SAVVY ABOUT COMPLEMENTARY AND INTEGRATIVE HEALTH: THE "CIH QUIZ"

This quiz was created to help you get a better sense of some of the big questions that are often asked about complementary and integrative health (CIH) therapies:

- Who is most likely to use them?
- What therapies are most frequently used?
- For what reasons are they used?
- What therapies are offered within the VA?
- What are some of the best indications for various CIH approaches?

Find out how many of the following 20 questions you can get right. The questions are repeated with their answers starting on page 4.

1. What percent of American adults use complementary medicine?

- a. 85%
- b. 66%
- c. 33%
- d. <10%

2. How much money do Americans spend on these approaches each year?

- a. \$3.3 trillion
- b. \$350 billion
- c. \$30 billion
- d. \$1 billion

3. Of 141 VA centers surveyed in 2015, how many incorporate complementary medicine in some form?

- a. 131
- b. 102
- c. 74
- d. 25

4. What are the most popular complementary approaches used by Americans?

- a. Energy medicine, osteopathy, dietary supplements
- b. Natural products, deep breathing, movement-based therapies
- c. Chiropractic/osteopathic manipulation, massage, yoga
- d. Natural products, yoga, meditation

5. According to the 2015 Healthcare Analysis and Information Group (HAIG) report,[1] what is the most popular complementary approach used in the VA system by Veterans?

- a. Tai chi
- b. Acupuncture
- c. Yoga
- d. Mindfulness/Other Meditation
- e. Chiropractic

6. What are the main health reasons for which Americans in general seek out complementary approaches?

- a. Musculoskeletal problems
- b. Anxiety and PTSD
- c. Cholesterol and high blood pressure
- d. Gastrointestinal (GI) problems

7. What are the top 3 health reasons complementary therapies are used in the VA system?

- a. Depression, pain, wellness
- b. Arthritis, headache, depression
- c. Pain, PTSD, depression
- d. Stress management, anxiety disorders, PTSD

8. What percent of patients have discussed complementary therapy use with their physician?

- a. 85%
- b. 66%
- c. 33%
- d. 10%

9. Who is most likely to use complementary approaches?

- a. Middle-aged, educated, white women
- b. Elderly men or women
- c. Only hippies
- d. It is fairly well distributed across the U.S. population

10. True or False? Veterans have a higher rate of CIH use than the general adult population of the United States.

- a. True
- b. False

11. Which of the following complementary approaches are on List 1 (which means they are now covered services in the VA, at least for some indications)?

- a. Biofeedback, tai chi, guided imagery, and Alexander Technique
- b. Healing Touch, aromatherapy, acupuncture, and some herbal supplements
- c. Yoga, meditation, Cognitive Behavioral Therapy, animal-assisted therapy
- d. Clinical hypnosis, yoga, acupuncture, therapeutic massage

12. Based on the research as of 2018, which of the following conditions can benefit from biofeedback?

- a. Urinary incontinence
- b. Hypertension (high blood pressure)
- c. Headaches in adults
- d. Attention deficit disorder
- e. All of the above

13. Which of the following is NOT true about when to use meditation?

- a. Meditation is always beneficial
- b. Meditation can be useful for people who do not have specific health problems
- c. Meditation is useful for people with chronic pain
- d. Meditation affects the immune system
- e. Additional research about meditation is needed to guide recommendations
- f. All of the above are actually true

14. What is Battlefield Acupuncture (BFA) most commonly used to treat?

- a. Depression
- b. PTSD
- c. Pain
- d. Insomnia
- e. Nausea and vomiting

15. Which of the following statements about massage therapy is most accurate?

- a. The VA now offers spa-like relaxation massages for all Veterans
- b. Massage in the VA must be done by physical therapists or nurses
- c. Massage can reduce anxiety, lower blood pressure, and decrease heart rate
- d. Massage is not helpful in the management of pain

16. Which of the following mind-body approaches covered by List 1 is most likely to elicit the "relaxation response" for a person?

- a. Guided Imagery
- b. Meditation
- c. Biofeedback

- d. Hypnosis
- e. All of these have benefit the key is to tailor the approach to each individual person

17. Tai chi and qi gong are particularly beneficial for which population group, according to the latest research?

- a. Women
- b. Men
- c. Children
- d. Veterans
- e. The elderly

18. True or False? Clinical hypnosis is a lot like stage hypnosis, where people can be encouraged to behave in strange ways without fully realizing it.

- a. True
- b. False

19. Which of the following has the potential to be beneficial in the treatment of pain?

- a. Acupuncture
- b. Therapeutic Massage
- c. Yoga
- d. Biofeedback
- e. All can have potential benefit

20. What are good criteria to keep in mind when you are talking with Veterans about choosing whether or not to use a therapy?

- a. Efficacy, cost, harms/safety, their opinions about the therapy
- b. How easily they can access a particular therapy
- c. It is never helpful to use them. There is no evidence supporting these therapies
- d. It is always okay. None of the therapies have any associated risk.
- e. A. & B.

ANSWERS BEGIN ON THE NEXT PAGE.

ANSWERS: SAVVY ABOUT CIH QUIZ

1. What percent of American adults use complementary medicine?

- a. 85%
- b. 66%
- c. 33%
- d. <10%

Answer: C. Based on the National Health Interview Survey of 2012, 33% of American adults (83 million) and 11.6% of children use CIH approaches.[2,3] This is up from 34% in 1990.

2. How much money do Americans spend on these approaches each year?

- a. \$3.3 trillion
- b. \$350 billion
- c. \$30 billion
- d. \$1 billion

Answer: C.[4] In 2016, \$3.3 trillion was the total health care spending in the United States.[5] Out-of-pocket payments for conventional medicine were over \$350 billion.[5] Note that the \$30 billion spent on CIH is particularly remarkable if one considers these are primarily out-of-pocket expenses.

Out of the \$30.2 billion spent on CIH, an estimated \$28.2 billion was spent on CIH products, classes, and materials (self-care costs), and \$12 billion was spent on nonvitamin/nonmineral natural products. Nearly \$14 billion was spent on visits to CIH practitioners.

3. Of 141 VA centers surveyed in 2015, how many incorporate complementary medicine in some form?

- a. 131
- b. 102
- c. 74
- d. 25

Answer: A. 131, or 93%, of the VA facilities surveyed, offered CIH in some form, according to the Healthcare Analysis and Information Group (HAIG), 2015 Report.[1]

Table 1.		2011		2015
	Count	%	Count	%
Yes	125	89%	131	93%
No	14	10%	3	2%
No, but are in the process of developing	2	1%	7	5%
Total	141	100%	141	100%

Figure 1. CIH use in VA facilities.[1]

Of the sites that offered CIH, the top reasons given for providing CIH were:

- Promote wellness
- Patient preferences
- Adjunct to conventional chronic care
- Proven clinical effect
- Provider request

Table 1.b.	2015	n=131	Count	%
Consistent with patient-centered model of care			122	93%
Promotes well being			121	92%
Adjunctive to chronic disease ma	nagemen	t	109	83%
Patient preference	_		104	79%
Proven clinical effectiveness			88	67%
Reflects facility's mission			84	64%
Provider request			79	60%
Have provider(s) who volunteer the	heir expei	tise	65	50%
Promotes cost savings			54	41%
Attracts new patients			43	33%
Cultural			36	27%
Other			9	7%

Figure 2. Reasons for using CIH in VA facilities.[1]

For the 10% of facilities not offering CIH, the main reasons given for not providing CIH were: [1]

- Lack of available providers
- Lack of patient interest
- Lack of evidence of efficacy
- Lack of facility funding support

4. What are the most popular complementary approaches used by Americans?

- a. Energy medicine, osteopathy, dietary supplements
- b. Natural products, deep breathing, movement-based therapies
- c. Chiropractic/osteopathic manipulation, massage, yoga
- d. Natural products, yoga, meditation

Answer: B. According to the 2012 National Health Interview Survey,[3,6] the CIH therapies most commonly used by U.S. adults in the past 12 months were:

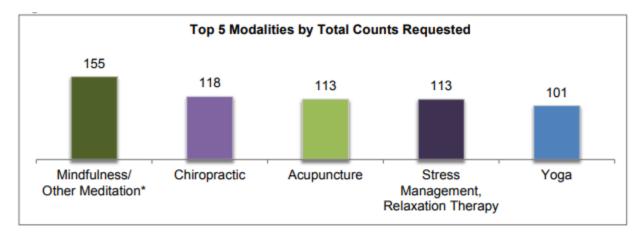
- Nonvitamin, nonmineral, natural products (17.7% of U.S. adults). Use of fish oil, probiotics, and melatonin increased between 2007 and 2012. Use of glucosamine/chondroitin, echinacea, and garlic decreased.[7]
- Deep breathing exercises (10.9%)
- Yoga, tai chi, and qi gong (10.1%)
- Chiropractic or osteopathic manipulation (8.4%)
- Meditation (8.0%)
- Massage (6.9%)

In the 2012 survey, yoga was the therapy with the most dramatic increase (9.5% of US adults practiced it) relative to previous studies in 2007 (6.1% of adults) and 2002 (5.1%).

5. According to the 2015 Healthcare Analysis and Information Group (HAIG) report[1], what is the most popular complementary approach used in the VA system by Veterans?

- a. Tai chi
- b. Acupuncture
- c. Yoga
- d. Mindfulness/other meditation
- e. Chiropractic

Answer: D. The following graphic from the HAIG report lists the 5 most popular "CIH modalities" offered by the VA. Of course, the fact that they are offered or covered for Veterans influences their popularity relative to therapies that are not.



*Mindfulness, Transcendental Meditation, and Mantram Repetition all fall in the general category of "Meditation." "Mindfulness" and "Other Meditations" are combined for comparison purposes.

Figure 3. Top 5 CIH Modalities[1]

The HAIG report concluded that for complementary providers within the VHA:

- The majority of them have conventional care training.
- More providers offered care in mind-body medicine than in any of the other categories (by far).
- They use complementary medicine as an adjunct, not as a primary treatment.

The following diagram from the 2011 HAIG survey of CIH use in the VA illustrates which therapies had the highest frequency of use.

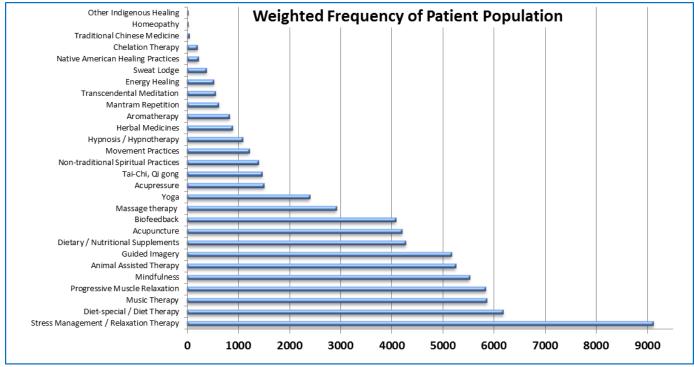


Figure 4. Frequency of CIH therapy use in the VA.[8]

The HAIG report also concluded that "There is significant interest in establishing Integrative clinics within VHA."[8]

6. What are the main health reasons for which Americans in general seek out complementary approaches?

a. Musculoskeletal problems

- b. Anxiety and PTSD
- c. Cholesterol and high blood pressure
- d. Gastrointestinal (GI) problems

Answer: A. Data indicate that American adults most often used CIH to treat musculoskeletal problems, including the following:[6,7]

• Back pain or problems (17%)

- Neck pain or problems (6%)
- Joint pain or stiffness, or other joint conditions (5%)
- Arthritis (3.5%)

7. What are the top 3 health reasons complementary therapies are used in the VA system?

- a. Depression, pain, wellness
- b. Arthritis, headache, depression
- c. Pain, PTSD, depression
- d. Stress management, anxiety disorders, PTSD

Answer: D. Figure 5 lists the top 5 conditions most commonly treated in the VA using CIH, and the number of facilities that used each type.[1] (SMRT is stress management/relaxation therapy, and PMR is progressive muscle relaxation.)

MODALITIES USED TO TREAT THE MOST COMMONLY TREATED CONDITIONS

Anxiety Disorders	Depression	PTSD	Stress Management	Musculoskeletal Pain
 Mindfulness (99) SMRT (98) Guided Imagery (87) PMRT (71) Yoga (64) 	 Mindfulness (94) SMRT (90) Guided Imagery (83) Art Therapy (66) PMRT (62) 	 SMRT (90) Mindfulness (88) Guided Imagery (79) PMRT (62) Yoga (62) 	 SMRT (104) Mindfulness (99) Guided Imagery (88) PMRT (77) Yoga (74) 	 Acupuncture (101) Chiropractic (101) PMRT (57) Yoga (57) SMRT (57)

Figure 5. Common conditions CIH is used for in the VA, with most commonly used therapies. Numbers next to each approach indicate how many sites offered it according to the 2015 HAIG Report[1]

8. What percent of patients have discussed complementary therapy use with their physician?

- a. 85%
- b. 66%
- c. 33%
- d. 10%

Answer: C. In a 2010 survey of over 1,000 people aged 50 and older, 33% of respondents reported they had discussed CIH with a health care provider, and 67% had not.[9]

In terms of which providers patients told about their CIH use, 28% reported discussing CIH with their physician (Figure 6). Roughly half as many reported discussing it with other types of clinicians.[9] In both 2006 and 2010, 26% of respondents reported that a health care provider raised the topic.[9] Given that at least 20% of people using CIH approaches

are also taking medications,[10] paying attention to the potential for interactions between the two is essential, especially where dietary supplements are concerned.

What, specifically, was discussed during these visits? The following table from the AARP survey outlines various topics and the frequency with which respondents reported they arose.[9]

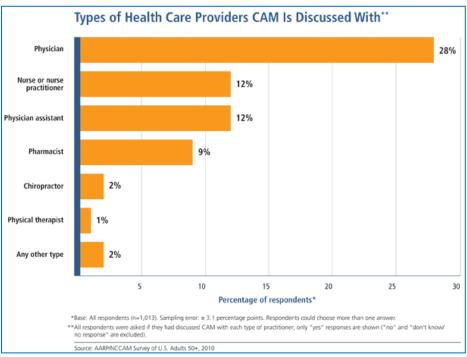


Figure 6. Who patients will speak to about CIH.[9]

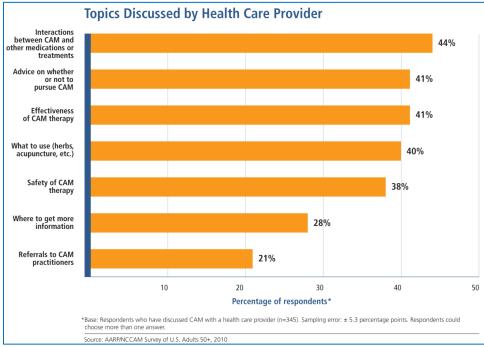


Figure 7. What people discussed about CIH with clinicians.[9]

Also worth noting were the reasons respondents gave for why they didn't bring up CIH use with their care provider:

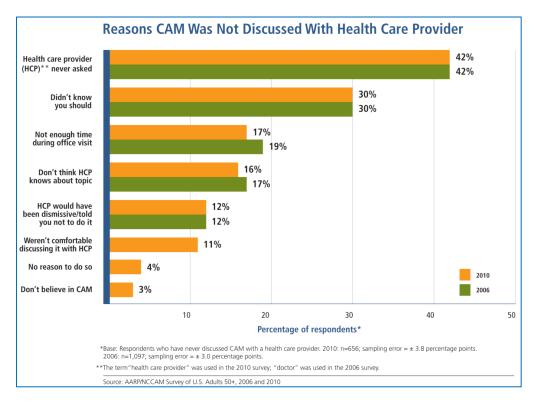


Figure 8. Why CIH was not discussed with clinicians.[9]

9. Who is most likely to use complementary approaches?

a. Middle-aged, educated, white women

- b. Elderly men or women
- c. Only hippies
- d. It is fairly well distributed across the U.S. population

Answer: A. According to the National Health Interview Survey, CIH use was highest in those aged 50-59 years (Figure 9).[2,10]

In a landmark 1998 study, [11] Astin ascertained that patients who use CIH have:

- More education
- Poorer health status
- More anxiety, back problems, chronic pain, and urinary tract disease
- A stronger sense of being feminist and environmentalist

Eisenberg and colleagues[12] reported that CIH use is also higher in:

• Non-black patients

- Those with higher incomes
- Women

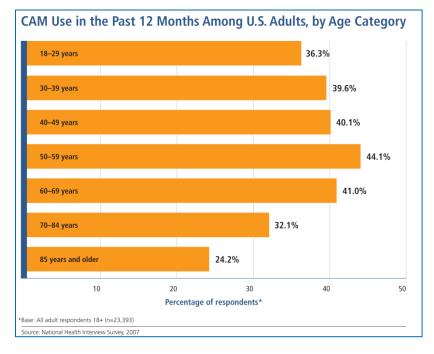


Figure 9. CIH use by age group.[9]

10. True or False? Veterans have a higher rate of CIH use than the general adult population of the United States.

- a. True
- b. False

Answer: True. A 2013 survey of over 16,000 people found that the rate of CIH use in Veterans was 44.5%, compared to the 38% found in the general population.[13]

11. Which of the following complementary approaches are on List 1 (which means they are now covered services in the VA, at least for some indications)?

- a. Biofeedback, tai chi, imagery, and Alexander Technique
- b. Healing Touch, aromatherapy, acupuncture, and some herbal supplements
- c. Yoga, meditation, Cognitive Behavioral Therapy, animal-assisted therapy
- d. Clinical hypnosis, yoga, acupuncture, therapeutic massage

Answer: D. D is the only answer where all four of the complementary approaches listed are from List 1. List 1 includes a total of eight different complementary approaches, all of which are mandated to be offered by all VA facilities in some fashion. The numbers next to each approach indicate what percent of VA medical centers had CHAR4 or CPT codes entered for it in fiscal year 2018:

- Acupuncture (89%)
- Therapeutic Massage (84%)
- Tai Chi/Qi Gong (26%)
- Yoga (42%)
- Meditation (41%)
- Guided Imagery (2%)
- Hypnosis (17%)
- Biofeedback (83%)

List 2 includes a growing list of CIH approaches that the VA is not required to offer, but which are considered safe. Sites may offer them if they so choose. Herbal supplements are not included in the VA formulary, but may be worth considering. For more information on these various approaches, refer to the *Passport to Whole Health*, Chapters 12-18. To learn more specifics about List 1 and List 2 and other aspects of Integrative Health in the VA, refer to the Integrative Health Coordinating Center SharePoint site.

12. Based on the research as of 2018, which of the following conditions can benefit from biofeedback?

- a. Urinary incontinence
- b. Hypertension (high blood pressure)
- c. Headaches in adults
- d. Attention deficit hyperactivity disorder (ADHD)
- e. All of the above

Answer: E. Biofeedback is showing promise for a number of indications. ADHD is treated mainly using neurofeedback, which involves monitoring and learning to consciously control EEG patters. Refer to Chapter 12 of the *Passport to Whole Health* for more information.

13. Which of the following is NOT true about when to use meditation?

a. Meditation is always beneficial

- b. Meditation can be useful for people who do not have specific health problems
- c. Meditation is useful for people with chronic pain
- d. Meditation affects the immune system
- e. Additional research about meditation is needed to guide recommendations
- f. All of the above are actually true

Answer: A. As with any therapy, certain people may not benefit or may experience adverse effects from meditation. For example, it should be used with care in people who are experiencing psychosis (e.g., hallucinating), or at high risk of having meditation trigger PTSD symptoms. In 2018, as series of articles criticized the strength of the methodologies

used in many meditation research studies, and there was a call for more research, done more rigorously, on larger populations. Refer to Chapter 4 and Chapter 12 of the <u>Passport</u> <u>to Whole Health</u> to learn more about meditation.

14. What is Battlefield Acupuncture (BFA) most commonly used to treat?

- a. Depression
- b. PTSD
- c. Pain
- d. Insomnia
- e. Nausea and vomiting

Answer: C. While BFA may have other benefits, it was developed primarily as an approach to pain, and it has shown some benefit.[14,15] Small needles are placed in five different locations in the ear and left there until they fall out on their own. The VA is now offering widespread training in BFA. Research is promising for the use of acupuncture in general for the other indications listed. Refer to Chapter 18 of the *Passport to Whole Health* for more information.

15. Which of the following statements about massage therapy is most accurate?

- a. The VA now offers spa-like relaxation massages for all Veterans
- b. Massage in the VA must be done by physical therapists or nurses
- c. Massage can reduce anxiety, lower blood pressure, and decrease heart rate
- d. Massage is not helpful in the management of pain

Answer: C. The VA will cover therapeutic massage, which is massage for very specific reasons. This is different from the type of massage offered in a spa. An occupation description for massage therapists is expected to be approved in the VA in late 2018. Massage can be offered by an array of different people, including licensed massage therapists who work in a Veteran's local community. It does show benefit in the treatment of pain. Refer to Chapter 16 of the *Passport to Whole Health* for more information.

16. Which of the following mind-body approaches covered by List 1 is most likely to elicit the "relaxation response" for a person?

- a. Guided Imagery
- b. Meditation
- c. Biofeedback
- d. Hypnosis
- e. All of these have benefit the key is to tailor the approach to each individual person

Answer: E. The relaxation response was first described in detail by Herbert Benson in the 1970s to describe the body's natural state of relaxation. In this state, the sympathetic nervous system (fight or flight) is less active and the parasympathetic nervous system is more active. All of the mind-body approaches listed (and many others) can elicit the relaxation response. The key is to decide which approach may be best for any given person, based on what is available, their preferences, and your clinical judgment. For more information, refer to Chapter 12 of the *Passport to Whole Health*.

17. Tai chi and qi gong are particularly beneficial for which population group, according to the latest research?

- a. Women
- b. Men
- c. Children
- d. Veterans
- e. The elderly

Answer: E. The strongest research to date for tai chi is related to enhancing balance and preventing falls in the elderly. Tai chi and qi gong have many other benefits as well and can be used for all of the groups listed. For more information, refer to Chapter 5 of the <u>Passport</u> to <u>Whole Health</u>.

18. True or False? Clinical hypnosis is a lot like stage hypnosis, where people can be encouraged to behave in strange ways without fully realizing it.

- a. True
- b. False

Answer: B. Hypnotherapists not that the trance-like state they help a person to reach during hypnotherapy can indeed make them open to suggestions, but they are in control at all times during a session. (This is likely true with stage hypnotherapy as well, though there are not a lot of studies.)

19. Which of the following has the potential to be beneficial in the treatment of pain?

- a. Acupuncture
- b. Therapeutic Massage
- c. Yoga
- d. Biofeedback
- e. All can have potential benefit

Answer: E. Increasing numbers of studies are finding that there is a role for CIH approaches for people with various types of pain, especially considering the risks related to

taking opioids. A number of national groups, such as the American College of Physicians[16] and England's National Institute for Health and Care Excellence (NICE)[17], have created guidelines that have added CIH approaches for management of chronic pain.

20. What are good criteria to keep in mind when you are talking with Veterans about choosing whether or not to use a therapy?

- a. Efficacy, cost, harms/safety, their opinions about the therapy
- b. How easily they can access a particular therapy
- c. It is never helpful to use them. There is no evidence supporting these therapies
- d. It is always okay. None of the therapies have any associated risk.
- e. A. & B.

Answer: E. A outlines the ECHO criteria for choosing a therapy. Access is also an important consideration, especially in rural areas. It is not helpful to make blanket statements about this incredibly diverse array of approaches being either uniformly beneficial or harmful.

INTERPRETATION OF YOUR SCORE

1-8

That's why you are taking this module. This is your chance to learn more!

8-12

Not bad. You are on your way to having a good grasp of CIH trends.

12-16

Even better. You are well on your way to being "CIH-savvy"!

16-20

Tremendous! You seem to know this stuff already. Maybe you should focus on a different Whole Health topic...

RESOURCE LINKS

• <u>Integrative Health Coordinating Center SharePoint</u>: https://dvagov.sharepoint.com/sites/VHAOPCC/Pages/Default.aspx <u>Passport to Whole Health</u>: https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Passport_to_WholeHealth_FY 2020_508.pdf

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REFERENCES

- Healthcare Analysis and Information Group (HAIG). FY 2015 VHA Complementary and Integrative Health (CIH) Services (formerly CAM). <u>https://sciencebasedmedicine.org/wp-</u> <u>content/uploads/2016/07/FY2015 VHA CIH signedReport.pdf</u>. Accessed September 27, 2018.
- 2. Nahin RL, Barnes PM, Stussman BJ, Bloom B. *Costs of complimentary and alternative medicine (CAM) and frequency of visits to CAM practitioners: United States, 2007. National Health Statistics Reports No. 18.* Hyattsville, MD: National Center for Health Statistics;2009.
- 3. Clarke TC, Black LI, Stussman BJ, Barnes PM, Nahin RL. Trends in the use of complementary health approaches among adults: United States, 2002-2012. *Natl Health Stat Report.* 2015(79):1-16.
- 4. Nahin RL, Barnes PM, Stussman BJ. Expenditures on Complementary Health Approaches: United States, 2012. *Natl Health Stat Report.* 2016(95):1-11.
- 5. Hartman M, Martin AB, Espinosa N, Catlin A, The National Health Expenditure Accounts T. National health care spending in 2016: spending and enrollment growth slow after initial coverage expansions. *Health Aff (Millwood).* 2018;37(1):150-160.
- 6. Barnes PM, Bloom B, Nahin RL, National Center for Health Statistics. *Complementary and alternative medicine use among adults and children: United States, 2007.* Hyattsville, MD: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics;2008.
- What Complementary and Integrative Approaches Do Americans Use? Key Findings from the 2012 National Health Interview Survey. National Center for Complementary and Integrative Health website <u>https://nccih.nih.gov/research/statistics/NHIS/2012/key-findings</u>. Updated September 24, 2017. Accessed September 27, 2018.
- 8. Healthcare Analysis and Information Group (HAIG). 2011 Complementary and Alternative Medicine Survey. September 2011. Department of Veterans Affairs, Veterans Health Administration.

https://www.research.va.gov/research_topics/2011cam_finalreport.pdf. Accessed September 27, 2018.

- 9. AARP, National Center for Complementary and Alternative Medicine (NCCAM). Complementary and alternative medicine: what people aged 50 and older discuss with their health care providers. National Institutes of Health (NIH);2011.
- 10. Gardiner P, Graham RE, Legedza AT, Eisenberg DM, Phillips RS. Factors associated with dietary supplement use among prescription medication users. *Arch Intern Med.* 2006;166(18):1968-1974.
- 11. Astin JA. Why patients use alternative medicine. *JAMA*. 1998;279(19):1548-1553.
- 12. Eisenberg DM, Davis RB, Ettner SL, et al. Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey. *JAMA*. 1998;280(18):1569-1575.
- 13. Goertz C, Marriott BP, Finch MD, et al. Military report more complementary and alternative medicine use than civilians. *J Altern Complement Med.* 2013;19(6):509-517.
- 14. Niemtzow R. Battlefield Acupuncture. *Medical Acupuncture*. 19(4).
- 15. Federman DG, Zeliadt SB, Thomas ER, Carbone GF, Jr., Taylor SL. Battlefield acupuncture in the Veterans Health Administration: effectiveness in individual and group settings for pain and pain comorbidities. *Medical Acupuncture.* 2018;30(5):273-278.
- 16. Qaseem A, Wilt TJ, McLean RM, Forciea MA. Noninvasive treatments for acute, subacute, and chronic low back pain: a clinical practice guideline from the American College of Physicians. *Ann Intern Med.* 2017;166(7):514-530.
- 17. Bernstein IA, Malik Q, Carville S, Ward S. Low back pain and sciatica: summary of NICE guidance. *BMJ.* 2017;356:i6748.