into the actual world of health care delivery. Implementation transforms policy objectives into desired outcomes. It is a complex process that involves formatting, disseminating, applying, revising and updating guidelines.

Clarity in language and format facilitates use of clinical practice guidelines as educational tools and peer review criteria. Guidelines must also be understandable to the average patient as well as the practitioner. The credibility of the process is dependent on representative participants, the scientific grounding of the guidelines, and their intended use. Acceptance and use of the guidelines outside the profession require multidisciplinary input in the development process. Guidelines should be flexible, comprehensive and specific enough to be useful in the varied settings and circumstances of everyday chiropractic practice. The guidelines should specify what information should be recorded about the clinical problem, the patient's circumstances and preferences, and the case management, to permit later evaluation of the appropriateness of care (judged against criteria generated from the guidelines).

Dissemination involves getting guidelines to the intended users, practitioners, patients and others. Initiated by the sponsor, other organizations can be enlisted to help spread the information, to create credibility, awareness and general understanding. Conferences, journals, and educational seminars can be used as communication vehicles. Personal presentations by those involved in developing guidelines provide educational opportunities to describe the process of guideline development in addition to presentation of the content of the guidelines.

Application and Administration of Guidelines

Administration of practice guidelines refers to practical application of guidelines in making specific decisions about appropriate health care for patients. The primary users of chiropractic practice guidelines are chiropractic practitioners. The greater the role of patients in making decisions, the more the patient will be a primary individual user of guidelines. This is fundamental to patient-centered care. The primary users of peer review criteria, standards of quality, and performance measures are professional reviewers in their internal review and monitoring programs. The primary organizational users of practice guidelines are health Care providers that should seek quality assurance. Early contact with peer review and quality assurance communities will help to facilitate the movement of guidelines into administrative application. The importance of disparate national and local organizations must be considered in the broader scheme of guideline implementation.

Evaluation of Guidelines

The purpose of evaluation is to determine what outcomes (both desired and undesired, anticipated and unanticipated) have occurred as a result of implementation of practice guidelines. Evaluation of guidelines involves both practice evaluation and policy and program evaluation. Practice evaluation includes clinical trials that explicitly evaluate the impact of clinical interventions. Evaluation of peer review criteria uses practice evaluation tools to compare how actual practice matches practices set forth in the review criteria standards. These kinds of assessments are looking for links between practice and better health outcomes.

Policy and program evaluation assesses whether practice guidelines improve clinical practice and health outcomes. This kind of evaluation is critical to determine the impact of guidelines and to build better policies and programs based on that evaluation. Such information is essential to understanding why a set of guidelines has or has not achieved the desired outcomes and to determine whether to continue, revise or abandon the guidelines. Implementation and evaluation issues should be built into the process of guidelines development rather than dealt with sequentially.

CONCLUSION

The primary role of clinical practice guidelines is as an educational tool to change attitudes and behaviors for better patient outcomes. The strength of these proposed guidelines is that they are profession-initiated with broad representation in the development process. Broad grassroots support facilitates the education process and promotes implementation. Patient-centered, evidence-based guidelines put the interest of the patient first, based on the best available evidence. Individual differences mandate that what may be good for a typical patient may not be good for the individual patient, requiring flexibility in interpretation. Consensus-based standards of quality, derived from high level evidence, provides a basis for peer review criteria, to assist the profession in decision-making based on predetermined elements of care against which aspects of chiropractic care can be compared. Perfect decisions about optimal care are not possible, since the process of analyzing evidence and opinion is imperfect. Nevertheless the potential benefits from patient-centered, evidence-based guidelines is protection of patients, reduction in practice variation, quality assurance, and improved risk management.

The significant strength of the proposed guideline development process is an organized search for best available evidence, rigorous evaluation and dissemination of the evidence followed by broad based consensus statements based on the evidence. In addition to patient-centered, evidence-based recommendations for chiropractic practice, the guidelines will also provide standards of quality supported by evidence and performance measures on which to base the success of the guidelines.

The evidence-based approach is an improvement over global subjective judgment, because the developers make recommendations based primarily on the scientific evidence rather than clinical

experience alone. An outcome-based approach should provide further gains in accuracy, accountability, predictability and defensibility. Patient-centered, preference-based guidelines represent a further gain in accuracy, because the optimal management recommendations often depend on a patient's preferences.

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