Complementary, Alternative, and Integrative Medicine: Introduction and Landscape

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Definitions (NIH)

- “CAM is a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine.”

- Complementary medicine is used together with conventional medicine.
  - e.g. aromatherapy to help lessen a patient's discomfort following surgery.

- Alternative medicine is used in place of conventional medicine.
  - e.g. using a special diet to treat cancer instead of undergoing surgery, radiation, or chemotherapy.
Integrative Medicine - Definitions

- Integrative medicine combines treatments from conventional medicine and CAM for which there is some high-quality evidence of safety and effectiveness (NIH)

- *Integrative Medicine is the practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and disciplines to achieve optimal health and healing* (CAHCM)

- Many other definitions

1. National Center for Complementary and Alternative Medicine (NCCAM), National Institutes of Health. NCCAM Publication No. D347
CAM – Domains (NIH)

- **Mind-Body Medicine**
  - Mainstreamed: patient support groups and cognitive-behavioral therapy.
  - meditation, prayer, mental healing, and therapies that use creative outlets such as art, music, or dance.

- **Biologically Based Practices**
  - use substances found in nature, such as herbs, foods, and vitamins
  - ‘Natural products’ / dietary supplements

- **Manipulative and Body-Based Practices**
  - Massage, chiropractic, osteopathic manipulation

- **Energy Medicine**
  - Reiki, therapeutic touch, qi gong. No recognized mechanism.

- **Whole Medical Systems**
  - built upon complete systems of theory and practice
  - Chinese medicine, Ayurveda, homeopathy

National Center for Complementary and Alternative Medicine (NCCAM), National Institutes of Health. NCCAM Publication No. D347
Prevalence of use

- 2007 National Health Interview Survey (NHIS), developed by the NIH and CDC
- Data from 34,000+ interviews nationwide

**CAM Use by U.S. Adults and Children**

![Bar chart showing CAM use by age group in 2007](image-url)


Figure 7. Reasons People Use CAM

- Thought CAM combined with conventional medicine would help: 54.9%
- Thought it would be interesting to try: 50.1%
- Thought conventional medicine would not help: 27.7%
- Conventional medical professional suggested it: 25.8%
- Conventional medicine too expensive: 13.2%
### Who are CAM providers?

<table>
<thead>
<tr>
<th>Profession</th>
<th>Designation</th>
<th>Degree</th>
<th>Training</th>
<th>Regulation</th>
<th>Credentialing body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acupuncture and Oriental Medicine</td>
<td>L.Ac. (Licensed Acupuncturist)</td>
<td>Masters</td>
<td>2-4 years</td>
<td>43 states</td>
<td>National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM)</td>
</tr>
<tr>
<td>Chiropractic</td>
<td>D.C. (Doctor of Chiropractic)</td>
<td>Doctorate</td>
<td>4 years</td>
<td>50 states</td>
<td>Federation of Chiropractic Licensing Boards</td>
</tr>
<tr>
<td>Midwifery</td>
<td>C.P.M. (Certified Professional Midwife)</td>
<td>variable</td>
<td>variable</td>
<td>Licensed or certified in 22 states</td>
<td>North American Registry of Midwives (NARM)</td>
</tr>
<tr>
<td>Massage therapy</td>
<td>None</td>
<td>None</td>
<td>500-1000 hours</td>
<td>Regulated in 39 states</td>
<td>National Certification Board for Therapeutic Massage and Bodywork (NCBTMB)</td>
</tr>
<tr>
<td>Naturopathic Medicine</td>
<td>N.D. (Doctor of Naturopathic Medicine)</td>
<td>Doctorate</td>
<td>4 years</td>
<td>Licensed in 15 states</td>
<td>North American Board of Naturopathic Examiners (NABNE)</td>
</tr>
</tbody>
</table>
CAM Advice: Ethical Framework

<table>
<thead>
<tr>
<th>Safe?</th>
<th>Effective?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Use/Recommend</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Tolerate</td>
</tr>
<tr>
<td></td>
<td>Monitor closely</td>
</tr>
<tr>
<td></td>
<td>Advise against</td>
</tr>
</tbody>
</table>

What to look for

- consistency
  - consistent with common sense
  - consistent within a system
- Training, credibility, and experience
- Safety / responsibility

How to choose? Our approach is the evidence hierarchy

Table 1 Evidence hierarchy. Characteristics that support the selection of a particular therapy or approach appear at the top of each cell in the table, with their opposite shown at the bottom of the cell. The overall priority, or rank, of a given approach is derived from the interaction of the five characteristics under consideration.

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Safety</th>
<th>Evidence</th>
<th>Alternatives of comparable utility</th>
<th>Confluent with patient preference</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>Strong</td>
<td>Absent</td>
<td>Yes</td>
<td>High</td>
</tr>
<tr>
<td>Low</td>
<td>Low</td>
<td>Weak/Absent</td>
<td>Numerous</td>
<td>No</td>
<td>Low</td>
</tr>
</tbody>
</table>
What to avoid

- Conspiracy theories
- ‘Secret knowledge’
- Exclusivity/absolutes/arrogance
- ‘Bad news’
- Sales pitches
- discerning vested interests
A model of evidence-based integrative care

- Also predicated upon:
  - The belief that no one person can know it all
  - Or, “two heads are better than one.”
Goals and Ideals

- There is no “alternative” vs. conventional care
- There is a single spectrum of options for care and healing, encompassing all
- The spectrum of healing arts is subject to the same evidence hierarchy, and creatively applied research
- Patients are guided/accompanied to the best, tailored options