

American Academy of Family Physicians National Research Network
Measuring Physicians' Opinions of CER to Strengthen Its Role in Patient-Centered Care

Report to American College of Physicians
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Methods

Participant Selection

The questionnaire was sent to a random sample of 2,000 American Academy of Family Physician (AAFP) active physician members. The sample was selected from the AAFP membership database on April 16, 2015. Selection criteria for the sample included: 1) currently active (non-retired) 2) post-resident trained, and 3) has a U.S mailing address. We mailed the self-administered survey (see Appendix A for survey instrument), along with a \$2.00 bill, a cover letter from the AAFP Executive Vice President, and a business reply postage paid envelope. An email reminder, with a link to the survey, was sent to non-responders 3 weeks after the initial mailing. A second email reminder was sent to non-responders 4 weeks following the initial mailing. Lastly, a paper survey was mailed to non-responders 9 weeks from the first mailing. The survey was administered from April 24, 2015 to July 15, 2015. The AAFP Institutional Board approved the study on December 11, 2014.

Of the 2000 surveys mailed to members, 101 were not delivered because of bad addresses. Of the remaining 1899 surveys, 501 were returned by respondents (482 on paper and 19 online) for an overall response rate of 25%. To be eligible for the analysis, physicians had to be currently working in medicine and providing primary care. Of 501 returned surveys, 4 were retired, 4 were not in the workforce for other reasons, and 4 didn't complete eligibility/screening questions. Respondents who did not answer the question on level of familiarity with the concept of comparative effectiveness research (n=48) were also excluded from the analysis. There are 453 respondents included in this report. This report includes a summary of survey findings by categories, descriptive tables of each survey item, and the survey instrument. Differences among subgroups based on age (< 40 years, 40-55 years, >55 years), practice size (solo physician, 2-3 physicians, 4-10 physicians, > 10 physicians), employee vs. owner, gender, professional activity in medical education (yes vs. no), and work status (full-time vs. part-time) were explored for all survey items. Statistically significant ($\alpha < 0.05$) findings from subgroup exploratory analysis are presented.

Key Findings

Familiarity with the term CER Family physicians have only a low level of familiarity with the term CER, with a majority reporting that they are “slightly” or “not at all” familiar with it.

Although they lack familiarity with CER by name, most respondents are confident in their abilities that are needed to use such research, namely finding, assessing, discussing with patients, and applying research findings related to treatment options.

Attitude toward CER The majority agree that it can improve how patients make health care decisions, the relationship between physicians and patients, the quality of patient care, and that CER should be used to develop guidelines. A sizeable minority, about one in five, feel that CER will be used to restrict physician’s freedom to choose treatments for patients. Only a few are skeptical about the validity of most CER.

Barriers to using CER findings Most commonly cited as a major barrier is lack of time to find and read research evidence to inform clinical decision-making. Patients’/families’ inability to pay for recommended care is a sizable barrier to using CER. However, the vast majority of physicians do not consider lack of payment to physicians for applying CER findings as a major barrier.

Trusted sources of research findings Most physicians report a high level of trust in a clinical information reference tool (e.g., UpToDate, Smart Medicine, American Family Physician), research findings from systematic reviews, peer reviewed literature, their medical professional society. CME conferences/webinars and disease-specific associations were moderately reported as trustworthy. One’s employer/institution and websites of government health agencies are less trusted.

Preferred dissemination methods Overall, print is the most preferred way to obtain research findings, followed by live meetings or courses, websites, and email. Virtual and mobile technology had moderate interest, with social media being of little interest.

Medical societies’ roles in disseminating and translating research Most respondents think the AAFP should spend more time disseminating and translating research findings into health care practice for clinicians and, specifically, should use findings to set guidelines, direct physicians to sites where they can obtain research findings, provide direct access to research articles, provide guidance on research articles, provide tools to assist in using results in making decisions with patients, provide educational resources for certification and recertification.

Ways to improve the value of CER Respondents are more likely to value evidence from CER if it is linked to clinical practice guidelines, endorsed by the AAFP, included in the AAFP’s repository of resources, and published in a medical journal. Less than half of respondents reported Certification and CME as ways to increase value of CER and very few found monetary incentives valuable.

Physician Characteristics

Respondents were more likely to be male (57.4%), non-Hispanic white (80.1%), middle-aged (average is 50.1 years), and employees of their practices (62.1%). Physician and practice characteristics are presented in Tables 1 and 2, respectively, (pages 22-26).

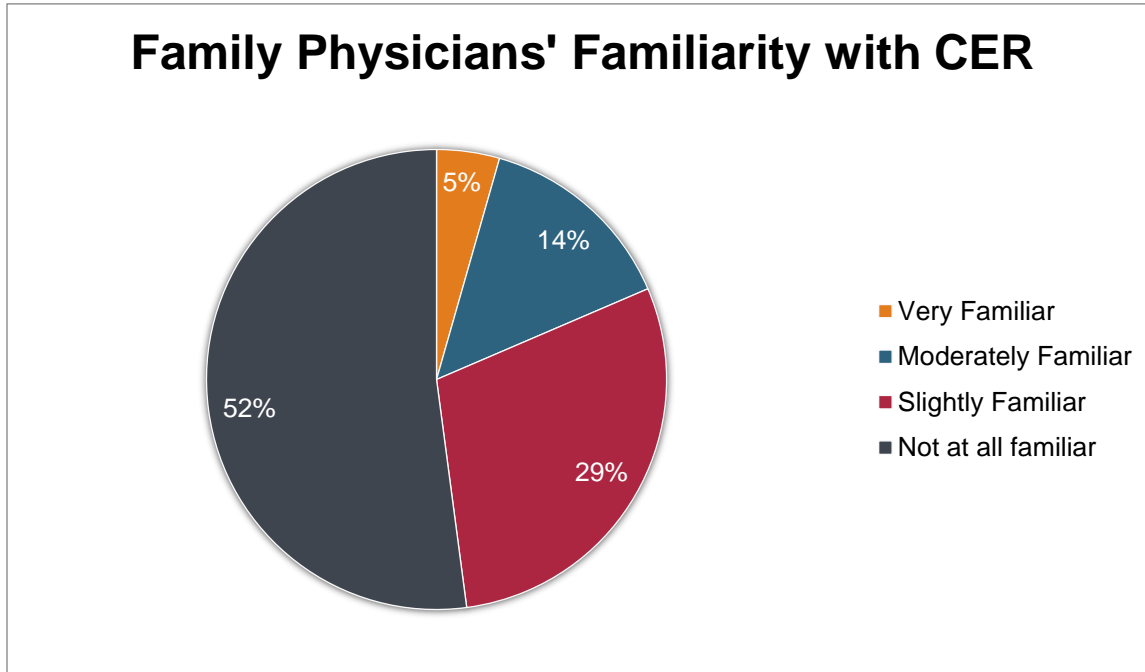
| Table 1. Physician Characteristics | |
|--|-------------|
| Age in years, mean (SD) | 51 (10.5) |
| Age group, <i>n</i> (%) | |
| <40 years old | 77 (17) |
| 40–55 years old | 196 (43.3) |
| >55 years old | 175 (38.6) |
| Unknown | 5 (1.1) |
| Gender, <i>n</i> (%) | |
| Female | 192 (42.5) |
| Male | 260 (57.5) |
| Race/Ethnicity | |
| Hispanic, Latino, or Spanish origin, <i>n</i> (%) | 22 (5) |
| White | 363 (80.1) |
| Black/African American | 7 (1.5) |
| Asian | 45 (9.9) |
| Native Hawaiian/Other Pacific Islander | 1 (0.2) |
| American Indian/Alaska Native | 3 (0.7) |
| Other | 19 (4.2) |
| Location of Medical School, <i>n</i> (%) | |
| U.S. | 377 (84.0) |
| Canada | 3 (0.7) |
| Other | 69 (15.4) |
| Employment Status | |
| Full-time | 390 (86.1) |
| Part-time | 63 (13.9) |
| <25% | 34 (7.5) |
| 25-49% | 30 (6.6) |
| 50-74% | 41 (9.1) |
| >74% | 348 (76.8) |
| Primary focus of medicine, <i>n</i> (%) | |
| Family medicine | 381 (85.6) |
| General internal medicine | 23 (5.2) |
| Geriatric medicine | 13 (2.9) |
| Other | 28 (6.3) |
| Hours worked per week in medicine, mean (SD) | 48.3 (14.7) |
| Professional activities ≥ 20% time (select all that apply), <i>n</i> (SD) | |
| Direct patient care | 425 (93.8) |
| Administrative care | 173 (38.2) |
| Medical education/teaching | 99 (21.9) |
| Medical research | 12 (2.6) |
| Other | 19 (4.2) |

Physician Characteristics

| Table 1 (continued). Physician Characteristics | |
|---|------------|
| Patient care setting where you practice, n (SD) | |
| All outpatient | 276 (61.9) |
| Primarily outpatient with some inpatient | 152 (34.1) |
| Primarily inpatient with some outpatient | 11 (2.5) |
| All inpatient | 7 (1.6) |
| Primarily inpatient with some outpatient | 11 (2.5) |
| Owner, employee, or independent contractor status, n (SD) | |
| Full-owner | 71 (15.9) |
| Part-owner | 65 (14.6) |
| Employee | 277 (62.1) |
| Independent contractor | 26 (5.8) |
| Other | 7 (1.6) |
| Practice setting, n (%) | |
| Office-based practice | 294 (67.4) |
| Hospital-based practice | 41 (9.4) |
| Free standing ambulatory care or urgent care center | 22 (5) |
| Health Maintenance Organization (staff model) | 9 (2.1) |
| Medical school/Academic Medical Center/University | 19 (4.4) |
| City/county/state government clinic | 10 (2.3) |
| U.S. government clinic (including VA/military) | 18 (4.1) |
| Institution (prison, nursing home, long term care facility, student health) | 7 (1.6) |
| Other | 16 (3.7) |
| Practice location, n (%) | |
| Rural | 119 (26.6) |
| Suburban | 207 (46.3) |
| Urban, inner city | 47 (10.5) |
| Urban, not inner city | 74 (16.6) |
| Single or multi-specialty practice, n (%) | |
| Single specialty | 298 (67.0) |
| Multi-specialty | 147 (33.0) |
| Number of physicians at primary care site, n (%) | |
| One physician | 75 (16.7) |
| 2-3 physicians | 96 (21.4) |
| 4-10 physicians | 150 (33.5) |
| 11-50 physicians | 95 (21.2) |
| 51-100 physicians | 8 (1.8) |
| >100 physicians | 24 (5.4) |
| Primary care site owner, n (%) | |
| Physician or physician group | 162 (26.6) |
| Hospital | 72 (16.3) |
| Health care system | 100 (22.6) |
| Insurance company, health plan, or HMO | 7 (1.6) |
| Academic Medical Center/Medical School/University | 25 (5.6) |
| Community Health Center | 27 (6.1) |
| Federal/state/local government (including VA/military) | 33 (7.4) |
| Other | 17 (3.8) |

Physicians' Familiarity with CER

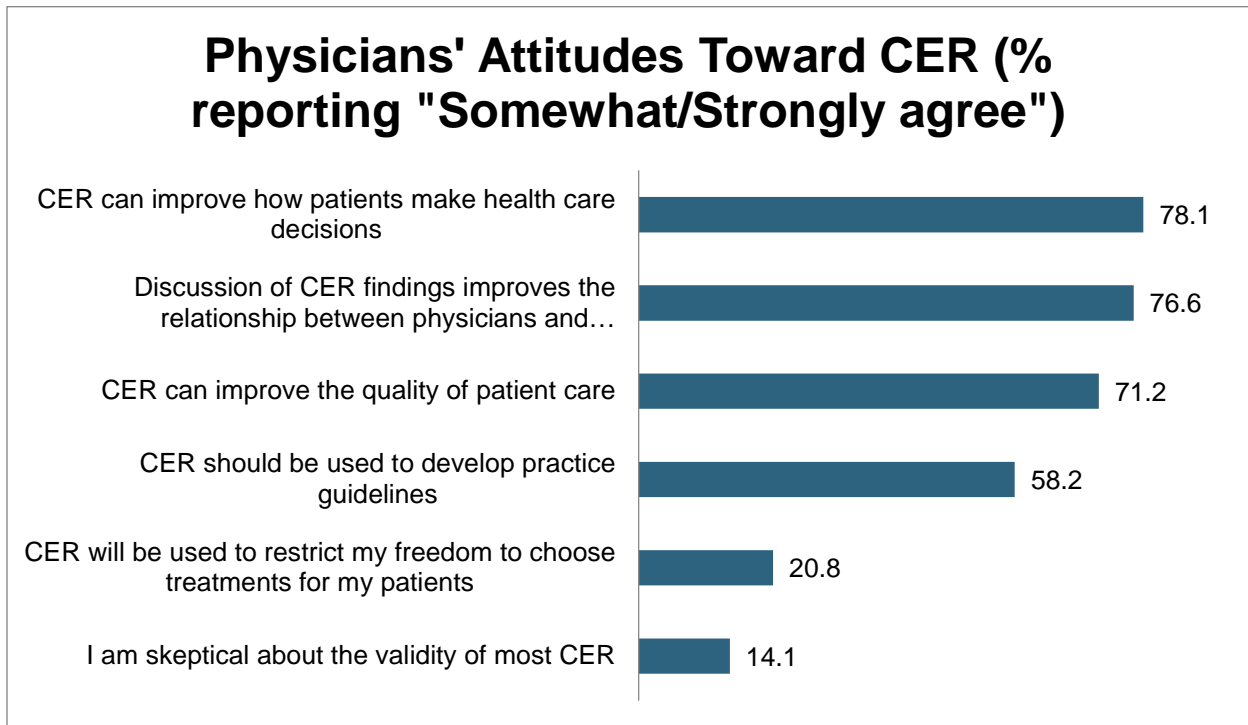
AAFP members were asked how familiar they are with the concept of comparative effectiveness research. More than half of the respondents (52.1%) were not at all familiar with the concept "comparative effectiveness research (CER)". Over one-fourth (29.4%) are slightly familiar with the concept.



- ❖ More than half (52%) of physicians are not familiar with concept of CER.
- ❖ Females were more likely than males to report no familiarity with CER (53.8% versus 46.2%, $p < .001$).

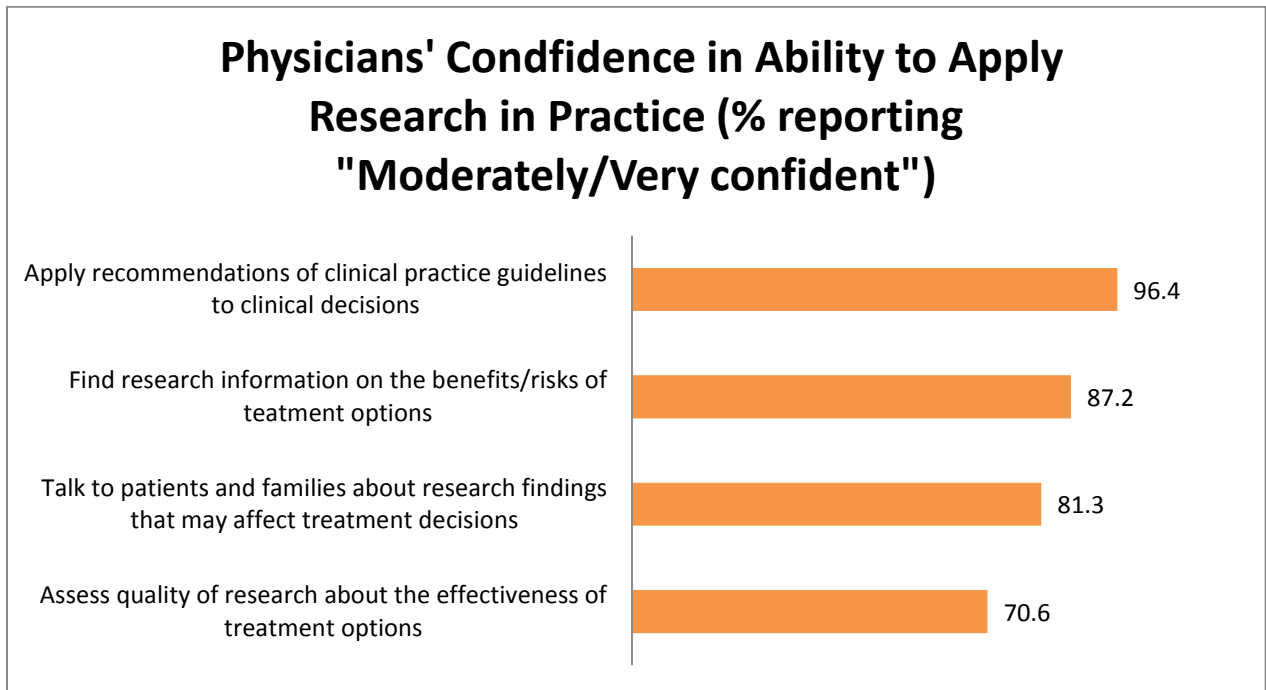
Physicians' Attitudes Toward CER

Physicians were given the following definition of CER in the survey, "Comparative effectiveness research (CER) compares the outcomes resulting from two or more health care services or treatments and provides evidence about the relative effectiveness of each, including risks and benefits, so that a physician and a patient/family member can work together to understand the facts about different treatments and make the best treatment choices for that patient".



- ❖ Most respondents agree when given this definition of CER that CER can improve outcomes including: 1) quality of patient care (71%), 2) relationship between physician and patients/families (77%), and 3) how patients make health care decisions (78%).
- ❖ One in five family physicians agreed that CER will be used to restrict their freedom to choose treatments for their patients.
- ❖ Approximately 14% of family physicians reported that they are skeptical about the validity of most CER.
- ❖ Only 9% of family medicine physicians reported that they would be somewhat or very likely to maintain their original treatment approach in light of a research study showing a more effective treatment option (not presented in chart).
- ❖ Most family medicine physicians think that CER studies will be somewhat or very important in their treatment decisions in the next 2-3 years (not presented in chart)

Physicians' Confidence in Ability to Apply CER



- ❖ Almost all physicians (96%) reported that they are confident in their ability to apply recommendations of clinical practice guidelines to their clinical decisions.
- ❖ Close to 9 out of 10 (87%) physicians are confident in their ability to find research information on benefits/risks of treatment options for specific conditions.
- ❖ Most physicians (81%) are confident to talk to patients and families about research findings that may affect treatment decisions.
- ❖ Seventy-one percent of physicians are confident in ability to assess quality of research about effectiveness of treatment options

Barriers to Incorporating CER Findings into Practice

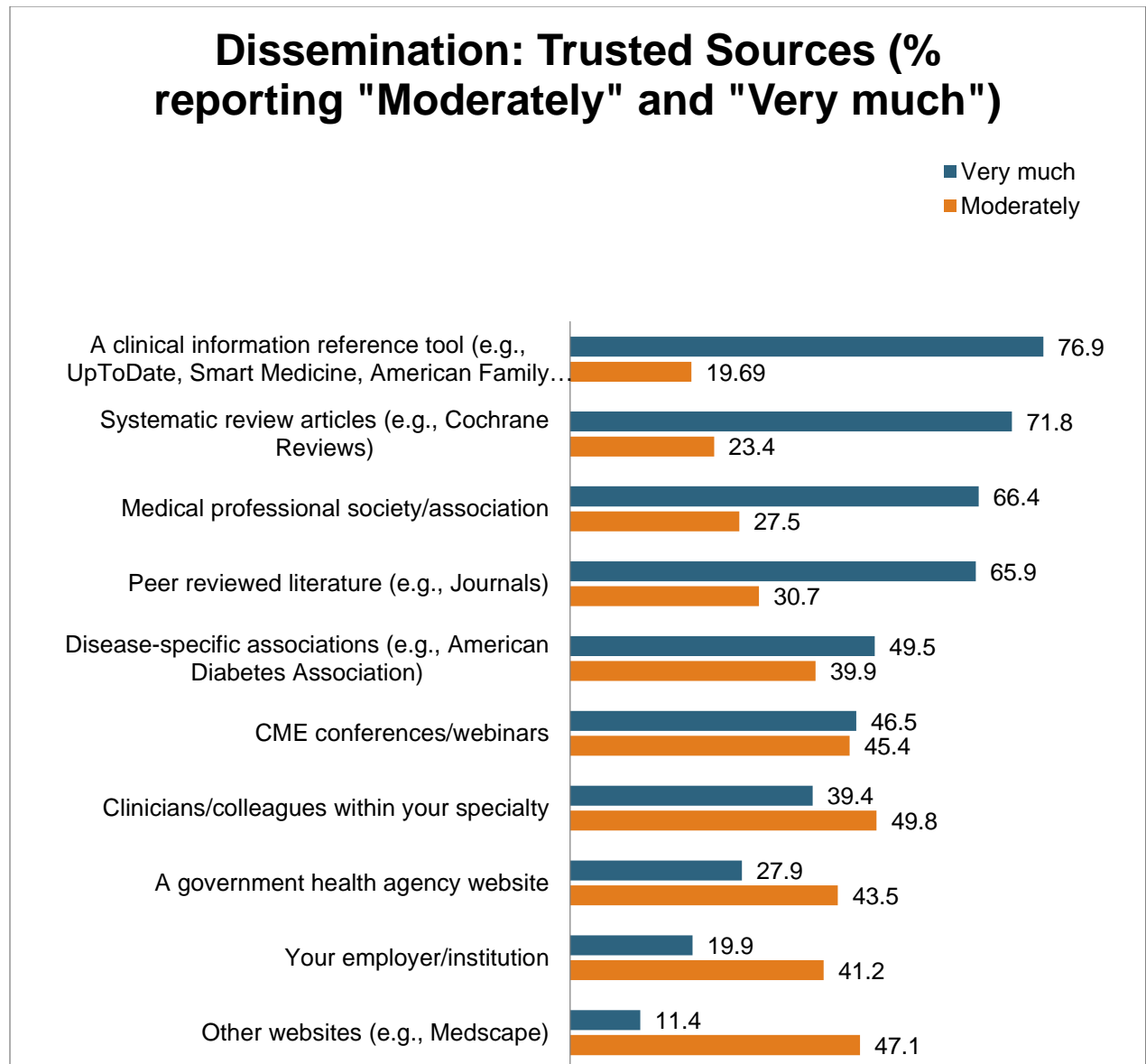
Barriers to Incorporating CER Findings into Practice (% reporting "Major" barrier)



Barriers to Incorporating CER Findings into Practice

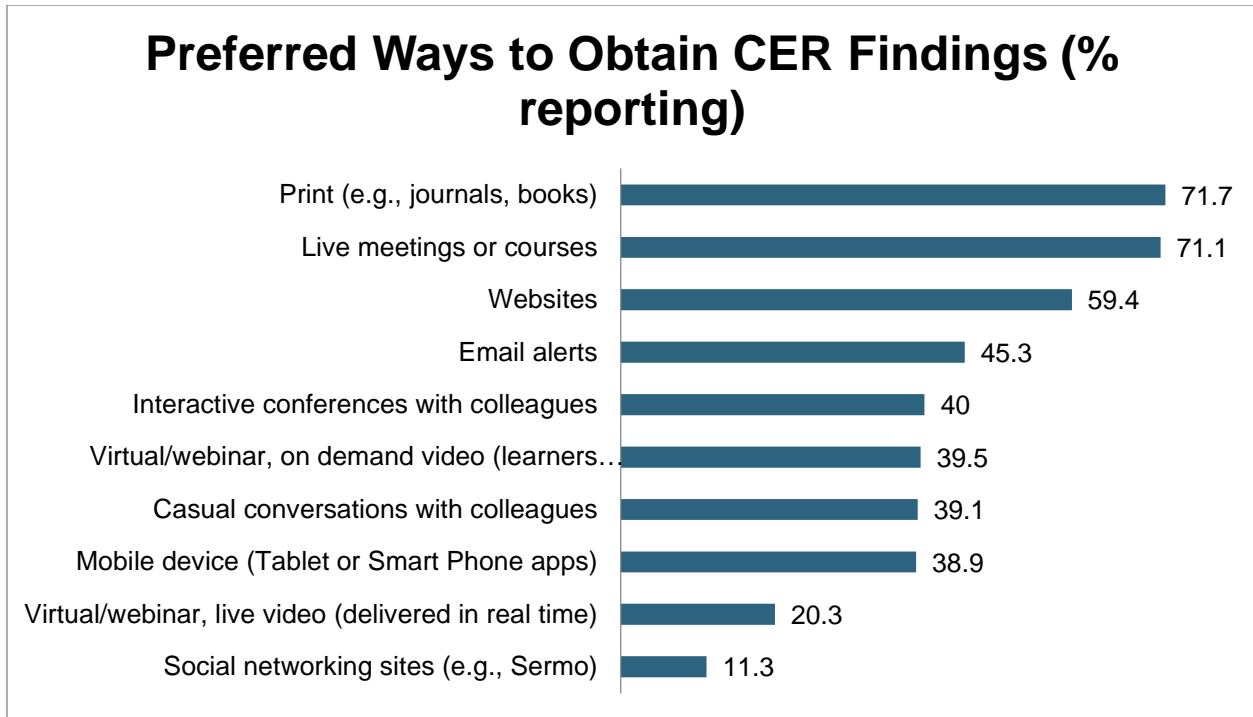
- ❖ Lack of time to find/read research evidence and patients'/families' inability to pay for recommended care were reported as major barriers by over 50% of respondents.
- ❖ Physicians that spend at least 20% of time in medical education/teaching are more likely to report that "Lack of confidence in evaluating the quality of research evidence" is not a barrier compared to other physicians (31.3% versus 20.0%, $p < .05$).
- ❖ Solo physicians are more likely to report that "Lack of confidence in evaluating the quality of research findings" is not a barrier compared to other physicians (31.0% compared to 14.6-28.2%, $p < .05$).
- ❖ Physician owners are more likely to select that "Lack of confidence...findings" is not a barrier compared to employed physicians (26.4% versus 14.3%, $p < .05$).
- ❖ Physicians not familiar with CER...
 - More likely to report "Lack of confidence...findings" is a major barrier than others (22.9% compared to 11.2%-13.4%, $p < .001$).
 - More likely to perceive that "Lack of effective tools/resources to give to patients/families is a major barrier than physicians slightly and moderately/very familiar with CER (28.8% compared to 16.1-20.7%, $p < .05$).
 - More likely to perceive that "Lack of relevant CER findings available in your area of clinical practice" is a major barrier than others. (36.6% compared to 18.0-27.2%, $p < .01$)
- ❖ Physicians older than 55 years...
 - More likely to report "Limited applicability of research findings to the uniqueness (e.g., comorbidities) of each patient" is a major barrier compared to physicians 40-55 years, and younger than 40 years (34.1%, 24.1%, 18.2%, respectively, $p < .01$).
 - More likely to report "Difficulty in finding the research evidence to inform your clinical decisions" as a major barrier (45.8%) compared to physicians age 40-55 (30.9%) and less than 40 years (26.0%), $p < .005$.
- ❖ Physicians less than 40 years old are more likely to perceive that "Insufficient training on how to engage patients/families" is not a barrier compared to other age groups (71.1% compared to 47.3-58.6%, $p < .01$).
- ❖ Part-time physicians...
 - More likely to report the major barrier "Limited applicability of research findings to the uniqueness...patient" compared to full-time physicians (39.3% versus 25.3%, $p < .05$).
 - More likely than full-time physicians to report that, "Difficulty convincing patients/families to accept a change in treatment based on research findings" is a major barrier (38.3% versus 20.4, $p < .01$).
- ❖ More than 7 out of 10 AAFP respondents reported a high level of trust in research findings from clinical reference tools and systematic review articles, followed by medical professional society and peer reviewed literature. Less trusted resources include government health agency website, employer/institutions, and other websites (e.g., Medscape).

Dissemination: Trusted Sources

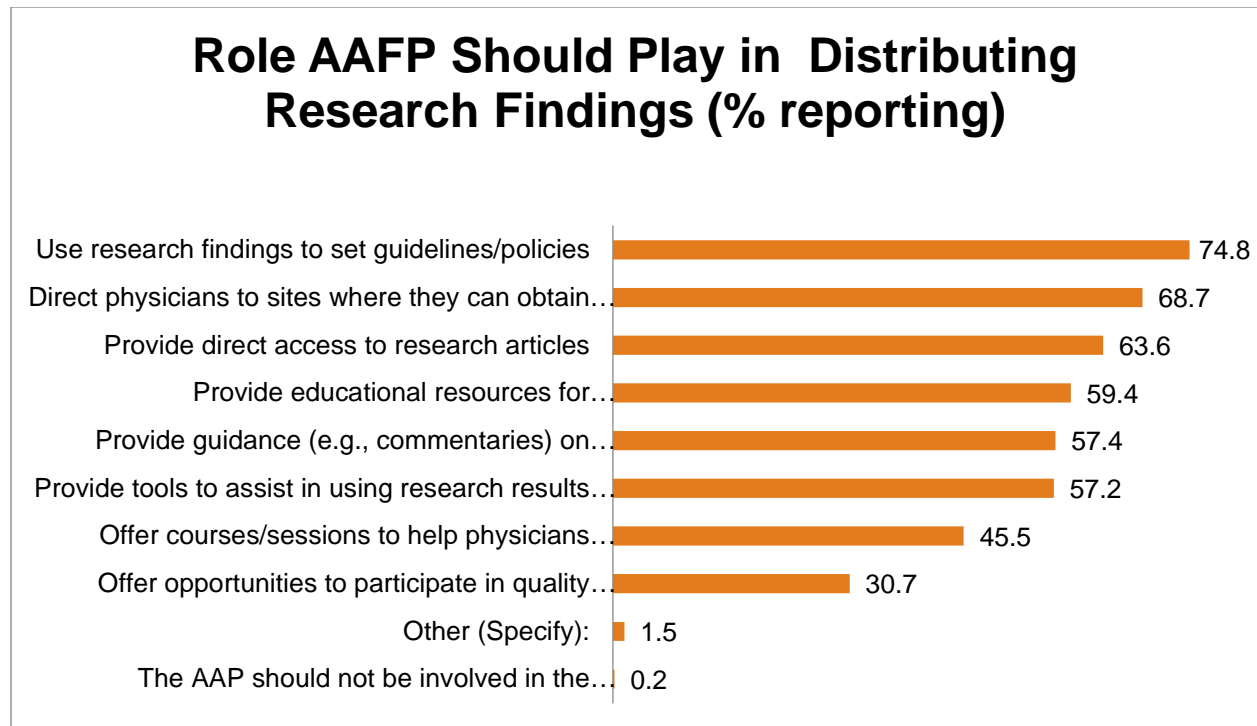


Print is the most preferred way to obtain research findings, followed by live meetings or courses, and websites. For the other options, less than half of the respondents (for each item) preferred email alerts, interactive conferences with colleagues, virtual/webinar, on demand, and other methods.

Dissemination: Preferred Ways to Obtain CER Findings

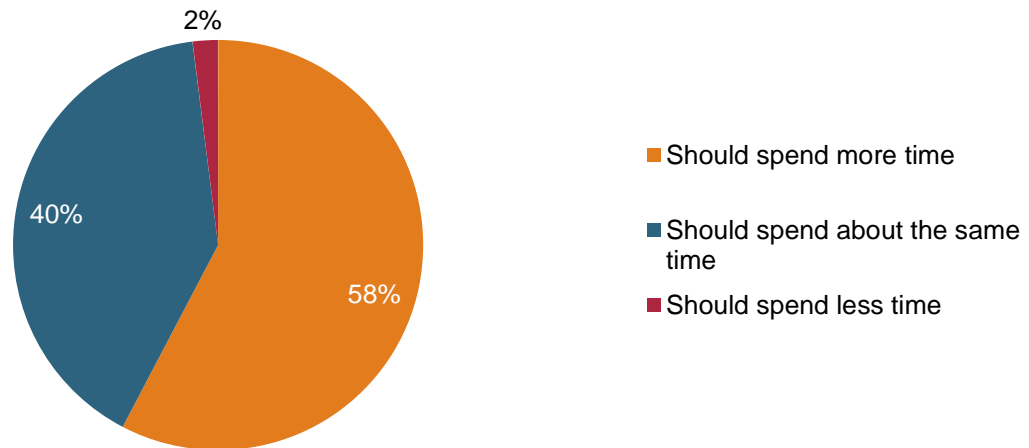


- ❖ Physicians from larger size physician group practices are more likely to prefer email alerts. Physicians from practices with more than 10 physicians selected email alerts (50.4%), compared to physicians from 4-10 physician sites (52%), physicians from 2-3 physician sites (35.4%), and solo physicians (38.7%), $p < .05$.
- ❖ Physicians younger than 40 years...
 - Prefer email alerts more than other age groups (58.4% compared to 36-48%, $p < .01$).
 - Prefer websites more than other age groups (74.0% compared to 49.1-63.3, $p < .001$).

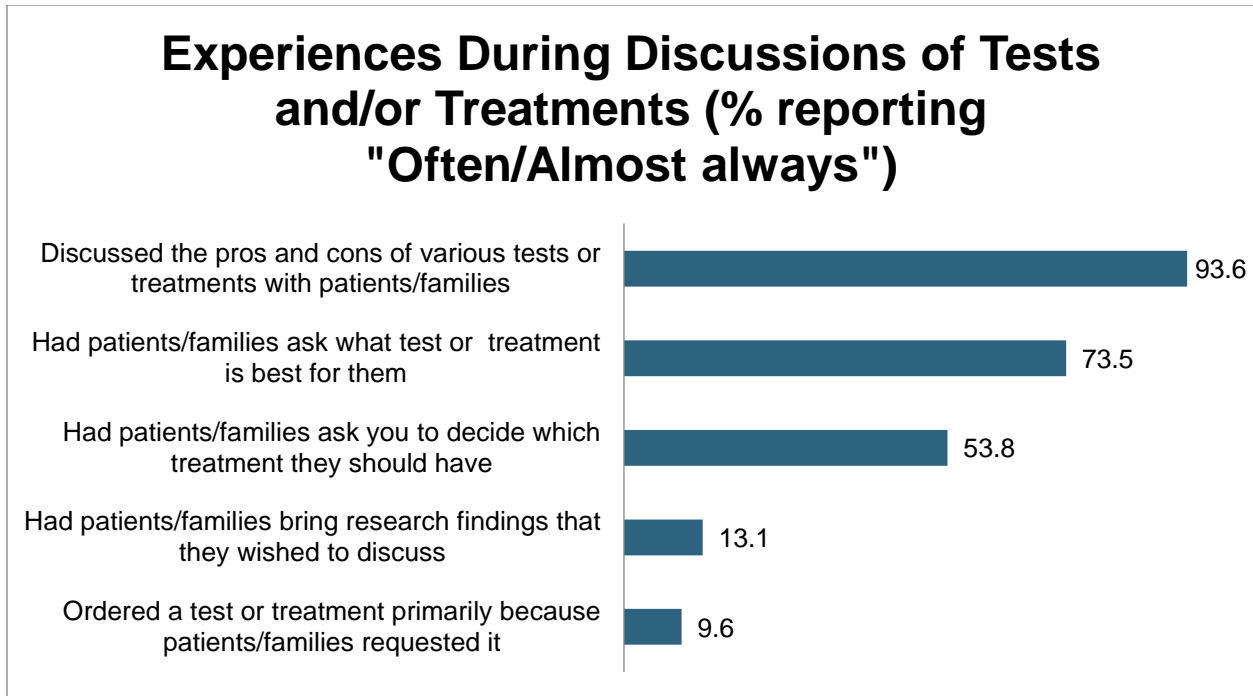


- ❖ More than 7 out of 10 respondents would like for the AAFP to use research findings to set guidelines/policies.
- ❖ Close to 70% of physicians would like for the AAFP to direct physicians to sites where they can obtain research findings.
- ❖ Only 1 person responded that the AAFP should not be involved in the distribution of research findings.

How Much Time Should AAFP Spend on Disseminating and Translating Research Findings into Health Care? (% reporting)

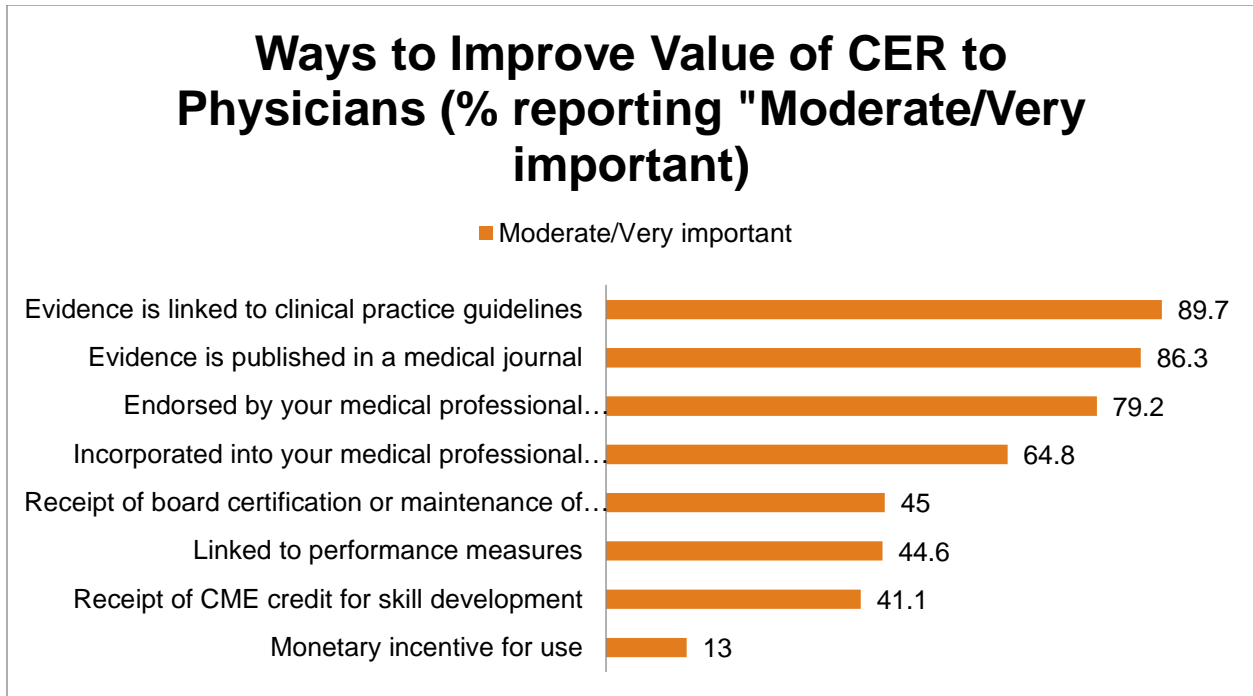


- ❖ Most physicians think that the AAFP should spend more time disseminating and translating research findings into health care practice for clinicians.
- ❖ Only 2% think the AAFP should spend less time.



- ❖ Only 13% of physicians reported that patients/families brought research findings to discuss.
- ❖ Patients/families often ask what test or treatment is best for them (74%).
- ❖ More often than not, patients/families ask physicians to decide which treatment they should have (53.8%).
- ❖ Most physicians (94%) discussed the pros and cons of various tests or treatments with patients/families.

Ways to Improve Value of CER



- ❖ Physicians are more likely to value CER if it is linked to clinical practice guidelines (90%), if the evidence is published in a medical journal (86%), or endorsed by their medical professional society (79%).
- ❖ Most physicians reported that incorporating CER into their medical professional society's toolkit of resources would improve value (65%).

AAFP CER Descriptive Tables
09/08/2015

Response Counts

| | N |
|--|-----|
| Completed responses | 501 |
| Ineligible responses (retired, not in workforce for other reasons, not delivering primary care, didn't answer familiarity to CER item) | 48 |
| Total | 453 |

1. Which of the following best describes your employment/professional situation?

| | N | % |
|-----------|-----|--------|
| Full-time | 390 | 86.1% |
| Part-time | 63 | 13.9% |
| Total | 453 | 100.0% |

2. What percentage of your professional time is spent delivering primary care to your patients?

| | N | % |
|---------------|-----|--------|
| Less than 25% | 34 | 7.5% |
| 25% to 49% | 30 | 6.6% |
| 50% to 74% | 41 | 9.1% |
| 75% or more | 348 | 76.8% |
| Total | 453 | 100.0% |

3. During the past 12 months, how often have you done or experienced each of the following when tests and/or treatments are being discussed? Please select ONE response for EACH statement.

| | Never | Rarely | Sometimes | Often | Almost Always | N |
|--|-------|--------|-----------|-------|---------------|-----|
| a. Discussed the pros and cons of various tests or treatments with patients/families | 0% | 0.7% | 5.8% | 39.9% | 53.7% | 451 |
| b. Had patients/families ask what test or treatment is best for them | 0.4% | 5.3% | 20.7% | 47.0% | 26.5% | 449 |
| c. Ordered a test or treatment primarily because patients/families requested it | 0.9% | 32.1% | 57.4% | 8.0% | 1.6% | 448 |
| d. Had patients/families bring research findings that they wished to discuss | 8.9% | 36.7% | 41.2% | 12.0% | 1.1% | 449 |
| e. Had patients/families ask you to decide which treatment they should have | 0.7% | 6.9% | 38.6% | 47.8% | 6.0% | 448 |

4. How confident are you in your ability to do each of the following? Please select ONE response for EACH statement.

| | Not at all confident | Slightly confident | Moderately confident | Very confident | N |
|---|----------------------|--------------------|----------------------|----------------|-----|
| a. Find research information on the benefits and risks of various treatment options for specific conditions | 1.8% | 11.1% | 50.6% | 36.6% | 451 |
| b. Assess the quality of research about the effectiveness of treatment options for specific conditions | 3.3% | 26.1% | 48.7% | 21.9% | 448 |
| c. Talk to your patients and families about research findings that may affect treatment decisions | 1.1% | 17.6% | 51.0% | 30.3% | 449 |
| d. Apply the recommendations of clinical practice guidelines to your clinical decisions | 0% | 3.6% | 45.3% | 51.1% | 450 |

5. A concept that is emerging in medicine is known as comparative effectiveness research (CER). How familiar are you with the concept of CER?

| | N | % |
|---------------------|----|-------|
| Very familiar | 20 | 4.4% |
| Moderately familiar | 64 | 14.1% |

| | | |
|---------------------|-----|--------|
| Slightly familiar | 133 | 29.4% |
| Not at all familiar | 236 | 52.1% |
| Total | 453 | 100.0% |

6. Comparative effectiveness research (CER) compares the outcomes resulting from two or more health care services or treatments and provides evidence about the relative effectiveness of each, including risks and benefits, so that a physician and a patient/family member can work together to understand the facts about different treatments and make the best treatment choices for that patient. Based on this definition, to what extent do you agree or disagree with the following statements? Please select ONE response for EACH statement.

| | Strongly Disagree | Somewhat Disagree | Neither Agree nor Disagree | Somewhat Agree | Strongly Agree | Uncertain | N |
|--|-------------------|-------------------|----------------------------|----------------|----------------|-----------|-----|
| a. Discussion of CER findings improves the relationship between physicians and patients/families | 0.9% | 1.8% | 13.3% | 37.8% | 38.7% | 7.4% | 444 |
| b. CER will be used to restrict my freedom to choose treatments for my patients | 14.9% | 27.1% | 28.9% | 15.1% | 5.6% | 8.4% | 443 |
| c. CER can improve how patients make health care decisions | 0.5% | 2.5% | 13.7% | 50.0% | 28.1% | 5.3% | 438 |
| d. I am skeptical about the validity of most CER | 11.4% | 26.4% | 36.4% | 10.5% | 3.6% | 11.8% | 440 |
| e. CER can improve the quality of patient care | 0.5% | 2.7% | 17.1% | 45.0% | 26.3% | 8.4% | 438 |
| f. CER should be used to develop practice guidelines | 2.3% | 6.8% | 21.6% | 32.0% | 26.1% | 11.1% | 440 |

7. If you were deciding whether or not to integrate a specific CER finding into your clinical decision-making, how important would each of the following be to your decision? Please select ONE response for EACH statement.

| | Not at all important | Slightly important | Moderately important | Very important | Uncertain | N |
|---|----------------------|--------------------|----------------------|----------------|-----------|-----|
| a. Evidence is published in a medical journal | 2.0% | 10.6% | 34.7% | 51.6% | 1.1% | 444 |
| b. Evidence is linked to clinical practice guidelines | 1.6% | 7.2% | 29.9% | 59.8% | 1.6% | 445 |
| c. Endorsed by your medical professional society/association | 2.7% | 15.7% | 37.7% | 41.5% | 2.5% | 446 |
| d. Incorporated into your medical professional society's toolkit of resources | 9.1% | 20.5% | 37.9% | 26.9% | 5.5% | 438 |

| | | | | | | |
|--|-------|-------|-------|-------|------|-----|
| e. Monetary incentive for use | 64.1% | 18.2% | 10.1% | 2.9% | 4.7% | 446 |
| f. Receipt of CME credit for skill development | 22.7% | 32.4% | 26.7% | 14.4% | 3.8% | 445 |
| g. Receipt of board certification or maintenance of certification credit | 19.1% | 31.5% | 28.1% | 16.9% | 4.5% | 445 |
| h. Linked to performance measures | 22.9% | 26.2% | 31.8% | 12.8% | 6.3% | 446 |

8. How much of a barrier are each of the following to your incorporating new CER findings into your clinical decision-making? Please select ONE response for EACH statement.

| | Not a Barrier | Minor Barrier | Major Barrier | N |
|---|---------------|---------------|---------------|-----|
| a. Difficulty in finding the research evidence to inform your clinical decisions | 11.3% | 52.8% | 35.8% | 441 |
| b. Lack of time to find/read research evidence to inform your clinical decisions | 3.4% | 29.3% | 67.3% | 441 |
| c. Lack of confidence in evaluating the quality of research findings | 22.4% | 59.6% | 17.9% | 441 |
| d. Lack of payment for applying the research evidence | 53.4% | 32.0% | 14.6% | 438 |
| e. Limited applicability of research findings to the uniqueness (e.g., comorbidities) of each patient | 9.9% | 62.8% | 27.3% | 436 |
| f. Difficulty convincing patients/families to accept a change in treatment based on research findings | 17.8% | 59.3% | 22.9% | 437 |
| g. Patients'/families' inability to pay for recommended care | 10.5% | 34.0% | 55.5% | 438 |
| h. Patients/families unwilling to discuss the pros and cons of treatment | 37.4% | 49.1% | 13.5% | 438 |

| | | | | |
|--|-------|-------|-------|-----|
| alternatives | | | | |
| i. Insufficient training on how to engage patients/families in decision-making | 56.5% | 35.5% | 8.0% | 439 |
| j. Lack of effective tools/resources to give to patients/families | 21.5% | 54.8% | 23.7% | 438 |
| k. Lack of relevant CER findings available in your area of clinical practice | 21.5% | 49.1% | 29.4% | 432 |

9. If you were looking for new research findings to integrate into your clinical decision-making, to what extent would you trust the information from each of the following sources? Please select ONE response for EACH statement.

| | Not at all | Slightly | Moderately | Very much | Uncertain | N |
|--|------------|----------|------------|-----------|-----------|-----|
| a. Medical professional society/association | 0.2% | 5.4% | 27.5% | 66.4% | 0.5% | 443 |
| b. Your employer/institution | 10.0% | 24.4% | 41.2% | 19.9% | 4.5% | 442 |
| c. Clinicians/colleagues within your specialty | 0.5% | 9.7% | 49.8% | 39.4% | 0.7% | 444 |
| d. Disease-specific associations (e.g., American Diabetes Association) | 1.1% | 8.8% | 39.9% | 49.5% | 0.7% | 444 |
| e. Peer reviewed literature (e.g., Journals) | 0.5% | 2.3% | 30.7% | 65.9% | 0.7% | 443 |
| f. Systematic review articles (e.g., Cochrane Reviews) | 0.5% | 3.2% | 23.4% | 71.8% | 1.1% | 444 |
| g. A clinical information reference tool (e.g., UpToDate, Smart Medicine, American Family Physician) | 0.7% | 1.8% | 19.6% | 76.9% | 1.1% | 445 |
| h. CME conferences/webinars | 0.7% | 6.7% | 45.4% | 46.5% | 0.7% | 445 |
| i. A government health agency website | 5.4% | 22.3% | 43.5% | 27.9% | 0.9% | 444 |
| j. Other websites (e.g., Medscape) | 6.9% | 27.2% | 47.1% | 11.4% | 7.3% | 437 |

10. Suppose you went to one of your trusted sources and found a research study showing that a particular treatment option was more effective than one you had always recommended. How likely would you be to take each of the following clinical decision-making approaches? Please select ONE response for EACH statement.

| | Very unlikely | Somewhat Unlikely | Neither likely nor unlikely | Somewhat Likely | Very Likely | N |
|--|---------------|-------------------|-----------------------------|-----------------|-------------|-----|
| a. I would maintain my original treatment approach without changes | 32.4% | 46.4% | 12.2% | 7.2% | 1.8% | 442 |
| b. I would investigate further through additional resources | 0.5% | 4.3% | 5.4% | 54.3% | 35.6% | 444 |
| c. I would assess the quality of the research, its validity, and generalizability to my patients | 1.6% | 2.5% | 11.1% | 47.0% | 37.9% | 443 |
| d. I would speak with/get opinion from colleagues before recommending the more effective treatment | 2.7% | 10.8% | 16.9% | 49.8% | 19.8% | 444 |
| e. I would begin to recommend the more effective treatment option | 0.5% | 2.3% | 15.3% | 54.5% | 27.5% | 444 |
| f. I would focus on the patient's/family's concerns in conjunction with my intuition when comparing the treatments | 2.3 | 4.3 | 15.6 | 45.2 | 32.6 | 442 |

11. How frequently do you apply CER in your practice when appropriate?

| | N | % |
|---------------|-----|-------|
| Almost always | 45 | 10.5% |
| Often | 138 | 32.3% |
| Sometimes | 135 | 31.6% |
| Rarely | 43 | 10.1% |

| | | |
|-------|-----|-------|
| Never | 66 | 15.5% |
| Total | 427 | 100% |

12. (A) If you were looking for CER findings to integrate into your clinical decision-making, in which of the following ways would you prefer to obtain the research findings? Please choose ALL that apply. (N = 453)

| | N | % |
|--|-----|-------|
| a. Print (e.g., journals, books) | 325 | 71.7% |
| b. Email alerts | 205 | 45.3% |
| c. Websites | 269 | 59.4% |
| d. Social networking sites (e.g., Sermo) | 51 | 11.3% |
| e. Mobile device (Tablet or Smart Phone apps) | 176 | 38.9% |
| f. Live meetings or courses | 322 | 71.1% |
| g. Casual conversations with colleagues | 177 | 39.1% |
| h. Interactive conferences with colleagues | 181 | 40.0% |
| i. Virtual/webinar, live video (delivered in real time) | 92 | 20.3% |
| j. Virtual/webinar, on demand video (learners need not participate in real time) | 179 | 39.5% |

12. (B) If you were looking for CER findings to integrate into your clinical decision-making, what would be your MOST preferred way to obtain the research findings? Please select ONE response.

| | N | % |
|---|-----|--------|
| Print (e.g., journals, books) | 136 | 34.5% |
| Email alerts | 60 | 15.2% |
| Websites | 78 | 19.8% |
| Social networking sites (e.g., Sermo) | 0 | 0.0% |
| Mobile device (Tablet or Smart Phone apps) | 43 | 10.9% |
| Live meetings or courses | 54 | 13.7% |
| Casual conversations with colleagues | 3 | 0.8% |
| Interactive conferences with colleagues | 11 | 2.8% |
| Virtual/webinar, live video (delivered in real time) | 1 | 0.3% |
| Virtual/webinar, on demand video (learners need not participate in real time) | 8 | 2.0% |
| Total | 453 | 100.0% |

13. If there are any other ways in which you would like to obtain research findings, please specify.

13. Other_Verbatim Responses

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|-----------|---------|---------------|--------------------|
| | 408 | 90.1 | 90.1 | 90.1 |
| AAFP journals | 1 | .2 | .2 | 90.3 |
| AAFP website | 1 | .2 | .2 | 90.5 |
| American Family Physician | 1 | .2 | .2 | 90.7 |
| Audio resources with reviews - audio digest and journal watch audio (preferred) | 1 | .2 | .2 | 90.9 |
| Choosing Wisely monthly newsletter would be nice. | 1 | .2 | .2 | 91.2 |
| CME CDs | 1 | .2 | .2 | 91.4 |
| CME, FP meetings. | 1 | .2 | .2 | 91.6 |
| Concise executive summary sent via email with more information if interested on web link. | 1 | .2 | .2 | 91.8 |
| Discussion with experts/specialists. | 1 | .2 | .2 | 92.1 |
| Do it myself. | 1 | .2 | .2 | 92.3 |
| Embed C and R into the EMR (or at least a direct link to useful info like UptoDate, ?, etc.). | 1 | .2 | .2 | 92.5 |
| Family Medicine Smart Briefs would be perfect! | 1 | .2 | .2 | 92.7 |
| Google question which brings up articles which I review through PubMed | 1 | .2 | .2 | 92.9 |

| | | | | |
|--|---|----|----|------|
| How does USPSTF fit in? | 1 | .2 | .2 | 93.2 |
| I really like Essential Evidence Plus which predigests the evidence and present searchable website and emails. | 1 | .2 | .2 | 93.4 |
| Inbed in practice guidelines. | 1 | .2 | .2 | 93.6 |
| Integrated into EMR decision making tools. | 1 | .2 | .2 | 93.8 |
| JAAFP, AFP | 1 | .2 | .2 | 94.0 |
| Journal Club | 1 | .2 | .2 | 94.3 |
| Journals - includes e-? | 1 | .2 | .2 | 94.5 |
| Local hospital presentations and communications. | 1 | .2 | .2 | 94.7 |
| Magazine ? subjects explain and detailed references. | 1 | .2 | .2 | 94.9 |
| Mail | 1 | .2 | .2 | 95.1 |
| Mail; CME | 1 | .2 | .2 | 95.4 |
| Mostly ? in AAPs format for easy ?. | 1 | .2 | .2 | 95.6 |
| None | 1 | .2 | .2 | 95.8 |
| Online version of journal. | 1 | .2 | .2 | 96.0 |
| Patients bring in, colleagues/friends who are specialists let me know, emails from AAFP. | 1 | .2 | .2 | 96.2 |
| Podcasts | 1 | .2 | .2 | 96.5 |

| | | | | |
|---|-----|-------|-------|-------|
| Point of care built into EMR. | 1 | .2 | .2 | 96.7 |
| Published on assoc. website with alerts. | 1 | .2 | .2 | 96.9 |
| PubMed | 1 | .2 | .2 | 97.1 |
| Reprints | 1 | .2 | .2 | 97.4 |
| Searchable web database. | 1 | .2 | .2 | 97.6 |
| Specialty Association CME on Rust Therapy for specific condition. | 1 | .2 | .2 | 97.8 |
| Subscriptions like UTD/epocrates. | 1 | .2 | .2 | 98.0 |
| UpToDate | 6 | 1.3 | 1.3 | 99.3 |
| Vulcan Mind Meld | 1 | .2 | .2 | 99.6 |
| Webinar - CME | 1 | .2 | .2 | 99.8 |
| Why no one central "here it is guys" info resource (NIH, CDC) to simplify search? | 1 | .2 | .2 | 100.0 |
| Total | 453 | 100.0 | 100.0 | |

14. What role, if any, should the AAFP play in distributing research findings for clinical decision-making? Please choose ALL that apply. (N = 453)

| | N | % |
|---|-----|------|
| a. Use research findings to set guidelines/policies | 339 | 74.8 |
| b. Provide direct access to research articles | 288 | 63.6 |
| c. Direct physicians to sites where they can obtain appropriate and applicable research information | 311 | 68.7 |
| d. Offer courses/sessions to help physicians communicate effectively with patients/families | 206 | 45.5 |
| e. Provide tools to assist in using research results in making decisions with patients/families | 259 | 57.2 |
| f. Offer opportunities to participate in quality improvement (QI) | 139 | 30.7 |

| | | |
|---|-----|------|
| programs | | |
| g. Provide educational resources for certification/recertification | 269 | 59.4 |
| h. Provide guidance (e.g., commentaries) on research articles to put findings in perspective for my clinical practice | 260 | 57.4 |
| i. Other (Specify): | 7 | 1.5 |
| j. The AAP should not be involved in the distribution of research findings | 1 | 0.2 |

14. Other, specify:

14. Other_Verbatim Responses

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|-----------|---------|---------------|--------------------|
| Valid | 445 | 98.2 | 98.2 | 98.2 |
| Allow AAFP members access to Cochrane Reviews. | 1 | .2 | .2 | 98.5 |
| As in 13 | 1 | .2 | .2 | 98.7 |
| Education material for patient and family free readily? | 1 | .2 | .2 | 98.9 |
| Improve access to Cochrane Reviews | 1 | .2 | .2 | 99.1 |
| Provide forum to share/update guidelines. | 1 | .2 | .2 | 99.3 |
| Since I have library access I did not choose #2 above. | 1 | .2 | .2 | 99.6 |
| Stay out of policy making and making guidelines. | 1 | .2 | .2 | 99.8 |
| Summarize comparisons and recommendations. | 1 | .2 | .2 | 100.0 |
| Total | 453 | 100.0 | 100.0 | |

15. Overall, do you think the AAFP should spend more, about the same, or less time disseminating and translating research findings into health care practice for clinicians?

| | % | N |
|----------------------------------|--------|-----|
| Should spend more time | 57.7% | 256 |
| Should spend about the same time | 40.3% | 179 |
| Should spend less time | 2.0% | 9 |
| Total | 100.0% | 444 |

16. In the next 2-3 years, how important do you think the findings from comparative effectiveness research (CER) studies will be in your treatment decisions?

| | N | % |
|--------------------|-----|--------|
| Very important | 188 | 42.6% |
| Somewhat important | 203 | 46.0% |
| Not important | 11 | 2.5% |
| Uncertain | 39 | 8.8% |
| Total | 441 | 100.0% |

17. What area of medicine is your primary focus; i.e., the one in which you spend the most hours per week? Please mark ONE response.

| | N | % |
|---------------------------|-----|--------|
| Family medicine | 381 | 85.6% |
| General internal medicine | 23 | 5.2% |
| Geriatric medicine | 13 | 2.9% |
| Pediatrics | 0 | 0.0% |
| Other | 28 | 6.3% |
| Total | 445 | 100.0% |

18. During a typical complete work week, approximately how many hours do you work in medicine? (Include all volunteer and paid patient care and medically-related research, administration, teaching, etc.)

| Min - Max | Mean | SD | N |
|-----------|-------|-------|-----|
| 4 - 120 | 48.27 | 14.72 | 430 |

19. In which professional activities do you spend at least 20% of your time? Please choose ALL that apply. (N = 453)

| | N | % |
|----------------------------|-----|-------|
| Direct patient care | 425 | 93.8% |
| Administrative activities | 173 | 38.2% |
| Medical education/teaching | 99 | 21.9% |
| Medical research | 12 | 2.6% |
| Other | 19 | 4.2% |

20. In which of the following settings do you provide your patient care? Please mark ONE response.

| | N | % |
|--|-----|--------|
| All outpatient | 276 | 61.9% |
| Primarily outpatient with some inpatient | 152 | 34.1% |
| Primarily inpatient with some outpatient | 11 | 2.5% |
| All inpatient | 7 | 1.6% |
| Primarily inpatient with some outpatient | 11 | 2.5% |
| Total | 446 | 100.0% |

21. Which of the following best describes your primary practice site (i.e., the setting in which you provide most of your patient care services)? Please select ONE response.

| | N | % |
|---|-----|--------|
| Office-based practice | 294 | 67.4% |
| Hospital-based practice | 41 | 9.4% |
| Free standing ambulatory care or urgent care center | 22 | 5.0% |
| Health Maintenance Organization (staff model) | 9 | 2.1% |
| Medical school/Academic Medical Center/University | 19 | 4.4% |
| City/county/state government clinic | 10 | 2.3% |
| U.S. government clinic (including VA/military) | 18 | 4.1% |
| Institution (prison, nursing home, long term care facility, student health) | 7 | 1.6% |
| Other (Specify): | 16 | 3.7% |
| Total | 436 | 100.0% |

21. Other (Specify):

PXSITEOTHERTXT

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|-----------|---------|---------------|--------------------|
| Valid | 425 | 93.8 | 93.8 | 93.8 |
| 1/2 day office 1/2 day Urgent Care | 1 | .2 | .2 | 94.0 |
| Community Based (FQHC) | 1 | .2 | .2 | 94.3 |
| Community Health Center | 3 | .7 | .7 | 94.9 |
| Emergency Department | 1 | .2 | .2 | 95.1 |
| ER | 1 | .2 | .2 | 95.4 |
| Fam Med Residency in private hosp. (not med school). | 1 | .2 | .2 | 95.6 |
| Federally Qualified Health Center | 1 | .2 | .2 | 95.8 |
| FQHC | 1 | .2 | .2 | 96.0 |
| FQHC/Community Clinic | 1 | .2 | .2 | 96.2 |
| Full scope family practice office and hospital. | 1 | .2 | .2 | 96.5 |
| Hospice - home - institution | 1 | .2 | .2 | 96.7 |
| I also do Endoscopy in the OR. | 1 | .2 | .2 | 96.9 |
| Locum Tenens - various practice settings. | 1 | .2 | .2 | 97.1 |
| Medical review | 1 | .2 | .2 | 97.4 |
| Military hospital | 1 | .2 | .2 | 97.6 |
| Multi-disciplinary group practice | 1 | .2 | .2 | 97.8 |
| Office on hosp. carry us. | 1 | .2 | .2 | 98.0 |

| | | | | |
|---|-----|-------|-------|-------|
| Post acute care facilities -mixed skilled rehab and long term care. | 1 | .2 | .2 | 98.2 |
| Post acute, skilled nursing. | 1 | .2 | .2 | 98.5 |
| Residency | 2 | .4 | .4 | 98.9 |
| Residency clinic | 1 | .2 | .2 | 99.1 |
| Residency program | 1 | .2 | .2 | 99.3 |
| Residency program clinic/faculty. | 1 | .2 | .2 | 99.6 |
| Residency-based clinic | 1 | .2 | .2 | 99.8 |
| UC division of large health care system. | 1 | .2 | .2 | 100.0 |
| Total | 453 | 100.0 | 100.0 | |

22. How many physicians, including you, work in your primary practice (i.e., the entity you checked in Question 19)? Please select ONE response.

| | N | % |
|--------------------------|-----|--------|
| I work solo | 75 | 16.7% |
| 2-3 physicians | 96 | 21.4% |
| 4-10 physicians | 150 | 33.5% |
| 11-50 physicians | 95 | 21.2% |
| 51-100 physicians | 8 | 1.8% |
| More than 100 physicians | 24 | 5.4% |
| Total | 448 | 100.0% |

23. Is this a single- or multi-specialty practice?

| | N | % |
|------------------|-----|--------|
| Single-specialty | 298 | 67.0% |
| Multi-specialty | 147 | 33.0% |
| Total | 383 | 100.0% |

24. Are you a full- or part-owner, employee, or independent contractor? Please select ONE response.

| | N | % |
|--|---|---|
|--|---|---|

| | | |
|------------------------|-----|--------|
| Full-owner | 71 | 15.9% |
| Part-owner | 65 | 14.6% |
| Employee | 277 | 62.1% |
| Independent contractor | 26 | 5.8% |
| Other (Specify): | 7 | 1.6% |
| Total | 453 | 100.0% |

25. Who owns your primary practice? Please select ONE response.

| | N | % |
|--|-----|--------|
| Physician or physician group | 162 | 36.6% |
| Hospital | 72 | 16.3% |
| Health care system | 100 | 22.6% |
| Insurance company, health plan or HMO | 7 | 1.6% |
| Academic Medical Center/Medical School/University | 25 | 5.6% |
| Community Health Center | 27 | 6.1% |
| Federal/state/local government (including VA/military) | 33 | 7.4% |
| Other (Specify): | 17 | 3.8% |
| Total | 443 | 100.0% |

26. Which of the following best describes the community in which your primary practice is located? Please mark ONE response.

| | N | % |
|-----------------------|-----|--------|
| Rural | 119 | 26.6% |
| Suburban | 207 | 46.3% |
| Urban, inner city | 47 | 10.5% |
| Urban, not inner city | 74 | 16.6% |
| Total | 447 | 100.0% |

27. Where was your medical school located?

| | N | % |
|--------|-----|-------|
| U.S. | 377 | 84.0% |
| Canada | 3 | 0.7% |
| Other | 69 | 15.4% |

| | | |
|-------|-----|--------|
| Total | 449 | 100.0% |
|-------|-----|--------|

28. Are you of Hispanic, Latino or Spanish origin?

| | N | % |
|----------------------|-----|--------|
| Yes | 22 | 5.0% |
| No | 415 | 95.0% |
| Prefer not to answer | 437 | 100.0% |
| Total | | |

29. With which racial group do you identify yourself? Please choose ALL that apply. (N = 453)

| | N | % |
|--|-----|-------|
| White | 363 | 80.1% |
| Black/African American | 7 | 1.5% |
| Asian | 45 | 9.9% |
| Native Hawaiian/Other Pacific Islander | 1 | 0.2% |
| American Indian/Alaska Native | 3 | 0.7% |
| Other | 19 | 4.2% |

Gender

| | N | % |
|--------|-----|--------|
| Female | 192 | 42.5% |
| Male | 260 | 57.5% |
| Total | 452 | 100.0% |

Age

| Min - Max | Mean | SD | N |
|-----------|-------|-------|-----|
| 29 - 84 | 50.87 | 10.53 | 448 |

Age by group

| | N | % |
|------------------------|-----|--------|
| Less than 40 years old | 77 | 17.0% |
| 40-55 years old | 196 | 43.3% |
| Greater than 55 | 175 | 38.6% |
| Unknown | 5 | 1.1% |
| Total | 453 | 100.0% |

