

# *Michigan Department of Community Health*

## *Survey of Physicians*

### **Survey Findings 2010**

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#### **INTRODUCTION**

As of January 2010, the total number of physicians licensed in Michigan was 43,562. Of these, 32,043 are doctors of allopathic medicine (MD) and 6,753 are doctors of osteopathic medicine (DO). The remaining 3,759 MDs and 1,007 DOs hold an educational limited license while they are enrolled in a graduate medical training program.

In 2010, in conjunction with the license renewal process, the Michigan Department of Community Health (MDCH) conducted the sixth 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 2010 survey also included questions about pain management and practice arrangements.

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 12,135 physicians renewed their license and 1,421 survey responses were received online or by mail (compared to 3,343 in 2009), for a response rate of 12 percent and a margin of error of  $\pm 2.4$  percent with 95 percent confidence.<sup>1</sup> About 93 percent of the physicians who responded to the survey are MDs and 7 percent are DOs. Since DOs comprise about 21 percent of fully licensed physicians, they are underrepresented in the survey responses for 2010.

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 2010 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 2010 compared to those renewing in 2009 or 2008.

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<sup>1</sup> For example, assume 60 percent of respondents answered “yes” to a survey question with a margin of error of  $\pm 2.4$  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 2010, in 95 occurrences the percentage of respondents who answer “yes” would be between 57.6 percent and 62.4 percent.

## EMPLOYMENT CHARACTERISTICS

- As shown in Exhibit 1, about 62 percent of fully licensed physicians responding to this survey are *active* in Michigan—that is, they are providing patient care *in Michigan* (58 percent) or working as a physician in Michigan with no time in patient care (4 percent).<sup>2</sup> The percentage of physicians reporting that they are providing patient care in Michigan appears to be decreasing slightly over time.
- About 38 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, 2010

Status	Percentage
<b>Active in Michigan</b>	<b>62%</b>
Providing patient care services in Michigan	58
Working as a physician in Michigan but no time in patient care	4
<b>Not Active in Michigan</b>	<b>38</b>
Working as a physician, but not in Michigan	31
Not working as a physician	7

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

In 2009, MDCH asked physicians for the first time to indicate their main practice arrangement. Physicians were also asked 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. There also is a slightly higher percentage (within the margin of error) of physicians who report that they share expenses with other physician practices or are part of a larger group practice.

- A large majority (67 percent) of active physicians practice in a group practice.
  - 38 percent work in a practice with six or more full-time equivalent (FTE) physicians
  - 29 percent work in a practice with two to five FTE physicians.
- One-third (33 percent) of active physicians work in a solo practice, including 7 percent who work in a solo practice that shares expenses with other physician practices.
- Just under one-third of active physicians (31 percent) indicate that they are not salaried employees.
- Nearly one in five (18 percent) are salaried employees with a practice that they own or co-own, compared to 25 percent of physicians responding to the survey in 2009. Another 18 percent are salaried employees with a practice or professional corporation owned by someone else.
- One-fifth (20 percent) are salaried employees with a hospital; compared to 17 percent of physicians responding to the survey in 2009. Fifteen percent are salaried employees with a university or teaching institution; compared to 10 percent in 2009.

<sup>2</sup> This definition of the term “active” is used throughout this report.

**EXHIBIT 2**  
Employment Characteristics of Active Physicians, 2010

Employment type	Percentage
Not a salaried employee	31%
Salaried employee with:	
a. a practice I own or co-own	18
b. a professional corporation or practice that I do not own	18
c. a managed care organization	1
d. a hospital	20
e. a university or teaching institution	15
f. another type of organization	6

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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 2010 (35 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). In the 2007 survey of physicians in the same license renewal cohort, the percentage of physicians indicating a primary care specialty was identical.

**EXHIBIT 3**  
Distribution of Active Physicians, by Specialty, 2010

	Specialty			Specialty	
	Primary	Secondary		Primary	Secondary
Addiction medicine	<1%	2%	Ophthalmology	1%	<1%
Allergy & Immunology	1	2	Orthopedic Surgery	2	<1
Anesthesiology	3	<1	Otolaryngology	<1	1
Cardiovascular Disease	3	2	Osteopathic Manipulative Medicine	<1	<1
Critical Care Medicine	<1	2	Pain medicine	<1	3
Dermatology	1	1	Pathology (General)	3	1
Emergency Medicine	4	3	Pediatrics (General)	7	8
Endocrinology	1	2	Pediatrics subspecialty	4	<1
Family Practice	15	6	Medical Pediatrics	<1	<1
Gastroenterology	<1	1	Physical Medicine & Rehabilitation	1	2
General Medicine	2	4	Plastic Surgery	1	<1
Geriatrics	1	8	Preventive Medicine	1	2
Hospice & palliative medicine	1	1	Psychiatry (Adult)	6	6
Hospitalist	2	3	Psychiatry (Child & Adolescent)	2	5
Infectious Disease	1	<1	Pulmonary Disease	1	<1

	Specialty		Specialty	
	Primary	Secondary	Primary	Secondary
Internal Medicine (General)	11%	14%	Radiology (Diagnostic)	5% <1%
Nephrology	<1	<1	Radiology (Therapeutic)	1 1
Neurology	2	2	Rheumatology	1 <1
Neurological Surgery	1	<1	Sports Medicine	1 3
Obstetrics & Gynecology (General)	5	<1	Surgery (General)	3 2
Obstetrics & Gynecology subspecialty	1	1	Thoracic Surgery	<1 1
Gynecology (Only)	1	<1	Urology	1 1
Occupational Medicine	2	2	Vascular Surgery	1 <1
Oncology/Hematology	1	2	Other	3 8

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
NOTE: Percentages do not equal 100 percent due to rounding.

Psychiatry, dermatology, and pain medicine are the specialties for which active physicians say that they or their patients have the greatest difficulty scheduling a timely appointment for a referral (see Exhibit 4). Six to nine percent of physicians note difficulty scheduling appointments for referrals to these specialty areas. About 5 percent of physicians also indicate difficulty arranging appointments for referrals to endocrinology, rheumatology, addiction medicine, and neurology.

#### EXHIBIT 4 Greatest Difficulty Scheduling Referrals, by Specialty Area, 2010

Specialty	Percentage of active physicians indicating difficulty scheduling a referral to the identified specialty
Psychiatry (Adult)	9%
Dermatology	8
Psychiatry (Child & Adolescent)	6
Pain medicine	6
Endocrinology	5
Rheumatology	5
Addiction medicine	5
Neurology	5

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
NOTE: Data presented are for *active* physicians fully licensed in Michigan.

## TIME SPENT PROVIDING PATIENT CARE

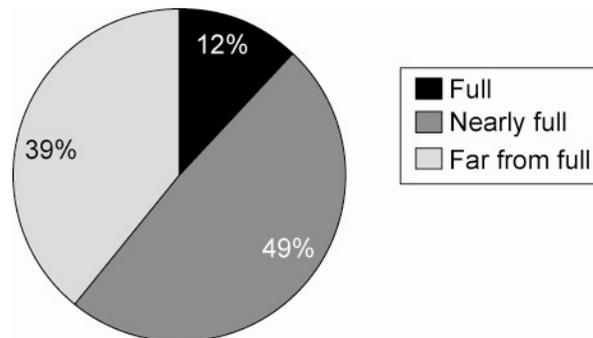
- Fully licensed, active physicians who provide patient care spend an average of 39 hours per week providing such care.
- One-fourth (25 percent) of these physicians spend 28 hours or fewer per week providing patient care.
- Another one in four (25 percent) spend more than 50 hours per week providing patient care.

## PRACTICE CAPACITY AND ACCEPTANCE OF MEDICAID

- The practice capacity of physicians who are providing patient care has not changed significantly since 2006.
  - 12 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 (49 percent) of active physicians report that their practice is nearly full and they can accept only a few new patients.
  - 39 percent report that their practice is far from full and they can accept many new patients.
- Nearly nine out of ten (87 percent) of fully licensed physicians who are providing patient care report that they currently provide care to Medicaid patients (see Exhibit 6); 73 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 2007.
- Eighty-eight percent of physicians who are providing patient care report that they provide care to Medicare patients; 83 percent provide care to *new* Medicare patients.

### EXHIBIT 5

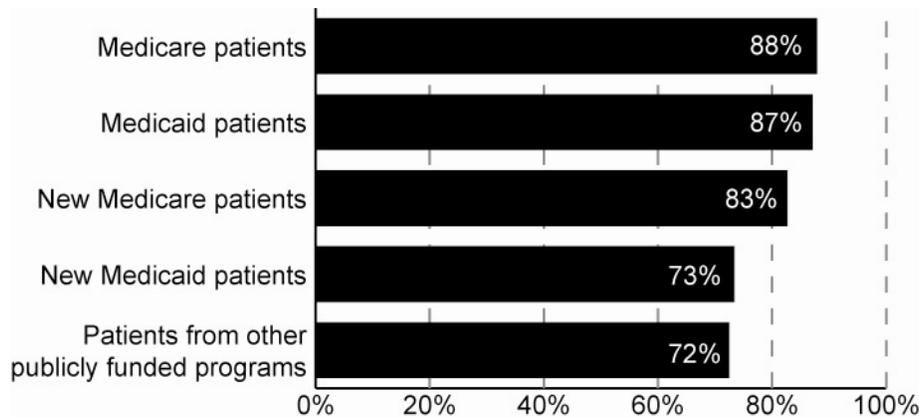
#### Practice Capacity of Active Physicians, 2010



SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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, 2010



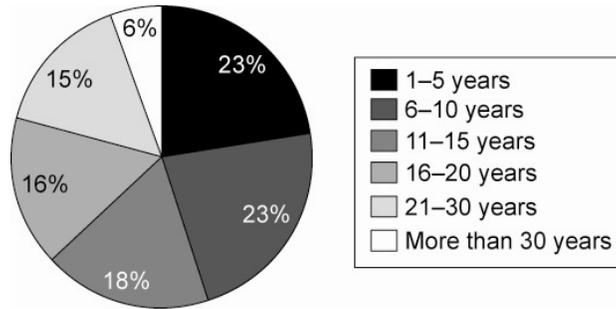
SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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

## PLANS TO CONTINUE PRACTICE

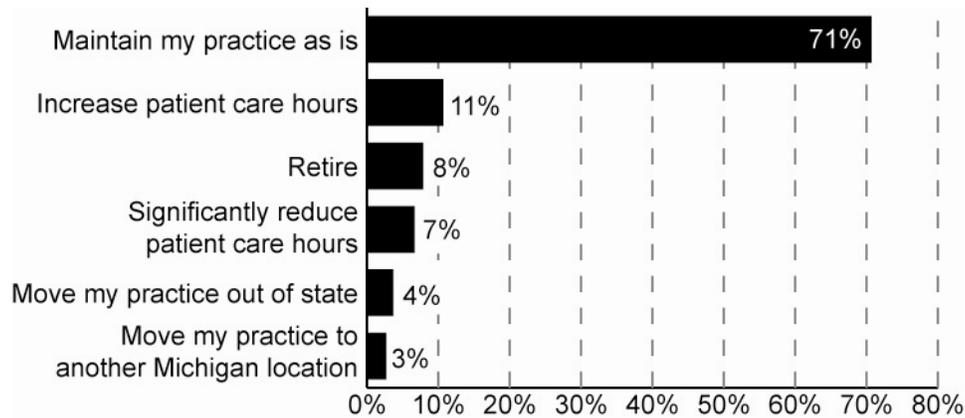
- Nearly half (46 percent) of active physicians surveyed in 2010 plan to practice medicine for only one to ten more years (see Exhibit 7). This percentage is about the same as reported by physicians surveyed in 2009, but significantly higher than reported by physicians in the same license renewal cohort when they were surveyed in 2007.
- About 21 percent of active physicians plan to continue practicing medicine for more than 20 years.
- In the next three years, 11 percent of active physicians plan to increase patient care hours, 7 percent plan to significantly reduce patient care hours, 4 percent plan to move their practice out of state, and 8 percent plan to retire (see Exhibit 8). 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, lifestyle changes, and inadequate reimbursement for services (see Exhibit 9).
  - By far, age is the predominant reason given by active physicians for retiring or reducing patient care hours. Among those planning to retire, 78 percent of active physicians cite age as a factor in their plans. While age has always been the foremost factor, it has been steadily increasing since 2006 when 63 percent of active physicians said age was a factor in their decision to retire or reduce patient care hours. This is not surprising given the increase in the percentage of physicians aged 55 and older over the same time period.
  - Another noteworthy finding is that the percentage of active physicians who cite lifestyle changes as a factor in the decision to retire or reduce patient care hours exceeds, for the first time, the percentage who cite inadequate reimbursement for services. About 30 percent of physicians cited lifestyle changes while only 24 percent cited inadequate reimbursement for services.

**EXHIBIT 7**  
Plans to Continue Practicing, Active Physicians, 2010



SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
NOTE: Data presented are for *active* physicians fully licensed in Michigan. Percentages do not equal 100 percent due to rounding.

**EXHIBIT 8**  
Practice Plans of Active Physicians for the Next Three Years, 2010



SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
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, 2010**

Factors	Percentage
Age	78%
Increasing administrative/regulatory burden	35
Lifestyle changes	30
Inadequate reimbursement for services	24
Medical malpractice insurance cost	19
Personal or family health concerns	15
General lack of job satisfaction	14
Move to management/consulting/teaching/research	10
Childbearing/childrearing	4
Employer/employee conflict	4

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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.

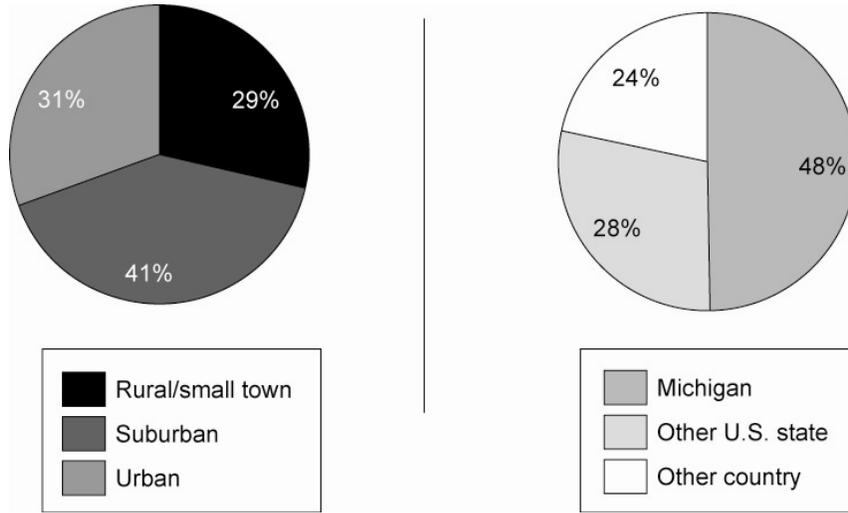
## ORIGIN AND EDUCATION BACKGROUND

The 2010 survey findings on the origin and education background of fully licensed, active physicians are similar to previous survey findings.

- In the 2010 survey, 48 percent of active Michigan-licensed physicians grew up in Michigan, and 28 percent grew up in another U.S. state (see Exhibit 10).
- About 41 percent of active physicians grew up in a suburban area, 31 percent in an urban area, and 29 percent in a rural area/small town.
- Survey results show that 42 percent of active physicians attended a medical school in Michigan, 31 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 60 percent of active physicians surveyed in 2010 did a residency in Michigan; about 19 percent did a fellowship in Michigan.
- About 4 percent of fully licensed physicians are currently enrolled in a graduate medical training program in Michigan.

**EXHIBIT 10**  
Origin of Active Physicians, 2010

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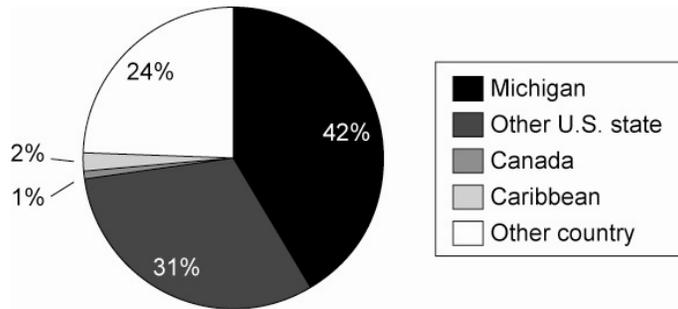


SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
NOTE: Data presented are for *active* physicians fully licensed in Michigan. Percentages do not equal 100 percent due to rounding.

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**EXHIBIT 11**  
Education Background of Active Physicians, 2010

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SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
NOTE: Data presented are for *active* physicians fully licensed in Michigan.

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## PROFESSIONAL ACTIVITIES

- The majority of physicians are involved in teaching. Sixty-seven percent are involved in teaching either in a classroom (17 percent) or clinical setting (50 percent) (see Exhibit 12).
- About 16 percent of physicians are involved in administration in a private practice. The percentage of active physicians involved in administration in private practice has declined since 2007 (24 percent), which is consistent with the decrease in the percentage of physicians in a single physician practice or a salaried position in a practice they own or co-own.

### EXHIBIT 12

#### Distribution of Professional Activities, 2010

Professional activity	Percentage
Teaching (clinical setting)	50%
Teaching (classroom)	17
Research	19
Administration in medical school, hospital, health plan, or nursing home	17
Administration in a private practice	16
Emergency room care	12
Patient care in a nursing home	8
Medical examiner	2

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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.

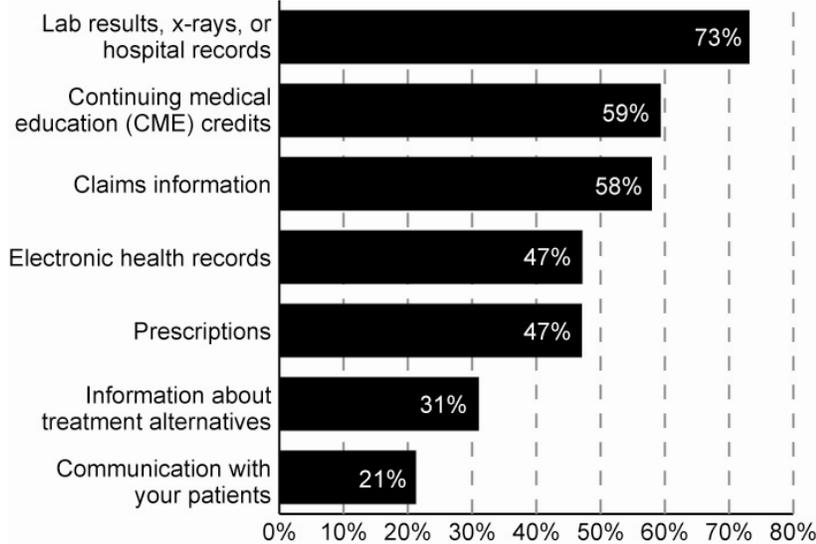
## USE OF COMPUTER TECHNOLOGY

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 (73 percent), followed by continuing medical education credits (59 percent) and claims information (58 percent).

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 almost doubled since 2006 from 25 to 47 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, 2010



SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

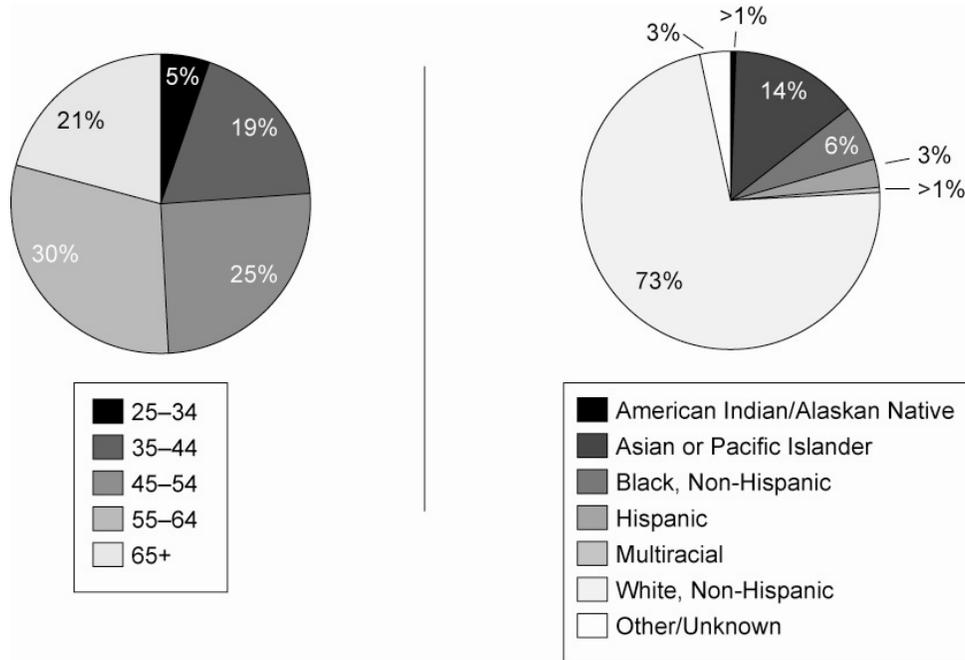
NOTE: Data presented are for *active* physicians fully licensed in Michigan.

### GENDER, AGE, RACE, AND ETHNICITY

- Seventy percent of fully licensed, active physicians surveyed in 2010 are male; 30 percent are female. The percentage of active physicians who are female is slowly increasing over time.
- About 51 percent of active physicians are aged 55 or older (see Exhibit 14).
- About 73 percent of active physicians are white, 14 percent are Asian or Pacific Islander, 6 percent are African American, 3 percent are Hispanic, 1 percent are American Indian/Alaskan Native, and 1 percent are multiracial.

## EXHIBIT 14

### Age and Race/Ethnicity of Active Physicians in Michigan, 2010



SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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

## PAIN MANAGEMENT

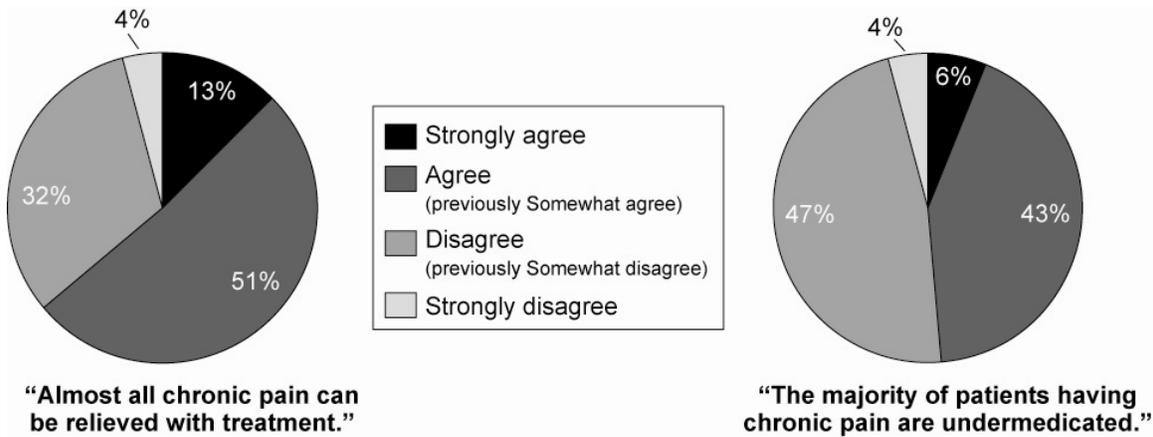
This is the second year the MDCH has collected information from physicians about pain management; the first time was in 2009. All responses are for physicians who are active, i.e., providing patient care services in Michigan or working as a physician in Michigan but with no time in patient care.

### *Attitudes Regarding Pain Management*

Nearly two-thirds of active physicians either strongly agree (13 percent) or agree (51 percent) with the statement, “Almost all chronic pain can be relieved with treatment” (see Exhibit 15). Approximately 49 percent either strongly agree (6 percent) or somewhat agree (43 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 2010 is 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 have had an effect on the distribution of responses.

### EXHIBIT 15

#### Physicians' Attitudes Regarding Treatment of Chronic Pain, 2010

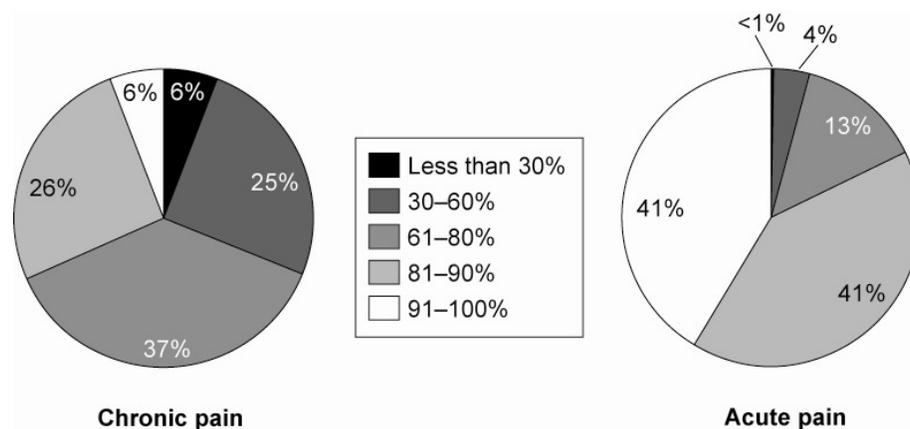


SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
 NOTE: Data presented are for *active* physicians fully licensed in Michigan.

Active physicians indicate much greater confidence in the ability of current medicine to alleviate *acute* pain than *chronic* pain (see Exhibit 16). More than four-fifths (82 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 (32 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.

### EXHIBIT 16

#### Physician Confidence in the Ability of Treatment to Safely and Effectively Alleviate Chronic and Acute Pain, 2010



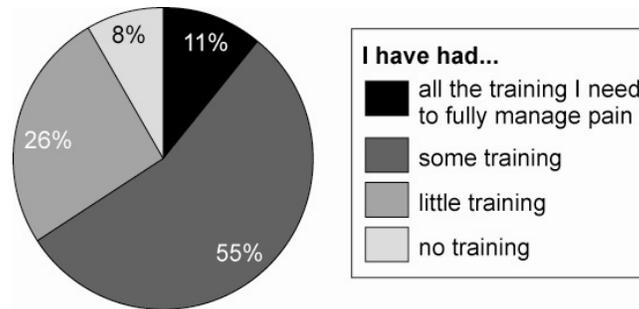
SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
 NOTE: Data presented are for *active* physicians fully licensed in Michigan.

## Pain Management Training

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

- Thirty-four percent of active physicians report having had little (26 percent) or no training (8 percent) in managing pain.
- Just over half (55 percent) say they have had some training, up from 52 percent in 2009; and 11 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.
- More than half of active physicians (54 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.
- About 18 percent of active physicians feel they do not need more training in pain assessment and treatment.

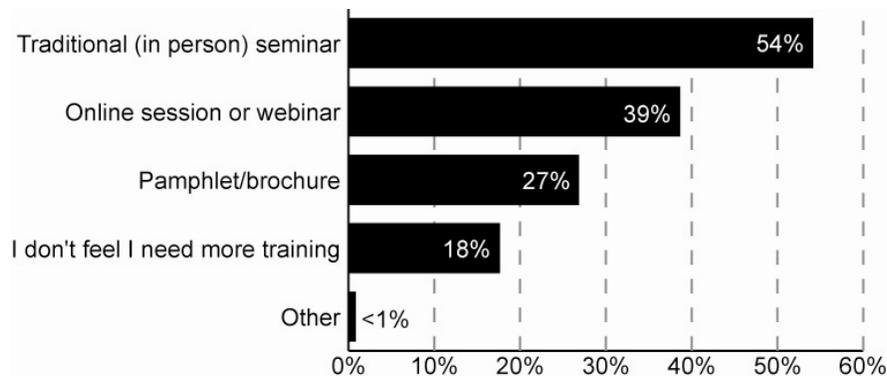
**EXHIBIT 17**  
Pain Management Training Received by Active Physicians, 2010



SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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

**EXHIBIT 18**  
Preferred Formats for Training in Pain Management, 2010



SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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 discussion with peers and professional publications, were the sources identified most often by physicians responding to the survey in 2010 (see Exhibit 19):

- About half (49 percent) say that continuing medical education (CME) courses have been their best source of information.
- About 35 percent say their best source of information has been discussion with peers, compared to 31 percent in 2009.
- More than a third (34 percent) indicate that professional journals, research literature, and/or websites have been the best sources of information.

**EXHIBIT 19**  
**Best Sources of Information on Pain Management**  
**as Indicated by Active Physicians, 2010**

Source	Percentage
CME courses	49%
Discussion with peers	35
Professional journals/research literature/websites	34
Residency program	18
Professional associations	11
MDCH Bureau of Health Professions	2
Medical school	1
Other	4

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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, 29 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. Sixteen percent point to their own lack of knowledge or proper training on how to fully assess and treat pain, and 16 percent say they have insufficient time with patients to assess pain.

Only about 7 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 (76 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, 2010

Barrier	Percentage
My fear that the patient may become addicted to pain medication.	29%
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.	16
Insufficient time with patients to assess pain.	16
Fear of losing my license for improper prescribing of controlled substances.	7
Lack of effective pain medication.	6
Hospice and palliative care services are not readily available to my patients.	3

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
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. More than two-thirds (69 percent) of active physicians report being aware of MAPS, and 42 percent report having used MAPS. Both of these percentages are slightly higher than reported by physicians in 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 percent of active physicians report using these to treat their patients, compared to 15 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, 2010

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	9%	35%
Physical movement	25	33
Meditation/relaxation techniques	15	27
Acupuncture	4	24
Non-prescription supplements	20	15
Spiritual approaches	7	15
Other	5	4

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.  
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, 93 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.

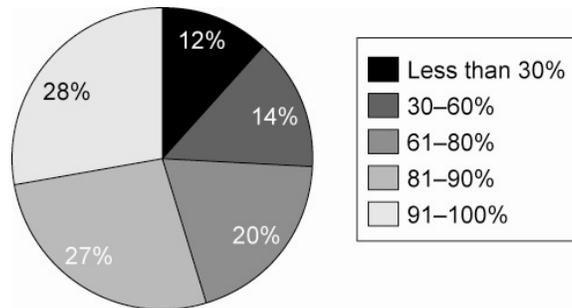
### ***Attitudes Regarding End-of-Life Pain Management***

Fifty-nine percent of physicians who treat end-of-life patients either strongly agree (21 percent) or agree (38 percent) with the statement, “Many end-of-life patients are being undertreated for pain.”

More than half (55 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, 2010



SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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.

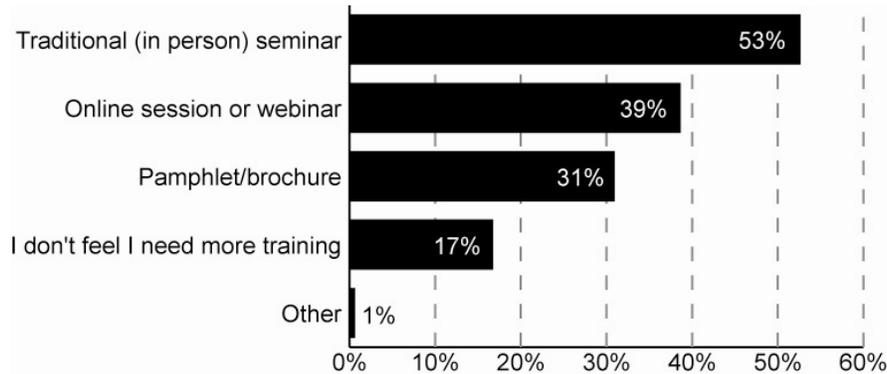
### ***Training Preferences***

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

- Fifty-three 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.
- Seventeen percent feel they do not need more training.

## EXHIBIT 23

### Preferred Formats for Training on End-of-Life Pain Management, 2010



SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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-nine 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-two percent say the greatest barrier is their own lack of knowledge or proper training on how to fully assess and treat pain.
- Twenty-one percent say the greatest barrier is that they have insufficient time with patients to assess pain.
- Five percent or fewer indicate the following barriers:
  - Lack of effective pain medication (5 percent)
  - Hospice and palliative care services are not readily available to my patients (5 percent)
  - Fear of losing my license for improper prescribing of controlled substances (4 percent)
  - Fear that the patient may become addicted to pain medication (4 percent)

## EXHIBIT 24

### Greatest Barriers to Addressing Patients' End-of-Life Pain, 2010

Barrier	Percentage
Patient does not report, or underreports, his/her pain.	39%
My lack of knowledge or proper training on how to fully assess and treat pain.	22
Insufficient time with patients to assess pain.	21
Lack of effective pain medication.	5
Hospice and palliative care services are not readily available to my patients.	5
Fear of losing my license for improper prescribing of controlled substances.	4
My fear that the patient may become addicted to pain medication.	4

SOURCE: Michigan Department of Community Health Survey of Physicians, 2010.

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



## Appendix:

### *Survey Questions and Response Frequencies<sup>†,‡</sup>*

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1. 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.)
- \_\_\_\_\_

2. Are you an MD or DO?

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

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

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

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

	2006	2007	2008	2009	2010
a. Yes	8.2%	6.0%	5.0%	4.1%	4.1%
b. No	91.8	94.0	95.0	95.9	95.9

**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”.**

5. What is your gender?

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

<sup>†</sup> Unless otherwise noted, data presented are only for fully licensed physicians who are providing patient care services in Michigan.

<sup>‡</sup> Frequencies from the 2005 survey are not included here because changes made to the survey after 2005 do not allow comparison of responses to the 2005 survey.

6. In what year were you born?

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

\*In 2006, the survey data was 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
a. American Indian/Alaskan Native	0.5%	0.2%	0.5%	0.3%	0.7%
b. Asian or Pacific Islander	20.4	17.4	17.3	16.4	13.9
c. Black, Non-Hispanic	6.7	4.1	4.4	4.2	5.9
d. Hispanic	2.3	2.3	2.6	2.8	3.1
e. Multiracial	1.0	0.4	0.6	0.6	0.6
f. White, Non-Hispanic	63.2	71.6	70.3	71.9	72.7
g. Other/Unknown	6.0	4.1	4.3	3.7	3.2

8. Please indicate your citizenship status:

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

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?

	Percentage of physicians who provide patient care				
	2006	2007	2008	2009	2010
a. Outpatient	71.4%	78.2%	79.3%	80.0%	75.2%
b. Inpatient	28.6	21.8	20.7	20.0	24.8

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

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

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

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

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

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

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

	Percentage of physicians who provide patient care				
	2006	2007	2008	2009	2010
a. Mean	40.0	41.6	39.9	39.4	38.5
b. 25 <sup>th</sup> Percentile	30.0	30.0	30.0	30.0	28.0
c. Median	40.0	40.0	40.0	40.0	40.0
d. 5 <sup>th</sup> Percentile	50.0	50.0	50.0	50.0	50.0

14. Do you have hospital admitting privileges?

	Percentage of physicians who provide patient care				
	2006	2007	2008	2009	2010
a. Yes	72.0%	75.0%	74.3%	72.1%	72.3%
b. No	28.0	25.0	25.7	27.9	27.7

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

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

\*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?

	Percentage of physicians who provide patient care				
	2006	2007	2008	2009	2010
a. My practice is full; I cannot accept any new/additional patients.	15.5%	10.8%	11.5%	11.7%	12.2%
b. My practice is nearly full; I can accept a few new patients.	46.7	49.6	50.4	48.7	48.9
c. My practice is far from full; I can accept many more patients.	37.8	39.7	38.0	39.6	39.0

17. Are you currently providing care to...

	Percentage of physicians who provide patient care				
	2006	2007	2008	2009	2010
a. Medicaid patients	89.0%	86.7%	84.6%	84.9%	87.0%
b. New Medicaid patients	79.6	73.2	70.5	73.1	73.3
c. Medicare patients	89.4	90.8	90.4	89.7	87.8
d. New Medicare patients	86.0	86.0	85.5	83.9	82.6
e. Patients from other publicly funded programs	77.1	72.5	71.3	73.3	72.4

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.)

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

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
a. Addiction Medicine	Not asked	Not asked	Not asked	0.2%	0.4%
b. Allergy & immunology	1.0%	1.0%	0.9%	0.7	1.1
c. Anesthesiology	3.6	2.8	3.0	3.2	2.5
d. Cardiovascular disease	2.9	2.7	2.1	1.6	3.1
e. Critical care medicine	0.4	0.6	0.4	0.6	0.3
f. Dermatology	1.3	1.4	1.9	1.4	1.0
g. Emergency medicine	7.5	5.4	4.8	5.2	3.8
h. Endocrinology	0.9	0.7	0.9	0.6	0.6
i. Family practice	10.8	15.7	14.3	15.8	15.1
j. Gastroenterology	1.3	0.8	1.2	1.0	0.4
k. General medicine	3.0	2.5	2.7	3.5	2.0
l. Geriatrics	0.9	0.5	0.9	0.7	1.3
m. Hospice & palliative medicine	Not asked	Not asked	Not asked	0.5	1.0
n. Hospitalist	1.5	0.8	1.0	1.2	2.0
o. Infectious disease	0.5	0.5	0.6	0.9	1.0
p. Internal medicine (general)	8.8	11.3	11.4	9.3	10.6
q. Nephrology	1.5	0.6	0.9	1.6	0.1
r. Neurology	2.3	1.8	1.7	2.5	1.5
s. Neurological surgery	0.7	0.5	0.6	0.4	0.6
t. Obstetrics & gynecology (general)	3.2	4.1	3.2	4.0	4.9
u. Obstetrics & gynecology subspecialty	0.7	0.8	0.7	0.3	0.9
v. Gynecology (only)	0.4	0.5	0.8	1.1	0.5
w. Occupational medicine	1.8	1.4	1.1	1.1	1.6
x. Oncology/hematology	2.2	1.5	1.5	1.9	1.0
y. Ophthalmology	2.0	2.0	2.8	2.7	1.3
z. Orthopedic surgery	2.4	2.8	2.8	2.9	2.0
aa. Otolaryngology	0.8	1.2	1.0	1.2	0.4
bb. Osteopathic manipulative medicine	0.0	0.2	0.3	0.4	0.1
cc. Pain medicine	Not asked	Not asked	Not asked	0.5	0.3
dd. Pathology (general)	2.6	2.5	2.7	3.0	2.9
ee. Pediatrics (general)	5.1	5.7	6.2	5.4	7.4
ff. Pediatrics subspecialty	3.1	1.8	1.6	1.7	3.5
gg. Medical pediatrics	0.2	0.1	0.2	0.2	0.1
hh. Physical medicine & rehabilitation	1.3	1.6	1.2	1.3	1.0
ii. Plastic surgery	0.5	1.2	0.8	0.4	1.0
jj. Preventive medicine	0.5	0.2	0.5	0.4	0.8
kk. Psychiatry (adult)	5.2	5.7	5.9	6.4	5.8
ll. Psychiatry (child & adolescent)	0.9	1.0	1.5	1.0	1.5
mm. Pulmonary disease	1.3	0.8	0.8	0.6	0.5
nn. Radiology (diagnostic)	4.8	4.4	4.7	4.1	4.7
oo. Radiology (therapeutic)	1.0	1.0	0.6	0.7	0.5
pp. Rheumatology	0.3	0.7	0.5	0.6	0.9

<b>Primary Specialties</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
qq. Sports medicine	0.0%	0.1%	0.1%	0.1%	0.5%
rr. Surgery (general)	3.0	4.0	3.6	3.3	3.1
ss. Thoracic surgery	0.8	0.3	0.4	0.3	0.4
tt. Urology	1.9	1.3	1.3	0.7	0.5
uu. Vascular surgery	0.6	0.4	0.3	0.5	0.6
vv. Other	4.2	3.4	3.4	2.6	2.9

<b>Secondary Specialties</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
a. Addiction Medicine	Not asked	Not asked	Not asked	4.3%	2.2%
b. Allergy & immunology	0.7%	1.1%	1.1%	1.0	1.9
c. Anesthesiology	0.9	0.5	0.7	1.0	0.0
d. Cardiovascular disease	2.7	2.7	1.6	1.6	2.2
e. Critical care medicine	3.9	3.4	2.9	1.6	1.9
f. Dermatology	0.2	1.1	0.4	0.6	1.1
g. Emergency medicine	4.0	2.7	2.5	1.3	2.6
h. Endocrinology	1.1	0.8	1.6	1.3	1.5
i. Family practice	4.5	4.7	4.6	4.9	5.6
j. Gastroenterology	1.2	1.2	0.8	1.0	0.7
k. General medicine	6.8	4.6	3.1	4.6	4.1
l. Geriatrics	4.3	9.0	5.6	7.6	7.9
m. Hospice & palliative medicine	Not asked	Not asked	Not asked	1.0	1.1
n. Hospitalist	3.1	2.7	3.1	2.5	2.6
o. Infectious disease	1.4	0.8	0.6	1.1	0.0
p. Internal medicine (general)	15.6	14.9	13.7	13.2	14.2
q. Nephrology	0.4	0.8	0.7	0.3	0.4
r. Neurology	2.2	0.7	0.7	0.8	1.9
s. Neurological surgery	0.1	0.2	0.2	0.3	0.0
t. Obstetrics & gynecology (general)	2.0	2.1	1.3	1.4	0.4
u. Obstetrics & gynecology subspecialty	1.5	0.7	0.3	1.3	1.1
v. Gynecology (only)	0.4	1.2	0.8	1.0	0.4
w. Occupational medicine	0.8	1.7	1.1	1.7	1.9
x. Oncology/hematology	1.2	1.2	1.0	1.1	1.5
y. Ophthalmology	0.1	0.2	0.3	0.3	0.0
z. Orthopedic surgery	0.3	0.3	0.1	0.2	0.4
aa. Otolaryngology	0.0	0.4	0.1	0.2	1.1
bb. Osteopathic manipulative medicine	1.1	2.6	2.9	3.0	0.0
cc. Pain medicine	Not asked	Not asked	Not asked	4.3	3.4
dd. Pathology (general)	0.7	0.5	0.6	0.6	0.7
ee. Pediatrics (general)	5.5	4.9	3.7	2.5	7.5
ff. Pediatrics subspecialty	3.9	2.7	2.2	2.9	0.4
gg. Medical pediatrics	0.8	0.4	0.2	0.5	0.4
hh. Physical medicine & rehabilitation	0.4	0.6	0.3	0.3	1.5
ii. Plastic surgery	0.4	1.2	0.7	0.8	0.0
jj. Preventive medicine	1.1	1.6	14.1	1.4	1.5
kk. Psychiatry (adult)	2.8	3.3	3.6	4.3	5.6

<b>Secondary Specialties</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
ll. Psychiatry (child & adolescent)	3.1%	3.6%	3.9%	3.8%	4.55
mm. Pulmonary disease	1.7	1.3	1.2	0.6	0.4
nn. Radiology (diagnostic)	1.1	0.8	0.4	0.5	0.4
oo. Radiology (therapeutic)	1.1	1.0	1.6	0.6	0.7
pp. Rheumatology	0.7	0.1	0.4	0.5	0.0
qq. Sports medicine	1.8	2.1	1.8	3.7	3.0
rr. Surgery (general)	2.4	1.8	1.7	1.7	1.9
ss. Thoracic surgery	0.8	0.3	0.6	0.6	0.7
tt. Urology	0.7	0.3	0.6	0.0	0.7
uu. Vascular surgery	0.6	1.4	1.6	1.6	0.4
vv. Other	9.7	10.3	9.6	8.7	7.5

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.)

<b>Referral Difficulties</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
a. Addiction Medicine	Not asked	Not asked	Not asked	5.4%	4.8%
b. Allergy & immunology	1.8%	1.2%	1.3%	1.1	1.3
c. Anesthesiology	0.5	0.3	0.3	0.1	0.3
d. Cardiovascular disease	1.5	0.8	0.9	0.7	0.3
e. Critical care medicine	0.4	0.2	0.4	0.7	0.3
f. Dermatology	7.0	7.0	6.4	6.6	7.8
g. Emergency medicine	0.2	0.2	0.1	0.2	0.1
h. Endocrinology	4.3	5.5	6.2	5.9	5.2
i. Family practice	0.3	0.5	1.1	0.9	0.6
j. Gastroenterology	2.7	2.5	2.2	2.4	3.1
k. General medicine	0.6	0.3	0.9	0.6	0.1
l. Geriatrics	0.7	0.4	0.8	0.7	0.8
m. Hospice & palliative medicine	Not asked	Not asked	Not asked	0.4	0.6
n. Hospitalist	0.3	0.2	0.3	0.3	0.1
o. Infectious disease	1.5	1.7	1.8	1.9	1.3
p. Internal medicine (general)	0.9	1.0	1.6	1.3	0.8
q. Nephrology	1.5	1.2	1.4	1.3	0.9
r. Neurology	5.2	4.8	5.2	4.7	4.6
s. Neurological surgery	3.3	2.7	3.7	3.8	2.3
t. Obstetrics & gynecology (general)	1.0	0.6	0.7	0.7	0.6
u. Obstetrics & gynecology subspecialty	0.6	0.5	0.7	0.5	0.6
v. Gynecology (only)	0.5	0.2	0.4	0.5	0.3
w. Occupational medicine	0.3	0.2	0.4	0.7	0.8
x. Oncology/hematology	0.5	0.3	0.6	0.8	0.3
y. Ophthalmology	1.2	1.0	0.7	0.5	0.7
z. Orthopedic surgery	5.3	5.0	4.5	4.0	2.8
aa. Otolaryngology	1.6	1.5	1.7	1.5	1.3
bb. Osteopathic manipulative medicine	0.5	0.5	0.7	0.7	0.6
cc. Pain medicine	Not asked	Not asked	Not asked	5.3	5.7
dd. Pathology (general)	0.2	0.1	0.1	0.1	0.1

<b>Referral Difficulties</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
ee. Pediatrics (general)	0.2%	0.5%	0.3%	0.1%	0.2%
ff. Pediatrics subspecialty	1.5	2.1	2.7	2.0	3.2
gg. Medical pediatrics	0.1	0.2	0.1	0.1	0.2
hh. Physical medicine & rehabilitation	1.2	0.6	0.8	0.7	1.2
ii. Plastic surgery	2.2	1.6	1.6	1.7	1.0
jj. Preventive medicine	0.1	0.2	6.4	0.4	0.5
kk. Psychiatry (adult)	4.7	6.2	7.7	9.5	9.2
ll. Psychiatry (child & adolescent)	4.4	4.9	6.4	8.1	5.9
mm. Pulmonary disease	1.0	0.7	0.9	1.6	1.2
nn. Radiology (diagnostic)	0.9	0.6	0.4	0.3	0.2
oo. Radiology (therapeutic)	0.4	0.4	0.2	0.3	0.2
pp. Rheumatology	3.8	1.7	5.7	5.9	5.2
qq. Sports medicine	0.7	0.3	0.2	0.5	0.1
rr. Surgery (general)	0.6	0.5	0.6	0.2	0.7
ss. Thoracic surgery	0.7	0.4	0.3	0.2	0.5
tt. Urology	1.7	1.5	1.5	1.7	2.1
uu. Vascular surgery	0.9	0.7	0.8	0.9	0.3
vv. Other	1.4	0.8	1.2	0.7	0.6

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

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

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

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

B. If in Michigan, please specify the school.

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

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

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

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
a. 1–5 years	14.7%	18.8%	22.5%	24.2%	22.5%
b. 6–10 years	18.8	22.1	23.6	22.7	22.7
c. 11–15 years	18.4	19.5	18.7	18.1	18.0
d. 16–20 years	19.0	16.2	15.5	14.4	16.1
e. 21–30 years	18.6	16.1	14.1	15.4	15.1
f. More than 30 years	10.5	7.4	5.6	5.1	5.5

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

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

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

## 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*
a. Strongly agree	21.5%	12.7%
b. Agree (previously “Somewhat agree”)	51.9	51.4
c. Disagree (previously “Somewhat disagree”)	20.2	31.9
d. Strongly disagree	6.4	4.0

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
a. Strongly agree	13.7%	6.2%
b. Agree (previously “Somewhat agree”)	47.8	42.6
c. Disagree (previously “Somewhat disagree”)	32.0	47.3
d. Strongly disagree	6.5	4.0

Response options revised in 2010.

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

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

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

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

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

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

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

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

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
a. Yes	67.5%	69.2%
b. No	32.5	30.8

33. Have you ever used MAPS?

	2009	2010
a. Yes	38.7%	42.4%
b. No	61.3	57.6

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

	2009	2010
a. Never	45.6%	45.5%
b. Rarely	26.8	30.6
c. Some of the time	18.6	16.0
d. Frequently	5.6	5.3
e. Always	3.4	2.6

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

	2009	2010
a. My lack of knowledge or proper training on how to fully assess and treat pain.	17.3%	16.4%
b. Insufficient time with patients to assess pain.	15.3	16.1
c. Patient does not report, or underreports, his/her pain.	23.1	23.1
d. Lack of effective pain medication.	6.1	5.6
e. My fear that the patient may become addicted to pain medication.	31.7	29.3
f. Fear of losing my license for improper prescribing of controlled substances.	4.9	6.8
g. Hospice and palliative care services are not readily available to my patients.	1.7	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	2009	2010
a. Acupuncture	3.2%	3.6%	22.7%	23.8%
b. Massage/therapeutic touch	10.3	8.9	31.7	35.2
c. Meditation/relaxation techniques	11.4	15.4	25.1	27.0
d. Spiritual approaches	6.8	7.3	14.6	14.8
e. Physical movement	22.4	24.9	31.0	33.3
f. Non-prescription supplements	21.0	20.4	15.4	14.7
g. Other	6.3	4.8	4.0	3.9

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

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

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

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

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

	2009	2010
a. 1–24%	93.7%	93.3%
b. 25–49%	3.4	4.3
c. 50–74%	0.9	0.8
d. 75–100%	2.0	1.6

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

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

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

	2009	2010
a. Strongly agree	21.1%	20.7%
b. Agree	40.6	38.4
c. Disagree	30.9	36.3
d. Strongly disagree	7.3	4.6

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

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

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