

## Patient Satisfaction Measurement in Occupational and Environmental Medicine Practice

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High patient satisfaction is a desirable goal in medical care. Patient satisfaction measures are increasingly used to evaluate and improve quality in all types of medical practices. However, the unique aspects of occupational and environmental medicine (OEM) practice require development of OEM-specific measures and thoughtful interpretation of results. The American College of Occupational and Environmental Medicine has developed and recommends a set of specific questions to measure patient satisfaction in OEM, designed to meet anticipated regulatory requirements, facilitate quality improvement of participating OEM practices, facilitate case-management review, and offer fair and accurate assessment of OEM physicians.

Patient satisfaction measures are increasingly used to evaluate and improve quality in all types of medical practices. In applying these tools, it is important that they be designed appropriately for the practice, adequately tested to ensure promotion and valid reflection of quality care, and avoid financial incentives that may lead to lower quality or excessive medical care. The unique aspects of occupational and environmental medicine (OEM) practice (eg, work status as a primary outcome, potential conflicts between employer and patient interests, medico-

legal context of work injuries, performance of regulatory examinations, and others) require development of OEM-specific measures and thoughtful interpretation of results.

The American College of Occupational and Environmental Medicine (ACOEM) has developed and recommends a set of OEM-specific questions to measure patient satisfaction in OEM, designed to meet anticipated regulatory requirements, facilitate quality improvement of participating OEM practices, facilitate case-management review, and offer fair and accurate assessment of OEM physicians.

### BACKGROUND

Studies have shown patient satisfaction to be associated with clinical effectiveness, patient safety, and treatment compliance.<sup>1</sup> Although high patient satisfaction is a desirable goal in medical care, a growing body of evidence has demonstrated problems with patient satisfaction measurement, and the interpretation and application of results.<sup>2</sup> Patient satisfaction reports can be influenced by many factors besides quality of care. Research has demonstrated systematic differences in patient satisfaction based on demographic characteristics, subjective experience with the clinic environment, communication style, and established relationship with the physician.<sup>3-6</sup> Dissatisfied patients are more likely to respond to surveys.<sup>7</sup> Patient satisfaction ratings are higher for care that may satisfy immediate patient requests (eg, requests for opioids or unnecessary diagnostic testing) but is clearly linked to worse long-term outcomes.<sup>8-11</sup>

High patient satisfaction does not always correlate with more objective measures of quality. Tying patient satisfaction results to physician compensation may produce objectively worse results for patients and dissatisfaction among providers.<sup>12-16</sup> In one study, almost half of physician respondents believed that pressure to obtain better patient satisfaction scores promoted inappropriate care, including unnecessary

antibiotic and opioid prescriptions, tests, procedures, and hospital admissions.<sup>17</sup>

### Patient Satisfaction in OEM

The OEM encounter often differs from the standard physician-patient encounter. As patients, workers certainly value the aspects of care which tend to drive patient satisfaction in general health care (quality, communication, and timeliness). Quality of OEM encounters also relies on several unique factors that could be measured via a patient survey tool:

- Physician's understanding of the job and work hazards,
- Provision of advice about navigating the return-to-work (RTW) process,
- Setting appropriate work restrictions, and
- Guidance about preventing re-injury.<sup>18,19</sup>

For most other medical specialties, the physician and patient are the primary, if not exclusive, stakeholders in the medical encounter. Decisions made in OEM encounters may have broader impact and involve other stakeholders including:

- Safety of coworkers,
- Safety of the general public,
- Economic well-being of family members,
- Interest of the employer in RTW outcomes,
- Legal and regulatory requirements, and
- Direct or indirect involvement of union representatives.

Many OEM encounters are primarily forensic. In some, such as independent medical examinations (IMEs), no physician-patient relationship is established. In others, such as urine drug screens, there may be no contact between the patient and physician at all. Visits for required physicals and care for workers' compensation (WC) injuries do not provide the type of long-standing relationships forged in other types of clinical practice.

Regardless of practice type, patients and physicians do not always agree on what should be done. However, OEM physicians

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are at particular risk of a “loyalties bind” because of three main factors. First, OEM physicians place great weight on adherence to evidence-based treatment guidelines (another important quality measure). These guidelines often conflict with patient wishes for off-work notes, opioid prescriptions, or diagnostic testing. Second, there is a greater number of parties for whom the OEM decisions are relevant. Patients may perceive a physician decision different from the patient’s wishes as a decision made to please the employer. Third, in many situations, the patient must see a specific OEM physician and patient choice of physician does not exist.

There has been limited research on the determinants of patient satisfaction in OEM, with the emphasis on acute injury care.<sup>20–22</sup> Studies have found that OEM patient satisfaction was more dependent on the patient’s ability to choose a physician than clinical quality, outcome, or return to work.<sup>14,19</sup> Washington State’s Department of Labor and Industries developed a patient satisfaction survey specific for occupational injury care. This survey was tested, validated, and subsequently used for both research and quality improvement efforts.<sup>23</sup> In this high-quality study, medical and disability outcomes were the same or better in WC managed care than usual care, but OEM patient satisfaction ratings were significantly lower, primarily related to the issue of restricted choice of physician (something the OEM physician cannot control). In the same study, employers were much more satisfied with the WC managed care intervention than with usual care.<sup>24</sup>

## Recommendations

An OEM patient satisfaction survey needs to deal effectively with the unique features of OEM encounters, ideally with unique question(s) tailored to specific types of OEM visit types. For purposes of patient satisfaction evaluation, ACOEM has identified five OEM visit types which differ in terms of their content and the context:

1. Acute, work-related injury visits: Includes for example, acute low back pain, knee/ankle sprains, lacerations, foreign bodies in the eye, simple chemical exposures, and burns. Includes the first and follow-up visits by the same physician or same group of providers.
  2. Referral visits for injury care and/or consultations for work-related injuries: Includes chronic low back pain and complex chemical exposures.
  3. Work examinations: Includes post-offer pre-placement physicals, annual physicals, respirator physicals, medical surveillance examinations (eg, OSHA required examinations), commercial driver examinations, and travel medicine encounters.
  4. Other examinations: Includes IMEs, and disability, fitness-for-duty, and return-to-work evaluations. These evaluations are usually performed at the request of an employer, insurer, or lawyer after end-of-healing, prolonged absences from work, or lost work time due to Family Medical Leave Act, etc.
  5. Medical testing only: Includes vision screening; laboratory tests; drug testing; hearing, lung function, and tuberculosis testing; and immunizations.
- These OEM visit types differ significantly in terms of factors contributing to patient satisfaction. Therefore, ACOEM recommends limiting comparisons of encounters within each of these five domains.
- ACOEM strongly recommends that the following issues are addressed in order to interpret properly patient satisfaction survey results:
- Use an OEM-specific survey instrument: Standard patient satisfaction survey instruments are inadequate for use in OEM settings.<sup>25</sup> An instrument specific to OEM patient satisfaction is necessary to provide valid data for quality improvement and a fair assessment of OEM physicians and their practices.<sup>22</sup> Our review of the patient satisfaction literature in general medicine and in OEM suggests that the validity of such measurement will be improved if the survey instrument incorporates the following characteristics:
    - (1) OEM physicians are compared with OEM physicians;
    - (2) OEM patient satisfaction scores for specific OEM encounter types are compared with similar OEM encounter types;
    - (3) Survey is anonymous and confidential;
    - (4) Minimum 70% response rate;
    - (5) Minimum of 100 surveys per physician for adequate statistical significance;
    - (6) Measurement of demographic variables; and
    - (7) Prompt timing of survey (immediately after the encounter to within 4 weeks).

ACOEM recommends that survey results for each visit type be considered separately. Caution must be exercised when results are used in benchmarking. Ideally, OEM physicians would be compared with other OEM physicians with adjustment for visit type, state, and other factors. Exogenous factors such as who chooses the OEM physician for WC care vary by state, and could confound the analysis.
  - View OEM patient satisfaction data in a broad context: Patient satisfaction is only one measure of healthcare quality, and is not always aligned with what physicians consider best practices in medicine. When assessing physician performance, it is essential that administrators, regulators, and others view patient satisfaction data in the broader context of a suite of quality measures. More research is needed to understand factors that may confound analyses of OEM patient satisfaction scores. Assessment and reassessment of these factors will be an ongoing process. As new challenges to accurate analysis are identified, survey instruments will need to adapt to account for them.
  - Consider the interests of employers and the public welfare in the overall evaluation of OEM encounters: Employers expect effective utilization of early return-to-work programs for their injured workers and cost-effective, appropriate medical care services that help workers regain function. Regarding the public welfare, the OEM physician is in a position of public trust when performing qualification examinations on personnel with safety-sensitive jobs. These include commercial motor vehicle drivers, airline pilots, nuclear power plant operators, police officers, and firefighters, among others. In many cases, regulations or consensus medical standards must be followed by the examiner. Adherence to evidence-based medical guidelines for OEM practice is one way of assuring the interests of payers, employers, and the public are being served, in addition to patient interests.
  - Critically evaluate any OEM quality-improvement process that potentially weakens evidence-based OEM practice outcomes prior to implementation: OEM physicians are appropriately concerned about reduced worker satisfaction scores being used for compensation adjustments when exemplary, evidence-based OEM decision-making is followed. Any OEM financial incentive program tied to worker satisfaction survey results should not inadvertently result in worse evidence-based OEM clinical practice decisions and worse medical outcomes.
  - Minimize unnecessary duplication of worker surveys: Payer case-management review programs have an important, independent, role in maintaining quality of care. Further development and adoption of appropriate OEM patient satisfaction instruments and standards should minimize any unnecessary duplication of worker surveys from

OEM practices and case-management programs. Additionally, this approach will potentially foster collaboration of OEM practices and case-management programs to strengthen evidenced-based OEM practice standards.

- Establish a central point for data collection and analysis: The complexity of a survey instrument suitable for measurement of patient satisfaction in OEM encounters, and the analytical difficulties this poses, are important challenges moving forward. To address these issues, ACOEM recommends that the survey be tested and validated with the goal of establishing a central point for collection and analysis of OEM patient satisfaction data.

## CONCLUSION

Richard Evans, an early patient satisfaction researcher, warns that even with a validated survey instrument, “We must continue to measure patients’ assessments of their experience with individual physicians and try to understand more what they mean, how they correlate with other aspects of individual performance, and how doctors can learn and improve by the assessment. If, however, these assessments become more summative, part of ‘performance management’, and integral to re-certification, then in terms of procedural justice there has to be more science around validity, reliability, standardized administration of the instruments and sampling and investment in comparative benchmarking.”<sup>26</sup>

There is a current focus on incorporating patient satisfaction scores in all medical practices. Development of a validated OEM patient satisfaction survey tool which accommodates the diversity of OEM practice encounters is essential. ACOEM recognizes the value of such an instrument and as our medical specialty representative should be involved in its development and dissemination. ACOEM’s Ad Hoc Committee on Patient Satisfaction Surveys has developed an OEM patient satisfaction survey tool (Appendix 1). This initial effort addresses the recommendations in this document. An iterative process of validation, testing, revision, and retesting is anticipated.

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## Appendix 1: Patient Satisfaction Measurement in OEM Practice Survey

### Patient Satisfaction Survey

Provider \_\_\_\_\_ Date: \_\_\_\_\_  
 Employer \_\_\_\_\_

Please fill out these questions as best as you can. We will use the answers to help improve how we care for workers. If you have any questions, please ask the person who checked you in. We are happy to help.

1. Why did you come to the clinic today?
  - Work-related injury** such as acute low back pain, knee/ankle sprains, cuts, something in your eye, chemical exposures, and burns. It can be the first visit and follow-up visits by the same provider or the same group of providers. It does NOT include second or third opinions or consultation visits. Please answer questions 2-21.
  - Referral from another health care provider for injury care or consultations for work-related injuries** such as low back pain and chemical exposures. It does NOT include acute injury care (the first time you are seeing someone about this injury), disability evaluations or independent medical examinations. Please answer questions 2-21.
  - Work Exams** such as pre-placement exams, physicals, annual physicals, respirator physicals, medical surveillance exams (eg, OSHA required exams), DOT exams, Coast Guard physicals, crane operator evaluations, FAA physicals, travel medicine encounters. It does NOT include visits that are only for tests, like hearing or breathing tests. Please answer questions 2-12 and 16-21.
  - Other Examinations** such as Independent Medical Evaluations, Disability Evaluations, Fitness-for-Duty Evaluations, and Return-To-Work Evaluations. These evaluations are usually done at the request of an employer, insurer or lawyer after end-of-healing, a long time away from work, or lost work time, etc. Please answer questions 2-12 and 16-21.
  - Medical Testing Only** such as hearing testing, vision screening, drug testing, laboratory testing, spirometry (breathing tests, or "PFTs"), tuberculosis testing, and immunizations. It does NOT include a visit that had BOTH testing and a visit with the provider. Please answer questions 2-7 and 16-21.

Please let us know how much you agree with the next 5 questions about the **clinic**. Please mark only one choice for each question.

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
2. This clinic was <u>COMFORTABLE</u> .					
3. I was <u>GREETED</u> when I entered the clinic.					
4. I was seen <u>ON TIME</u> or told if there was a delay.					
5. The check-in staff was <u>HELPFUL</u> and <u>POLITE</u> .					
6. The nurses/medical assistants were <u>HELPFUL</u> and <u>POLITE</u> .					
7. I would <u>RECOMMEND</u> this clinic to co-workers for worker health needs.					

If you chose "Disagree" or "Strongly Disagree," please explain why you wouldn't recommend this clinic to coworkers:

If you marked "**Medical Testing Only**" in question #1 above, please skip to question #16. Otherwise go to #8.

Please let us know how much you agree with the next 6 questions about the **doctor/provider**. Try not to think about if you agree with their findings or not.

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
8. My doctor was <u>ON TIME</u> for my exam or I was told why the doctor was late.					
9. My doctor <u>SPENT ENOUGH TIME</u> with me.					
10. My doctor's treatment of me was <u>INDEPENDENT AND FAIR</u> (they were not influenced by outside concerns such as those of my employer).					
11. My doctor treated me with <u>COURTESY</u> and <u>RESPECT</u> .					



12. My exam was IN-DEPTH and COMPLETE.

If it wasn't in-depth and complete, please explain why:

If you answered "Work Exams" or "Other Examinations" in question #1 above, skip to Question #16. Otherwise, go to #13.

Please let us know how much you agree with the next 2 questions about the doctor/provider. Try not to think about if you agree with their findings or not.

Strongly Agree      Agree      Neither      Disagree      Strongly Disagree

13. My doctor talked with me about RETURNING TO WORK OR STAYING AT WORK (e.g. changes in the way you do your job, work restrictions, etc.).

14. My doctor EXPLAINED my medical condition and treatment(s).


15. Have you ever changed doctors because you were DISSATISFIED or NOT HAPPY with treatment for this injury?

Yes  No  Don't Know

If "Yes" please explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

16. How soon after you told your employer about your injury did you first see a doctor?

Within 24 hours  1-3 days  4-6 days  1-4 weeks  more than 4 weeks

17. I agree with the doctor's findings.  Yes  No

18. Please provide any other comments (both good and bad) about your visit to this clinic:

19. How old are you?  0-18  19-34  35-49  50-64  65-79  80 or older

20. Gender:  Male  Female  Other (please describe) \_\_\_\_\_

21. What is your Race/Ethnicity (mark all that apply)?

White

Black or African American

Hispanic or Latino

Asian

Native Hawaiian or Pacific Islander

Native American or Alaskan Native

Other (please specify) \_\_\_\_\_

Wish to abstain/Decline to answer

22. If you would like to be contacted about anything that you have shared with us, please leave your contact information.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email: \_\_\_\_\_