CLEAR POLICIES AND PROCEDURES

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, evidence guidelines, reviewers and the review process, and reporting. The document describes CLEAR policies and procedures during the initial pilot phase. As of July 2013, CLEAR has reviewed studies with causal designs – that is, studies that use quantitative methods to determine the effectiveness of a particular policy, program, or intervention – in two topic areas. The final section of this document discusses plans to include a full range of study types, such as case studies, process studies, implementation analysis, and performance analysis, among other study designs. The policies and procedures documented here are intended to provide transparency regarding the approaches implemented in the initial pilot phase and do not limit the scope and approaches of future phases of CLEAR.

Topic Area Selection

The topic areas in which CLEAR reviews studies 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, 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. To date, CLEAR has reviewed studies in two topic areas: interventions to improve employment outcomes for disconnected youth and Occupational Safety and Health Administration enforcement activities.

Once a broad topic area has been identified, CLEAR staff work with CEO and DOL agency staff to identify content experts from outside DOL to provide input on the review process. 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 studies to be included in the review process, including types of study designs to be included, populations of interest, and outcomes of interest. For example, the OSHA enforcement review protocol (draft May 21, 2013) requires that studies included in the review must examine an OSHA enforcement activity, use quantitative methods to determine the effectiveness of OSHA enforcement activities, examine outcomes related to workplace safety, and be conducted in the United States. The topic area content experts, DOL staff, and the CLEAR Technical Working Group (TWG) provide input on the topic area review protocol.

Identifying Studies for Review

CLEAR project staff, including research librarians, develop a process for identifying the studies that could meet the eligibility criteria set forth in the topic area review protocol. For systematic reviews, the literature search is designed to capture *all* studies and research papers that examine the research questions of interest. However, 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. Each topic area protocol describes the process CLEAR will use to search for studies that might meet the inclusion 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 studies that are identified through the literature search satisfy the criteria for study eligibility that are described in the topic area review protocol. Therefore, the first step in the review process is to screen out those studies and reports that were identified through the literature search but do not meet the criteria in the topic area protocol. For example, only about ten percent of the studies 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 studies may meet the criteria to be reviewed. Then, the Principal Investigator (PI) examines those studies more thoroughly to determine whether they are eligible to be reviewed for CLEAR.

As part of the systematic review process, CLEAR searches other clearinghouses (What Works Clearinghouse, FindYouthInfo (https://www.youth.gov/), 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 a study that was reviewed by another clearinghouse fits the eligibility criteria for CLEAR, CLEAR examines the evidence 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 evidence guidelines are the same as CLEAR's, CLEAR simply confirms the evidence rating from the other clearinghouse. If not, the study will have a full review by CLEAR. 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.

CLEAR Evidence Guidelines for Causal Studies

For causal studies, CLEAR conducts an assessment of the degree to which the study's design provides evidence that a policy or program causally affects critical outcomes. Causal studies are those that use quantitative methods to determine the effectiveness of a given program, policy, or intervention. In collaboration with a Technical Work Group (TWG) of experts,

Mathematica Policy Research developed a set of evidence guidelines to be used in reviewing non-experimental studies with causal designs. These causal designs include instrumental variables, difference-in-differences, fixed and random effects, and other types of regression analyses. Studies that meet the CLEAR evidence guidelines for their nonexperimental design receive a *moderate* evidence rating; this rating indicates that there is evidence that the study's design establishes a causal relationship between the intervention being examined and the outcomes of interest, but there may be other factors that were not included in the analysis that also could affect the outcomes of interest. A *moderate* rating is the highest rating a nonexperimental design can achieve because nonexperimental studies can never control for the influence of all factors that potentially influence the outcome. Study designs that do not meet their respective guidelines receive a *low* evidence rating, which indicates that we cannot be confident that the estimated effects are attributable to the intervention being examined.

CLEAR evidence guidelines for non-experimental study designs are tailored to the topic area of interest. In particular, the topic area protocol sets forth the specific types of control variables that need to be included in non-experimental regression analyses in order for a study to receive a *moderate* rating. The control variables are typically developed in consultation with one or more content experts.

In addition to non-experimental designs, CLEAR assesses the quality of causal evidence for randomized controlled trials (RCTs). For these designs, CLEAR uses an adaptation of the Institute for Education Science's What Works Clearinghouse (WWC) standards. The WWC standards for RCTs have been extensively reviewed and represent the current state-of-the art in determining the level of causal evidence. RCTs that are determined to have low attrition and no other threats to study validity receive the highest rating CLEAR offers: *high* evidence. This rating means we are confident that the estimated effects are solely attributable to the intervention that was examined. RCTs with high attrition or some other threat to validity can be evaluated using the CLEAR evidence guidelines for non-experimental designs. See Table 1 for a summary of the CLEAR causal evidence ratings.

Table 1. Summary of Causal Evidence Ratings

Rating	What it means
High	There is strong evidence that the effects estimated in this study are solely attributable to the program or policy being examined. This rating applies to randomized controlled trials (RCTs) that meet the criteria in the CLEAR evidence guidelines.
Moderate	There is moderate evidence that the effects estimated in this study are attributable at least in part to the program or policy being examined. However, there may be other factors that were not accounted for in the study that might also have contributed to the estimated effect. This rating applies to non-experimental designs and RCTs with high attrition that meet the criteria in the CLEAR evidence guidelines.
Low	There is little evidence that the effects estimated in this study are attributable solely to the intervention. Other factors are likely to have contributed to the estimated effects. This rating is for all causal designs that do not meet the criteria in the CLEAR evidence guidelines for high or moderate evidence.

The full set of CLEAR evidence guidelines for causal studies can be found at https://clear.dol.gov/reference-documents/causal-evidence-guidelines-version-21.

CLEAR causal evidence ratings refer only to the quality of *causal* evidence of a given study's design and not to the overall study quality. 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 summaries—which are produced for all reviewed studies regardless of their causal evidence rating—but are not factored into the causal evidence rating itself.

Reviewers and the Review Process[1]

CLEAR reviewers must attend a training session and demonstrate that they can apply the CLEAR evidence guidelines with fidelity before reviewing any studies. Reviewers of studies using a RCT design must be certified by the WWC as being able to implement the WWC's evidence standards with fidelity. In addition to the general training on evidence guidelines, CLEAR conducts mini-trainings with reviewers at the start of reviews for a new topic area to discuss the aspects of the topic area protocol that are relevant to applying the CLEAR causal evidence guidelines (e.g., required control variables).[2]

Each study that is identified as being eligible for review is assigned to a trained reviewer. The reviewer reads the study in detail; applies the CLEAR causal evidence guidelines to determine the study's causal evidence rating; and documents all aspects of the review in a standardized study review guide. The study review guide contains supporting information for the rating assigned, along with details of the intervention being examined, data sources, model estimated, and results.

If the reviewer assesses the quality of causal evidence of a study's design 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 PI and/or the content expert as needed to determine a final rating. If the first reviewer assigns a rating of *low,* the PI examines the study review guide and confirms that the rating is appropriate.[3]

When a study does not contain sufficient information to determine a study design's 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

[1] Note that, at the present time, the process applies only to reviews of studies with causal designs. These procedures will likely differ for studies that do not have causal designs.

[2] There are no specific degree requirements for CLEAR reviewers, although some graduate-level training on statistical methods is recommended. PIs must hold a PhD in a relevant discipline.

[3] This process was modified while CLEAR was piloting the use of the newly designed evidence guidelines for non-experimental study designs. Under the modified process, two reviewers independently reviewed each study, and the PI reconciled the two reviews. This was done to assess whether the guidelines were written clearly and comprehensively enough that two independent raters would apply them similarly to the same study.

(so as not to overly burden study authors). Authors receive a minimum of four 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 study design's rating. If the authors do not provide the relevant information, the design is given the highest rating that can be determined with the information available in the study.

Future phases of CLEAR may use reviewers who are not staff of the CLEAR project.[4] For example, reviewers maybe 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.

In the next phase of CLEAR, we will develop an appeals process whereby study authors and other interested parties can submit an online query or request for re-review and provide any additional information that could be relevant to the study's causal evidence rating. 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 of the study.

Reporting

In the initial phase, CLEAR reviews of causal studies will be used to produce two types of products: study summaries and synthesis reports. CLEAR produces a short document summarizing the results of the causal evidence review for every reviewed study, regardless of its evidence rating. These summaries describe the key features of the program or intervention being studied, the context in which the study was conducted, information about the data sources used and methods, and key study findings. For causal studies, they contain the critical information about how CLEAR assessed the quality of causal evidence presented in the study and considerations for interpreting the study's results and/or evidence rating. For instance, the summary might note that implementation fidelity had been low to help interpret a study's null findings. For studies that receive low causal evidence ratings, the considerations will include information on which specific evidence criteria the study's design did not meet. They will also include a statement about the concerns and consequences of incorrectly estimating variances if this were an issue for the study.

The summaries are designed to be short—one to two pages in length—and quickly convey the key points that a practitioner or policymaker would need to know about the study. The summary begins with a brief synopsis so that readers can quickly assess whether the full summary is of interest. It also contains a citation of the study that was reviewed so that interested readers can go directly to that study for additional information.

In addition to the study summaries for each reviewed study, CLEAR will have a variety of synthesis reports that are developed over time to meet the needs of CLEAR users. For example, a synthesis report might draw on causal evidence reviews to summarize the evidence for policies and programs that improve specific outcomes. Another synthesis report might summarize the

[4] To date, reviewers are CLEAR project staff at Mathematica Policy Research. However, studies that were conducted by Mathematica will be reviewed by trained reviewers who are not Mathematica staff.

causal research on the impacts of a specific policy. The synthesis reports will contain the key information about the relevant topic area, outcome, or intervention, presented in a concise document. They will also contain citation information to locate the studies that were included in the piece.

CLEAR Website

All CLEAR products are posted to the CLEAR website after passing through a quality assurance review conducted by a trained reviewer who was not involved in the review of the particular study. All CLEAR products are also reviewed by DOL staff.

Study summaries are organized according to topic area, and each has a dedicated webpage that displays a synopsis of the study and its rating. Synthesis pieces are also organized according to topic area, with a dedicated webpage that displays a synopsis of the research synthesis. Interested readers may click on links to open the full text of the study summary or synthesis.

Citations for all studies identified through the literature search will appear on the website in a searchable study database. Each study citation is accompanied by the study rating (if applicable), the study design, the protocol under which the study was screened, and a link to any related reviews. For studies that were not reviewed, the citation will provide the reason why the study was not formally reviewed.

In addition to containing the products of CLEAR study reviews, the website contains CLEAR background documents. These include this policy and procedures document, topic area review protocols, the evidence guidelines, and any other relevant materials. These materials describing the review process have their own tab on the website.

Finally, the website provides links to other research clearinghouses that might be of interest to CLEAR users on the relevant topic area pages. For instance, the topic area page for interventions for disconnected youth 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.

Plans for the Next Phases of CLEAR

To date, evidence guidelines have been developed for causal studies of the effectiveness of a policy, program, or intervention. In the next phase of CLEAR, reviewer guidelines for two additional types of analysis will be developed:

1. Implementation analysis examining whether a policy or program was implemented with fidelity to a model.
2. Descriptive studies that use quantitative, qualitative, or mixed methods. This is broadly defined to include all studies that do not fit into the first two categories.

Studies that use more than one type of analysis will be reviewed using a combination of the relevant reviewer guidelines. We envision that as CLEAR evolves, it may become relevant to distinguish additional categories for types of analysis that require a different approach to the review.

For implementation studies, CLEAR will develop a checklist that reviewers will use to evaluate whether the study included key elements such as a conceptual framework to guide the analysis, a clear description of the key features of the program, and methodology used to determine whether the program was implemented with fidelity for each of the key features. These checklists will be developed by researchers with expertise in implementation studies in consultation with DOL staff.

Descriptive studies include a broad range of research including case studies, descriptions of programs or policies, statistics on characteristics of program participants, regressions that establish relationships between variables, performance analysis and other research studies. For these study types, CLEAR research experts, in consultation with DOL staff, will develop checklists for quantitative and qualitative analyses. Although the specifics have not yet been developed, we do not envision assigning high, moderate, and low ratings to studies other than causal designs, as this has the potential to confuse users.

The reviewer guidelines for all three types of analysis 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 once the guidelines are publicly available. In the next phase of CLEAR, we will develop a process for updating the guidelines, such as an expert panel review every two-to-three years. In addition, as the science of research evolves, so will the guidelines. Topic area protocols will report which version of the guidelines were used in the review for the topic area.