

CDC Guidelines for the Field Triage of Injured Patients: National Evaluation

OSTLTS Generic Information Collection Request
OMB No. 0920-0879

Supporting Statement – Section A

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Program Official/Project Officer

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Section A – Justification

1. Circumstances Making the Collection of Information Necessary

Background

This new data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. The respondent universe for this data collection aligns with that of the OSC. Data will be collected from CDC personnel in the Division of Injury Response acting in their official capacities.

CDC’s mission includes addressing the leading causes of injury and disability within the United States. CDC’s priorities in approaching improvements to public health include – enhancing public health surveillance, the development of sound public health policies, and the implementation of prevention strategies. CDC’s relationship with key state and local EMS officials on emergency services and ambulatory support of injured patients is vital to public health. The National Study on the Costs and Outcomes of Trauma (NSCOT) identified a 25% reduction in mortality for severely injured patients who received care at a Level I trauma center rather than at a non-trauma center

At the scene of any crash or other event involving traumatic injury, emergency medical services (EMS) providers must rapidly evaluate patients’ severity of injury to determine the most appropriate treatment facility to transport these persons. This decision process is known as “field triage” and is based on a practice algorithm called a “decision scheme.” The benefits of accurate field triage have been well documented. Research has shown that 1-year mortality was lower among severely injured patients treated at a Level I trauma center than among those treated at a large non-trauma-center hospital. Lower in-hospital mortality, fewer deaths at 30 days after injury, and fewer deaths at 90 days after injury was also reported among those treated at Level I trauma centers. Additionally, accurate field triage has the potential to reduce over utilization of scarce medical resources and reduce the cost of injury. In 1976, ACS-COT began to publish resources to provide guidance for designation of facilities as trauma centers. Previous to this guidance, trauma victims were transported to the nearest hospital, regardless of the capabilities of that hospital, often with little pre-hospital intervention. Studies conducted in the 1970s and early 1980s reported a reduction in mortality in areas of the US with specialized trauma centers.

These studies led to the publication of the 1986 ACS field triage protocols known as the Triage Decision Scheme. Since 1986, this Decision Scheme has served as the basis for the field triage of trauma patients in the majority of EMS systems in the US. EMS systems have also been known to adapt and modify the Decision Scheme to reflect the operational context in which they function. The first Field Triage Decision Scheme was published by the American College of Surgeons (ACS) in 1986 with subsequent updates in 1990, 1993, and 1999. To improve field triage for injured patients, the Centers for Disease Control and Prevention’s (CDC) National Center for Injury Prevention and Control (NCIPC) worked with experts and partner organizations to develop the 2006 *Guidelines for Field Triage of Injured Patients* (**Attachment A**) which was published by the ACS Committee on trauma (ACS-COT).

This *Guideline* provides on-scene guidance to EMS professionals for the transport of injured patients by ambulance to the most appropriate facility. The *Guideline* is a necessary tool to help get the patient to the appropriate hospital suited to provide care for the patient's injuries. The 2006 version of the *Guidelines* reflects many changes from the version published in 1999. Changes have been made through the addition, modification, and elimination of criteria. Field triage criteria development included the concept of bypassing closer facilities in favor of those with enhanced capabilities for treating severely injured patients.

In April 2010, CDC conducted a search of state Public Health departments' and EMS external websites to identify the current status of adoption of the *Guidelines* within their state (**Attachment B**). Based on this internet search, information regarding field triage was located within 41 states. Of these states, 7 were classified as "full adopters," 9 were considered "partial adopters," 17 were found to be utilizing a full or modified version of the 1999 Field triage Decision Scheme, and 8 states were considered to be using a different decision scheme for field triage. The *Guideline* continues to serve as the template for field triage protocols in the majority of EMS systems across the United States; however, we recognize that the *Guideline* may require modification to account for local resource needs and geographic barriers that may hinder the destination transport decisions of an injured patient.

In order to learn more about state adoption status, utilization, and experiences, CDC plans to conduct a survey to assess state experiences with the adoption and implementation of the 2006 *Guideline* as described in *Guidelines for Field Triage of Injured Patients: Recommendations of the National Expert Panel on Field Triage*.

Privacy Impact Assessment

Overview of the Data Collection System – The evaluation is designed to answer several adoption questions. These questions will help the CDC understand immediate and long-term barriers to the *Guideline* adoption. The data will be collected using structured telephone interviews (see **Attachment C**) of State EMS Directors or his or her designee.

Items of Information to be Collected –The 15 questions asked are divided into three different sections. The first section (four questions) of the interview is designed to gather knowledge regarding the current state of awareness, level of adoption, and experience regarding the CDC 2006 *Guidelines* for all 50 states contacted. Section two (7 questions) is specifically for those states who are currently utilizing the guidelines. The focus of these questions is to gain further insight into the reasons for adoption, the level of adoption (full or partial), if the *Guideline* has been implemented and to what success, specific tools used for the implementation process, and how much of the state has implemented the *Guideline* if known. The third section (3 questions) attempts to learn more about why the state has not adopted the *Guideline*, what potential barriers to adoption and implementation exist within the state, and what field triage protocol or algorithm is currently being used by the state. A final question will be asked to all participants intended to gather additional feedback regarding the 2006 *Guideline*. Participants will also be asked to submit a current version of their state's field triage guidelines. Interviewers will record the information by taking notes via pen and paper or a computer word processor. The notes will then be transferred to an excel spreadsheet after all interviews have been completed. The interview notes will be destroyed once all of the information has been transferred to the excel spreadsheet.

2. Purpose and Use of the Information Collection

In order to learn more about state adoption status, utilization, and experiences, CDC plans to conduct a survey to assess state experiences with the adoption and implementation of the 2006 *Guideline* as described in *Guidelines for Field Triage of Injured Patients: Recommendations of the National Expert Panel on Field Triage*. Data will be collected through structured telephone interviews of State EMS Administrators/Directors or their designees (n=50). The information collected will allow CDC to better understand the scope of state adoption of the 2006 *Guideline* and any barriers that may have hindered the implementation of the *Guideline*. This information is needed to help CDC carry out its mission to improve public health and minimize potential injury-related disability. Use of the *Guideline* has the potential to reduce morbidity and mortality of severely injured patients through the rapid triage to appropriate level of care facilities. The data collected will be used to inform the Division of Injury Response and the Morbidity and Mortality Weekly Report: Recommendations and Reports of the impact the *Guideline* has had throughout the nation. Additionally, CDC will be able to learn about potential struggles and barriers of adoption and implementation to better understand how it can provide optimal assistance throughout the process.

Privacy Impact Assessment

Expression of guideline adoption by a state poses no risk to the respondent state because such matters are widely known within each State and are a matter of public record. To protect the individual privacy of respondents, the phone interviewers will not record the participant's name and will refer to their interview by the state in which they are located.

3. Considerations Given to Information Technology

Data will be collected via structured telephone interviews lasting approximately 15 minutes with an additional 5 minutes for the respondents to email CDC their current state field triage protocol. This method was chosen over a web-based survey to gain a better understanding of any potential successes and barriers to *Guideline* adoption. A telephone interview will allow for the interviewer to get a better sense of how the *Guideline* is being received within each state. Additionally, this method will allow for the EMS professional being interviewed to express the potential barriers and successes to *Guideline* adoption within their state. This information will help CDC define its role in assisting states with *Guideline* adoption. The survey was designed to collect the minimum information necessary for the purposes of this project--limited to 15 survey questions and a copy of existing state protocol.

4. Duplication of Information

CDC recognizes and understands that many collection requests are made to governmental health agencies and intends to use this generic clearance judiciously to ensure only the most relevant collections are undertaken and that they are not duplicative of other efforts. Previous efforts have been undertaken to assess state adoption of the 2006 *Guideline* via information available on state EMS websites. Although vital information was obtained regarding various state adoption status of the 2006 *Guideline*, the websites often provide incomplete or outdated information. This undertaking is unique in that it will allow CDC, for the first time, to query

state EMS leadership about the impact the *Guideline* on state EMS decision protocols. To date, no other articles have been published specifically assessing the level of state adoption of the 2006 *Guideline*.

5. Reducing the Burden on Small Entities

No small businesses will be involved in this data collection.

6. Consequences of Not Conducting Collection

The purpose of CDC's request for this generic clearance is to ensure collection of data that is not otherwise available. Specifically, without this data there would be:

- No timely feedback regarding the scope and impact of CDC's work in understanding how the *Guideline* was being adopted.
- Potentially less effective dissemination of our various *Guideline* materials to better assist EMS providers with scarce resources.
- Incomplete understanding of the barriers of the *Guideline* adoption.
- Reduced ability to fully promote the adoption of the *Guideline* which has the ability to save lives.

This request is for a one time data collection. There are no known legal obstacles to reduce the burden.

7. Special Circumstances

There are no special circumstances with this information collection package. This request fully complies with the regulation 5 CFR 1320.5 and will be voluntary.

8. Consultation with Persons Outside the Agency

This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. A 60-day Federal Register Notice was published in the Federal Register on October 22, 2010, Vol. 75, No. 204; pp. 65353-54. Two comments were received from the Association of State and Territorial Health Officials (ASTHO), and the National Association of County and City Health Officials (NACCHO).

CDC partners with professional STLT organizations, such as the Association of State and Territorial Health Officials (ASTHO), the National Association of County and City Health Officials (NACCHO), and the National Association of Local Boards of Health (NALBOH) along with the National Center for Health Statistics (NCHS) to ensure that the collection requests under individual ICs are not in conflict with collections they have or will have in the field within the same timeframe.

9. Payment or Gift

CDC will not provide payments or gifts to respondents.

10. Confidentiality

The Privacy Act does not apply to this data collection. Employees of state and local public health agencies will be speaking from their official roles. Since the data collected is public information, there is no risk to the respondent and no assurance of confidentiality. This data collection is not research involving human subjects.

11. Sensitive Nature

No information will be collected that are of personal or sensitive nature.

12. Burden of Information Collection

The estimate for burden hours is based on a pilot test of the survey instrument by 3 public health professionals. In the pilot test, the average time to complete the survey including time for reviewing instructions, gathering needed information and completing the survey, was 15 minutes. Based on these results, the estimated time range for actual respondents to complete the entire survey is 20 minutes because the EMS professionals interviewed will also be asked to submit their current state field triage protocol via email which should take no longer than 5 minutes. For the purposes of estimating burden hours, the upper limit of this range (i.e., 20 minutes) is used.

Estimates for the average hourly wage for respondents are based on the Department of Labor (DOL) National Compensation Survey estimate for management occupations – medical and health services managers in state government (<http://www.bls.gov/ncs/ocs/sp/nctb1349.pdf>). Based on DOL data, an average hourly wage of \$57.11 is estimated for all 50 number respondents. Table A-12 shows estimated burden and cost information.

Table A-12: Estimated Annualized Burden Hours and Costs to Respondents – PSR Survey

Type of Respondent	No. of Respondents	No. of Responses per Respondent	Average Burden per Response (in hours)	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
State EMS Official	50	1	20/60	17	\$57.11	\$971
TOTALS	50	1	20/60	17	\$57.11	\$971

13. Costs to Respondents

There will be no direct costs to the respondents other than their time to participate in each survey.

14. Cost to Federal Government

There are no equipment or overhead costs. Contractors are not being used to support this data collection. The only cost to the federal government would be the salary of CDC staff supporting the data collection activities and associated tasks.

The lead staff for this project is a Behavioral Health Scientist (GS-13) in the Division of Injury Response Research Team. The development of the survey instrument included the assistance of an Associate Service Fellow (GS-9) on the Division of Injury Response Research Team. In addition to the lead staff, a CDC Experience Fellow (GS 9 equivalent) within the Division of Injury Response Research Team will collect the data and prepare the data for analysis; conduct analysis and prepare the report with ongoing consultation from the other team members. The interviews are estimated to be 15 minutes in length and the time it will take the interviewee to email their current state field triage protocol is estimated to be 5 minutes. The transfer of data to the Excel spreadsheet is estimated to take 20 minutes.

Table A-14: Estimated Annualized Cost to the Federal Government

Staff (FTE)	Average Hours per Collection	Average Hourly Rate	Average Cost
Associate Service Fellow – GS 9	46.67	\$23.55	\$1099.08
Health Scientist – GS 13	13.33	\$45.06	\$600.65
CDC Experience Fellow – funded through CDC Foundation equivalent to GS 9	13.33	\$23.55	\$313.92
Estimated Total Cost of Information Collection			\$2013.65

15. Reason for Changes

This is a new data collection.

16. Tabulation of Results, Schedule, and Analysis Plan

The data collected will be analyzed for its descriptive nature and no formal statistical analysis will be used. Data from the states will be evaluated to determine the level of state adoption of the *Guidelines* and to better inform CDC efforts in assisting states through leadership and training. State guidelines not consistent with the 2006 *Guidelines* will be reviewed to determine the number of corresponding criteria between the protocols by a physician board certified in Emergency Medicine. The number of criteria from the state protocol that

correspond with the 2006 *Guidelines* will be totaled and divided by the total number of criteria within the 2006 *Guidelines* to determine the total percent of adoption for each state.

The information gathered will be used to inform the Division of Injury Response of the adoption of the 2006 *Guidelines* on State EMS practices.

Project Time Schedule

Once approved, potential participants will be identified (one week). Once identified, formal emails (see **Attachment D**) will be sent informing participants about the study and asking for their participation (one week). Participants will be given two weeks to respond. For those who do not respond, an additional email will be sent to remind non-respondents (see **Attachment E**). Those who have accepted participation will receive an email to set up the phone interview. If a state does not respond, additional participants will be identified and the timeline will proceed as before. After the surveys are complete, the investigator will take two weeks to aggregate the data and complete new state adoption map. Below is a following time schedule

- ✓ Design survey questionnaire..... (COMPLETE)
- ✓ Develop survey protocol, instructions, and analysis plan..... (COMPLETE)
- ✓ Pilot test survey questionnaire..... (COMPLETE)
- ✓ Prepare OMB package..... (COMPLETE)
- ✓ Submit OMB package..... (COMPLETE)
- OMB approval..... (TBD)
- Identify list of all state EMS Directors..... (1 week)
- Contact potential survey participants..... (1 week)
- Conduct survey..... (4-6 weeks)
- Collect, enter, quality control, and analyze data..... (2 weeks)
- Prepare report..... (2 weeks)
- Disseminate results/reports..... (3 weeks)

17. Display of OMB Approval Date

We are requesting no exemption.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification. These activities comply with the requirements in 5 CFR 1320.9.