

Michigan Department of Community Health

Survey of Physicians

Survey Findings 2011

INTRODUCTION

As of January 2011, the total number of physicians licensed in Michigan was 44,118. Of these, 32,180 are doctors of allopathic medicine (MD) and 6,857 are doctors of osteopathic medicine (DO). The remaining 5,081 consist of 3,858 MDs and 1,115 DOs with an educational limited license while they are enrolled in a graduate medical training program; 72 clinical academic MDs; 35 special volunteer MDs; and 1 special volunteer DO.

In 2011, in conjunction with the license renewal process, the Michigan Department of Community Health (MDCH) conducted the seventh annual survey of fully licensed physicians to collect data on their employment characteristics, practice specialty, time spent providing patient care, practice capacity and acceptance of Medicaid, plans to continue practice, origin and education background, professional activities, use of computer technology, and gender, age, race, and ethnicity. The survey also includes questions about pain management and practice arrangements, which were introduced in the 2009 survey.

Physicians are required to renew their license every three years, thus dividing the universe of physicians into three cohorts of roughly equal size. Physicians who were eligible for renewal received a copy of the survey instrument with their license renewal form. The survey was also available to physicians completing their license renewal online. A total of 12,721 physicians renewed their license and 1,596 survey responses were received online or by mail (compared to 1,421 in 2010), for a response rate of 13 percent and a margin of error of ± 2.3 percent with 95 percent confidence.¹ About 80 percent of the physicians who responded to the survey are MDs and 20 percent are DOs, which is similar to the distribution of MDs and DOs within the licensed physician population.

The returned surveys (paper and Web surveys) include fully and partially completed surveys (i.e., those with information missing for one or more variables); for this reason, sample size and margin of error for individual questions will differ.

The MDCH contracted with Public Sector Consultants Inc. (PSC) for development, implementation, and analysis of the survey of physicians. The survey questions and response frequencies are provided in the Appendix. Findings from the survey are presented below. Many of the findings from the 2011 survey of physicians are consistent with findings from previous surveys; differences in the data that fall outside the margin of error are noted. However, differences should be interpreted with caution; they may be due to changes over time or simple variation in the group of physicians renewing their licenses in 2011 compared to those renewing in 2009 or 2010.

¹ For example, assume 60 percent of respondents answered “yes” to a survey question with a margin of error of ± 2.3 percent. Then the margin of error and confidence level mean that if this question were asked 100 times among all physicians who renewed their license in 2011, in 95 occurrences the percentage of respondents who answer “yes” would be between 57.7 percent and 62.3 percent.

EMPLOYMENT CHARACTERISTICS

- As shown in Exhibit 1, about 69 percent of fully licensed physicians responding to this survey are *active* in Michigan—that is, they are providing patient care *in Michigan* (65 percent) or working as a physician in Michigan with no time in patient care (4 percent).² The percentage of physicians reporting that they are providing patient care in Michigan is higher than reported by physicians who renewed their license in the past two years.
- About 31 percent of physicians fully licensed in Michigan are *not active*; they are not working as a physician, or they are working as a physician, but not in Michigan.

EXHIBIT 1

Employment Characteristics of Fully Licensed Physicians, 2011

| Status | Percentage |
|--|------------|
| Active in Michigan | 69% |
| Providing patient care services in Michigan | 65 |
| Working as a physician in Michigan but no time in patient care | 4 |
| Not Active in Michigan | 31 |
| Working as a physician, but not in Michigan | 24 |
| Not working as a physician | 7 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

Physicians are asked to indicate their main practice arrangement and whether they are a salaried employee (see Exhibit 2). The data for 2010 show a lower percentage of physicians in “a practice I own or co-own” and a higher percentage in “a university or teaching institution” compared to the data for 2009. In 2011, the opposite is true: the percentage of physicians in “a practice I own or co-own” is slightly higher (within the margin of error), while the percentage in “a university or teaching institution” is lower compared to survey findings for 2010.

- A large majority (64 percent) of active physicians practice in a group practice.
 - 34 percent work in a practice with six or more full-time equivalent (FTE) physicians
 - 30 percent work in a practice with two to five FTE physicians.
- More than one-third (36 percent) of active physicians work in a solo practice, including 5 percent who work in a solo practice that shares expenses with other physician practices.
- Just over one-third of active physicians (36 percent) indicate that they are not salaried employees.
- Almost one-quarter (23 percent) are salaried employees with a practice that they own or co-own, compared to 18 percent of physicians responding to the survey in 2010. Another 16 percent are salaried employees with a practice or professional corporation owned by someone else.
- About one in six (17 percent) are salaried employees with a hospital, compared to 20 percent of physicians responding to the survey in 2010. Eleven percent are salaried employees with a university or teaching institution, compared to 15 percent in 2010.

² This definition of the term “active” is used throughout the report.

EXHIBIT 2

Employment Characteristics of Active Physicians, 2011

| Employment type | Percentage |
|---|------------|
| Not a salaried employee | 36% |
| Salaried employee with: | |
| a. a practice I own or co-own | 23 |
| b. a professional corporation or practice that I do not own | 16 |
| c. a managed care organization | 1 |
| d. a hospital | 17 |
| e. a university or teaching institution | 11 |
| f. another type of organization | 6 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Physicians were asked to "mark all that apply," so percentages do not equal 100 percent.

PRACTICE SPECIALTY

About one-third of active physicians surveyed in 2011 (36 percent) are primary care doctors (that is, their primary specialty is family practice, general medicine, internal medicine, or general pediatrics). The remainder are specialists in an area other than primary care (see Exhibit 3).

EXHIBIT 3

Distribution of Active Physicians, by Specialty, 2011

| | Specialty | | | Specialty | |
|-------------------------------|-----------|-----------|------------------------------------|-----------|-----------|
| | Primary | Secondary | | Primary | Secondary |
| Addiction medicine | 1% | 3% | Ophthalmology | 3% | <1% |
| Allergy & Immunology | 1 | <1 | Orthopedic Surgery | 2 | 1 |
| Anesthesiology | 4 | 1 | Otolaryngology | 1 | <1 |
| Cardiovascular Disease | 2 | 2 | Osteopathic Manipulative Medicine | <1 | 3 |
| Critical Care Medicine | 1 | 2 | Pain medicine | 1 | 3 |
| Dermatology | 2 | <1 | Pathology (General) | 2 | 1 |
| Emergency Medicine | 5 | 3 | Pediatrics (General) | 6 | 4 |
| Endocrinology | 1 | 1 | Pediatrics subspecialty | 2 | 2 |
| Family Practice | 16 | 5 | Medical Pediatrics | <1 | <1 |
| Gastroenterology | 2 | 2 | Physical Medicine & Rehabilitation | 1 | 1 |
| General Medicine | 2 | 5 | Plastic Surgery | 1 | 1 |
| Geriatrics | 1 | 7 | Preventive Medicine | <1 | 3 |
| Hospice & palliative medicine | <1 | 2 | Psychiatry (Adult) | 6 | 5 |
| Hospitalist | 1 | 2 | Psychiatry (Child & Adolescent) | 2 | 5 |
| Infectious Disease | 1 | 1 | Pulmonary Disease | 1 | 1 |
| Internal Medicine (General) | 12 | 13 | Radiology (Diagnostic) | 3 | 1 |
| Nephrology | 1 | 1 | Radiology (Therapeutic) | 1 | 1 |

| | Specialty | | | Specialty | |
|--------------------------------------|-----------|-----------|-------------------|-----------|-----------|
| | Primary | Secondary | | Primary | Secondary |
| Neurology | 2% | 1% | Rheumatology | 1% | <1% |
| Neurological Surgery | 1 | <1 | Sports Medicine | <1 | 2 |
| Obstetrics & Gynecology (General) | 4 | 2 | Surgery (General) | 3 | 2 |
| Obstetrics & Gynecology subspecialty | 1 | 2 | Thoracic Surgery | 1 | 1 |
| Gynecology (Only) | 1 | 1 | Urology | 1 | <1 |
| Occupational Medicine | 1 | 2 | Vascular Surgery | 1 | 2 |
| Oncology/Hematology | 2 | 1 | Other | 3 | 7 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Percentages do not equal 100 percent due to rounding.

Psychiatry for adults is the specialty for which active physicians say that they or their patients have the greatest difficulty scheduling a timely appointment for a referral (see Exhibit 4). Slightly fewer physicians (6 percent) note difficulty scheduling appointments for referrals to psychiatry for children and adolescents. About 5 percent of physicians also indicate difficulty arranging appointments for referrals to dermatology, neurology, addiction medicine, rheumatology, and endocrinology.

EXHIBIT 4

Greatest Difficulty Scheduling Referrals, by Specialty Area, 2011

| Specialty | Percentage of active physicians indicating difficulty scheduling a referral to the identified specialty |
|---------------------------------|---|
| Psychiatry (Adult) | 9% |
| Psychiatry (Child & Adolescent) | 6 |
| Dermatology | 5 |
| Neurology | 5 |
| Addiction medicine | 5 |
| Rheumatology | 5 |
| Endocrinology | 5 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan.

TIME SPENT PROVIDING PATIENT CARE

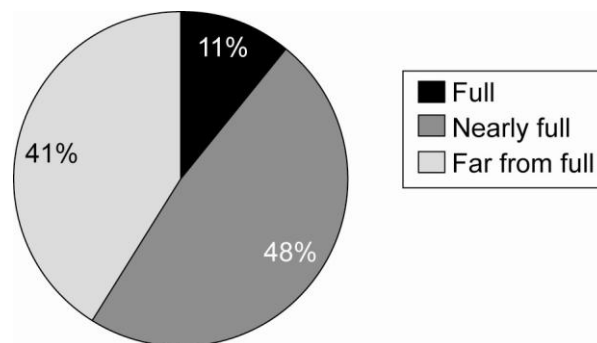
- Fully licensed, active physicians who provide patient care spend an average of 39 hours per week providing such care.
- One-fourth (25 percent) of these physicians spend 30 hours or fewer per week providing patient care.
- Another one in four (25 percent) spend more than 40 hours per week providing patient care.

PRACTICE CAPACITY AND ACCEPTANCE OF MEDICAID

- The practice capacity of physicians who are providing patient care has not changed significantly since 2006.
 - About 11 percent of physicians who are providing patient care report that their practice is full, and they cannot accept any new patients (see Exhibit 5).
 - About half (48 percent) of active physicians report that their practice is nearly full and they can accept only a few new patients.
 - About 41 percent report that their practice is far from full and they can accept many new patients.
- About eighty-four percent of fully licensed physicians who are providing patient care report that they currently provide care to Medicaid patients (see Exhibit 6); 72 percent provide care to *new* Medicaid patients. These percentages have not changed from those reported by physicians surveyed in the same license renewal cohort in 2008.
- Nine out of ten (90 percent) physicians who are providing patient care report that they provide care to Medicare patients; 85 percent provide care to *new* Medicare patients.

EXHIBIT 5

Practice Capacity of Active Physicians, 2011

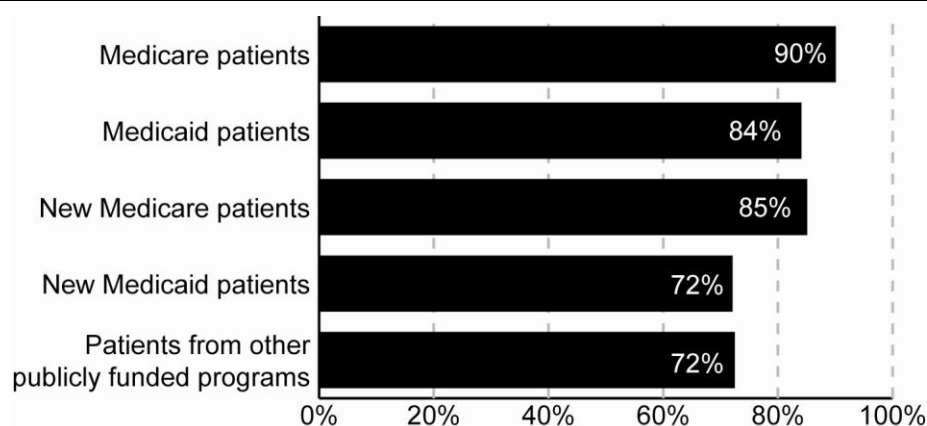


SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan who are providing patient care services.

EXHIBIT 6

Percentage of Active Physicians Providing Care to Patients from Publicly Funded Programs, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

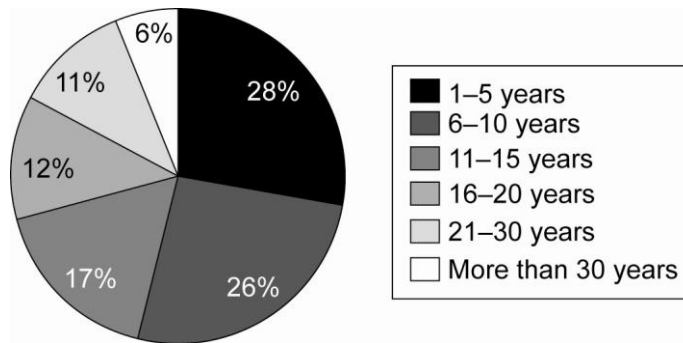
NOTE: Data presented are for *active* physicians fully licensed in Michigan who are providing patient care services.

PLANS TO CONTINUE PRACTICE

- Just over half (54 percent) of active physicians surveyed in 2011 plan to practice medicine for only one to ten more years (see Exhibit 7). This percentage is significantly higher (by about 8 percentage points) than reported by physicians in the same license renewal cohort when they were surveyed in 2008.
- About 17 percent of active physicians plan to continue practicing medicine for more than 20 years.
- As shown in Exhibit 8, in the next three years, 10 percent of active physicians plan to increase patient care hours, 10 percent plan to retire, 9 percent plan to significantly reduce patient care hours, and 3 percent plan to move their practice out of state. These data have remained fairly constant over the past few years.
- For physicians who are planning to retire or reduce their patient care hours, the factors cited most often are age, increasing administrative/regulatory burden, inadequate reimbursement for services, lifestyle changes, and medical malpractice insurance cost (see Exhibit 9).
 - By far, age is the predominant reason given by active physicians for retiring or reducing patient care hours. Among each cohort of physicians renewing their license over the past three years, 69 to 78 percent of active physicians cite age as a factor in their plans.

EXHIBIT 7

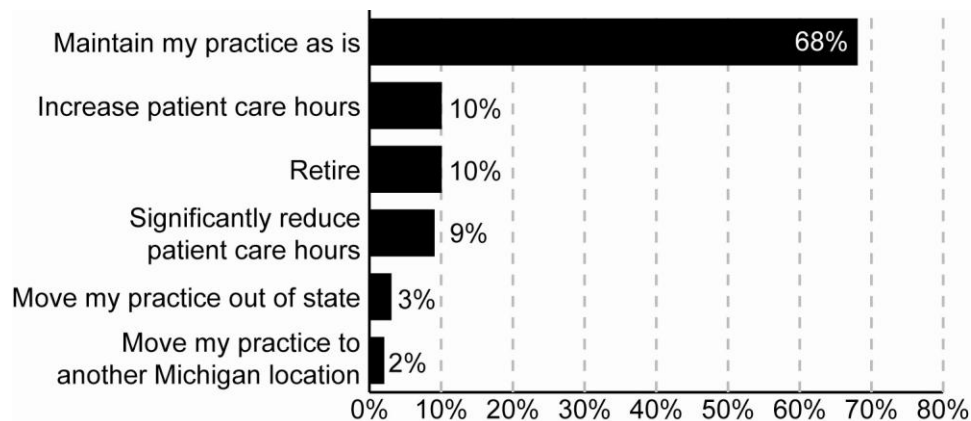
Plans to Continue Practicing, Active Physicians, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.
NOTE: Data presented are for *active* physicians fully licensed in Michigan.

EXHIBIT 8

Practice Plans of Active Physicians for the Next Three Years, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.
NOTE: Data presented are for *active* physicians fully licensed in Michigan. Physicians were asked to “mark all that apply,” so percentages equal more than 100 percent.

EXHIBIT 9
Distribution of Factors Contributing to Decisions to
Retire or Reduce Patient Care Hours, 2011

| Factors | Percentage |
|---|-------------------|
| Age | 69% |
| Increasing administrative/regulatory burden | 38 |
| Inadequate reimbursement for services | 30 |
| Lifestyle changes | 20 |
| Medical malpractice insurance cost | 20 |
| General lack of job satisfaction | 19 |
| Personal or family health concerns | 15 |
| Move to management/consulting/teaching/research | 8 |
| Employer/employee conflict | 4 |
| Childbearing/childrearing | 3 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan who indicated they plan to retire or reduce their patient care hours in the next three years. Physicians were asked to “mark all that apply,” so percentages equal more than 100 percent.

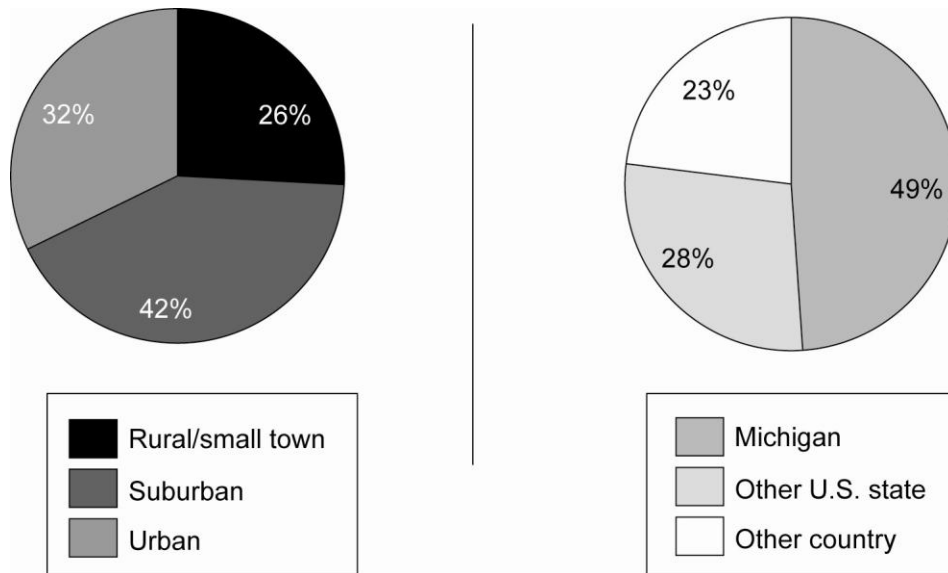
ORIGIN AND EDUCATION BACKGROUND

The 2011 survey findings on the origin and education background of fully licensed, active physicians are similar to previous survey findings.

- In the 2011 survey, about 49 percent of active Michigan-licensed physicians grew up in Michigan, and 28 percent grew up in another U.S. state (see Exhibit 10).
- About 42 percent of active physicians grew up in a suburban area, 32 percent in an urban area, and 26 percent in a rural area/small town.
- Survey results show that about 39 percent of active physicians attended a medical school in Michigan, 35 percent attended a medical school in another state, and about 27 percent attended a medical school outside of the United States (see Exhibit 11).
- About 63 percent of active physicians surveyed in 2011 completed a residency in Michigan; about 15 percent did a fellowship in Michigan.
- About 5 percent of fully licensed physicians are currently enrolled in a graduate medical training program in Michigan.

EXHIBIT 10

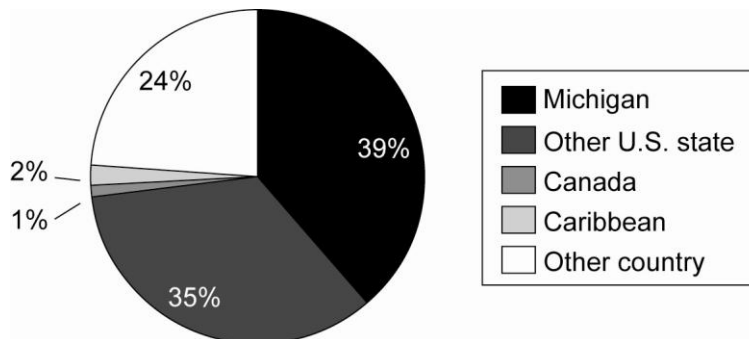
Origin of Active Physicians, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.
 NOTE: Data presented are for *active* physicians fully licensed in Michigan.

EXHIBIT 11

Location of Medical School Attended by Active Physicians, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.
 NOTE: Data presented are for *active* physicians fully licensed in Michigan. Percentages do not equal 100 percent due to rounding.

PROFESSIONAL ACTIVITIES

- The majority of physicians are involved in teaching. Sixty-seven percent are involved in teaching either in a classroom (15 percent) or clinical setting (52 percent) (see Exhibit 12).
- About 21 percent of physicians reported they are involved in administration in a private practice. The percentage of active physicians involved in administration in private practice is slightly lower than reported by the same license renewal cohort in 2008 (23 percent), but within the margin of error.

EXHIBIT 12

Distribution of Professional Activities, 2011

| Professional activity | Percentage |
|--|------------|
| Teaching (clinical setting) | 52% |
| Administration in a private practice | 21 |
| Research | 15 |
| Teaching (classroom) | 15 |
| Administration in medical school, hospital, health plan, or nursing home | 13 |
| Emergency room care | 11 |
| Patient care in a nursing home | 8 |
| Medical examiner | 2 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan. Physicians were asked to “mark all that apply,” so percentages equal more than 100 percent.

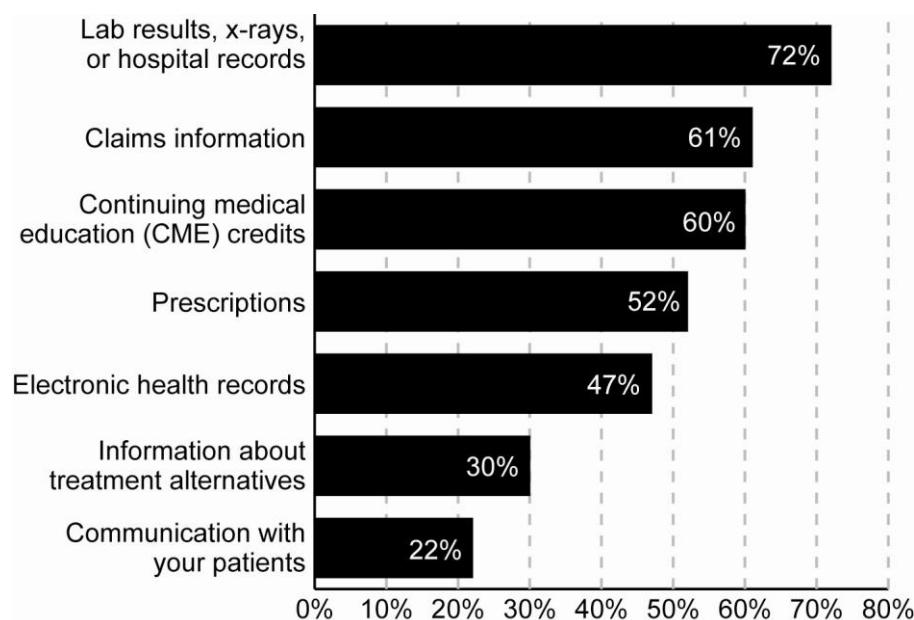
USE OF COMPUTER TECHNOLOGY

The use of computer technology for receiving or transmitting information has continued to expand since the first survey of physicians. As shown in Exhibit 13, the most common use of computer technology by fully licensed, active physicians is still to receive or transmit lab results, x-rays, or hospital records (72 percent), followed by claims information (61 percent) and continuing medical education credits (60 percent). These are the three most commonly reported uses of computer technology since the survey began in 2005.

The largest increase in the use of technology has been in the area of electronic prescribing. The percentage of physicians who indicate that they or someone in their office electronically prescribes medication has doubled since 2006 from 25 to 52 percent. The e-prescribing incentive authorized by the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) has probably contributed to this increase. Eligible professionals were able to receive incentive payments from Medicare for successful electronic prescribing beginning January 1, 2009.

EXHIBIT 13

Use of Computer Technology to Receive or Transmit Information, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

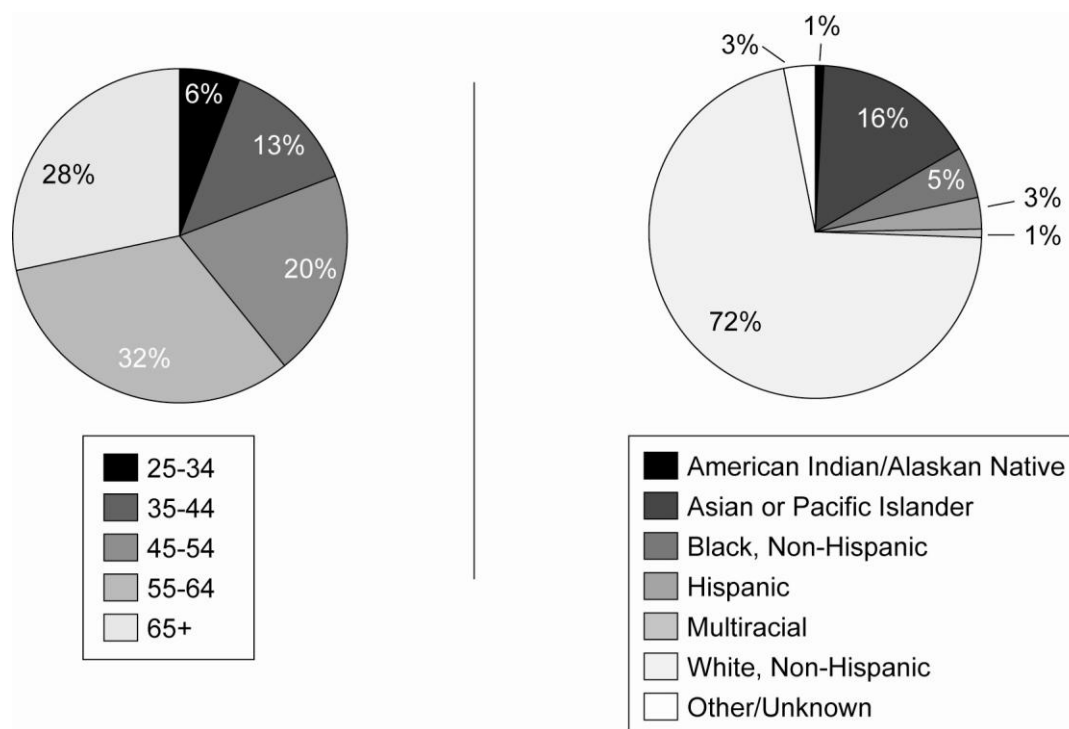
NOTE: Data presented are for *active* physicians fully licensed in Michigan.

GENDER, AGE, RACE, AND ETHNICITY

- Seventy-one percent of fully licensed, active physicians surveyed in 2011 are male; 29 percent are female. The percentage of active physicians who are female is slowly increasing over time.
- About 60 percent of active physicians are aged 55 or older (see Exhibit 14), whereas only 48 percent of active physicians in the same license renewal cohort were aged 55 and older when they were surveyed in 2008.
- More than one-fourth (28 percent) of active physicians are aged 65 and older.
- About 72 percent of active physicians are white, 16 percent are Asian or Pacific Islander, 5 percent are black (non-Hispanic), 3 percent are Hispanic, 1 percent are multiracial, and 1 percent are American Indian/Alaskan Native.

EXHIBIT 14

Age and Race/Ethnicity of Active Physicians in Michigan, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan. Percentages do not equal 100 percent due to rounding.

PAIN MANAGEMENT

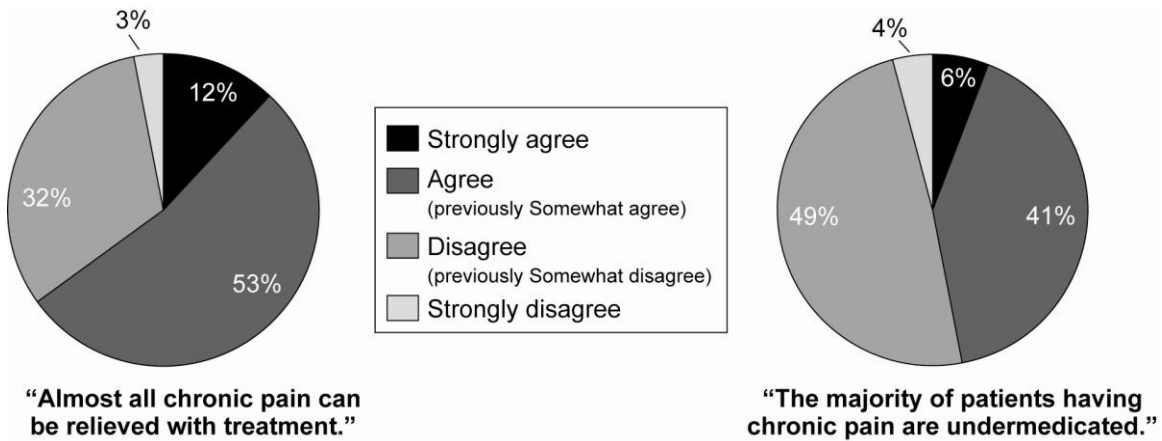
This is the third year the MDCH has collected information from physicians about pain management; the first time was in 2009. All responses are for physicians who are active, i.e., providing patient care services in Michigan or working as a physician in Michigan but with no time in patient care.

Attitudes Regarding Pain Management

About two-thirds of active physicians either strongly agree (12 percent) or agree (53 percent) with the statement, “Almost all chronic pain can be relieved with treatment” (see Exhibit 15). Approximately 47 percent either strongly agree (6 percent) or agree (41 percent) with the statement, “The majority of patients having chronic pain are undermedicated.” For both of these statements, the percentage of active physicians who indicated agreement (“strongly agree” or “agree”) in 2011 is nearly the same as in 2010, yet lower than the percentage of active physicians who indicated agreement with the statements in 2009 (73 percent and 62 percent, respectively). Response options were revised in 2010 for clarity, which may contribute to the difference in the distribution of responses compared to 2009.

EXHIBIT 15

Physicians' Attitudes Regarding Treatment of Chronic Pain, 2011



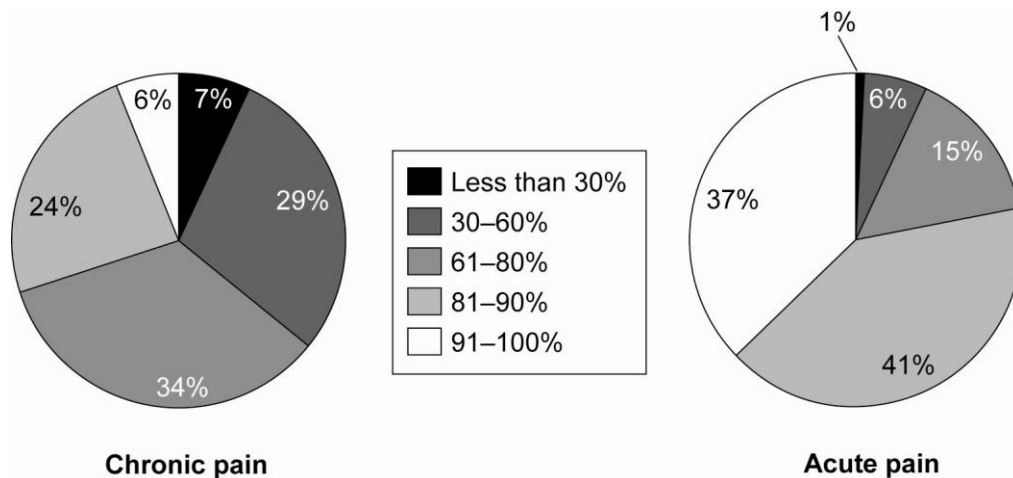
SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan.

Active physicians indicate much greater confidence in the ability of current medicine to alleviate *acute* pain than *chronic* pain (see Exhibit 16). Almost four-fifths (78 percent) of active physicians believe that 81 to 100 percent of *acute* pain can be safely and effectively alleviated by today's treatments. Less than a third (30 percent) of active physicians believe that 81 to 100 percent of *chronic* pain can be safely and effectively alleviated by today's treatments. These data are similar to data reported in 2009 and 2010.

EXHIBIT 16

Physician Confidence in the Ability of Treatment to Safely and Effectively Alleviate Chronic and Acute Pain, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan.

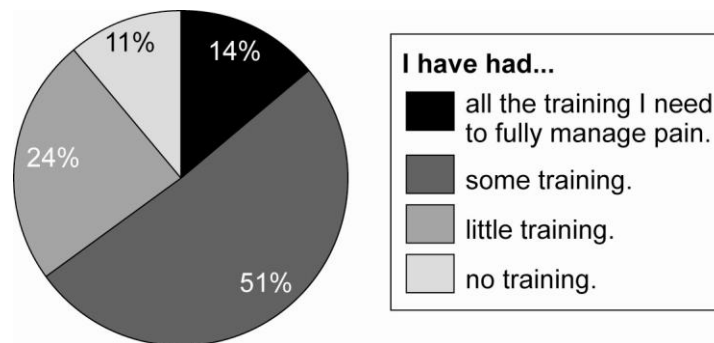
Pain Management Training

Physicians surveyed in 2009, 2010, and 2011 were asked how much training they have had in managing pain and in what format they prefer to receive training (see Exhibit 17). In 2011:

- About 35 percent of active physicians report having had little (24 percent) or no training (11 percent) in managing pain.
- About half (51 percent) say they have had some training, and 14 percent say they have had all the training they need to fully manage pain.
- About 3 percent of active physicians are formally certified in pain management.
- About half of active physicians (52 percent) report they would prefer to receive training in pain assessment and treatment in a traditional (in person) seminar (see Exhibit 18). Another 39 percent prefer an online session or webinar. These preferences are consistent with the preferences expressed by physicians in 2009 and 2010.
- About 16 percent of active physicians feel they do not need more training in pain assessment and treatment.

EXHIBIT 17

Pain Management Training Received by Active Physicians, 2011

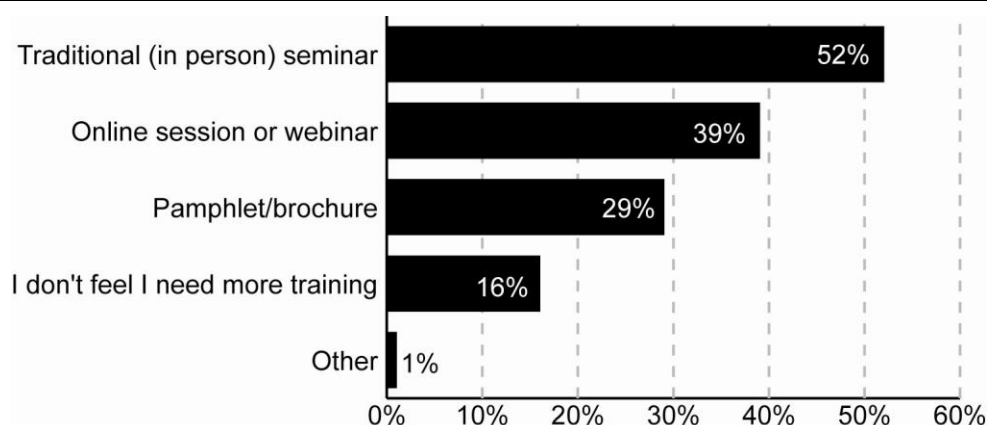


SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan.

EXHIBIT 18

Preferred Formats for Training in Pain Management, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan. Physicians were asked to “mark all that apply” so percentages equal more than 100 percent.

When asked what have been their best sources of information on pain management, continuing medical education, followed by professional publications and discussion with peers, were the sources identified most often by physicians responding to the survey in 2011 (see Exhibit 19).

- About half (51 percent) say that continuing medical education (CME) courses have been their best source of information.
- Almost one-third (32 percent) indicate that professional journals, research literature, and/or websites have been the best sources of information.
- Twenty-nine percent say their best source of information has been discussion with peers, compared to 35 percent in 2010.

EXHIBIT 19

Best Sources of Information on Pain Management as Indicated by Active Physicians, 2011

| Source | Percentage |
|--|------------|
| CME courses | 51% |
| Professional journals/research literature/websites | 32 |
| Discussion with peers | 29 |
| Residency program | 15 |
| Medical school | 12 |
| Professional associations | 10 |
| MDCH Bureau of Health Professions | 2 |
| Other | 1 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan. Physicians were asked to “mark all that apply” so percentages equal more than 100 percent.

Barriers to Addressing Pain

When asked what the greatest barrier is to adequately addressing their patients' pain, 32 percent of active physicians indicated it is the fear that the patient may become addicted to pain medication (see Exhibit 20). About a quarter (23 percent) say the greatest barrier is that the patient does not report, or underreports, his or her pain. Seventeen percent point to their own lack of knowledge or proper training on how to fully assess and treat pain, and 15 percent say they have insufficient time with patients to assess pain.

Only about 5 percent of active physicians report that fear of losing their license for improper prescribing of controlled substances is the greatest barrier to adequately addressing their patients' pain. In response to a separate question, three-quarters (73 percent) say that fear of losing their medical license never or rarely affects their decision to prescribe opiates.

EXHIBIT 20
Greatest Barriers to Addressing Patients' Pain, 2011

| Barrier | Percentage |
|--|-------------------|
| My fear that the patient may become addicted to pain medication. | 32% |
| Patient does not report, or underreports, his/her pain. | 23 |
| My lack of knowledge or proper training on how to fully assess and treat pain. | 17 |
| Insufficient time with patients to assess pain. | 15 |
| Fear of losing my license for improper prescribing of controlled substances. | 5 |
| Lack of effective pain medication. | 5 |
| Hospice and palliative care services are not readily available to my patients. | 3 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan.

The Michigan Automated Prescription System (MAPS) is available to physicians to track when and where controlled substances have been dispensed to their patients. Almost three-quarters (74 percent) of active physicians report being aware of MAPS, and 47 percent report having used MAPS. Both of these percentages have increased since 2009.

Non-pharmacological Treatments for Pain

Active physicians are generally more likely to make a referral or recommend non-pharmacological treatments for pain than to use such treatments themselves to treat their patients (see Exhibit 21). The only exception is non-prescription supplements. Twenty-one percent of active physicians report using these to treat their patients, compared to 14 percent who either make a referral or recommend non-prescription supplements to their patients.

The most common non-pharmacological pain treatment used by physicians themselves to treat their patients is physical movement, followed by non-prescription supplements. The most common non-pharmacological pain treatment for which physicians either refer or recommend is massage/therapeutic touch, followed by physical movement.

EXHIBIT 21
Non-Pharmacological Treatments for Pain Used and Recommended
by Active Physicians, 2011

| Non-pharmacological pain treatment | Percentage of active physicians who use the treatment | Percentage of active physicians who refer for or recommend the treatment |
|---|--|---|
| Massage/therapeutic touch | 12% | 32% |
| Physical movement | 26 | 28 |
| Meditation/relaxation techniques | 14 | 23 |
| Acupuncture | 4 | 22 |
| Spiritual approaches | 7 | 15 |
| Non-prescription supplements | 21 | 14 |
| Other | 5 | 4 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan.

END-OF-LIFE PAIN MANAGEMENT

Physicians who are responsible for treating any end-of-life patients were asked to respond to several additional questions regarding pain management.

Of physicians who are responsible for treating any end-of-life patients, 92 percent indicated that less than 25 percent of the patients they saw in the last 12 months received end-of-life care. Two percent said that between 75 and 100 percent of the patients they saw in the last 12 months received end-of-life care.

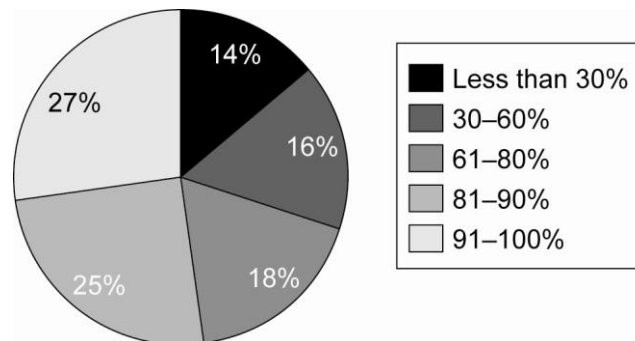
Attitudes Regarding End-of-Life Pain Management

Fifty-nine percent of physicians who treat end-of-life patients either strongly agree (19 percent) or agree (40 percent) with the statement, “Many end-of-life patients are being undertreated for pain.”

About half (52 percent) of active physicians who treat end-of-life patients believe that more than 80 percent of their end-of-life patients are receiving the best pain management that is safely available (see Exhibit 22). Thirty-four percent of these physicians believe that between 30 and 80 percent of their end-of-life patients are receiving the best pain management that is safely available.

EXHIBIT 22

Percentage of End-of-Life Patients Receiving the Best Pain Management Available According to Active Physicians, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan who are responsible for treating end-of-life patients.

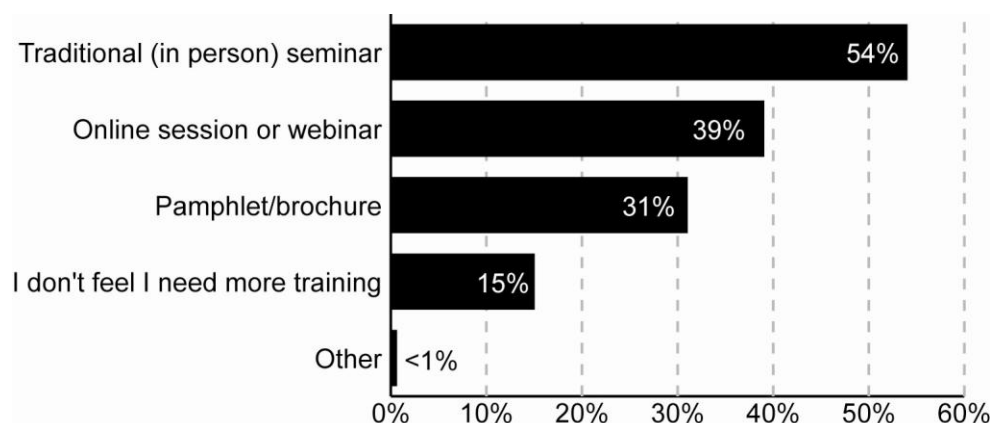
Training Preferences

Preferred formats for training in pain assessment and treatment with respect to end-of-life patients (see Exhibit 23) are similar to those for general pain management.

- Fifty-four percent of physicians who are responsible for treating end-of-life patients prefer traditional (in person) seminars.
- Thirty-nine percent prefer an online session or webinar.
- Thirty-one percent prefer receiving information from a pamphlet or brochure.
- Fifteen percent feel they do not need more training.

EXHIBIT 23

Preferred Formats for Training on End-of-Life Pain Management, 2011



SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan who are responsible for treating end-of-life patients.

Barriers to Addressing Pain for End-of-Life Patients

Barriers to addressing patients' end-of-life pain are similar to those noted regarding general pain management, with the exception that only 4 percent indicate as a significant barrier the fear that the patient may become addicted to pain medication (see Exhibit 24).

- Thirty-six percent of physicians who are responsible for the treatment of end-of-life patients say the greatest barrier to adequately addressing their patients' end-of-life pain is that the patient does not report, or underreports, his or her pain.
- Twenty-six percent say the greatest barrier is their own lack of knowledge or proper training on how to fully assess and treat pain.
- Twenty percent say the greatest barrier is that they have insufficient time with patients to assess pain.
- Six percent or fewer indicate the following barriers:
 - Fear of losing my license for improper prescribing of controlled substances (6 percent)
 - Hospice and palliative care services are not readily available to my patients (5 percent)
 - Fear that the patient may become addicted to pain medication (4 percent)
 - Lack of effective pain medication (4 percent)

EXHIBIT 24

Greatest Barriers to Addressing Patients' End-of-Life Pain, 2011

| Barrier | Percentage |
|--|-------------------|
| Patient does not report, or underreports, his/her pain. | 36% |
| My lack of knowledge or proper training on how to fully assess and treat pain. | 26 |
| Insufficient time with patients to assess pain. | 20 |
| Fear of losing my license for improper prescribing of controlled substances. | 6 |
| Hospice and palliative care services are not readily available to my patients. | 5 |
| My fear that the patient may become addicted to pain medication. | 4 |
| Lack of effective pain medication. | 4 |

SOURCE: Michigan Department of Community Health Survey of Physicians, 2011.

NOTE: Data presented are for *active* physicians fully licensed in Michigan who are responsible for treating end-of-life patients. Percentages do not equal 100 percent due to rounding.

Appendix:

Survey Questions and Response Frequencies^{†‡}

- Please enter your 10-digit permanent ID number beginning with the numbers 43 or 51. (This number is located directly above your name on the renewal application form.)
-

- Are you an MD or DO?

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-------|-------|-------|-------|-------|-------|-------|
| a. MD | 90.2% | 83.4% | 83.0% | 83.6% | 93.4% | 80.1% |
| b. DO | 9.8 | 16.6 | 17.0 | 16.4 | 6.6 | 19.9 |

- What is your current status? (Mark one.)

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|-------|-------|-------|-------|-------|-------|
| a. Providing patient care services in Michigan | 65.8% | 62.2% | 65.5% | 61.9% | 58.1% | 64.7% |
| b. Working as a physician in Michigan but no time in patient care | 3.3 | 2.9 | 3.3 | 3.9 | 3.7 | 3.6 |
| c. Working as a physician, but not in Michigan | 26.8 | 28.5 | 25.0 | 26.8 | 31.0 | 24.4 |
| d. Not working as a physician | 4.1 | 6.5 | 6.2 | 7.4 | 7.1 | 7.2 |

- Are you enrolled in a Michigan graduate medical training program (i.e., internship or residency)?

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------|------|------|------|------|------|------|
| a. Yes | 8.2% | 6.0% | 5.0% | 4.1% | 4.1% | 4.5% |
| b. No | 91.8 | 94.0 | 95.0 | 95.9 | 95.9 | 95.5 |

NOTE: All of the following tables present data for “active” physicians, i.e., physicians “providing patient care services in Michigan” or “working as a physician in Michigan but no time in patient care,” unless otherwise noted.

- What is your gender?

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------|-------|-------|-------|-------|-------|-------|
| a. Female | 24.5% | 25.8% | 27.6% | 27.5% | 30.2% | 28.9% |
| b. Male | 75.5 | 74.2 | 72.4 | 72.5 | 69.8 | 71.1 |

[†] Unless otherwise noted, data presented are only for fully licensed physicians who are providing patient care services in Michigan.

[‡] Frequencies from the 2005 survey are not included here because changes made to the survey after 2005 do not allow comparison of many of the responses.

6. In what year were you born?

| Age | 2006* | 2007 | 2008 | 2009 | 2010 | 2011 |
|----------|-------|------|------|------|------|------|
| a. 25–34 | --- | 8.0% | 6.4% | 5.4% | 5.3% | 6.2% |
| b. 35–44 | --- | 20.9 | 18.2 | 17.9 | 18.8 | 12.8 |
| c. 45–54 | --- | 30.2 | 28.0 | 23.7 | 25.1 | 20.4 |
| d. 55–64 | --- | 24.7 | 28.3 | 29.0 | 30.2 | 32.1 |
| e. 65+ | --- | 16.1 | 19.2 | 22.1 | 20.6 | 28.2 |

*In 2006, the survey data were weighted by age of physicians in the universe (i.e., all licensed physicians); therefore age ranges are not calculated from the survey data for 2006.

7. What is your race/ethnicity?

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---------------------------------------|------|------|------|------|------|------|
| a. American Indian/ Alaskan Native | 0.5% | 0.2% | 0.5% | 0.3% | 0.7% | 0.5% |
| b. Asian or Pacific Islander | 20.4 | 17.4 | 17.3 | 16.4 | 13.9 | 15.9 |
| c. Black, Non-Hispanic | 6.7 | 4.1 | 4.4 | 4.2 | 5.9 | 4.8 |
| d. Hispanic | 2.3 | 2.3 | 2.6 | 2.8 | 3.1 | 2.8 |
| e. Multiracial | 1.0 | 0.4 | 0.6 | 0.6 | 0.6 | 0.7 |
| f. White, Non-Hispanic | 63.2 | 71.6 | 70.3 | 71.9 | 72.7 | 71.9 |
| g. Other/Unknown | 6.0 | 4.1 | 4.3 | 3.7 | 3.2 | 3.4 |

8. Please indicate your citizenship status:

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|----------------------------|-------|-------|-------|-------|-------|-------|
| a. Native-born U.S. | 63.9% | 68.8% | 69.4% | 70.0% | 72.8% | 71.1% |
| b. Naturalized U.S. | 25.1 | 24.3 | 24.7 | 24.9 | 22.9 | 24.6 |
| c. Permanent Resident | 7.4 | 5.3 | 4.5 | 3.9 | 3.2 | 3.5 |
| d. H-1 Temporary Worker | 3.1 | 1.0 | 1.1 | 0.9 | 1.1 | 0.6 |
| e. J-1 Exchange Visitor | 0.6 | 0.5 | 0.4 | 0.1 | 0.1 | 0.2 |

9. Please indicate the street address and ZIP Code for your *main* practice site and, if applicable, a ZIP Code for an additional practice (no PO Box). _____

10. Is your main practice site an outpatient or inpatient site?

| Physicians providing patient care services in Michigan | | | | | | |
|--|-------|-------|-------|-------|-------|-------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| a. Outpatient | 71.4% | 78.2% | 79.3% | 80.0% | 75.2% | 79.0% |
| b. Inpatient | 28.6 | 21.8 | 20.7 | 20.0 | 24.8 | 21.0 |

11. Indicate which best describes your main practice arrangement: (Mark one.)

| | 2009* | 2010 | 2011 |
|---|-------|-------|-------|
| a. Single physician practice | 29.7% | 26.4% | 30.9% |
| b. Single physician practice that shares expenses with other physician practices | 4.9 | 6.5 | 5.2 |
| c. Group practice (2-5 FTE physicians) | 29.4 | 29.3 | 29.5 |
| d. Group practice (6 or more FTE physicians) | 35.9 | 37.8 | 34.4 |

*This question was asked for the first time in 2009.

12. Are you a salaried employee? (Mark all that apply.)

| | 2009* | 2010 | 2011 |
|---|-------|-------|-------|
| A. Not a salaried employee | 33.4% | 30.7% | 36.1% |
| B. Salaried employee with: | | | |
| a. a practice I own or co-own | 24.7 | 18.4 | 22.8 |
| b. a professional corporation or practice that I do not own | 16.1 | 17.5 | 15.5 |
| c. a managed care organization | 0.8 | 0.7 | 1.3 |
| d. a hospital | 17.0 | 19.6 | 17.2 |
| e. a university or teaching institution | 10.1 | 14.5 | 10.6 |
| f. another type of organization | 5.7 | 6.3 | 6.1 |

*This question was asked for the first time in 2009.

13. How many hours per week do you spend providing direct patient care?

| Physicians providing patient care services in Michigan | | | | | | |
|--|------|------|------|------|------|-------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| a. Mean | 40.0 | 41.6 | 39.9 | 39.4 | 38.5 | 39.10 |
| b. 25 th Percentile | 30.0 | 30.0 | 30.0 | 30.0 | 28.0 | 30.0 |
| c. Median | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| d. 50 th Percentile | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 40.0 |

14. Do you have hospital admitting privileges?

| Physicians providing patient care services in Michigan | | | | | | |
|--|-------|-------|-------|-------|-------|-------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| a. Yes | 72.0% | 75.0% | 74.3% | 72.1% | 72.3% | 69.0% |
| b. No | 28.0 | 25.0 | 25.7 | 27.9 | 27.7 | 31.0 |

15. Are you involved in any of the following professional activities? (Mark all that apply.)

| | 2006 | 2007 | 2008 | 2009* | 2010 | 2011 |
|---|-------|-------|-------|-------|-------|-------|
| a. Research | 31.5% | 20.5% | 19.2% | 16.6% | 19.4% | 15.3% |
| b. Teaching | 54.0 | 52.2 | 47.7 | | | |
| c. Teaching (classroom) | | | | 17.5 | 17.2 | 15.1 |
| d. Teaching (clinical setting) | | | | 49.1 | 50.2 | 51.6 |
| e. Administration in a private practice | 19.7 | 24.3 | 23.4 | 20.3 | 15.9 | 20.7 |
| f. Administration in medical school, hospital, health plan, or nursing home | 19.7 | 15.6 | 13.8 | 14.8 | 16.7 | 13.0 |
| g. Emergency room care | 17.5 | 14.6 | 13.8 | 11.5 | 12.2 | 11.1 |
| h. Medical examiner | 2.2 | 2.1 | 1.8 | 1.8 | 2.2 | 1.6 |
| i. Patient care in a nursing home | 6.6 | 8.2 | 7.9 | 7.4 | 7.7 | 7.8 |

*Response options for this question were modified in 2009 to provide a better picture of what physicians were reporting as "teaching." Prior to 2009, physicians were asked only to mark whether they were involved in "teaching." In 2009, the response options were modified to separate classroom teaching from teaching that is done in a clinical setting.

16. Which best describes your patient care practice capacity?

| Physicians providing patient care services in Michigan | | | | | | |
|--|-------|-------|-------|-------|-------|-------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| a. My practice is full; I cannot accept any new/additional patients. | 15.5% | 10.8% | 11.5% | 11.7% | 12.2% | 10.6% |
| b. My practice is nearly full; I can accept a few new patients. | 46.7 | 49.6 | 50.4 | 48.7 | 48.9 | 48.0 |
| c. My practice is far from full; I can accept many more patients. | 37.8 | 39.7 | 38.0 | 39.6 | 39.0 | 41.3 |

17. Are you currently providing care to...

| Physicians providing patient care services in Michigan | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | |
| | | | | | | yes | No |
| a. Medicaid patients | 89.0% | 86.7% | 84.6% | 84.9% | 87.0% | 83.7% | 16.3% |
| b. New Medicaid patients | 79.6 | 73.2 | 70.5 | 73.1 | 73.3 | 72.1 | 27.9 |
| c. Medicare patients | 89.4 | 90.8 | 90.4 | 89.7 | 87.8 | 90.4 | 9.6 |
| d. New Medicare patients | 86.0 | 86.0 | 85.5 | 83.9 | 82.6 | 85.1 | 14.9 |
| e. Patients from other publicly funded programs | 77.1 | 72.5 | 71.3 | 73.3 | 72.4 | 72.3 | 27.7 |

18. In your medical practice, does someone use a computer or computer-like device (e.g. PDA) to receive or transmit... (Mark all that apply.)

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|-------|-------|-------|-------|-------|-------|
| a. Lab results, x-rays, or hospital records | 64.4% | 64.3% | 66.0% | 67.7% | 73.1% | 71.7% |
| b. Prescriptions | 25.3 | 24.3 | 28.1 | 36.3 | 47.0 | 51.5 |
| c. Claims information | 46.3 | 55.2 | 56.7 | 55.6 | 57.9 | 61.3 |
| d. Electronic health records | 43.5 | 36.4 | 37.6 | 40.8 | 47.1 | 47.4 |
| e. Communication with your patients | 21.3 | 15.9 | 17.3 | 20.1 | 21.2 | 22.2 |
| f. Information about treatment alternatives | 28.4 | 25.2 | 25.1 | 27.6 | 31.0 | 29.8 |
| g. Continuing medical education (CME) credits | 49.8 | 47.3 | 50.9 | 54.3 | 59.3 | 59.7 |

19. Mark the practice specialty/specialties in which you spend most of your professional time. Mark ONE primary, and, if applicable, ONE secondary specialty.

| Primary Specialties | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|-----------|-----------|-----------|------|------|------|
| a. Addiction Medicine | Not asked | Not asked | Not asked | 0.2% | 0.4% | 0.5% |
| b. Allergy & immunology | 1.0% | 1.0% | 0.9% | 0.7 | 1.1 | 1.0 |
| c. Anesthesiology | 3.6 | 2.8 | 3.0 | 3.2 | 2.5 | 3.5 |
| d. Cardiovascular disease | 2.9 | 2.7 | 2.1 | 1.6 | 3.1 | 2.0 |
| e. Critical care medicine | 0.4 | 0.6 | 0.4 | 0.6 | 0.3 | 0.7 |
| f. Dermatology | 1.3 | 1.4 | 1.9 | 1.4 | 1.0 | 2.2 |
| g. Emergency medicine | 7.5 | 5.4 | 4.8 | 5.2 | 3.8 | 4.8 |
| h. Endocrinology | 0.9 | 0.7 | 0.9 | 0.6 | 0.6 | 0.7 |
| i. Family practice | 10.8 | 15.7 | 14.3 | 15.8 | 15.1 | 15.5 |
| j. Gastroenterology | 1.3 | 0.8 | 1.2 | 1.0 | 0.4 | 1.5 |
| k. General medicine | 3.0 | 2.5 | 2.7 | 3.5 | 2.0 | 2.0 |
| l. Geriatrics | 0.9 | 0.5 | 0.9 | 0.7 | 1.3 | 0.8 |
| m. Hospice & palliative medicine | Not asked | Not asked | Not asked | 0.5 | 1.0 | 0.3 |
| n. Hospitalist | 1.5 | 0.8 | 1.0 | 1.2 | 2.0 | 1.0 |
| o. Infectious disease | 0.5 | 0.5 | 0.6 | 0.9 | 1.0 | 0.5 |
| p. Internal medicine (general) | 8.8 | 11.3 | 11.4 | 9.3 | 10.6 | 11.9 |
| q. Nephrology | 1.5 | 0.6 | 0.9 | 1.6 | 0.1 | 0.6 |
| r. Neurology | 2.3 | 1.8 | 1.7 | 2.5 | 1.5 | 2.4 |
| s. Neurological surgery | 0.7 | 0.5 | 0.6 | 0.4 | 0.6 | 0.6 |
| t. Obstetrics & gynecology (general) | 3.2 | 4.1 | 3.2 | 4.0 | 4.9 | 4.2 |
| u. Obstetrics & gynecology subspecialty | 0.7 | 0.8 | 0.7 | 0.3 | 0.9 | 0.5 |
| v. Gynecology (only) | 0.4 | 0.5 | 0.8 | 1.1 | 0.5 | 0.8 |
| w. Occupational medicine | 1.8 | 1.4 | 1.1 | 1.1 | 1.6 | 1.3 |
| x. Oncology/hematology | 2.2 | 1.5 | 1.5 | 1.9 | 1.0 | 1.6 |
| y. Ophthalmology | 2.0 | 2.0 | 2.8 | 2.7 | 1.3 | 2.9 |
| z. Orthopedic surgery | 2.4 | 2.8 | 2.8 | 2.9 | 2.0 | 2.1 |
| aa. Otolaryngology | 0.8 | 1.2 | 1.0 | 1.2 | 0.4 | 0.7 |
| bb. Osteopathic manipulative medicine | 0.0 | 0.2 | 0.3 | 0.4 | 0.1 | 0.3 |
| cc. Pain medicine | Not asked | Not asked | Not asked | 0.5 | 0.3 | 0.5 |
| dd. Pathology (general) | 2.6 | 2.5 | 2.7 | 3.0 | 2.9 | 1.8 |
| ee. Pediatrics (general) | 5.1 | 5.7 | 6.2 | 5.4 | 7.4 | 5.8 |
| ff. Pediatrics subspecialty | 3.1 | 1.8 | 1.6 | 1.7 | 3.5 | 2.2 |
| gg. Medical pediatrics | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| hh. Physical medicine & rehabilitation | 1.3 | 1.6 | 1.2 | 1.3 | 1.0 | 0.9 |
| ii. Plastic surgery | 0.5 | 1.2 | 0.8 | 0.4 | 1.0 | 0.6 |
| jj. Preventive medicine | 0.5 | 0.2 | 0.5 | 0.4 | 0.8 | 0.1 |
| kk. Psychiatry (adult) | 5.2 | 5.7 | 5.9 | 6.4 | 5.8 | 5.8 |
| ll. Psychiatry (child & adolescent) | 0.9 | 1.0 | 1.5 | 1.0 | 1.5 | 1.6 |
| mm. Pulmonary disease | 1.3 | 0.8 | 0.8 | 0.6 | 0.5 | 0.5 |

| Primary Specialties | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| nn. Radiology (diagnostic) | 4.8% | 4.4% | 4.7% | 4.1% | 4.7% | 3.2% |
| oo. Radiology (therapeutic) | 1.0 | 1.0 | 0.6 | 0.7 | 0.5 | 1.0 |
| pp. Rheumatology | 0.3 | 0.7 | 0.5 | 0.6 | 0.9 | 0.6 |
| qq. Sports medicine | 0.0 | 0.1 | 0.1 | 0.1 | 0.5 | 0.1 |
| rr. Surgery (general) | 3.0 | 4.0 | 3.6 | 3.3 | 3.1 | 3.1 |
| ss. Thoracic surgery | 0.8 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 |
| tt. Urology | 1.9 | 1.3 | 1.3 | 0.7 | 0.5 | 0.8 |
| uu. Vascular surgery | 0.6 | 0.4 | 0.3 | 0.5 | 0.6 | 0.5 |
| vv. Other | 4.2 | 3.4 | 3.4 | 2.6 | 2.9 | 3.3 |

| Secondary Specialties | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| a. Addiction Medicine | Not asked | Not asked | Not asked | 4.3% | 2.2% | 2.9% |
| b. Allergy & immunology | 0.7% | 1.1% | 1.1% | 1.0 | 1.9 | 0.4 |
| c. Anesthesiology | 0.9 | 0.5 | 0.7 | 1.0 | 0.0 | 0.8 |
| d. Cardiovascular disease | 2.7 | 2.7 | 1.6 | 1.6 | 2.2 | 1.6 |
| e. Critical care medicine | 3.9 | 3.4 | 2.9 | 1.6 | 1.9 | 1.8 |
| f. Dermatology | 0.2 | 1.1 | 0.4 | 0.6 | 1.1 | 0.2 |
| g. Emergency medicine | 4.0 | 2.7 | 2.5 | 1.3 | 2.6 | 2.7 |
| h. Endocrinology | 1.1 | 0.8 | 1.6 | 1.3 | 1.5 | 1.2 |
| i. Family practice | 4.5 | 4.7 | 4.6 | 4.9 | 5.6 | 4.9 |
| j. Gastroenterology | 1.2 | 1.2 | 0.8 | 1.0 | 0.7 | 1.8 |
| k. General medicine | 6.8 | 4.6 | 3.1 | 4.6 | 4.1 | 4.7 |
| l. Geriatrics | 4.3 | 9.0 | 5.6 | 7.6 | 7.9 | 6.5 |
| m. Hospice & palliative medicine | Not asked | Not asked | Not asked | 1.0 | 1.1 | 1.8 |
| n. Hospitalist | 3.1 | 2.7 | 3.1 | 2.5 | 2.6 | 2.2 |
| o. Infectious disease | 1.4 | 0.8 | 0.6 | 1.1 | 0.0 | 0.8 |
| p. Internal medicine (general) | 15.6 | 14.9 | 13.7 | 13.2 | 14.2 | 12.7 |
| q. Nephrology | 0.4 | 0.8 | 0.7 | 0.3 | 0.4 | 0.6 |
| r. Neurology | 2.2 | 0.7 | 0.7 | 0.8 | 1.9 | 1.2 |
| s. Neurological surgery | 0.1 | 0.2 | 0.2 | 0.3 | 0.0 | 0.2 |
| t. Obstetrics & gynecology (general) | 2.0 | 2.1 | 1.3 | 1.4 | 0.4 | 2.0 |
| u. Obstetrics & gynecology subspecialty | 1.5 | 0.7 | 0.3 | 1.3 | 1.1 | 1.8 |
| v. Gynecology (only) | 0.4 | 1.2 | 0.8 | 1.0 | 0.4 | 0.8 |
| w. Occupational medicine | 0.8 | 1.7 | 1.1 | 1.7 | 1.9 | 2.0 |
| x. Oncology/hematology | 1.2 | 1.2 | 1.0 | 1.1 | 1.5 | 0.8 |
| y. Ophthalmology | 0.1 | 0.2 | 0.3 | 0.3 | 0.0 | 0.0 |
| z. Orthopedic surgery | 0.3 | 0.3 | 0.1 | 0.2 | 0.4 | 1.0 |
| aa. Otolaryngology | 0.0 | 0.4 | 0.1 | 0.2 | 1.1 | 0.0 |
| bb. Osteopathic manipulative medicine | 1.1 | 2.6 | 2.9 | 3.0 | 0.0 | 2.7 |
| cc. Pain medicine | Not asked | Not asked | Not asked | 4.3 | 3.4 | 3.0 |
| dd. Pathology (general) | 0.7 | 0.5 | 0.6 | 0.6 | 0.7 | 0.8 |
| ee. Pediatrics (general) | 5.5 | 4.9 | 3.7 | 2.5 | 7.5 | 4.0 |
| ff. Pediatrics subspecialty | 3.9 | 2.7 | 2.2 | 2.9 | 0.4 | 1.8 |
| gg. Medical pediatrics | 0.8 | 0.4 | 0.2 | 0.5 | 0.4 | 0 |

| Secondary Specialties | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| hh. Physical medicine & rehabilitation | 0.4% | 0.6% | 0.3% | 0.3% | 1.5% | 0.8% |
| ii. Plastic surgery | 0.4 | 1.2 | 0.7 | 0.8 | 0.0 | 0.6 |
| jj. Preventive medicine | 1.1 | 1.6 | 14.1 | 1.4 | 1.5 | 2.5 |
| kk. Psychiatry (adult) | 2.8 | 3.3 | 3.6 | 4.3 | 5.6 | 4.5 |
| ll. Psychiatry (child & adolescent) | 3.1 | 3.6 | 3.9 | 3.8 | 4.5 | 5.3 |
| mm. Pulmonary disease | 1.7 | 1.3 | 1.2 | 0.6 | 0.4 | 1.0 |
| nn. Radiology (diagnostic) | 1.1 | 0.8 | 0.4 | 0.5 | 0.4 | 0.8 |
| oo. Radiology (therapeutic) | 1.1 | 1.0 | 1.6 | 0.6 | 0.7 | 1.2 |
| pp. Rheumatology | 0.7 | 0.1 | 0.4 | 0.5 | 0.0 | 0.4 |
| qq. Sports medicine | 1.8 | 2.1 | 1.8 | 3.7 | 3.0 | 2.0 |
| rr. Surgery (general) | 2.4 | 1.8 | 1.7 | 1.7 | 1.9 | 2.0 |
| ss. Thoracic surgery | 0.8 | 0.3 | 0.6 | 0.6 | 0.7 | 0.8 |
| tt. Urology | 0.7 | 0.3 | 0.6 | 0.0 | 0.7 | 0.2 |
| uu. Vascular surgery | 0.6 | 1.4 | 1.6 | 1.6 | 0.4 | 2.0 |
| vv. Other | 9.7 | 10.3 | 9.6 | 8.7 | 7.5 | 7.0 |

Identify specialties for which you or your patients have the greatest difficulty scheduling/obtaining/arranging a timely appointment when making referrals. (Mark up to 3 specialties.)

| Referral Difficulties | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| a. Addiction Medicine | Not asked | Not asked | Not asked | 5.4% | 4.8% | 5.2% |
| b. Allergy & immunology | 1.8% | 1.2% | 1.3% | 1.1 | 1.3 | 0.9 |
| c. Anesthesiology | 0.5 | 0.3 | 0.3 | 0.1 | 0.3 | 0.4 |
| d. Cardiovascular disease | 1.5 | 0.8 | 0.9 | 0.7 | 0.3 | 0.3 |
| e. Critical care medicine | 0.4 | 0.2 | 0.4 | 0.7 | 0.3 | 0.4 |
| f. Dermatology | 7.0 | 7.0 | 6.4 | 6.6 | 7.8 | 5.4 |
| g. Emergency medicine | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 |
| h. Endocrinology | 4.3 | 5.5 | 6.2 | 5.9 | 5.2 | 4.5 |
| i. Family practice | 0.3 | 0.5 | 1.1 | 0.9 | 0.6 | 0.7 |
| j. Gastroenterology | 2.7 | 2.5 | 2.2 | 2.4 | 3.1 | 2.1 |
| k. General medicine | 0.6 | 0.3 | 0.9 | 0.6 | 0.1 | 0.3 |
| l. Geriatrics | 0.7 | 0.4 | 0.8 | 0.7 | 0.8 | 0.5 |
| m. Hospice & palliative medicine | Not asked | Not asked | Not asked | 0.4 | 0.6 | 0.2 |
| n. Hospitalist | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 0.3 |
| o. Infectious disease | 1.5 | 1.7 | 1.8 | 1.9 | 1.3 | 1.1 |
| p. Internal medicine (general) | 0.9 | 1.0 | 1.6 | 1.3 | 0.8 | 0.6 |
| q. Nephrology | 1.5 | 1.2 | 1.4 | 1.3 | 0.9 | 1.1 |
| r. Neurology | 5.2 | 4.8 | 5.2 | 4.7 | 4.6 | 5.4 |
| s. Neurological surgery | 3.3 | 2.7 | 3.7 | 3.8 | 2.3 | 2.6 |
| t. Obstetrics & gynecology (general) | 1.0 | 0.6 | 0.7 | 0.7 | 0.6 | 0.5 |
| u. Obstetrics & gynecology subspecialty | 0.6 | 0.5 | 0.7 | 0.5 | 0.6 | 0.6 |
| v. Gynecology (only) | 0.5 | 0.2 | 0.4 | 0.5 | 0.3 | 0.4 |
| w. Occupational medicine | 0.3 | 0.2 | 0.4 | 0.7 | 0.8 | 0.6 |
| x. Oncology/hematology | 0.5 | 0.3 | 0.6 | 0.8 | 0.3 | 0.4 |

| Referral Difficulties | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| y. Ophthalmology | 1.2% | 1.0% | 0.7% | 0.5% | 0.7% | 0.6% |
| z. Orthopedic surgery | 5.3 | 5.0 | 4.5 | 4.0 | 2.8 | 3.1 |
| aa. Otolaryngology | 1.6 | 1.5 | 1.7 | 1.5 | 1.3 | 1.6 |
| bb. Osteopathic manipulative medicine | 0.5 | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 |
| cc. Pain medicine | Not asked | Not asked | Not asked | 5.3 | 5.7 | 4.0 |
| dd. Pathology (general) | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| ee. Pediatrics (general) | 0.2 | 0.5 | 0.3 | 0.1 | 0.2 | 0.3 |
| ff. Pediatrics subspecialty | 1.5 | 2.1 | 2.7 | 2.0 | 3.2 | 2.3 |
| gg. Medical pediatrics | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 |
| hh. Physical medicine & rehabilitation | 1.2 | 0.6 | 0.8 | 0.7 | 1.2 | 0.6 |
| ii. Plastic surgery | 2.2 | 1.6 | 1.6 | 1.7 | 1.0 | 1.1 |
| jj. Preventive medicine | 0.1 | 0.2 | 6.4 | 0.4 | 0.5 | 0.3 |
| kk. Psychiatry (adult) | 4.7 | 6.2 | 7.7 | 9.5 | 9.2 | 8.5 |
| ll. Psychiatry (child & adolescent) | 4.4 | 4.9 | 6.4 | 8.1 | 5.9 | 5.7 |
| mm. Pulmonary disease | 1.0 | 0.7 | 0.9 | 1.6 | 1.2 | 1.1 |
| nn. Radiology (diagnostic) | 0.9 | 0.6 | 0.4 | 0.3 | 0.2 | 0.6 |
| oo. Radiology (therapeutic) | 0.4 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 |
| pp. Rheumatology | 3.8 | 1.7 | 5.7 | 5.9 | 5.2 | 5.2 |
| qq. Sports medicine | 0.7 | 0.3 | 0.2 | 0.5 | 0.1 | 0.4 |
| rr. Surgery (general) | 0.6 | 0.5 | 0.6 | 0.2 | 0.7 | 0.6 |
| ss. Thoracic surgery | 0.7 | 0.4 | 0.3 | 0.2 | 0.5 | 0.5 |
| tt. Urology | 1.7 | 1.5 | 1.5 | 1.7 | 2.1 | 1.4 |
| uu. Vascular surgery | 0.9 | 0.7 | 0.8 | 0.9 | 0.3 | 0.6 |
| vv. Other | 1.4 | 0.8 | 1.2 | 0.7 | 0.6 | 0.8 |

20. How would you describe the area where you grew up? (Please mark an answer in both sections A & B.)

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Section A | | | | | | |
| a. Rural/small town | 24.0% | 25.3% | 25.3% | 27.8% | 28.8% | 25.5% |
| b. Suburban | 43.3 | 42.2 | 41.0 | 40.6 | 40.7 | 42.4 |
| c. Urban | 32.7 | 32.5 | 33.7 | 31.6 | 30.5 | 32.1 |
| Section B | | | | | | |
| a. Michigan | 40.7% | 48.1% | 49.3% | 49.3% | 48.2% | 48.6 |
| b. Other U.S. state | 30.1 | 26.8 | 25.7 | 25.5 | 27.7 | 28.0 |
| c. Other country | 29.3 | 25.1 | 25.0 | 25.3 | 24.1 | 23.4 |

21. A. Please indicate where you attended medical school. If in Michigan, please specify the school.

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| a. Michigan | 34.3% | 38.5% | 39.0% | 40.1% | 41.6% | 38.7% |
| b. Other U.S. state | 32.5 | 33.0 | 32.7 | 31.5 | 31.3 | 34.9 |
| c. Canada | 1.8 | 0.9 | 0.8 | 1.1 | 0.7 | 0.5 |
| d. Caribbean | 2.2 | 2.2 | 1.8 | 2.7 | 2.0 | 2.0 |
| e. Other country | 29.2 | 25.3 | 25.6 | 24.6 | 24.3 | 23.9 |

B. If in Michigan, please specify the school.

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|-------|-------|-------|-------|-------|-------|
| a. Michigan State University College of Human Medicine | 12.3% | 12.7% | 13.3% | 12.5% | 19.0% | 11.0% |
| b. Michigan State University College of Osteopathic Medicine | 11.1 | 18.5 | 17.8 | 18.2 | 5.5 | 22.6 |
| c. University of Michigan Medical School | 33.3 | 25.9 | 25.5 | 28.9 | 31.9 | 26.8 |
| d. Wayne State University School of Medicine | 43.3 | 42.9 | 43.5 | 40.4 | 43.7 | 39.6 |

22. If you did a residency or fellowship, was it an... (Mark all that apply.)

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|----------------------------|-------|-------|-------|-------|-------|-------|
| a. In-state residency | 55.6% | 61.8% | 61.6% | 61.3% | 59.7% | 63.2% |
| b. In-state fellowship | 15.8 | 14.6 | 15.6 | 13.9 | 18.6 | 15.0 |
| c. Out-of-state residency | 35.1 | 32.0 | 33.6 | 33.8 | 37.2 | 31.6 |
| d. Out-of-state fellowship | 18.1 | 14.5 | 13.9 | 16.0 | 13.9 | 13.5 |

23. To assist us in projecting the supply of physicians in the future, please tell us how much longer you plan to practice medicine.

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------|-------|-------|-------|-------|-------|-------|
| a. 1–5 years | 14.7% | 18.8% | 22.5% | 24.2% | 22.5% | 28.4% |
| b. 6–10 years | 18.8 | 22.1 | 23.6 | 22.7 | 22.7 | 26.0 |
| c. 11–15 years | 18.4 | 19.5 | 18.7 | 18.1 | 18.0 | 16.8 |
| d. 16–20 years | 19.0 | 16.2 | 15.5 | 14.4 | 16.1 | 11.6 |
| e. 21–30 years | 18.6 | 16.1 | 14.1 | 15.4 | 15.1 | 11.4 |
| f. More than 30 years | 10.5 | 7.4 | 5.6 | 5.1 | 5.5 | 5.9 |

24. In the next 3 years, I plan to... (Mark all that apply.)

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|-------|-------|-------|-------|-------|-------|
| a. Maintain my practice as is | 61.6% | 68.5% | 69.4% | 70.0% | 70.6% | 68.0% |
| b. Increase patient care hours | 14.8 | 12.3 | 10.4 | 11.2 | 10.6 | 10.2 |
| c. Significantly reduce patient care hours | 6.8 | 7.7 | 8.2 | 6.9 | 6.6 | 8.8 |
| d. Move my practice to another Michigan location | 3.5 | 3.0 | 2.4 | 2.2 | 2.6 | 2.1 |
| e. Move my practice out of state | 4.6 | 4.4 | 4.6 | 4.1 | 3.6 | 3.4 |
| f. Retire | 4.2 | 5.8 | 7.6 | 7.9 | 7.8 | 9.6 |

25. If you are retiring or reducing your patient care hours, what are the factors that led to this decision? (Mark all that apply.)

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|-------|-------|-------|-------|-------|-------|
| a. Age | 62.9% | 67.4% | 70.0% | 75.7% | 78.3% | 69.1% |
| b. General lack of job satisfaction | 19.2 | 19.6 | 18.9 | 18.8 | 13.9 | 19.1 |
| c. Childbearing/childrearing | 4.1 | 3.0 | 3.3 | 2.3 | 4.3 | 2.5 |
| d. Lifestyle changes | 24.8 | 24.0 | 28.0 | 20.7 | 29.6 | 20.2 |
| e. Medical malpractice insurance cost | 23.3 | 25.1 | 26.2 | 16.1 | 19.1 | 19.8 |
| f. Personal or family health concerns | 16.3 | 16.2 | 15.3 | 14.1 | 14.8 | 15.2 |
| g. Increasing administrative/regulatory burden | 30.4 | 36.1 | 41.1 | 34.5 | 34.8 | 37.5 |
| h. Employer/employee conflict | 1.5 | 3.4 | 4.7 | 2.6 | 3.5 | 4.1 |
| i. Inadequate reimbursement for services | 28.1 | 33.8 | 38.7 | 27.0 | 24.3 | 30.2 |
| j. Move to management/consulting/teaching/research | 11.5 | 10.7 | 8.2 | 5.9 | 9.6 | 8.0 |
| k. Other | 4.5 | 1.6 | 0.4 | 0.7 | 0.0 | 0.5 |

PAIN MANAGEMENT

The MDCH collected information from physicians about pain management for the first time in 2009. All responses are for physicians who are active, i.e., providing patient care services in Michigan or working as a physician in Michigan but with no time in patient care.

26. To what extent do you agree with the following statement? “Almost all chronic pain can be relieved with treatment.”

| | 2009 | 2010* | 2011 |
|--|-------|-------|-------|
| a. Strongly agree | 21.5% | 12.7% | 12.2% |
| b. Agree (previously “Somewhat agree”) | 51.9 | 51.4 | 52.5 |
| c. Disagree (previously “Somewhat disagree”) | 20.2 | 31.9 | 32.0 |
| d. Strongly disagree | 6.4 | 4.0 | 3.3 |

*Response options revised in 2010.

27. To what extent do you agree with the following statement? “The majority of patients having chronic pain are undermedicated.”

| | 2009 | 2010* | 2011 |
|--|-------|-------|------|
| a. Strongly agree | 13.7% | 6.2% | 6.0% |
| b. Agree (previously “Somewhat agree”) | 47.8 | 42.6 | 40.5 |
| c. Disagree (previously “Somewhat disagree”) | 32.0 | 47.3 | 49.3 |
| d. Strongly disagree | 6.5 | 4.0 | 4.2 |

*Response options revised in 2010.

28. What percentage of *chronic* pain can be safely and effectively alleviated by today's treatments?

| | 2009 | 2010 | 2011 |
|------------------|------|------|------|
| a. Less than 30% | 6.7% | 5.9% | 7.0% |
| b. 30–60% | 29.5 | 25.2 | 29.0 |
| c. 61–80% | 32.8 | 37.2 | 33.9 |
| d. 81–90% | 23.9 | 25.7 | 24.2 |
| e. 91–100% | 7.2 | 5.7 | 5.9 |

29. What percentage of *acute* pain can be safely and effectively alleviated by today's treatments?

| | 2009 | 2010 | 2011 |
|------------------|------|------|------|
| a. Less than 30% | 1.1% | 0.3% | 1.2% |
| b. 30–60% | 6.2 | 4.1 | 6.0 |
| c. 61–80% | 14.3 | 13.4 | 15.0 |
| d. 81–90% | 39.0 | 40.9 | 40.9 |
| e. 91–100% | 39.4 | 41.3 | 36.8 |

30. How much training have you had in managing pain?

| | 2009 | 2010 | 2011 |
|---|-------|-------|-------|
| a. I have had all the training I need to fully manage pain. | 10.7% | 11.0% | 13.5% |
| b. I have had some training. | 51.7 | 55.0 | 51.0 |
| c. I have had little training. | 25.7 | 25.7 | 24.3 |
| d. I have had no training. | 11.9 | 8.3 | 11.3 |

31. Which of these formats would you prefer for training in pain assessment and treatment? (Mark all that apply.)

| | 2009 | 2010 | 2011 |
|--------------------------------------|-------|-------|-------|
| a. Pamphlet/brochure | 28.9% | 26.8% | 28.8% |
| b. Online session or webinar | 37.4 | 38.6 | 38.8 |
| c. Traditional (in person) seminar | 54.3 | 54.1 | 52.0 |
| d. I don't feel I need more training | 15.4 | 17.6 | 16.3 |
| e. Other | 0.1 | 0.8 | 0.7 |

32. Are you aware of the Michigan Automated Prescription System (MAPS), which is available to physicians to track when and where controlled substances have been dispensed to your patients?

| | 2009 | 2010 | 2011 |
|--------|-------|-------|-------|
| a. Yes | 67.5% | 69.2% | 73.5% |
| b. No | 32.5 | 30.8 | 26.5 |

33. Have you ever used MAPS?

| | 2009 | 2010 | 2011 |
|--------|-------|-------|-------|
| a. Yes | 38.7% | 42.4% | 47.0% |
| b. No | 61.3 | 57.6 | 53.0 |

34. How often does the fear of losing your medical license affect your decision to prescribe opiates?

| | 2009 | 2010 | 2011 |
|---------------------|-------|-------|-------|
| a. Never | 45.6% | 45.5% | 44.3% |
| b. Rarely | 26.8 | 30.6 | 28.2 |
| c. Some of the time | 18.6 | 16.0 | 19.1 |
| d. Frequently | 5.6 | 5.3 | 5.3 |
| e. Always | 3.4 | 2.6 | 3.1 |

35. What is the greatest barrier to adequately addressing your patients' pain? (Mark one.)

| | 2009 | 2010 | 2011 |
|---|-------|-------|-------|
| a. My lack of knowledge or proper training on how to fully assess and treat pain. | 17.3% | 16.4% | 16.5% |
| b. Insufficient time with patients to assess pain. | 15.3 | 16.1 | 15.2 |
| c. Patient does not report, or underreports, his/her pain. | 23.1 | 23.1 | 22.7 |
| d. Lack of effective pain medication. | 6.1 | 5.6 | 5.1 |
| e. My fear that the patient may become addicted to pain medication. | 31.7 | 29.3 | 32.4 |
| f. Fear of losing my license for improper prescribing of controlled substances. | 4.9 | 6.8 | 5.4 |
| g. Hospice and palliative care services are not readily available to my patients. | 1.7 | 2.7 | 2.7 |

36. Which of the following non-pharmacological treatments for pain do you use to treat your patients' pain?

| Treatment Modality | I use | | | I refer/ recommend | | |
|-------------------------------------|-------|------|------|-----------------------|-------|-------|
| | 2009 | 2010 | 2011 | 2009 | 2010 | 2011 |
| a. Acupuncture | 3.2% | 3.6% | 4.1% | 22.7% | 23.8% | 22.2% |
| b. Massage/therapeutic touch | 10.3 | 8.9 | 12.1 | 31.7 | 35.2 | 31.6 |
| c. Meditation/relaxation techniques | 11.4 | 15.4 | 14.1 | 25.1 | 27.0 | 23.2 |
| d. Spiritual approaches | 6.8 | 7.3 | 7.2 | 14.6 | 14.8 | 14.6 |
| e. Physical movement | 22.4 | 24.9 | 26.3 | 31.0 | 33.3 | 28.4 |
| f. Non-prescription supplements | 21.0 | 20.4 | 21.3 | 15.4 | 14.7 | 14.2 |
| g. Other | 6.3 | 4.8 | 4.7 | 4.0 | 3.9 | 4.3 |

37. What have been your best sources of information on pain management? (Mark two.)

| | 2009 | 2010 | 2011 |
|---|-------|-------|-------|
| a. CME courses | 52.2% | 48.8% | 51.4% |
| b. Discussion with peers | 30.7 | 35.2 | 28.9 |
| c. MDCH Bureau of Health Professions | 0.7 | 2.0 | 2.2 |
| d. Medical school | 9.9 | 0.8 | 11.5 |
| e. Professional associations | 10.4 | 11.0 | 10.3 |
| f. Professional journals/research literature/websites | 36.1 | 34.2 | 31.5 |
| g. Residency program | 15.3 | 17.5 | 14.8 |
| h. Other | 0.3 | 3.9 | 0.6 |

38. Are you formally certified in pain management by any of the following organizations? (Mark all that apply.)

| | 2009 | 2010 | 2011 |
|---|-------|-------|-------|
| a. I am not formally certified in pain management | 96.9% | 97.5% | 97.1% |
| b. American Academy of Pain Management | 0.7 | 0.3 | 0.6 |
| c. American Board of Anesthesiology | 1.0 | 0.8 | 1.1 |
| d. American Osteopathic Board of Anesthesiology | 0.2 | 0.0 | 0.5 |
| e. American Board of Hospice and Palliative Medicine | 0.5 | 0.2 | 0.9 |
| f. American Board of Interventional Pain Physicians | 0.1 | 0.2 | 0.2 |
| g. American Board of Neurological Surgery | 0.1 | 0.0 | 0.4 |
| h. American Board of Pain Medicine | 0.2 | 0.2 | 0.4 |
| i. American Board of Physical Medicine and Rehabilitation | 0.6 | 0.5 | 0.7 |
| j. American Board of Psychiatry and Neurology | 0.8 | 0.2 | 0.8 |

39. What percentage of the patients you saw in the last 12 months received end-of-life care?

| | 2009 | 2010 | 2011 |
|------------|-------|-------|-------|
| a. 1–24% | 93.7% | 93.3% | 91.8% |
| b. 25–49% | 3.4 | 4.3 | 4.4 |
| c. 50–74% | 0.9 | 0.8 | 2.1 |
| d. 75–100% | 2.0 | 1.6 | 1.7 |

40. What percentage of your end-of-life patients do you believe are receiving the best pain management that is safely available?

| | 2009 | 2010 | 2011 |
|------------------|-------|-------|-------|
| a. Less than 30% | 12.5% | 11.9% | 14.0% |
| b. 30–60% | 16.9 | 14.1 | 16.1 |
| c. 61–80% | 17.7 | 19.5 | 18.1 |
| d. 81–90% | 26.7 | 26.8 | 25.0 |
| e. 91–100% | 26.2 | 27.7 | 26.8 |

41. To what extent do you agree with the following statement? “Many end-of-life patients are being undertreated for pain.”

| | 2009 | 2010 | 2011 |
|----------------------|-------|-------|-------|
| a. Strongly agree | 21.1% | 20.7% | 18.6% |
| b. Agree | 40.6 | 38.4 | 40.3 |
| c. Disagree | 30.9 | 36.3 | 35.3 |
| d. Strongly disagree | 7.3 | 4.6 | 5.8 |

42. Which of these formats would you prefer for training in pain assessment and treatment with respect to end-of-life patients? (Mark all that apply.)

| | 2009 | 2010 | 2011 |
|--------------------------------------|-------|-------|-------|
| a. Pamphlet/brochure | 29.8% | 30.9% | 31.1% |
| b. Online session or webinar | 36.7 | 38.6 | 39.1 |
| c. Traditional (in person) seminar | 58.4 | 52.6 | 53.7 |
| d. I don't feel I need more training | 16.9 | 16.7 | 15.4 |
| e. Other | 0.2 | 0.6 | 0.2 |

43. What is the greatest barrier to adequately addressing your patients' end-of-life pain? (Mark one.)

| | 2009 | 2010 | 2011 |
|---|-------|-------|-------|
| a. My lack of knowledge or proper training on how to fully assess and treat pain. | 26.3% | 21.5% | 25.8% |
| b. Insufficient time with patients to assess pain. | 19.8 | 20.6 | 20.2 |
| c. Lack of effective pain medication. | 6.3 | 5.2 | 4.0 |
| d. Patient does not report, or underreports, his/her pain. | 35.4 | 38.9 | 35.6 |
| e. My fear that the patient may become addicted to pain medication. | 1.8 | 4.2 | 3.6 |
| f. Fear of losing my license for improper prescribing of controlled substances. | 4.9 | 4.2 | 5.5 |
| g. Hospice and palliative care services are not readily available to my patients. | 5.4 | 5.4 | 5.3 |