

CLEAR POLICIES AND PROCEDURES, VERSION 2.0

The U.S. Department of Labor’s (DOL’s) Clearinghouse for Labor Evaluation and Research (CLEAR) provides a central source of research and information on labor-related topics for a broad audience that includes practitioners, policymakers, researchers, the media, and the general public. This document provides details on all aspects of CLEAR operations, including how topic areas are selected, the procedures for identifying studies to be reviewed, review guidelines, reviewers and the review process, and reporting. The policies and procedures documented here are intended to provide transparency regarding the approaches implemented in the second phase of CLEAR—from approximately July 2013 through January 2015—and do not limit the scope and approaches of future phases.

Topic Area Selection

The topic areas in which CLEAR reviews the research are determined by the DOL Chief Evaluation Office (CEO). The CEO may consult with multiple stakeholders, including various DOL agencies, other federal departments, CLEAR contractor project staff,¹ and the CLEAR Technical Work Group of advisors. In choosing topics, the CEO considers factors such as the importance of the topic to CLEAR stakeholders, the relevance of the topic to current policy issues, and the availability of research to address the topic. CLEAR is designed to include research relevant to many of the agencies within DOL.

Once a broad topic area has been identified, CLEAR staff work with CEO and DOL agency staff to develop and define the topic area. Content experts from outside DOL also provide insights and help define some topic areas. The content experts and DOL staff advise CLEAR staff in development of primary research questions of interest for the topic area. The research questions narrow the scope of the review, but are broad enough to ensure that the products of the review will be useful to a range of stakeholders.

CLEAR staff then draft a topic area review protocol that focuses on the research questions of interest. The review protocol sets forth the criteria for research to be included in the review process, including types of research designs to be included, populations of interest, and domains and outcomes of interest. For example, the OSHA enforcement review protocol requires that research included in the review must examine an OSHA enforcement activity, use quantitative methods to determine the effectiveness of OSHA enforcement activities, and examine outcomes in the workplace and safety domain.

Identifying the Research

CLEAR project staff, including research librarians, develop a process for identifying the research that could meet the criteria set forth in the topic area review protocol. For systematic reviews, the literature search is designed to capture *all* research papers and reports that examine the research questions of interest. The specific strategies employed can vary across topic areas; for example, the OSHA enforcement topic area literature search included the websites of policy institutes that conduct research on OSHA and other workplace safety enforcement activities.

¹ Mathematica Policy Research (Mathematica) is the CLEAR contractor. At this time, all CLEAR staff are staff of Mathematica.

Each topic area protocol describes the process CLEAR will use to search for research that might meet the criteria for that topic area. This includes specific search terms, date ranges, and databases to be queried. The content experts and DOL staff provide input on the search process.

Not all the research papers and reports that are identified through the literature search fit within the topic area as defined by the topic area review protocol. Therefore, the first step in the review process is to screen them out. For example, only about ten percent of the research papers and reports identified through a systematic literature search under the OSHA enforcement topic area met the criteria to be reviewed as defined by the topic area protocol. A trained screener performs a first pass through the search results and indicates which research may meet the criteria to be reviewed. Then, the Principal Investigator (PI) for the topic area examines those studies more thoroughly to determine whether they fit within the topic area protocol.

As part of the systematic review process, CLEAR searches other clearinghouses (such as What Works Clearinghouse, FindYouthInfo.org, and Self-Sufficiency Research Clearinghouse) to determine whether they have already conducted reviews of research in similar topic areas; if so, CLEAR uses the references from those reviews as a starting point for the literature search. If research that was reviewed by another clearinghouse fits the topic area criteria for CLEAR, CLEAR examines the review guidelines used in the review conducted by the other clearinghouse and whether the outcomes and study samples align with those of interest to CLEAR. If the review guidelines are the same as CLEAR's, CLEAR simply confirms the review from the other clearinghouse. If not, the research is subject to CLEAR's review process. A link to the relevant clearinghouse is provided on the CLEAR website for all topic areas in which there is overlap with another clearinghouse.

In future phases of CLEAR, DOL may decide not to conduct a systematic literature search for a topic area. For example, in some topic areas DOL may decide to review studies selected by an agency or expert panel. In such cases, the topic area protocol would describe the criteria for inclusion in the review process. Alternatively, DOL may decide to review studies of interest that do not fall within a topic area. For these "single studies," CLEAR would have a protocol that describes how the studies are identified, selected, and reviewed.

Review Types

CLEAR uses a two-level approach for conducting reviews. All research that meets the criteria for inclusion under a topic area protocol receives a first-level review. This review focuses on basic information about the research question of interest, data and methods, and findings. It does not attempt to assess the quality of the research design or methods. The purpose of these reviews is to provide enough information about the research so that CLEAR users would be able to determine whether it was relevant for their purposes. CLEAR provides a link to each report that undergoes a first-level review so that users can easily find the original research.

Select studies also undergo a second-level review against CLEAR guidelines. This review is much more in-depth and covers aspects of the technical quality of the research design, data, methods, and findings. For causal research, this review results in a causal evidence rating, which summarizes the extent to which the estimated impacts can be attributed to the intervention or program being examined.

Each topic area protocol describes the selection criteria for research that undergoes a second-level review. Typically, selected studies examine a research question that is particularly relevant for decisions about programs and policies. For example, in the Opportunities for Youth topic area, impact studies examining the effectiveness of non-school-based programs for economically disadvantaged youth were selected for second-level reviews. The implementation studies associated with these impact studies also received second-level reviews. Research on other types of programs received first-level reviews.

CLEAR Guidelines for Second-Level Reviews

Comprehensive guidelines for second-level reviews are intended to promote quality and consistency, resulting in summaries of the research that provide clear and concise information about the purpose, context, and findings with enough information on the quality of the research and its limitations to properly interpret the findings. At this time, CLEAR has developed review guidelines for causal, implementation, and other descriptive studies. Causal studies are those that attempt to estimate the causal impact of a given program, policy, or intervention. Implementation studies examine in-depth the experiences of service providers and/or government agencies as they provide such programs. Descriptive studies encompass many other kinds of studies that use quantitative methods to describe some aspect of a program, policy, or intervention; these include cost-benefit analyses or descriptive statistics. Studies that use more than one type of analysis are reviewed using a combination of the relevant review guidelines. As CLEAR evolves, it may become relevant to distinguish additional categories for types of analysis that require a different approach to the review.

The review guidelines will be revised over time. They will be adjusted based on issues faced when implementing the guidelines as well as input from experts and others. In addition, as the science of research evolves, so will the guidelines. The CLEAR guidelines will be reviewed by an expert panel every three years. Topic area protocols report which version of the guidelines were used in the review for the topic area.

Causal Research

In collaboration with DOL and a technical work group (TWG) of experts, CLEAR developed a set of causal evidence guidelines to use in reviewing nonexperimental research with causal designs. These causal designs include instrumental variables and various other regression analyses, including those with fixed or random effects (FE or RE) and difference-in-differences. In addition to nonexperimental designs, CLEAR assesses the quality of evidence for randomized controlled trials (RCTs) using an adaptation of the Institute for Education Science's What Works Clearinghouse (WWC) standards.

During CLEAR's pilot phase, the evidence guidelines underwent a continuous review and improvement process and were revised to reflect lessons learned as they were first implemented. Version 1.1 incorporated these revisions, as well as feedback from DOL and the TWG for CLEAR. It also incorporated additional examples of how to apply the guidelines, gleaned from reviews in the pilot phase. During CLEAR's second phase, evidence guidelines for evaluating the quality of causal evidence for studies with interrupted time series (ITS) designs were

developed in collaboration with two technical experts from the TWG for CLEAR. Version 2.0 incorporates these guidelines.²

CLEAR has three possible ratings to describe the strength of causal evidence presented in a given piece of research. Two types of studies can receive a rating of *high*, the highest evidence rating that CLEAR offers: (1) well-conducted RCTs that are determined to have low attrition and no other threats to study validity and (2) ITS designs with sufficient replication wherein the intervention condition is intentionally manipulated by the researcher.³ A high causal evidence rating means we are confident that the estimated effects are solely attributable to the intervention that was examined. RCTs and ITS designs that cannot be classified as providing high causal evidence can be evaluated against CLEAR evidence guidelines for nonexperimental designs. Research designs that meet these guidelines receive a *moderate* rating; this indicates there is evidence that the study establishes a causal relationship between the intervention being examined and the outcomes of interest, but there might be other factors that were not included in the analysis that also could affect the outcomes of interest. Research that does not meet the criteria for a high or moderate rating receives a *low* rating, which indicates that we cannot be confident that the estimated effects are attributable to the intervention being examined.

Table 1. Summary of Causal Evidence Ratings

Rating	What it means
High causal evidence	There is strong evidence that the estimated effects are solely attributable to the program or policy being examined. This rating can apply only to RCTs and ITS designs.
Moderate causal evidence	There is moderate evidence that the estimated effects are attributable at least in part to the program or policy being examined. However, there may be other factors that were not accounted for and that might also have contributed to the estimated effects. This rating can apply to nonexperimental designs. It can also apply to RCTs and ITS designs that do not meet the criteria for a high causal evidence rating.
Low causal evidence	There is little evidence that the estimated effects are attributable solely to the intervention; other factors are likely to have contributed. This rating applies to all designs that do not meet the criteria for high or moderate causal evidence ratings.

² Regression discontinuity designs are not currently included in the causal evidence guidelines because there has not been a need for guidelines for these designs thus far. However, CLEAR will develop such guidelines in future phases of the project as necessary.

³ Research has shown that ITS designs can provide strong causal evidence (see Shadish, W., Cook, T., & Campbell, D. (2002). *Quasi-experiments: Interrupted time-series designs*. In *Experimental and Quasi-Experimental Designs for General Causal Inference*. Boston: Houghton Mifflin Company, 171–206). In addition, ITS designs can be seen as a hybrid of single-case and regression discontinuity designs, which have both been judged by experts to provide strong causal evidence when well executed (see *WWC Procedures and Standards Handbook, Version 3.0*, available at <http://ies.ed.gov/ncee/wwc/documentsum.aspx?sid=19>). Note, however, that CLEAR leadership anticipates that ITS designs in topic areas of interest to CLEAR will rarely be strong enough to receive a high causal evidence rating.

The full set of CLEAR causal evidence guidelines can be found at <http://clear.dol.gov>.

CLEAR causal evidence ratings refer only to the quality of *causal* evidence of a given research design and not to the overall quality of the research. In some cases, authors may use innovative quantitative methods that would nevertheless receive a low causal evidence rating because of the study's data limitations or some other factor outside the authors' control. In addition, some studies may provide interesting and important descriptive evidence, which is not factored into the CLEAR causal evidence rating. These aspects of the studies will be discussed in CLEAR study profiles—which are produced for all second-level reviews—but are not factored into the causal evidence rating itself.

Implementation Research

Guidelines for implementation research are used for reports that describe the implementation process of a program or policy, or that measure implementation inputs and outputs to assess the quality and fidelity of implementation of a planned program. The guidelines present a checklist for quality issues related to the research design, sample, data collection, data analysis, and findings. The implementation research guidelines were developed and synthesized from several sources on assessing research evidence in qualitative and implementation studies. The guidelines were reviewed by CLEAR project senior staff, two outside implementation research experts, and DOL staff.

CLEAR does not use a rating system for implementation research, nor is there a minimum bar of quality or rigor that the research must meet. The purpose of the review of technical qualities is to ensure that the findings reported in the research are accurate and appropriate for the design. The criteria for technical adequacy help identify the strengths of the research and important limitations. This information is used in the CLEAR profile (in the section for “Considerations for Interpreting the Study’s Results”). In some cases, these considerations may be well-aligned with the limitations reported by the authors; for others, the considerations noted in the CLEAR summary may be different or more comprehensive than those of the authors.

Quantitative Descriptive Research

Guidelines for quantitative descriptive research are used for reports that employ statistical techniques and other quantitative approaches but do not attempt to assess the causal impact of a program or policy. The guidelines describe the characteristics that reviewers assess related to design, data collection, data quality, study sample, analysis methods, and findings. The guidelines were developed and synthesized from several sources related to assessing descriptive research. The guidelines were reviewed by CLEAR project senior staff, two outside experts, and DOL staff.

CLEAR does not use a rating system for descriptive research, nor is there a minimum bar of quality or rigor that the research must meet. Similar to the reviews of implementation research, the purpose of the review of technical qualities is to ensure that the findings reported in the research are accurate and appropriate for the design. The use of the guidelines and the reporting on the technical strengths and limitations is the same as for implementation studies (as described in the section immediately above).

Reviewers and the Review Process

CLEAR reviewers must attend a training session and demonstrate that they can apply the CLEAR guidelines with fidelity. In addition to the general training on review guidelines, senior CLEAR staff conduct mini-trainings specific to each new topic area. These mini-trainings focus on the aspects of the topic area protocol that are relevant to applying the CLEAR guidelines (e.g., required control variables for nonexperimental designs).⁴

For first-level reviews of all types of research, a trained reviewer uses an abbreviated study review guide to systematically capture information about the research question of interest, design, setting, data, methods, and key findings. A quality assurance reviewer confirms the information contained in the study review guide is accurate.

For second-level reviews of all types of research, a trained reviewer reads each report that meets topic area criteria in detail; applies the full set of relevant review guidelines; and documents all aspects of the review in a comprehensive study review guide. In addition to the fields contained in the abbreviated study review guide, the comprehensive guide contains an assessment of the technical aspects of the research and considerations for interpreting the findings. If the research does not have a causal design, and thus a causal evidence rating is not assigned, the comprehensive study review guide undergoes a quality assurance review by a senior CLEAR staff member to confirm that the information contained in it is accurate and verifiable.

However, second-level reviews of causal research undergo additional scrutiny to ensure the accuracy of the assigned causal evidence rating. If the first reviewer assesses the quality of causal evidence as *high* or *moderate*, a second reviewer also reviews the study to confirm such a rating is warranted. Any discrepancies between the two reviewers' ratings are resolved by the topic area PI and/or the content expert as needed to determine a final rating. If the first reviewer assigns a rating of *low*, the topic area PI examines the comprehensive study review guide and confirms that the rating is appropriate.

When a report containing causal research does not contain sufficient information to determine its causal evidence rating, CLEAR may contact the study authors to gather this information; whether this step is undertaken depends on the age of the study and the quantity of information that would need to be gathered (so as not to overly burden study authors). Authors receive a minimum of two weeks to respond, and reasonable requests for extensions are granted. If the information is provided by the authors, it is incorporated into the review and factors into the causal evidence rating. If the authors do not provide the relevant information, or do not respond to the author query or follow-up communications within one week, the design is given the highest rating that can be determined with the information available in the report.

⁴ There are no specific degree requirements for CLEAR reviewers, although some graduate-level training on statistical methods is recommended for reviews of causal studies.

Future phases of CLEAR may use reviewers who are not staff of the CLEAR project.⁵ For example, reviewers may be trained and certified through a web-based system. Certified reviewers would then apply the CLEAR review guidelines to conduct reviews and submit review materials. These submissions would lead to CLEAR publications, subject to a quality review process.

CLEAR has an appeals process whereby authors and other interested parties can submit an online query or request for re-review and provide any additional information that could be relevant. If a re-review is needed, the request will trigger an independent review conducted by a trained reviewer who was not involved in the initial review.

CLEAR Website and Reporting

CLEAR maintains a website—<http://clear.dol.gov>—to disseminate the results of topic area reviews. CLEAR produces four products:

1. **Research database.** Citations for all eligible studies identified through the literature search for a given topic area appear on the website in a searchable research database. Each citation is accompanied by an indication of the research design, the relevant topic area protocol, and the causal evidence rating (if applicable).
2. **Highlights.** For all citations in the CLEAR database, first-level reviews result in *highlights*—a set of bulleted items that capture the main features of the research: the research question of interest, description of the program or intervention studied, research methods, and key findings.
3. **Profiles.** For research that undergoes a second-level review—typically research that is particularly relevant for decisions about programs and policies—CLEAR produces *profiles* that provide more detailed information. The profile begins with a highlights section (described above). The second section describes the features of the program, including the target population and the implementation sites, if applicable. The third section describes the features of the study, data sources, methods used, and outcomes studied. The fourth section describes findings of the study. The fifth section provides considerations for interpreting the findings, such as features of the study design or implementation that could influence the interpretation of the results. For causal research, the final section of the profile explains the causal evidence rating and contains critical information about the quality of causal evidence presented.
4. **Synthesis pieces.** CLEAR develops a variety of synthesis pieces to meet the needs of CLEAR users. For example, a synthesis piece could draw on causal evidence reviews to summarize the evidence for policies and programs that improve specific outcomes. It could also point out gaps in the existing literature. Another type of synthesis piece could weave together the findings from causal and non-causal literature to provide a comprehensive view of the existing research. Synthesis pieces are developed in consultation with content experts and/or DOL agency staff.

⁵ To date, reviewers are CLEAR project staff at Mathematica. CLEAR reviews of studies conducted by Mathematica receive a further review by an independent subcontractor who is not an employee of Mathematica.

In addition to containing the products of CLEAR reviews, the website contains CLEAR background documents. These include this policies and procedures document, topic area review protocols, review guidelines, and other relevant materials. Materials describing the review process have their own tab on the website (the “About Clear” tab).

Finally, the topic area pages provide links to other research clearinghouses that might be of interest to CLEAR users. For instance, the Opportunities for Youth topic area page includes links to FindYouthInfo (<https://www.youth.gov/>) and WorkForceGPS (<https://www.workforcegps.org/>). In the future, the website could be developed to allow for user interaction regarding research evidence on labor topics. For example, users could recommend research, provide their own reviews, and pose and respond to questions about research evidence.