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**Content Attestation**

I, Robert Barth, Ph.D., hereby declare that the content for this activity, including any presentation of therapeutic options, is well balanced, unbiased, and to the extent possible, evidence-based.

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**Conflict of Interest Disclosure**

I have no financial relationships with commercial entities producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients relevant to the content I am planning, developing, presenting, or evaluating.

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**“Opportunities for Improvement”**

In almost every one of your claims...

- If you apply the information from the AMA Causation Guides to the documentation from the claim, you will find...
- The doctors who are claiming work-relatedness did NOT follow professional standards.
- Therefore...

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**“Opportunities for Improvement”**

In almost every one of your claims...

- The claim of work-relatedness did NOT arise through professional expertise
- The doctor did NOT behave as an expert
- The doctor behaved like an amateur
- The claim of work-relatedness is baseless

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**“Opportunities for Improvement”**

Why should the non-credible nature of most opinions of work-relatedness be *vigorously* addressed?

Protect the integrity of the claim, and of the workers comp system.

Protect the health of the claimant (involvement in workers comp is reliably bad for claimants' health)

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**“Opportunities for Improvement”**

*Chronic pain* as an example of the extremely common trend toward *non-credible* claims of work-relatedness

***Facts!***

Scientific research has not produced any reliable findings linking chronic pain to injury or work. Scientific findings have instead linked chronic pain to a long list of non-injury-related, non-work-related factors.

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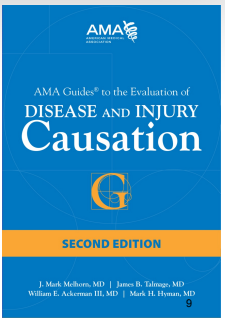
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**AMA Guides to the Evaluation of Disease and Injury Causation**

There are professional standards that allow causation determinations to be based on scientific facts, rather than opinion.



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AMA Guides to the Evaluation of Disease and Injury Causation

Avoiding Common Trends Toward Basing Opinions of Work-Relatedness on Unreliable Information and Logical Fallacies

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Typical baseless opinions

Typical opinion:  
"It is my opinion that Mr. Lumbago's symptoms were caused by this accident"...

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Typical baseless opinions

*Bases of the Opinion...*  
1. *Training and experience*

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*Training an experience as basis for Opinions*

Experience, defined as “making the same mistakes with increasing confidence over an impressive number of years”.

British Medical Journal, 1999

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*AMA Guides to the Evaluation of Disease and Injury Causation*

The training and experience of the individual doctor is NOT part of the professional standards for determining injury-relatedness or work-relatedness.

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*Typical baseless opinions*

Bases of the Opinion...

1. Training and experience
2. Because Mr. Lumbago told me that he did not have this problem before the accident

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*Mr. Lumbago told me that he did not have this problem before the accident*

What's wrong with this rationale?

1. Mr. Lumbago is not a reliable source of information

FACT: Scientific findings revealed that ~100% of such reports from claimants are false

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*Mr. Lumbago told me that he did not have this problem before the accident*

What's wrong with this rationale?

1. Mr. Lumbago is not a reliable source of information
2. This rationale is a logical fallacy.

Therefore, this is not part of the professional standards for causation analysis.

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**AMA Guides to the Evaluation of Disease and Injury Causation**

The Protocol (highly summarized)

1. Definitively establish a diagnosis.
2. Apply relevant findings from epidemiologic science to the individual case.
3. Obtain and assess the evidence of exposure.
4. Consider other relevant factors.
5. Scrutinize the validity of the evidence.
6. Evaluate above and generate conclusions.

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AMA Guides to the Evaluation of Disease and Injury Causation

The Protocol

If the doctor who is claiming work-relatedness has not documented these six steps in a manner that supports the claim, then the claim is baseless.

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AMA Guides to the Evaluation of Disease and Injury Causation

As is the case for any forensic work, a causation analysis should be conducted in an independent context.

*Treating doctors have too many extreme conflicts of interest, and some have admitted to a willingness to lie for their patients.*

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Step 1 of the Causation Protocol

Definitively establish an explanatory diagnosis, primarily be based on objective findings.

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**Step 1 of the Causation Protocol**

**“Self”-assessment questions:**

- Please show us, in your documentation, the diagnostic method that you used.
- Please provide reference information for literature that we can review in order to find independent confirmation that your method has been scientifically validated.

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**Step 1 of the Causation Protocol**

**“Self”-assessment questions:**

Please refer us to scientific literature that we can review in order to find independent confirmation that this diagnosis involves this case’s specific type of clinical presentation.  
(For example, if the presentation involves back pain, scientific findings have revealed that most types of spine abnormalities are not associated with back pain).

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**Step 2 of the Causation Protocol**

Apply relevant findings from causation science

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## 2. Apply relevant findings from causation science

- The doctor who is claiming work-relatedness must bring *scientific findings* into the discussion.
- The claim of work-relatedness is not credible unless scientific research has revealed a clear and specific link between the claimed cause and the claimed clinical presentation.

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## Step 3 of the Causation Protocol

Obtain and Assess the Evidence of Exposure

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## 3. Obtain and assess the evidence of exposure

- Did the doctor collect evidence of the details of the claimed exposure?
- Was the level of exposure, and the timing of exposure, consistent with scientific findings regarding the type of exposure that needs to occur in order to bring on the clinical presentation?
- Claimant reports of the level of exposure are the least reliable source of information for this step.

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**Level of exposure example**

Mild Traumatic Brain Injury  
“a minimum threshold  
for linear gravitational acceleration in the range of  
80-100g” ... “appears to be necessary, but not  
solely sufficient, to cause MTBI” (rotational forces  
also apparently necessary)  
McCrea MA. Mild Traumatic Brain Injury and  
Postconcussion Syndrome. Oxford Workshop  
Series. 2008

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**Step 4 of the Causation Protocol**

Consider other scientifically established causes  
*(today's discussion of chronic pain will provide a  
tangible example of this step)*

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**4. Consider other scientifically established causes**

- Did the doctor document consideration of other potential causes for the clinical presentation?
- Did the doctor review a significant portion of pre-claim records, so that he/she could potentially identify non-work-related causes?
- Did the doctor document an objective and credible basis for determining which potential causes are of primary importance in the creation of this claimed clinical presentation?

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**Step 5 of the Causation Protocol**

Scrutinize the Validity of the Evidence

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**5. Scrutinize the validity of the evidence**

- Details of the claim:  
Is there *conflicting information* regarding date of injury or timing of exposure, mechanism of injury or exposure, prior injuries or prior health problems, the examinee's activity level, the examinee's ability to work, etc?
- Adequacy of professional services:  
Have clinicians offered opinions that lack scientific credibility? Have clinical services been relied upon that actually lack scientific credibility or that lack relevance to the specifics of this case?

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**Step 6 of the Causation Protocol**

Evaluate the Results from All of the Above Steps, and Generate Conclusions

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### Chronic Pain: Fundamental Scientific Considerations



The image shows the cover of the AMA Guides Newsletter, dated January/February 2012. The main article is titled "Chronic Pain: Fundamental Scientific Considerations, Specifically for Legal Claims" by Robert J. Barth, PhD. The cover also lists other topics such as "Chronic pain is common, affecting about half of adults in the United States per a 2011 Gallup poll (Barth, 2012)", "AMA's new edition of the AMA Guides (2012) (Barth, 2012)", and "AMA's new edition of the AMA Guides (2012) (Barth, 2012)". The AMA logo is visible at the bottom left of the newsletter cover.

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### Chronic Pain: Fundamental Scientific Considerations

- Chronic pain is common / normal.
- Dominant role of financial compensation
  - Prospective research
  - Meta-analysis
    - Rohling et al, 1995
    - Harris, et al., 2005
  - Societal Experimentation on a grand scale
    - Cassidy, 2000
  - “Outside Medical-Legal Context”
  - Disability data

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### Dominant role of financial compensation

Clinical examples

- Carpal tunnel syndrome
- Complex regional pain syndrome
- Reflex sympathetic dystrophy
- “Posttraumatic” headaches
- Rotator cuff studies
- Back pain
- “Non-organic” findings on physical examination

Controlling for psychopathology fails to eliminate the detrimental effects of compensation.

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### Personality Disorders

- Pervasive form of pre-existing mental illness
- Among health issues, most important
  - Dwarfs all other risk factors except compensation.
- Prevalence among patients with chronic pain as high as 73% (vs.. 10-13% in general population)

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### Narcotics

- Misuse of narcotics is an epidemic in the US.
  - Excessive prescription, overuse, abuse, diversion and death.
- Reliably causes worsening of pain, and more harm than good (even before it kills the claimant).
- Prevents credibility for claims of maximal medical improvement.

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### Malingering

The findings from the most credible scientific research indicates that approximately 50% of claimants are faking.

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### A Focus on One Body Part Is Usually Misdirected

- Most chronic pain patients experience pain in multiple sites.
  - Childhood chronic stomach pain predicts adult pain in other body parts (including fibromyalgia, headache, back pain).
  - Adult onset back pain is predicted by childhood headaches.
  - Migraine predicts the development of CRPS.
- Continued...

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### A Focus on One Body Part Is Usually Misdirected

- New claims of disability are predicted by other pain complaints that the research participants had 14 years prior to the disability claim.
- Pain complaints are also correlated with non-pain complaints (e.g. palpitations/extra heartbeats, breathing difficulties, diarrhea, constipation, eczema, tiredness, dizziness).

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### A Focus on One Body Part Is Usually Misdirected

#### Scientific Conclusions

- Multiple pains cluster together because of an underlying susceptibility of the patient which has been referred to as pain vulnerability or pain sensitivity.
- It will often be inappropriate to target healthcare or scientific investigation for chronic pain on single anatomical sites.
  - Patients would instead be more likely to benefit from scientifically validated treatment approaches that are not anatomically specific, such as exercise and cognitive behavioral psychotherapy

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### Other Forms of Mental Illness

- Pain is a common manifestation of mental illness.
- Mental illness is far more likely to manifest prior to complaints of pain.

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### Chronic pain is a learned phenomenon which can be un-learned

- In your handout, page 12: "Detailed Discussion of the Psychodynamics of Chronic Pain"
- Latest IASP Book of Chronic Pain
- "Sensitization" is a learned phenomenon which may be un-learned.

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### Smoking

Risk factor for:

New back pain, Chronic back pain, Disabling back pain, shoulder pain, face pain, Fibromyalgia, arm pain, knee pain, greater intensity of chronic pain, increased number of painful anatomical sites in any one chronic pain patient, more severe claims of functional disability among chronic pain patients, greater depression among chronic pain patients, worse outcomes for chronic pain patients, and longer duration of chronic pain complaints

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### Smoking

- Smoking is predictive of adult onset back pain, even when the smoking only occurred during adolescence
- Smoking is predictive of greater consumption of narcotics among chronic pain patients, while increased pain severity is not predictive of greater consumption of narcotics.

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### Smoking

The relationship between smoking and chronic pain has apparently produced an artifact that might lead to a misdirected conclusion that heavy physical labor is a risk factor for chronic pain.

Specifically, a relationship between heavy physical labor and chronic pain was discovered in a preliminary analysis, but that relationship disappeared when the effect of smoking was considered.

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### Obesity

- Predictive of chronic back pain
- Predictive of chronic shoulder pain
- One-direction relationship: Obesity predicts pain, but pain does not predict obesity

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### Childhood Abuse or Neglect

- Reliable association, and dose-response gradient, with adult-onset chronic pain.
- Relationship with mental illness in adult life.
- Forms of adult mental illness which involve pain are especially strongly associated with childhood abuse/neglect.

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### Recommendations for Evaluators and Reviewers

- Provide definitive, scientific-based recommendations.
- Note: Readers are often unfamiliar with science.
- Examples.

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### Discussion



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