

**American College of Sports Medicine**

**Exercise is Medicine™ Initiative**

**A Report of the Physicians' Survey and  
The Exercise Professionals' Survey**

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## **INTRODUCTION**

The American College of Sports Medicine (ACSM) is an organization with over 20,000 international members dedicated to advancing health through science, education and medicine. Established in 1954, the ACSM has applied the members' knowledge, training and dedication in sports medicine and exercise science to promote healthier lifestyles for people around the world.<sup>1</sup> In the spirit of this philosophy, the ACSM membership works together to specifically design and implement strategies that promote regular physical activity to improve individual and population health status. To encourage physicians to discuss the importance of physical activity with patients, the ACSM and American Medical Association (AMA) developed the Exercise Is Medicine™ initiative. The goal of this program makes “level of physical activity” a standard vital sign with each patient visit including an exercise prescription or a referral to a qualified health fitness professional for further physical activity counseling.

## **BACKGROUND AND SIGNIFICANCE**

Despite the numerous health benefits achieved through physical activity, such as reduced risk for the development of several chronic diseases, including diabetes and some cancers, weight control, maintenance of healthy bones, muscles and joints; and the promotion of psychological well-being, physical inactivity, over half (51.2%) of adults in the United States do not engage in physical activity at levels recommended by the Centers for Disease Control and Prevention.<sup>2</sup>

In 2007, ACSM in collaboration with the AMA developed the Exercise Is Medicine™ initiative, which calls upon physicians nationwide to assess and review every patient's physical activity level at every visit as a standard part of a primary prevention and chronic disease care

paradigm in the United States. The overarching goal of the program is that physical activity be considered a vital sign by health care providers. As such, all physicians would effectively counsel each patient at every visit according to their physical activity and health needs or refer them for further exercise counseling. According to the ACSM, the Exercise Is Medicine™ program is an initiative that:

1. Creates broad awareness that exercise is indeed medicine.
2. Makes "level of physical activity" a standard vital sign question in each patient visit.
3. Helps physicians and other healthcare providers to become consistently effective in counseling and referring patients as to their physical activity needs.
4. Leads to policy changes in public and private sectors that support physical activity counseling and referrals in clinical settings.
5. Produces an expectation among the public and patients that their healthcare providers should and will ask about and prescribe exercise.
6. Appropriately encourages physicians and other healthcare providers to be physically active themselves.

The guiding principles of the Exercise Is Medicine™ initiative are that exercise and physical activity are important to health and the prevention and treatment of many chronic diseases that more should be done to address physical activity and exercise in health care settings and that the efforts of the ACSM and AMA will bring a greater focus on physical activity and exercise in health care settings. These efforts will be sustained through a program that is guided by a social-ecological approach that not only touches the individual patient through direct patient-physician interaction, but also includes efforts to produce policy changes in communities that supports the program, such as reimbursement to physicians for time spent in physical activity counseling.

## **PURPOSE**

This project was designed to:

1. Determine how physicians and exercise professionals view counseling on physical activity and patient referrals.
2. Determine physician barriers to providing counseling to their patients on physical activity.
3. Determine exercise professional's barriers to providing counseling on physical activity.
4. Determine what qualifications and critical skill sets are needed by exercise professionals to effectively counsel individuals on physical activity.

To obtain the information needed, this project consisted of two major components:

1. A survey to assess physician attitudes and opinions on:
  - counseling patients on physical activity and
  - referring patients to exercise professionals for counseling on physical activity.
2. A survey to assess exercise professional's attitudes and opinions on:
  - counseling clients with chronic health conditions on physical activity and
  - accepting patient referrals from physicians for counseling physical activity.

## **PROJECT LOGISTICS**

The ACSM Exercise Is Medicine™ Vice President (VP) contracted with faculty and staff of the Indiana University Department of Family Medicine Bowen Research Center (consultants) to develop two survey instruments to determine how physicians and exercise professionals view counseling on physical activity, barriers to counseling on physical activity, and training for exercise professionals. The instruments were developed by the consultant team using focus group materials and other documents provided by the VP. Final electronic instruments were approved by the VP before the start of data collection (Appendix A and B). The web-based data

were collected using Survey Monkey.com<sup>®</sup>. Electronic mail addresses (email) for physicians and exercise professionals were provided by the VP.

## **METHODS AND RESULTS**

The methods and results for each survey are presented in this report as a distinct component of each section. The two sections, one for each survey, include a description of the survey design, data collection/analysis methods, and a summary of the findings.



## SECTION I

### PHYSICIAN SURVEY

#### **Methods**

##### *Survey Preparation*

The physician survey instrument was developed using items and discussion notes from an Exercise Is Medicine™ focus group convened by teleconference in Indianapolis, Indiana, in March 2009 to obtain opinions from a convenience sample of four physicians on how they view counseling on physical activity, barriers to counseling on physical activity, and training for exercise professionals. Following the development and approval of the survey items, the consultant team developed an electronic version of the survey instrument using Survey Monkey.com<sup>®</sup>. Each of the electronic items and the skip pattern logic for the survey instrument were checked by the consultants, VP and a small group of students in the Indiana University Masters of Public Health program

##### *Target Population*

The target population for the physician survey was the physician membership of ACSM. Six hundred thirty seven (n=637) physician email addresses were provided by the VP to the consultant team in a Microsoft Excel™ file. Duplicate email addresses were removed, leaving 626 physicians targeted for participation in this study. Of these 626, eight (n=8) messages were returned as undeliverable.

##### *Survey Administration*

The survey was administered using Survey Monkey.com<sup>®</sup>. Physician email addresses and appropriate email messages were copied into the Survey Monkey.com<sup>®</sup> “recipient” list and “message” dialog box, respectively. In total, three rounds of emails were sent to targeted

physicians to invite their participation in the survey. The first email was sent to all available email addresses. Emails two and three were only sent to those who had not previously responded. Each follow up email (email 2 and email 3) was sent approximately two weeks after the delivery of the previous. Approximately one-fifth (21.2%, n=131) of physicians responded to the survey.

*Data Collection and Export*

All data were collected electronically. Approximately three weeks after sending the last email (email 3), the data were exported from Survey Monkey.com<sup>®</sup>. and prepared for analysis. Data were analyzed using SPSS Version 16.0 (Chicago, IL).

**Findings**

Most of the respondents were male (78.0%) and over half (67.2%) were between the ages of 30-49 years. Their mean age was 43.7 (Table 1.1).

Almost all (92.0%) of the respondents were primary care physicians. Nine (7.2%) were Sports Medicine physicians and one (0.9%) was an Occupational Health \ Sports Medicine doctor. Of the physicians reporting a specialty, sixty-two percent (62.4%, n=112) of the primary care physicians reported having a specialty in sports medicine. Most of the

physicians who responded to the survey were from the Midwest (30%) and the West (23%) (Appendix C). The physicians added a number of comments to their surveys. These are shown

<b>Table 1.1: Physician Characteristics</b>		
	n	%
<b>Participants</b>		
<b>SEX</b>		
Male	99	78.0
Female	28	22.0
Total	127	100.0
Missing	4	
<b>AGE (mean=43.7)</b>		
27-29	6	4.8
30-39	39	31.2
40-49	45	36.0
50-59	26	20.8
60-69	8	6.4
70+	1	0.8
Total	125	100.0
Missing	6	

in the *American College of Sports Medicine Exercise Is Medicine™ Physician and Exercise Professional Supplemental Report*.

**Physician Responsibility to Provide Counseling on Physical Activity**

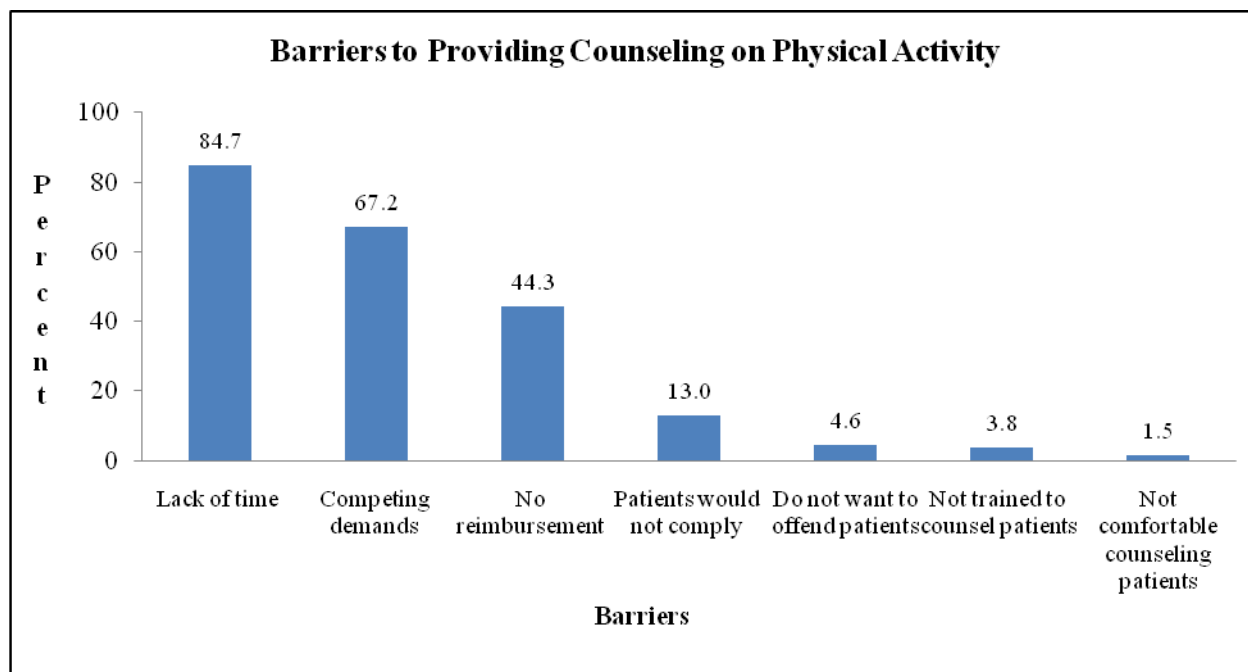
- Three-quarters (74.0%) of the physicians “Strongly Agree” that it was their responsibility to provide counseling on physical activity to all of their patients (Table 1.2).
- Nearly all (99.2%) of the physicians “Agree” it was their responsibility to provide counseling on physical activity to all of their patients (Table 1.2).
- About one-quarter of the physicians (23.7%) reported they provide counseling on physical activity to their patients “All of the Time”. Another sixty percent (58.8%) indicated they provide counseling to their patients “Most of the Time” (Table 1.3).

<b>Table 1.2: Physician Responsibility to Provide Counseling on Physical Activity</b>		
	n	%
<b>Responses</b>		
Strongly Agree	97	74.0
Agree	33	25.2
Neither Agree or Disagree	1	0.8
Disagree	0	0.0
Strong Disagree	0	0.0
Total	131	100.0
Missing	0	

<b>Table 1.3: Frequency Physicians Provide Counseling on Physical Activity to Patients</b>		
	n	%
<b>Responses</b>		
All of the Time	31	23.7
Most of the Time	77	58.8
Sometimes	22	16.8
Seldom	1	0.8
Never	0	0.0
Total	131	100.0
Missing	0	

**Barriers to Physician Counseling Patients on Physical Activity**

- Most physicians reported that “Lack of time during patient visit” (84.7%) was the primary barrier to counseling their patients on physical activity. Other important barriers reported by physicians were “Too many competing demands that are more important to cover during the visit” (67.2%), and “No reimbursement for counseling” (44.3%) (Figure 1.1).



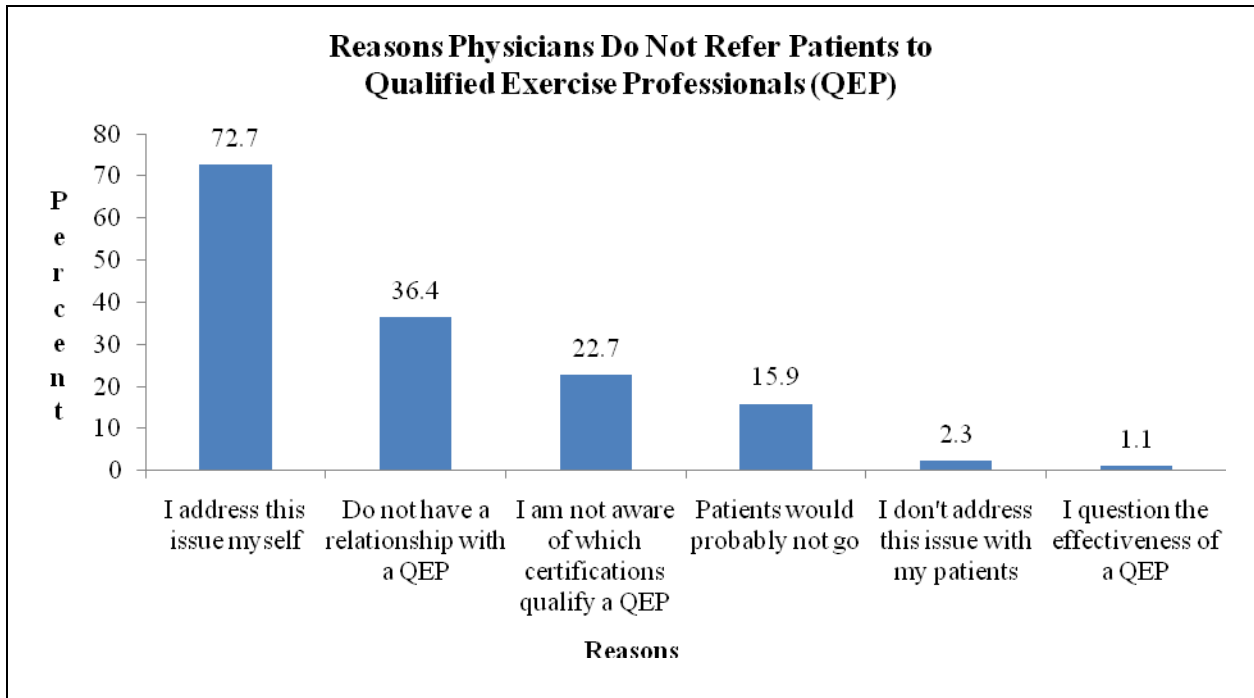
**Figure 1.1.** Physicians’ Barriers to Providing Counseling to their Patients on Physical Activity

### **Patient Referral to Exercise Professionals for Counseling on Physical Activity**

- Over one-third “Seldom” (38.9%) referred their patients to an exercise professional for counseling on physical activity. Others “Sometimes” (28.2%) or “Never” (28.2%) referred their patients to an exercise professional for counseling on physical activity (Table 1.4)
- Less than five percent of the physicians referred patients to an exercise professional for counseling on physical activity “All of the Time” (0.8%) or “Most of the Time” (3.8%) (Table 1.4).
- The reasons physicians “Seldom” or “Never” referred patients to an exercise

	n	%
<b>Responses</b>		
All of the Time	1	0.8
Most of the Time	5	3.8
Sometimes	37	28.2
Seldom	51	38.9
Never	37	28.2
Total	131	100.0
Missing	0	

professional for counseling on physical activity (Table 1.4) were because they reported “I address this issue with my patients myself (72.7%), I do not have a professional relationship with a qualified exercise professional who would provide feedback to me (36.4%), or I am not aware of which certification programs qualify an exercise professional to be a trusted provider of counseling on physical activity (22.7%) (Figure 1.2).



**Figure 1.2.** Reasons Physicians Do Not Refer Patients to Qualified Exercise Professionals (QEP)

**Qualifications Needed by an Exercise Professional for Physician Referral of Patients for Counseling on Physical Activity**

- Most (89.6%) of the physicians reported that a certification plus a bachelor’s degree in exercise science or physiology, physical therapy, nutrition, or other related science or a certification from a reputable organization like the American College of Sports Medicine, the National Strength and Conditioning Association (NSCA) and the American Council on Exercise (ACE) were necessary qualifications needed by an exercise professional to feel comfortable referring patients for counseling on physical activity (Table 1.5).
- About ten percent (9.5%) of the physicians reported a bachelor’s degree in exercise science or physiology, physical therapy, nutrition, or other related science were necessary qualifications needed by an exercise professional to feel comfortable referring patients for counseling on physical activity (Table 1.5).

**Table 1.5: Qualifications Needed by Exercise Professional for Physicians to Refer Patients for Counseling on Physical Activity**

	n	%
Certification plus a Bachelors degree Exercise Science, Exercise Physiology, Physical Therapy, Nutrition or other related sciences	57	45.2
Certifications from reputable organizations	56	44.4
Bachelor’s degrees in Exercise Science, Exercise Physiology, Physical Therapy, Nutrition or other related sciences	12	9.5
I would not refer my patients to a qualified exercise professional	1	0.8
Total	126	100.0
Missing	5	

**Critical Skill Sets Needed by an Exercise Professional for Referrals**

- All (100.0%) of the physicians reported “Good communication skills” was a critical skill set needed by exercise professionals for patient referral for counseling on physical activity (Table 1.6).

- Most of the physicians reported being “Able to provide cardiovascular as well as resistance training counseling” (99.2%), and having a “Strong understanding of exercise guidelines for patients with a chronic health condition” (97.6%) were critical skill sets needed by exercise professionals for patient referral for counseling on physical activity (Table 1.6).

<b>Table 1.6: Critical Skill Sets Needed by Exercise Professionals for Physicians to Refer Patients for Counseling on Physical Activity</b>		
	n	%
Good communication skills	123	100.0
Provide cardiovascular and resistance training	122	99.2
Strong understanding of exercise guidelines for patients with chronic health conditions	120	97.6
Knowledge about chronic disease	102	82.9
Training in exercise prescription writing	98	79.7
Weight management counseling	98	79.7
CPR	88	71.5
First aid	67	54.5

- Just over three-quarters of the physicians indicated that “Knowledge about chronic diseases such as diabetes, heart disease or hypertension” (82.9%), having “Training in exercise prescription writing” (79.7%) and being able to provide “Weight management counseling”(79.7%) were critical skill sets needed by exercise professionals for patient referral for counseling on physical activity (Table 1.6).

**Processes In Place For Referrals to Exercise Professionals**

- All (100.0%) physicians indicated that having a “Physician feedback process from the exercise professional” in place would facilitate patient referral to an exercise professional (Table 1.7).
- About three-quarters (74.1%) indicated that “Quality/performance measures reported regularly by the exercise professional” would facilitate patient referral to an exercise professional (Table 1.7).
- Services provided by the exercise professionals would also need to be “Low cost or free service options for those without insurance who cannot pay” (71.3%), have a “Low co-pay (70.4%) or should be covered by insurance (“Services provided by the Exercise Professional Covered by Insurance) (64.8 %) would facilitate patient referral to an exercise professional (Table 1.7).

**Table 1.7: Processes/Conditions Necessary to Facilitate Patient Referral to an Exercise Professional**

	n	%
<b>Responses</b>		
Physician feedback process from exercise professional	108	100.0
Quality /performance measures reported regularly by the exercise profession	80	74.1
Low cost or free service options for those without insurance who cannot pay	77	71.3
Low co-pay	76	70.4
Services provided by the exercise professional covered by insurance	70	64.8
Appointments \ consultation with the exercise professional in your office	29	26.9
Electronic referral and follow up system	28	25.9
I would not refer my patient to a qualified exercise professional	0	0.0

**Table 1.8: Consider Using a Software Tool Facilitate Writing Exercise Prescriptions**

	n	%
<b>Responses</b>		
Strongly agree	64	50.0
Agree	44	34.4
Neither agree or disagree	15	11.7
Disagree	5	3.9
Total	128	100.0
Missing	3	



- Eighty-four percent (84.4%) of the physicians reported they would consider using a software tool developed by ACSM that would provide best practice guidelines to facilitate writing exercise prescriptions for patients (Table 1.8).

- Eighty-one percent (81.0%) indicated they would consider using a database developed by ACSM that would help them locate qualified exercise professionals in convenient locations to refer patients for counseling on physical activity (Table 1.9).

**Table 1.9: Database Developed by ACSM to Find Qualified Exercise Professionals for Patient Referral**

	n	%
<b>Responses</b>		
Strongly agree	52	41.3
Agree	50	39.7
Neither agree or disagree	21	16.7
Disagree	2	1.6
Strongly disagree	1	0.8
Total	126	100.0
Missing	5	

- Physicians who indicated that they would use electronic tools to facilitate counseling on physical activity among patients reported that the tools would need to be “Current and up-to-date” (100.0%), “Low cost or free to members” (99.1%) and “Easy to access while using an electronic medical record” (88.9%) (Table 1.10).

**Table 1.10: Features of Electronic Tools**

	n	%
<b>Responses</b>		
Current and up to date	108	100.0
Low cost or free to members	107	99.1
Easy access while using an electronic medical record	96	88.9
Web-Based	86	79.6
Must not get in the way of patient care	85	78.7
Allow multiple users	75	69.4
Easy to use by front office staff	68	63.0
Able to load onto PDA	24	22.2

**Conclusions**

- Physicians agreed that it was their responsibility to provide counseling to their patients on physical activity and most report providing counseling at least most of the time.
- Lack of time and competing demands during the visit were the primary barriers to counseling patients on physical activity.

- Most of the physicians reported they seldom, sometimes or never referred patients to an exercise professional for counseling on physical activity because they address the issue themselves, do not have a relationship with an exercise professional, or were not aware of which certification programs qualify an exercise professional to counsel patients on physical activity.
- Physicians indicated that a bachelor's degree in an exercise science or nutrition related program **or** a certification from a reputable organization would be needed for them to feel comfortable referring patients to exercise professionals for counseling on physical activity.
- Physicians also reported that exercise professionals need good communication skills, the ability to provide cardiovascular and resistance training, and have a good understanding of physical activity guidelines for patients with chronic health conditions” for them to feel comfortable referring patients to exercise professionals for counseling on physical activity.
- Physicians indicated they would need to have a feedback process and performance measures in place for them to feel comfortable referring patients to exercise professionals for counseling on physical activity.
- Most of the physicians indicated they would consider using software developed by ACSM that would provide best practice guidelines to facilitate writing exercise prescriptions and a database that would help them locate exercise professionals in their area for referrals for counseling on physical activity. However, these tools need to be up-to-date, low or no cost and easy to integrate into current practice.

## SECTION II

### EXERCISE PROFESSIONAL SURVEY

#### Methods

##### *Survey Preparation*

The exercise professional survey instrument was developed using items and discussion notes from an Exercise Is Medicine™ focus group convened by teleconference in Indianapolis, Indiana in March 2009 to obtain opinions from a convenience sample of four exercise professionals on how they view counseling on physical activity, barriers to counseling on physical activity, and training for exercise professionals. Following the development and approval of the survey items, the consultant team developed an electronic version of the survey instrument using Survey Monkey.com<sup>®</sup>. Each of the electronic items and the skip pattern logic for the survey instrument were checked by the consultants, VP and a small group of students in the Indiana University Masters of Public Health program.

##### *Target Population*

The target population for the exercise professional survey was the exercise professional membership of the ACSM. Seventeen thousand three hundred ninety four (17,394) exercise professional email addresses were provided by the VP to the consultant team in a Microsoft Excel™ file. Duplicate email addresses were removed, leaving 14,720 exercise professionals targeted for participation in this study. Of these 14,720, eight hundred thirty seven (n=837) messages were returned as undeliverable.

##### *Survey Administration*

The survey was administered using Survey Monkey.com<sup>®</sup>. Exercise professional email addresses and appropriate email messages were copied into the Survey Monkey.com<sup>®</sup> “recipient” list and “message” dialog box, respectively. In total, three rounds of emails were sent to targeted

exercise professionals to invite their participation in the survey. The first email was sent to all available email addresses. Emails two and three were only sent to those who had not previously responded. Each follow up email (email 2 and email 3) was sent approximately two weeks after the delivery of the previous. Fifteen percent (14.9%, n=2,065) of exercise professionals responded to the survey.

*Data Collection and Export*

All data were collected electronically. Approximately three weeks after sending the last email (email 3), the data were exported from Survey Monkey.com<sup>®</sup> and prepared for analysis. Data were analyzed using SPSS Version 16.0 (Chicago, IL)

**Findings**

- Most of the respondents were female (69.4%) and were between the ages of 20-49 (27.7%). Their mean age was 38.8 (Table 2.1). Over one-third (36.1%) of the respondents were health fitness instructors, 27.3% were certified trainers and another 36.5% had both certifications.
- Most exercise professionals who responded to the survey were from the South (28%) and the West (21%) (Appendix C)

<b>Table 2.1: Exercise Professional Characteristics</b>		
	n	%
<b>Participants</b>		
<b>SEX</b>		
Female	1237	69.4
Male	546	30.6
Total	1783	100.0
Missing	282	
<b>AGE (mean=38.8)</b>		
18-19	2	0.1
20-29	490	27.7
30-39	473	26.8
40-49	441	24.9
50-59	289	16.3
60-69	61	3.5
70+	12	0.7
Total	1768	100.0
Missing	297	

A number of exercise professionals’ added comments to their responses to the survey. Those responses are shown in These are shown in the *American College of Sports Medicine Exercise Is Medicine™ Physician and Exercise Professional Supplemental Report*.

**Responsibility to Provide Counseling on Physical Activity to Clients With Chronic Health Conditions**

- Nearly all of the exercise professionals “Agree” or “Strongly Agree” that it was their responsibility to provide counseling on physical activity to their clients with chronic health conditions (97.0 %) (Table 2.2).
- About one-quarter (26.3%) of the exercise professionals reported that they are confident “All of the Time” in their ability to provide counseling on physical activity to their clients with chronic health conditions (Table 2.3).
- Over one-half (60.8%) of the exercise professionals indicated they are confident in their ability provide counseling to their clients with chronic health conditions “Most of the Time” (Table 2.3).

**Table 2.2: Responsibility to Provide Counseling On Physical Activity To Clients With Chronic Health Conditions**

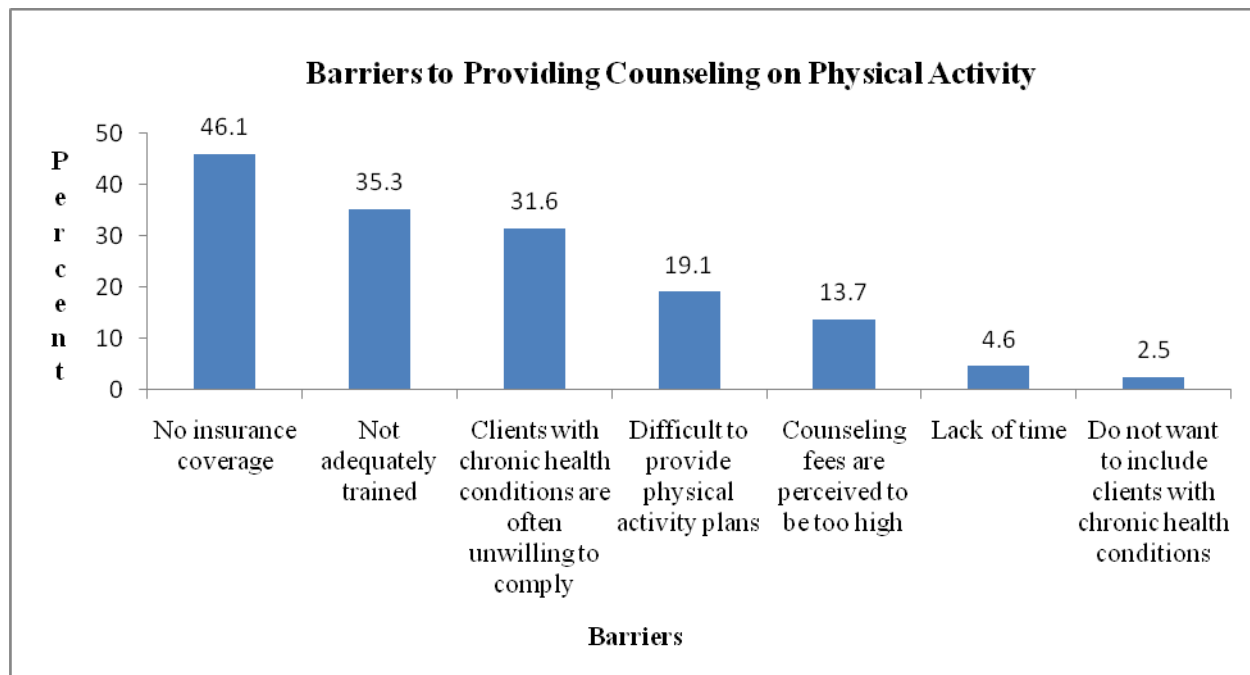
	n	%
<b>Responses</b>		
Strongly Agree	1581	76.9
Agree	414	20.1
Neither Agree or Disagree	35	1.7
Disagree	15	0.7
Strong Disagree	10	0.5
Total	2055	100.0
Missing	10	

**Table 2.3: Confident in Ability To Provide Counseling On Physical Activity To Clients With Chronic Health Conditions**

	n	%
<b>Responses</b>		
All of the Time	530	26.3
Most of the Time	1223	60.8
Sometimes	230	11.4
Seldom	21	1.0
Never	9	0.4
Total	2013	100.0
Missing	52	

### **Barriers to Counseling Patients on Physical Activity**

- Forty-six percent (46.1%) of the exercise professionals reported “There is no insurance coverage for exercise professionals to counsel on physical activity” as the primary barrier to counseling their patients on physical activity. Other important barriers that hampered exercise professionals ability to provide counseling on physical activity to clients with chronic health conditions “I do not feel adequately trained to provide counseling on physical activity to individuals with chronic health conditions” (35.3%), and “Clients with chronic health conditions are often unwilling to follow their advice” (31.6%) (Figure 2.1).



**Figure 2.1.** Exercise professionals’ barriers to providing counseling to patients on physical activity

**Frequency of Referrals from Physicians to Provide Counseling on Physical Activity**

- Less than half (45.3%) of the exercise professionals “Yes, regularly” (12.4%) or “Yes, occasionally” (32.9%) received referrals from physicians to provide physical activity counseling to their patients (Table 2.4).

<b>Table 2.4: Referrals from Physicians</b>		
	n	%
<b>Responses</b>		
Yes, regularly	230	12.4
Yes, occasionally	610	32.9
No	1016	54.7
Total	1856	100.0
Missing	209	

**Professional Contact Information**

- The majority of exercise professionals (78.1%) would like their professional contact information included in a searchable database developed by ACSM to help physicians find qualified exercise professionals for patient referrals (Table 2.5). Of those exercise professionals who would like to be included in the searchable database, approximately six percent (5.5%) provided a list of preconditions that must be met in order for them to be included (additional comments in *American College of Sports Medicine Exercise Is Medicine™ Physician and Exercise Professional Supplemental Report*).

<b>Table 2.5: Contact Information Included in a Searchable Database</b>		
	n	%
<b>Responses</b>		
Yes, certainly	1328	72.6
Yes, with the following conditions	100	5.5
Not at this time	392	21.4
I would not accept referrals from physicians	10	0.5
Total	1830	100.0
Missing	235	

- One-fifth (21.4%) of the exercise professionals did not want to be included in the searchable database at this time (Table 2.5).

**Qualifications Needed by an Exercise Professional for Referrals**

- Most exercise professionals (71.6%) reported that a certification plus a bachelor’s degree in exercise science or physiology, physical therapy, nutrition, or other related science were necessary qualifications needed by an exercise professional to be included in the searchable database (Table 2.6).

**Table 2.6:  
Qualifications exercise professionals should have to be listed in the ACSM database for physician referral**

	n	%
Certification plus a Bachelors degree in Exercise Science, Exercise Physiology, Physical Therapy, Nutrition or other related sciences	1283	71.6
Certifications from reputable organizations	447	25.0
Bachelors degree in Exercise Science, Exercise Physiology, Physical Therapy, Nutrition or other related sciences	61	3.4
Total	1791	100.0
Missing	274	

- One-quarter (25.0%) indicated a certification from a reputable organization like the American College of Sports Medicine, the National Strength and Conditioning Association (NSCA) and the America Council on Exercise (ACE) were necessary qualifications needed by an exercise professional to be included in the database (Table 2.6)
- Only a few (3.4%) reported a bachelor’s degree in exercise science or physiology, physical therapy, nutrition, or other related science were necessary qualifications needed by an exercise professional to be included in the database (Table 2.6).



**Critical Skill Sets Needed by an Exercise Professional for Referrals**

- Critical skill sets that exercise professionals thought they should have to provide counseling on physical activity to individuals with chronic health conditions was having a “Strong understanding of exercise guidelines for patients with a chronic health conditions” (100.0%) (Table 2.7). (See additional comments in the

<b>Table 2.7: Critical Skill Sets</b>		
	n	%
Strong understanding of exercise guidelines for patients with chronic health conditions	1028	100.0
Good communication skills	160	15.6
CPR	137	13.3
Training in exercise prescription writing	124	12.1
Provide cardiovascular and resistance training	103	10.0
First aid	92	8.9
Weight management counseling	44	4.3

*American College of Sports Medicine Exercise Is Medicine™ Physician and Exercise Professional Supplemental Report*

**Exercise Professionals Expectations for a Partnership with Physicians**

- All exercise professionals reported that that they would want to have access to the physician to clarify written instructions, as needed (100.0%) (Table 2.8)
- Exercise professionals also reported that they would want written instructions from the physicians on the services they would want me to provide to their patients (96.2%) and would provide documentation to the physician on services provided and follow up plans” (90.6%) (Table 2.8)

<b>Table 2.8: Expectations for a Partnership with Physicians</b>		
	n	%
Have access to the physician to clarify written instructions	1430	100.0
Written instructions from the physicians on needed services	1376	96.2
Provide documentation to the physician on services provided and follow up plans	1296	90.6
Want physician’s office to bill the patient for their services	347	24.3
Meet with the patient in the physician’s office to provide the counseling	337	23.6

## Conclusions

- Exercise professionals agreed that it was their responsibility to provide counseling to clients with chronic health conditions.
- Most exercise professionals are confident in their ability to provide counseling on physical activity to clients with chronic health conditions.
- No insurance coverage for exercise professionals to counsel on physical activity and not feeling adequately trained to provide counseling on physical activity to individuals with chronic health conditions were the primary barriers to exercise professionals counseling patients on physical activity.
- Less than half of the exercise professionals received referrals from physicians to provide physical activity counseling.
- Most exercise professionals would like their contact information in a searchable database to help physicians find them for referrals.
- Exercise professionals indicated that a bachelor's degree in an exercise science or nutrition related program plus a certification from a reputable organization were necessary qualifications needed by an exercise professional to be included in a searchable database used for physician referrals.
- Exercise professionals reported that having a strong understanding of exercise guidelines for patients with chronic health conditions was a critical skill set.
- Most exercise professionals would want access to physicians to clarify written instructions provided with referrals.

## **C ONCLUSION**

This study examined the views of physicians and exercise professionals on counseling on physical activity among patients and those with chronic health conditions. Physicians indicated they felt it was their responsibility to provide counseling on physical activity, but they often do not have time or have too many competing demands to provide that counseling. To make referrals to exercise professionals for this counseling, physicians reported they would need to have processes in place to track patient outcomes, along with an understanding of the skills and qualifications of the exercise professional providing counseling. Exercise professionals indicated they would like to provide counseling to individuals referred to them by a physician. Exercise professionals also expressed they would want an open relationship with the physicians to facilitate good communication and high quality patient\client care. Given that both groups who responded are open to this type of relationship, the ACSM and AMA should consider building stronger professional relationships between these two groups to facilitate counseling on physical activity.

## REFERENCES

1. American College of Sports Medicine. *Advancing health through science, education and medicine*. Retrieved June, 2009, from [http://www.acsm.org/AM/Template.cfm?Section=About\\_ACSM](http://www.acsm.org/AM/Template.cfm?Section=About_ACSM)
2. [Centers for Disease Control and Prevention, U.S. Physical Activity Statistics](http://apps.nccd.cdc.gov/PASurveillance). Retrieved June, 2009, from <http://apps.nccd.cdc.gov/PASurveillance>

## APPENDIX A

### American College of Sports Medicine Exercise is Medicine™ Exercise Physician Survey

The *Exercise is Medicine*™ program was developed to encourage physicians across the United States to consider physical activity a vital sign at every patient visit and encourage them to become effective in physical activity counseling and/or referral of patients to qualified exercise professionals.

*Exercise is Medicine*™ needs your valuable feedback to better understand how the physician community views providing physical activity counseling in their practice and referring patients to qualified exercise professionals.

#### Survey Items

**Please mark the box/circle next to the response option(s) that most closely represents your level of agreement with each statement or the option(s) that matches your opinion.**

1. I believe it is my responsibility to provide counseling on physical activity to all my patients in an ongoing fashion.
  - a. Strongly Agree
  - b. Agree
  - c. Neither agree or disagree
  - d. Disagree
  - e. Strongly disagree

Please add any additional comments:

2. I provide counseling on physical activity to my patients...
  - a. All of the time
  - b. Most of the time
  - c. Sometimes
  - d. Seldom
  - e. Never

Please add any additional comments:

3. What barriers hamper your ability to provide counseling on physical activity to your patients? (check all that apply)
  - a. Lack of time during patient visit
  - b. Too many competing demands that are more important to cover during the visit
  - c. No reimbursement for exercise counseling
  - d. Not trained to counsel patients on physical activity
  - e. Not comfortable counseling patients on physical activity
  - f. Do not want to offend patients
  - g. I doubt patients would comply with my advice
  - h. I don't think it is my responsibility to address this issue with my patients
  - i. Other (please specify):

4. I refer my patients to a qualified exercise professional for counseling on physical activity.
  - a. All of the time (go to question 6)
  - b. Most of the time (go to question 6)
  - c. Sometimes (go to question 6)
  - d. Seldom (go to question 5)
  - e. Never (go to question 5)

Please add any additional comments:

5. What are the reasons you would not refer your patients to a qualified exercise professional for counseling on physical activity? (check all that apply)
  - a. I do not have a professional relationship with a qualified exercise professional who would provide feedback to me
  - b. I address this issue with my patient myself
  - c. I am concerned that qualified exercise professionals may jeopardize the safety of my patient
  - d. I question the effectiveness of physical activity counseling from qualified exercise professionals
  - e. I am not aware of which certifications qualify an exercise professional to be a trusted provider of counseling on physical activity
  - f. Patients would probably not go
  - g. I don't address this issue with my patients
  - h. Other (please specify):
6. Whether you currently refer patients or not, what qualifications would an exercise professional need to have for you to feel comfortable referring your patients for counseling on physical activity?
  - a. Certifications from reputable organizations like American College of Sports Medicine (ACSM), the National Strength and Conditioning Association (NSCA), and the American Council on Exercise (ACE)
  - b. Bachelors degree in Exercise Science, Exercise Physiology, Physical Therapy, Nutrition or other related sciences
  - c. Certification plus a Bachelors degree in Exercise Science, Exercise Physiology, Physical Therapy, Nutrition or other related sciences
  - d. I would not refer my patients to a qualified exercise professional
  - e. Other (please specify):

7. Whether you currently refer patients or not, what critical skill sets would an exercise professional need to have for you to feel comfortable referring your patients for counseling on physical activity. (check all that apply)
- First aid
  - CPR
  - Weight management counseling
  - Training in exercise prescription writing
  - Able to provide cardiovascular as well as resistance training counseling
  - Strong understanding of exercise guidelines for patients with a chronic health condition
  - Good communication skills
  - I would not refer my patients to a qualified exercise professional
  - Other (please specify):
8. Whether you current refer patients or not, what processes/conditions would need to be in place for you to feel comfortable referring your patients to an exercise professional? (check all that apply)
- Electronic referral and follow up system in your office
  - Appointments \ consultations with the exercise professional in your office
  - Physician feedback process from the exercise professional
  - Services provided by the exercise professional covered by insurance
  - Low co-pay for the patients
  - Low cost or free service options for those without insurance who cannot pay
  - Quality/performance measures reported regularly by the exercise professional
  - I would not refer my patients to a qualified exercise professional
  - Other (please specify):
9. I would consider using a software tool developed by the American College of Sports Medicine that would provide best practice guidelines to facilitate writing exercise prescriptions for my patients.
- Strongly Agree
  - Agree
  - Neither agree or disagree
  - Disagree
  - Strongly disagree
- Please add any additional comments:
10. I would consider using a database developed by the American College of Sports Medicine that would help me find qualified exercise professionals in convenient locations to whom I could refer my patients for counseling on physical activity
- Strongly Agree (go to item 11)
  - Agree (go to item 11)
  - Neither agree or disagree (go to item 11)
  - Disagree (go to item 12)
  - Strongly disagree (go to item 12)
- Please add any additional comments:

11. Please indicate the features that the American College of Sports Medicine would need to incorporate into electronic tools to facilitate exercise counseling.
- Easy to use by front office staff
  - Easy to access while using an electronic medical record
  - Current and up to date
  - Web-based
  - Able to load onto a PDA
  - Allow multiple users
  - Must not get in the way of patient care
  - Low cost or free to members
  - Other (please specify):
12. Please let us know about other suggestions or comments you might have about the *Exercise is Medicine™* program  
COMMENT: TEXT BOX
13. What is your age? \_\_\_\_\_
14. What is your sex?
- Female
- Male
15. What is your medical specialty? \_\_\_\_\_
16. State where your primary practice is located. State: \_\_\_\_\_

Thank you for your time, we will post the results of this survey and other related documents to further the *Exercise is Medicine™* program tools and resources on our website as they become available.



## APPENDIX B

### American College of Sports Medicine Exercise is Medicine™ Exercise Professional Survey

The *Exercise is Medicine*™ program was developed to encourage physicians across the United States to consider physical activity a vital sign at every patient visit and encourage them to become effective in physical activity counseling and/or referral of patients to qualified exercise professionals.

*Exercise is Medicine*™ needs your valuable feedback to better understand how the community of exercise professionals views physical activity counseling for individuals with chronic health conditions and how to best link exercise professionals with physicians to optimize the patient referral process.

#### Survey Items

**Please mark the box next to the response options given that most closely represents your level of agreement with each statement or the option that matches your opinion.**

1. I believe it is my responsibility to provide counseling on physical activity to all of my clients, including those with chronic health conditions in an ongoing fashion.
  - a. Strongly Agree
  - b. Agree
  - c. Neither agree or disagree
  - d. Disagree
  - e. Strongly disagree

Please add any additional comments:

2. I am confident in my ability to provide counseling on physical activity to my clients with chronic health conditions...
  - a. All of the time
  - b. Most of the time
  - c. Sometimes
  - d. Seldom
  - e. Never

Please add any additional comments:

3. What barriers hamper your ability to provide counseling on physical activity to your clients with chronic health conditions? (check all that apply)
  - a. I do not feel adequately trained to provide counseling on physical activity to individuals with chronic health conditions
  - b. I do not want to include clients with chronic health conditions in my practice
  - c. Clients with chronic health conditions are often unwilling to follow my advice
  - d. It is difficult to provide physical activity plans for patients with chronic health conditions that they are able to follow
  - e. I am too busy working with clients who are generally healthy to take the extra time needed to counsel clients with chronic health conditions
  - f. My counseling fees for this service are perceived by my clients to be too high
  - g. There is no insurance coverage for exercise professionals to counsel on physical activity
  - h. Other (please specify):
  
4. Do you currently get referrals from physicians to provide physical activity counseling to their patients?
  - a. Yes, regularly
  - b. Yes, occasionally
  - c. NoPlease add any additional comments:
  
5. I would like my professional contact information included in a searchable database developed by the American College of Sports Medicine to help physicians find qualified exercise professionals for patient referrals.
  - a. Yes, certainly (go to question 7)
  - b. Yes, with the following conditions (go to question 6)
  - c. Not at this time (go to question 7)
  - d. I would not accept referrals from physicians (go to question 7)
  - e. Other (please specify):
  
6. Please list the conditions under which you would like your professional contact information included in a searchable database developed by the American College of Sports Medicine to help physicians find qualified exercise professionals for patient referrals.
  - a. Condition 1:
  - b. Condition 2:
  - c. Condition 3:
  - d. Condition 4:
  - e. Condition 5:

7. What qualifications do you think exercise professionals should have to be listed in the American College of Sports Medicine database for physicians to use to locate to whom they could refer patients with chronic health conditions for physical activity counseling?
  - a. Certifications from reputable organizations like American College of Sports Medicine (ACSM), the National Strength and Conditioning Association (NSCA), and the American Council of Exercise (ACE)
  - b. Bachelors degree in Exercise Science, Exercise Physiology, Physical Therapy, Nutrition, or other related sciences
  - c. Certification plus Bachelors degree in Exercise Science, Exercise Physiology, Physical Therapy, Nutrition, or other related sciences
  - d. Other (please specify):
  
8. What critical skill sets do you think exercise professionals should have to provide counseling on physical activity to individuals with chronic health conditions? (check all that apply)
  - a. First aid
  - b. CPR
  - c. Weight management counseling
  - d. Training in exercise prescription writing
  - e. Able to provide cardiovascular as well as weight training counseling
  - f. Strong understanding of exercise guidelines for patients with a chronic health condition
  - g. Good communication skills
  - h. Other (please specify):
  
9. If you accepted client referrals from physicians, what expectations would you have of that partnership? (check all that apply)
  - a. I would want written instructions from the physicians on the services they would want me to provide to their patients
  - b. I would want to have access to the physician to clarify written instructions, as needed
  - c. I would provide documentation to the physician on services provided and follow up plans
  - d. I would want to meet with the patient, at least initially, in the physician's office to provide the counseling
  - e. I would want the physician's office to bill the patient for my services
  - f. Other (please specify):
  
10. Please let us know about other suggestions or concerns you might have about the *Exercise is Medicine*<sup>TM</sup> program.  
COMMENT: TEXT BOX

11. I am a...
- a. Certified Trainer
  - b. Health Fitness Instructor
  - c. Both
  - d. Other (please specify):
12. What is your age? \_\_\_\_\_
13. Sex
- Female
  - Male
14. State where you see clients. \_\_\_\_\_

Thank you for your time, we will post the results of this survey and other related documents to the *Exercise is Medicine*<sup>™</sup> program website as they become available.

## **APPENDIX C**

### U.S. Census Bureau Regions

- Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
- Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
- South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
- West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming