Executive Summary

Common Ground: Transforming Public Health Information Systems

*Common Ground: Transforming Public Health Information Systems*, a national initiative of the Robert Wood Johnson Foundation (RWJF), helped public health agencies improve both their information systems and their systems performance in order to better respond to health threats, such as pandemics and bioterrorism, as well as to chronic diseases, such as obesity.

RWJF’s Board of Trustees authorized up to $15.4 million for the program, which ran from May 2006 through December 2010. The Public Health Informatics Institute, a program of the Task Force for Global Health, which is based in Decatur, Ga., managed the program and provided technical assistance to the grantee organizations. NORC at the University of Chicago evaluated the program.

Read the full Program Results.

**CONTEXT**

Public health informatics—the use of sophisticated information technology to collect, analyze, and share information—is a core capacity, helping agencies to address acute emergencies, such as an infectious disease outbreak or a bioterrorism attack; prevent and control chronic diseases, such as obesity, diabetes, and asthma; meet day-to-day operational needs more efficiently; and exchange information with other health-related entities.

In 2006, when *Common Ground* was launched, many agencies lacked the information capacity needed for a coordinated response to large-scale health problems.
THE PROGRAM

*Common Ground* helped state and local public health agencies better respond to health threats by improving their use of information systems and the overall quality and efficiency of their operations. The program’s overarching principle was that public health agencies do essentially the same kind of work throughout the country and function in many similar ways. Finding this “common ground” was key to helping them share their experiences and best practices, and develop common approaches to solving problems.

RWJF awarded grants to 31 state and local public health agencies throughout the country. Fifteen relatively modest awards (up to $30,000) were for Informatics Capacity projects that allowed agencies to analyze their business processes related to a specific public health problem and create a plan for future information management needs.

Sixteen larger grants (up to $600,000) were for Requirements Development projects that enabled health departments to analyze their business processes and also define user requirements for information systems. Ten of those agencies focused on chronic disease prevention and control, six on public health preparedness.

The framework for *Common Ground* is the Public Health Informatics Institute’s **Collaborative Requirements Definition Methodology (CRDM)**, a collaborative approach to developing requirements for public health information systems. The methodology brings together public health agencies to act collaboratively on a three-step process: analyzing a business process; redesigning a business process; and defining the requirements for a new information system.

KEY RESULTS AND FINDINGS

- The 16 Requirements Development grantee agencies participated in two national collaborative workgroups, one in chronic disease prevention and control, and one in preparedness.

  “For the first time ever,” according to institute staff, “the workgroups created a consensus-driven description of the work that is conducted by public health practitioners in the two domains.” The workgroups also developed a set of information system requirements for each business process and created toolkits and other documents to share their products with other public health organizations.

- All of the grantee agencies developed a local project that could benefit from *Common Ground* tools, including CRDM, analyzing and redesigning one or more of their business practices.
An evaluation conducted by NORC\textsuperscript{1} at the University of Chicago consolidated findings into nine central themes:

— The majority of the public health departments reported that \textit{Common Ground} helped them to develop knowledge and skills in business-process analysis, business-process redesign, and defining requirements for information systems.

— Almost all grantees reported process improvement in multiple areas. Health departments developed new or enhanced capacity to examine public health business processes, identify inefficiencies, streamline service delivery, help build organizational memory, and minimize duplicative efforts.

— Seven Requirements Development grantees reported that they will use the requirements developed through \textit{Common Ground} to develop or purchase new information systems.

— Grantees that participated in the national collaborative workgroups were able to reach consensus on common processes. Twelve out of 14 agencies that responded to a survey agreed that the national collaborative was effective in developing common information system requirements.

— Some grantees reported that \textit{Common Ground} was a catalyst for bringing people together. \textit{Common Ground} helped participants to break down silos within agencies and cultivate new relationships among local and state health departments, and external organizations, such as police, fire, and emergency management, and the public.

— Many grantees disseminated the \textit{Common Ground} methodology to other public health partners. Eleven Requirements Development grantees reported that they trained external stakeholders, such as other state and local health departments, as well as departmental staff, as part of their local projects.

— Seven Requirements Development grantees reported that they will use their skills and knowledge from \textit{Common Ground} to prepare for voluntary public health department accreditation.

— Many grantees leveraged other resources to continue their work or to implement new process-improvement activities. Eighteen (58\%) of the 31 \textit{Common Ground} grantee agencies indicated they will seek government and foundation grants in the future. Thirteen (42\%) reported that their agencies would continue to support their \textit{Common Ground} work in the future.

— Some grantee agencies reported that changes in organizational behavior, processes, and/or information systems flowing from the \textit{Common Ground} experience could result in public health benefits over the long term.

\textsuperscript{1} Formerly called the National Opinion Research Center.
AFTERWARD

The work of Common Ground is continuing, and spreading, according to national program office staff. Among the activities:

- **Preparation for Meaningful-Use Data Exchange.** With remaining RWJF funding,² the institute is helping public health agencies prepare for the “tsunami” of information that is likely to flow to them as providers comply with requirements to report information about immunizations, laboratory results, and syndromic surveillance³ to public health departments.

- **Applied Public Health Informatics Curriculum.** In July 2009, the institute convened a workgroup to produce a curriculum that aligns the nationally recognized public health informatics competencies needed in local and state health departments with course titles, descriptions, learning objectives, and recommended portfolio projects.

- **Public Health Informatics Academy.** The Common Ground training program was key to the institute’s establishment of the Public Health Informatics Academy, whose mission is to improve informatics capacity among the public health workforce.

- **Requirements Lab Project.** Common Ground was the “launch pad” for the requirements lab project, a five-year effort funded by the Bethesda, Md.-based de Beaumont Foundation, according to Program Director David A. Ross, ScD. The project will focus CRDM on the priority areas of surveillance and epidemiology, community health improvement planning, and public communications.

- **CRDM’s Global Impact.** CRDM is being used to build global public health information systems, according to Ross. The institute has partnered with PATH, a nongovernmental organization, to make appropriate technologies available to developing countries in an economically and socially sustainable manner. For example, the partners have developed a common set of requirements for distributing, warehousing, and moving vaccinations in Kenya, Rwanda, Senegal, and Vietnam.⁴

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**Program Management**

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² Grant ID# 68885, June 2011–December 2012.
³ Syndromic surveillance is the collection and analysis of population-based data to detect abnormal patterns and to assess the probability of an outbreak warranting a public health response.