CHRONIC PAIN MANAGEMENT PRODUCTS & SERVICES: A MARKET ANALYSIS

(September 2010 – 7th Edition)

TABLE OF CONTENTS

	<u>Page</u>
Introduction: Study Scope, Objectives, Sources Used	1-7
* How information was obtained, list of sources used, sample cover letter and questionnaire used for mail survey, forecasting methodology	
Executive Overview of Major Findings (\$300)	8-33

* Summary/highlights of all report chapters: definition of chronic pain, prevalence among Americans, characteristics of the field, status of pain management in 2010 vs. 2003-key trends of past 7 yrs., most important issues & mkt. developments, patient demographics, market structure & types of providers (no. of clinics, programs, anesthesiologists, devices, drugs), outlook for the field by pain clinic directors, insurance, reimbursement, painkiller drug abuse and pill mills, typical caseloads, cost of treatment, existing/emerging new treatment methods, \$ market size & growth estimates (1985-2014F), 2009 mkt. performance, 2010 outlook, 2014 4-year projections, Pain Management Devices Market

<u>Tables</u>: 2009 Patient Caseloads by type practitioner

1998-2009 \$ Value of Market, by Type Service & Product

Nature & Structure of The Field (\$200)

34-59

- * National cost of lost workdays, drugs, due to pain
- * Definition of chronic pain vs. acute pain, types of pain conditions, cost of pain in the workplace, number of: accredited vs. non-accredited pain clinics, solo practitioners, years when pain clinics first appeared
- * Accreditation & Industry Standards
- * CARF (Commission on Accreditation of Rehab. Facilities)—its mission, criteria for accreditation, what accreditation means, categories of pain programs
- * IASP (Intl. Assn. for the Study of Pain) trade group, definitions for: pain facilities, multidisciplinary centers, modality-oriented clinics, etc., desirable characteristics of pain clinics/operating guidelines
- * American Academy of Pain Management: types of members, accreditation & certification requirements, types of programs
- **2010 directory** of 101 CARF-accredited multidisciplinary pain clinics/programs in the U.S. (hospital, university, freestanding), by state (name/address/phone), by inpatient/outpatient category.

- * Findings of American Pain Foundation study "Pain in Maryland 2002" (attitudes toward pain, frequency of pain, etc.)
- * Findings of 2000 **Merck study** "Pain in America" study of pain sufferers: use of drugs/other therapies, referrals by MDs, effectiveness of medical profession, actions taken, time to get pain under control, etc.
- * Findings of **Prevention Magazine/CBS News** poll, Jan. 2003 study (type/severity of pain, relief, use of drugs, alternative therapies used, etc.)
- * Analysis of number of Americans with pain-related conditions—scope of the affected population (why some estimates are inaccurate): back pain, arthritis, RSIs, migraines, **TMJ**, etc., opinions of accuracy of figures from pain associations/societies
- * Discussion of repetitive stress injuries/carpal tunnel syndrome, BLS data
- * Discussion of **back pain** patients, no. of Americans with back pain (ACA), back surgeries, no. of patient-visits for chiropractors, percentage who are realistic candidates for pain clinics
- * **Headaches** discussion of types (vascular, migraine, cluster) number of sufferers, new & traditional treatment methods, new drug developments
- * Arthritis number of sufferers, (by sex, race, age), by types of arthritis
- * TMJ/TMD (temporomandibular joint disorders) discussion of condition, causes, misdiagnoses, treatment options, patient demographics, trigeminal neuralgia
- * Cancer patients no. of new cases in 2009, for 16 types of cancer (by male/female)

Pain Management Treatment Methods (\$100)

83-90

- * List of most common methods used to treat chronic pain, discussion/analysis of each: multidisciplinary programs, drugs/opioids, TENS, trigger point injections, nerve blocks, psychotherapy, brain stimulation, acupuncture, work hardening, physical therapy, biofeedback, stimulators, pumps, radiofrequency, etc.
- * Typical staff of a multidisciplinary pain clinic team, goals of a treatment program, number of anesthesiologists certified in pain therapy, their treatment methods
- * <u>Inpatient vs. outpatient programs</u>--typical costs, length, mix--percent of a pain clinic's total patient population
- * How pain programs work typical phases/patient activities, example

The Role of Anesthesiologists in Pain Management (\$350)

91-112

- * Why anesthesiologists' income has been squeezed, why they are seeking other subspecialties such as pain therapy, number practicing, avg. income
- * Share of total anesthesiologists active in pain therapy 2010 vs. 2003: analysis, typical caseloads of pain patients, high/low volume practices
- * Number of anesthesiologists certified in pain management to date.
- * Training and A.B.A. certification requirements

- * Growth of epidural injections in the Medicare population: analysis of CMS data, Major findings & trends: 1997-2006
- * Status report of anesthesiologists' role currently: interview with staff of American Soceity of Interventional Pain Physicians: typical caseloads, effect of recession Tables
 - Characteristics of Medicare beneficiaries & epidural procedures: 1997, 2002, 2006
 - No. of interventional procedures, by type, in Medicare population: 1998-2007

Results of Marketdata's 2003 Mail Survey: Anesthesiologist Group Tabulations (comparisons to multidisciplinary programs when relevant)

- List: the organization where they received certification in pain mgmt., schools attended.
- Physical location of program (hospital, freestanding clinic, MD office, university %)
- Percent of the anesthesiologist's time spent in: hospital/ER vs. their pain program.
- No. of total patient-visits annual avg. in 2001, 2002, 1990-96 historical growth.
- 2002 percent increase in patient visits, <u>NEW patients</u>.
- 2001, 2002 no. of procedures performed annually
- 2003 expected increase in caseloads/no. of patient visits
- Most critical problems faced, most frequently denied modalities 2003

Table: Percentage of pain patients treated, by condition - 1997, 1999, 2001, 2003

- Avg. total and per-visit cost of treatment 1997, 1999, 2001, 2003 discussion.
- Avg. length of time patients in treatment: 1997, 1999, 2001, 2003

Table: Methods of payment by patients (Medicare, Medicaid, HMO, private insurance)

- Single most denied modality - list of.

<u>Table</u>: Treatment methods used by anesthesiologists, ranked by % using: 2003, 2001, 1999, 1997.

- Documentation of outcome data 2003, 2001, 1999
- Methods of patient follow-up, how information is used 1999

Table: Who do anesthesiologists compete with most often? – 2003, 2001, 1999, 1997

- Attitude of anesthesiologists about giving up pain practice if their O.R. hrs. were to rise

Status Report of Pain Clinics & Programs & Major Findings of Past Marketdata Mail Surveys (\$300)

113-146

<u>Findings of 2010 Interviews with Leading Pain Program Directors</u>: Status of pain management today, effects of recession, competition, prices, major issues, forecasts (Mensana Clinic, Rehab. Institute of GA, Rossomoff Pain Center, Amer. Assn. of Pain Medicine, Norman Marcus)

Summary of Results by Major Group: Combined Total, Multidisciplinary Programs, Anesthesiologists: 2003 Survey

<u>Table</u>: total group vs. multidisciplinary and anesthesiologists separately: 2002 & 2001: no. of patient visits, 2002 % chg., 2003 expected growth rate, new patient visits, 2002 % chg., no. of procedures performed, 2002 % chg.

- Patient caseloads: 2001, 2002 avg., 2002 increase, 1990-96 growth, explanation of actual patients vs. patient-visits data, adjustments made
- Major findings and comparisons among groups.
- Accreditation rate for all programs, multidisciplinary programs.
- Most critical problems facing pain programs in 2003, 2001, 1999, 1997, 1994, 1992 Table: Pain conditions patients are treated for: 2003, 2001, 1999, ranked
- Average program **treatment costs**: 2003, 2001, 1998, 1997, 1994, 1991, accredited vs. non-accredited programs costs possible reasons for declining costs.
- Average program length-time patient spends in treatment: 2003, 2001, 1998, 1996
- <u>Table</u>: **Treatment methods** used (% of programs using: 1992 2003): multidisciplinary, psychotherapy, physical therapy, TENS, nerve blocks, saline injections, medications, acupuncture, implantable pumps, at-home pca, others)
- <u>Table</u>: Percent of payments by: Medicare, Medicaid, cash, managed care entities, Private insurance, workmen's compensation: 2003, 2001, 1999, 1997.
- Documentation & tracking of **outcome data** % of pain programs that can document it, % with a tracking system, measures are tracked, how programs use data, patient follow-up
- Who pain programs compete with most often, ranked order: 1994 2003
 - The most commonly denied modalities by insurers: 2003, 2001, 1999.
- Opioids regulation: % of program directors concerned about regulation.

Historical Data: One-Time Questions (1997, 1999)

- Most important needs of pain programs, tools desired, number of operating staff: professional specialty of physicians on staff, Intentions to join future pain clinic national network, most popular advertising methods used, age mix of patients, type pain facility chosen most often, alliances with other healthcare professionals, year pain clinic was established, capability & expertise of program staff- % using: Md., psychiatrists, physical therapists, social workers

Market Size, Growth Rates, Forecasts & Outlook (\$150)

147-160

- * Discussion/analysis of total no. of pain programs, clinics, solo practitioners in 2010 vs. 2003, annual patient caseload: estimates for CARF accredited, JCAHO accredited, American Academy of Pain Mgmt. accredited, non-accredited programs, anesthesiologists, other MDs, chiropractors, discussion of inpatients/outpatients mix, overlap between types of programs
- * Market developments and growth indicators: 2003-2010: discussion
- * 2009 Market Performance: recession, factors affecting growth
- * 2010 Outlook
- * 2014 4-year Forecast: Outlook for major issues, economy, pill mills, ageing of the population, Obesity, role of anesthesiologists/other MDs, pain drugs, devices: discussion/analysis
- * 2003-2004 outlook & 2007 forecasts, rationale for estimates, caseload volume vs. declining cost of treatment, relative weightings, factors affecting demand.

Tables:

- Estimated patient caseloads, by type program: 2009: accredited/non-accred. programs, anesthesiologists, other physicians, chiropractors (avg. no. of patients)
- Estimated patient caseloads, by type program, by avg. cost & inpatient/outpatients: 2009
- National Market Potential: \$ value, 1998, 2000, 2022, 2009, by type service & product (incl. pain drugs, pain management devices)
- Estimated \$ value of pain PROGRAMS ONLY: 1985-2009

The Pain Drugs Market (\$350)

161-190

Status report of the U.S. pain management pharmaceuticals market

- * Summary of origins of chronic pain, concerns over opioids painkiller addiction and abuse, discussion of Oxycontin & hydrocodone history and usage, patents, producers, FDA actions
- * Actions to regulate opioids by FDA, REMS (risk evaluation and mitigation strategy), list of Brand name and generic products required to have REMS
- * Discussion of new drugs in development, COX-2 inhibitors, Tanezumab, Neurotonin, Alternative use of Cymbalta, Lyrica
- * Transdermal patches: discussion of, size of mkt.
- * Descriptions of available pain drugs: prescription/non-pres. drugs used for pain relief anti-seizure drugs, Cox-2 inhibitors, NSAIDS, analgesics, opioids, etc.
- * Discussion of controversy about the regulation of opioids, discuss. f analgesics, tri-Cyclic antidepressants, other antidepressants
- * Market Size & Growth: U.S. \$ value of Oxycontin sales: 2009 to 2014
- * Findings of <u>Drug Trend Report</u> (by Express Scripts): outlook for Oxycontin vs. generics, top Drugs and mkt. share, development of abuse-resistant opioids.
- * Forecasts of size of pain drugs market (U.S., global) by other research firms Tables:
 - U.S. sales of Oxycontin: 2005-2009
 - U.S. prescriptions written for hydrocodone: 2005-2009

Pill Mills – A Major Challenge

- * Nature of the problem: why they exist, lack of regulation in many states, huge profit potential, the black market
- * The DEA's position on enforcement, actions taken against physicians
- * Pill Mill "hot spots" discussion of pill mills operating in Broward, Hillsborough, Dade Counties, California examples of scams discovered, profits, no. of clients, prices, Where customers come from, etc.
- * PDMPs The Solution? (prescription drug monitoring programs): Discussion of how These state systems track painkiller abuse, which states have a PDMP/which don't

191-202

- * Definition of neuromdulation market and technique
- * Primary customers and competitors for pain management devices such as **TENS machines**, spinal cord stimulators, implantable pumps
- * Competitor Profiles: **Medtronic, Boston Scientific, St. Jude Medical** description of product lines, sales data when available
- * Market Size & Growth: 2005-2009 sales of devices by Top 3 Mfrs
- * Estimated total market size for pain management devices: 2005-2014 forecast
- List of medical device trade associations
- Directory of major pain management device producers (name, address, phones)

Profiles of Some Leading Pain Programs (\$200)

203-224

(In-depth descriptions of how programs work, outpatient vs. inpatient programs, costs, estimated caseloads, services offered, type specialists, 2009 performance)

- * The Cleveland Clinic Foundation
- * The Mayo Clinic
- * Mensana Clinic (defunct)
- * Norman Marcus Pain Institute
- * Scripps Memorial Hospital
- * University of Washington Medical Center
- * Pain Control & Rehabilitation Inst. of Georgia
- * The Rosomoff Comprehensive Pain & Rehabilitation Center
- * Johns Hopkins Blaustein Pain Treatment Center

Status Report of the Chiropractic Services Industry (\$150)

225-237

- * Discussion of the profession, competition with pain programs for same clients, federal low back pain guidelines, industry receipts (1985-2001)
- * Patient demographics--survey results, patients by: sex, age, race, occupation
- * Controversial new research/study by the Annals of Internal Medicine, other recent studies
- * ACA Statistical Study results: avg. number patient-visits per doctor per week, no. of new patients, referrals, gross & net income, historical new patients & patient-visits (1984-1996), type conditions patients treated for (1995, '97, '89), age of patients, sources of chiropractor revenue by type insurance
- * **Future trends** the major issues likely to affect the profession, current state legislative actions, diagnostic testing, outcome assessment, etc.

Reference Directory of Chronic Pain and Related Associations, Societies, Groups, Institutes

238-246

* Name/address/phone, director, description, no. of members, mission, activities, journals/newsletters/directories