

Supporting Statement A for

NLM Lost People-Finder System Lister Hill National Center for Biomedical Communications

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Mini Supporting Statement NLM Lost People-Finder Tool

Section A

A.1 Circumstances Making the Collection of Information Necessary

This collection of data is intended to assist in the reunification of family members who are separated during a disaster. Experience in operational drills and during real-world disasters such as the January 2010 earthquakes in Haiti demonstrates that family members and loved ones are often separated during disasters and have significant difficulty determining each other's safety, condition, and location. Reunification can not only improve the emotional well-being of family members and loved ones during the recovery period, but also improve the chances that family members will be available to care for injured victims once they are released from urgent medical care. Reunited family members and loved ones are also a valuable source of medical information that may be important to the care of injured victims (e.g., by providing family or personal medical history, information about allergies). The National Library of Medicine (NLM) aims to assist other Federal agencies in disaster relief efforts and to serve its mission of supporting national efforts to the response to disasters via the Lost People Finder (LPF) system. The information collection would be voluntary. It would be activated only during times of declared emergencies and would operate until relief efforts have ceased in response to a particular disaster.

This data collection is authorized pursuant to sections 301, 307, 465 and 478A of the Public Health Service Act [42 USC 241, 242l, 286 and 286d]. NLM has in its mission the development and coordination of communication technology to improve the delivery of health services. NLM is a member of the Bethesda Hospitals' Emergency Preparedness Partnership (BHEPP), which was established in 2004 to improve community disaster preparedness and response in Bethesda, MD. As part of the National Capital Region, Bethesda would likely be called upon to absorb mass casualties in a major regional disaster. BHEPP hospitals include the National Naval Medical Center (NNMC), the National Institutes of Health Clinical Center (NIH CC), and Suburban Hospital/Johns Hopkins Medicine. Congress provided funding for BHEPP in FY 2005 and provided additional funding for supporting research and development in FY 2008. NLM, with its expertise in communications, information management, and medical informatics joined BHEPP to coordinate the R&D program, one element of which is development of a lost person finder to assist in family reunification after a disaster. NLM hastened development of the system so it could be deployed as part of relief efforts following the January 2010 earthquakes in Haiti. The agency requested and was granted an emergency clearance from OMB for this information collection (OMB Control # 0925-0612). The OMB Notice-of-Action granting approval of the emergency clearance became effective January 29, 2010 with the currently approved collection due to expire on July 31, 2010. This proposed information collection was published in the Federal Register on February 8, 2010 (Vol. 75, No. 25, p. 6207) and allowed 60 days for public comment. No public comments were received.

A.2 Purpose and Use of the Information Collection

This information collection would support efforts to reunite family members and loved ones who are separated during a disaster. Information about missing (“lost”) people would be collected from family members or loved ones who are searching for them. Information about recovered (“found”) people would be provided by medical personnel and other relief workers assisting in the disaster recovery effort. Information collected about missing and recovered persons would include: a photograph, name (if available for a found person), age group (child, adult) and/or range, gender, status (alive and well, injured, deceased, unknown), and location. Additional free-form text notes and voice notes may also be submitted. Collected information would be made available to the public via a specialized search interface to allow users to search for and locate family members and other loved ones. Information would also be collected from and shared with other lost person finder systems endorsed or used by other Federal agencies, such as the U.S. Department of State, which made use of a system developed by Google during the relief efforts in Haiti in early 2010. NLM would also use the information to evaluate the functioning and utility of the lost person finder system and guide future enhancements to the system.

An early version of the NLM LPF was made operational during the recovery effort in Haiti. Information was collected on some 55,000 individuals, mostly missing persons whose family members were trying to locate them. Much of this information was imported from Google and other lost person finder systems that were established for use in Haiti, and data submitted directly to NLM’s system was shared with Google. While an iPhone application for submitted information on recovered people was made available to the public, it had only limited use by relief personnel in Haiti.

Nevertheless, based on its experience developing and deploying the LPF, NLM improved the information collection in several ways. The capability was added to enable users to submit voice notes of up to 30 seconds in length, in addition to free-text notes. The speaker of the voice note can also be identified (i.e., social worker, reporter, and victim). Other enhancements included: (i) expanding the set of Web browsers that work with the system, thereby broadening the reach and usefulness of the website; (ii) adding additional search options as well as optimizing search queries to produce more relevant results; (iii) increasing the multilingual support by adding an additional language; (iv) automating the import and export of records from/to other relevant person finding systems (such as Google’s); (v) improving the help pages; (vi) adding a “details page” to support a broader set of information displayed about each lost or found person; and (vii) improving the speed at which the initial results pages can be generated. While the initial system took over 3 weeks to develop and deploy in Haiti, an enhanced version of the system was created, customized, and tested in just two days in response to the Chilean earthquake. We expect this response time be improved further as a result of continuing R&D efforts.

Other enhancements to the system have aimed to improve search capabilities and structured data input through mobile phone email, and the iPhone App (“Found in Haiti”). A mobile web-form was created that supports data entry from multiple mobile browser devices, including the Blackberry. The iPhone App was revised to: (i) support a iPhone/iPod devices with previous-generation operating-systems; (ii) enhance the user-interface; (iii) offer higher image quality; (iv) enable region-of-interest selection on the image; (v) provide XML formatted communication between iPhone client and server; and (vi) improve device data handling. Recognizing that the system might be used simultaneously for multiple disasters (e.g., earthquakes in Chile and Haiti), the iPhone App was also redesigned (and renamed “Reunite”) to support Web services that enable refreshing image tags and database content for future disaster events. Records and images are now color-coded for each disaster, making it easier for users to search the right set of records. To further simplify data entry for users, the iPhone app was modified to use Google Maps for recording the location of the person entering the data, saving addresses for repeated use (e.g., for the location of a relief/aid station), addition of up to four image tags. Ongoing enhancements include support for the new Apple iPad and the addition of search capability for mobile devices. A federated search feature permits searching of multiple people finder systems, viz. currently Google, International Committee of the Red Cross, and CNN iReport. Other systems can be added with little delay.

A.3 Use of Information Technology and Burden Reduction

The information collection uses advanced information technology for submitting information to the system and for searching it. Photographs and textual information describing “found” victims of the disaster can be submitted via email from computers or camera-enabled cell phones. NLM has also developed applications for widely used smart communication devices including the iPhone and Blackberry to simplify the submission of information. Applications for other devices, such as the iPad and Android-based devices are in development. A Web-based search mechanism allows on-line retrieval of possible matches using descriptive information, such as age group, gender, and location, in addition to name. As indicated below, enhancements will continue to be made to the data submission and search capabilities in order to improve the efficiency and the effectiveness of the system.

A.4 Efforts to Identify Duplication and Use of Similar Information

NLM has sole responsibility for developing the lost person finder for use within member organizations of the BHEPP. It collaborates with other organizations involved in disaster response to identify and ensure coordination with related efforts. In the case of the Haiti earthquakes, for example, Google launched a lost person finder that accepts information from a variety of sources. The NLM LPF accepted data from and shared data with the Google system in order to ensure that users of either system had access to as much relevant information as possible. The NLM-LPF offers several unique features, such as an iPhone application for data submission, that are not currently available in Google’s system. NLM’s system also allows users to search based on criteria other than name,

such as age (adult or child), and gender. The NLM LPF also includes a "notification wall" for a scrolling display of images of victims added in the last 1 or 24 hours. In addition, NLM's system federates data collected by other lost person finders to provide one-stop searching across all known lost person finder systems and allow more comprehensive searching and matching capabilities. Information sent to NLM is shared with other lost person finder systems and searches performed with the NLM search engine will retrieve relevant information from other known lost person finders. In this way, NLM's information collection will not be duplicative, but will complement and augment other services.

A.5 Impact on Small Businesses or Other Small Entities

N/A

A.6 Consequences of Collecting the Information Less Frequently

The use of the LPF enables timely data entry by first responders, care providers, and other relief workers at the scene of a disaster (such as when victims are triaged for medical care) to assist in reunifying family members. Not collecting and not making available information for the Lost People Finder would reduce the probability of timely reunification of families after a disaster or lengthen the time needed for family members to find each other. Failure to collect this information would also slow continuing efforts to improve the system for use in future disasters.

A.7 Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

This survey will be implemented in a manner that fully complies with 5 C.F.R. 1320.5. The agency requested and was granted an emergency clearance in January 2010 (OMB Control # 0925-0612) so that the information collection could be initiated during the recovery efforts in Haiti. As noted, the system had been in development for use within the BHEPP, but the unexpected earthquake in Haiti prompted an effort to complete development of an operational system on a very short timeline that precluded the use of standard comment and review procedures.

A.8 Comments in Response to the Federal Register Notice and Efforts to Consult Outside Agency

The requested extension of this information collection was published in the Federal Register on February 8, 2010 (Vol. 25, No. 25, p. 6207) and allowed 60 days for public comment. No substantive public comments were received; however, there were inquiries of interest about the collection from a Senior Public Health Advisor at the Department of Health and Human Services Emergency Care Coordination Center and a private vendor of web-based applications for disaster response.

Development of NLM's Lost People Finder has been pursued in consultation with members of the BHEPP: the NIH Clinical Center, Navy National Medical Center, and

Suburban Hospital/Johns-Hopkins Medicine. In addition, since the earthquake in Haiti, NLM has been in contact with Apple, Google, the US Department of State, and the White House Office of Science and Technology Policy to inform them of its efforts.

A.9 Explanation of Any Payment of Gift to Respondents

No payment or gift will be provided to survey participants.

A.10 Assurance of Confidentiality Provided to Respondents

Information describing missing (“lost”) and recovered (“found”) victims of the disaster will be made available to the public, consistent with the intent of the system to assist family members in finding each other. Information collected about missing and recovered persons will include: a photograph, name (if available for a found person), age group (child, adult) and/or range, gender, status (alive and well, injured, deceased, unknown), and location. Additional free-form text notes and voice notes may also be submitted. Those submitting information to the system will be informed that all submitted information will be made publicly available and that submission of information is voluntary. Personally Identifiable Information (PII) will be collected. The data collection is covered by NIH Privacy Act Systems of Record 09-25-0200, “Clinical, Basic and Population-based Research Studies of the National Institutes of Health (NIH), HHS/NIH/OD.” The SORN is currently being amended by the NIH Privacy Officer to add the National Library of Medicine. NLM has been granted an IRB exemption for this data collection.

A.11 Justification for Sensitive Questions

As noted above, collected information will consist of: a photograph, name (if available for a found person), age group (child, adult) and/or age range, gender, status (alive and well, injured, deceased, unknown), and location, as well as free-form voice or text notes. Experience in operational exercises and in the Haiti earthquake suggests that such information is essential to reunification efforts. As noted, all data submission is voluntary, and data submitters may withhold information they do not wish to provide.

A.12 Estimates of Hour Burden Including Annualized Hourly Costs

The estimated burden consists of the burden to emergency responders (care providers, relief workers) entering data into the system and of family members entering data to list a missing person and/or search for possible matches. We estimate that some 500 emergency responders might use the system during the course of the relief effort and that each might submit information on 100 people. Submission of information, especially through the iPhone application, is very fast and is estimated to average not more than 5 minutes per entry. The number of family members entering information about a missing person could be much higher. Based on use to-date of the Google person finder system (note: Google’s person finder contained 55,000 records as of April 2010, most of which related to missing people), we estimate that some 50,000 family members might use the

system twice during a disaster. Data entry would average no more than 5 minutes. The total hour burden is calculated to be 12,000 hours. Using the average wage for all US workers of \$20.32 per hour for family members and a rate of \$32.64 per hour for emergency responders and other healthcare providers, the total dollar burden would be \$293,120. All use of the system is voluntary.

A.12-1 Estimates of Annual Hours Burden				
Types of Respondents	Number of Respondents	Responses per Respondent	Average Response Time	Annual Hour Burden
Emergency Care First-Responders, Physicians, Other Health Care Providers	500	100	0.08	4,000
Family members seeking a missing person	50,000	2	0.08	8,000
Total	50,500			12,000

A12.2 Annualized Cost to Respondents					
Types of Respondents	Number of Respondents	Responses per Respondent	Average Time per Response	Hourly Wage Rate	Respondent Cost
Emergency Care First-Responders, Other Health Care Providers	500	100	0.08	\$32.64	\$130,560
Family members seeking a missing person	50,000	2	0.08	\$20.32	\$162,560
Total	50,500				\$293,120

Cost has been estimated using the U.S. Department of Labor (DOL) Bureau of Labor Statistics occupational employment statistics <http://www.bls.gov/oes/data.htm>

A.13 Estimate of Other Total Annual Cost Burden to Respondents or Record Keepers

N/A

A.14 Annualized Cost to the Federal Government

N/A

A.15 Explanation for Program Changes or Adjustments

The agency requested and was granted an emergency clearance from OMB for this information collection (OMB Control # 0925-0612). The OMB Notice-of-Action granting approval of the emergency clearance became effective January 29, 2010 with the currently approved collection due to expire on July 31, 2010. Because this was an emergency clearance request, the normal approval process requiring first publishing the proposed collection in the Federal Register for public comments was waived by OMB. After the emergency clearance was granted by OMB, this proposed information collection was published in the Federal Register on February 8, 2010 (Vol. 75, No. 25, p. 6207) and allowed 60 days for public comment. No public comments were received.

A.16 Plans for Tabulation and Publication and Project Time Schedule

Data submitted to the lost person finder will be made publicly available/searchable as soon as possible after receipt. At the end of relief operations for a particular disaster, a summary paper may be prepared to describe the use of the system and its effectiveness in reuniting family members.

A.17 Reason(s) Display of OMB Expiration Date is Inappropriate

We are not requesting an exemption to the display of the OMB Expiration date.

A.18 Exceptions to Certification for Paperwork Reduction Act Submissions

This survey will comply with the requirements in 5 CFR 1320.9.