The authors, editor, and publisher have made every effort to provide accurate information. However, they are not responsible for errors, omissions, or for any outcomes related to the use of the contents of this book and take no responsibility for the use of the products and procedures described. Treatments and side effects described in this book may not be applicable to all people; likewise, some people may require a dose or experience a side effect that is not described herein. Drugs and medical devices are discussed that may have limited availability controlled by the Food and Drug Administration (FDA) for use only in a research study or clinical trial. Research, clinical practice, and government regulations often change the accepted standard in this field. When consideration is being given to use of any drug in the clinical setting, the health care provider or reader is responsible for determining FDA status of the drug, reading the package insert, and reviewing prescribing information for the most up-to-date recommendations on dose, precautions, and contraindications, and determining the appropriate usage for the product. This is especially important in the case of drugs that are new or seldom used.
I wish to dedicate this text to my wife Francie, and sons, Aaron and Wesley for their continued understanding and patience. Without their love and support, this text and its revisions would not have been possible.
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I would like to express my appreciation to those who have contributed to editing the *Fourth Edition*. This includes many of the department chairs at various chiropractic colleges and the suggestions of practitioners and students. As usual, a task this size is not possible without the dedication and hard work from the editorial and production staff at the publisher, Jones and Bartlett. Special thanks to Anne Spencer, Maro Asadoorian, David Cella, Diana Coe, and everyone else who assisted in this project.
Introduction

There are new and exciting examples of the impact that chiropractors have on a healthcare system that recognizes our portal-of-entry role. Two examples are worth mentioning from the managed-care environment. One illustrates the effectiveness of patient management when chiropractors are used as “gatekeepers” in a managed-care system. This four-year study demonstrated dramatic decreases in the use of hospitalization, surgery, and medication use when chiropractors were utilized by patients as the initial contact of care compared to medical physician-managed patients. The second, also a four-year study, demonstrated similar results for the treatment of low back and neck pain.

Guidelines and recommendations for evaluation and management of spinal pain have proliferated over the past two years. Manipulation has weathered these highly stringent processes and is recommended as a viable approach for spine pain and spine-related pain conditions. A discussion of these guidelines/recommendations is included in the Fourth Edition. Some examples include:

- The North American Spine Society Evidence-Informed Management for Chronic Low Back Pain
- The European Guidelines for the Management of Acute Non-Specific Low Back Pain in Primary Care
- Clinical Practice Guidelines for the Diagnosis and Treatment of Low Back Pain by the American College of Physicians and the American Pain Society
- The Council on Chiropractic Guidelines and Practice Parameters Best-Practices Documents (on-line at www.ccgpp.org)
- Radiographic guidelines for the spine and extremities

Also added to this new edition are:
- Over 500 new references
- Updated algorithms
- Updated ICD Codes
- Over 50 new medications (medications appendix)

The focus of this text has always been an evidence-based approach even before it became the adopted standard by healthcare decision makers. Over recent years many efforts have been put forth in an attempt to find out “what really works” in patient evaluation and management. What has been primarily gained is a greater appreciation for what is not known and the complexity of finding out the answers to what constitutes, produces, and sustains better health care. Conclusions reached by systematic reviews and guideline development groups are often that the quality of the literature is poor and that there is not enough quality literature to allow a recommendation for or against a given approach for either diagnosis or management. It has become apparent that the requirement for evidence supported by a randomized controlled trial (RCT) is not a practical solution to many pressing healthcare questions. In other words, RCTs are expensive and require years to conduct in an attempt to answer a very specific question with a specific group of patients. And although they reflect a very controlled study of a sample group they may not represent the individual patient sitting in front of the doctor who must make a clinical decision.

What will serve as a guide for practice decisions while waiting for RCT evidence or in lieu of an RCT and what will drive decisions in the absence of high quality literature? I contend that it is the individual practitioner and his/her colleagues that hold the key. Certainly, from a quality perspective, consistent approaches to evaluation and management are a starting point. This is a goal of this text. Having consistency for a provider and within a provider network minimally assures that a standard is
Chronic disease is now the focus of concern for the
World Health Organization and other healthcare
consortiums.

- The understanding that many diseases thought to be
unrelated have a common underlying inflammatory
process and a likely relationship with diet and lifestyle.

- The alarming rate of increase for obesity in the U.S.

- An increase in diabetes and hypertension resulting in
pre-diabetes and pre-hypertension threshold levels
being developed and used as initiating points for man-
agement.

Chiropractors are well-positioned to act not only as
safety-nets for serious conditions in need of referral, but
also as a starting point for conservative management for
many of the preceding trends. Much has to do with the core
concept of wellness which is to provide a path for healthy liv-
ing and by doing so, provide the stimulation and encour-
agement for a pattern of living that is also preventive.

In a recent article in the *New England Journal of
Medicine*, Schroeder presented the shocking truth of
what actually contributes the most to early death in a
graphic representation. Although 30 percent of prema-
ture death is attributable to genetic factors, 40 percent is
due to behavioral causes. The two prominent factors are
obesity/inactivity and smoking. Although chiropractors
may not feel that their role is to save lives, a change in at-
titude and commitment should be made to do so albeit in
slow motion. Behavioral change takes time and is the
most complex and difficult patient management issue to
initiate and monitor, yet, we are positioned in a unique
interaction frequency, especially with early care, to remind
and support patients to change. Let us take on this new
challenge regardless of any reimbursement issues.

I am proud to have survived another edition and hope
to continue on to more. In the meantime, consult the
numerous Web-based opportunities to learn and keep
abreast of change. Following the introduction are some
general Websites related to chiropractic, for general
searches, and for evidence-based/guideline resources.
These are essential for filling the gap between editions of
any text.

Thomas Souza, DC, DACBSP

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Chiropractic Websites
American Chiropractic Association
http://www.amerchiro.org/

International Chiropractic Association
http://www.chiropractic.org/

Evidence-Based Sites
Agency for Healthcare Research and Quality
http://www.ahrq.gov/

Cochrane Collaboration
http://www.cochrane.org/

Center for Evidence-Based Medicine
http://www.cebm.net/

Evidence-Based Medicine
http://ebm.bmjournals.com/

Practice Guideline Sites
American Chiropractic College of Radiology Guidelines
http://www.accr.org/ACCRfullspineradiology.pdf

Canadian Medical Association Clinical Practice Guidelines (CPG) Infobase
http://mdm.ca/cpgsnew/cpgs/index.asp

Canadian Task Force Preventive Health Care, Canadian Guide to Clinical Preventive Health Care: Full text of the Task Force guidelines on screening and other preventive health measures
http://www.ctfphc.org

CCGPP—Council on Chiropractic Guidelines and Practice Parameters
http://www.ccgpp.org/

National Guidelines Clearinghouse: Guidelines from the U.S. Agency for Health Care Policy & Research, the U.S Preventive Services Task Force, and other agencies
http://www.guidelines.gov

National electronic Library for Health (NeLH) Guidelines Finder: A database contains over 600 UK national guidelines with links to Internet downloadable versions
http://www.library.nhs.uk/GuidelinesFinder/

New Zealand Guidelines Group
http://www.nzgg.org.nz

Prodigy (Practical Support for Clinical Governance): Clinical guidance products from UK NHS
http://www.prodigy.nhs.uk/clinicalguidance

Rehabilitation Guidelines: Evidence-based rehabilitation guidelines from University of Ottawa
http://cks.library.nhs.uk/home

Scottish Intercollegiate Guidelines Network (SIGN): How the literature is rated.
http://www.sign.ac.uk/

Databases Search Sources
Pubmed
www.ncbi.nlm.gov/Pub Med/

CINAHL (Cumulative Index to Nursing and Allied Health Literature)
http://www.ebscohost.com/cinahl/

MANTIS (Chiropractic literature not on PubMed)
http://www.healthindex.com/

Cochrane Library
http://www3.interscience.wiley.com/cgi-bin/mrwhome/106568753/HOME?CRETRY=1& SRETRY=0

Clinical Evidence
www.clinicaledgevidence.com

PEDro (Physiotherapy Evidence Database)
http://www.pedro.fhs.usyd.edu.au/

HSTAT (Health Services/Technology Assessment Text)