



# SUMMARY OF THE MIECHV GATEWAY

## Missouri Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program



August 2016

# Scope of Report

The University of Missouri Health Management and Informatics Department (HMI) has prepared this report for the Missouri Department of Health and Senior Services (MODHSS) to meet contractual requirements and share the successes of advances made to the Affordable Care Act (ACA) Maternal, Infant and Early Childhood Home Visiting (MIECHV) Program continuous quality improvement process.

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number D89MC2791501-Affordable Care Act (ACA) Maternal, Infant and Early Childhood Home Visiting (MIECHV) Program in the amount of \$379,024 with 0% financed with nongovernmental sources. This information or content and conclusions are those of the authors, and should not be construed as the official position or policy of, nor should any endorsements be inferred by, HRSA, HHS, or the U.S. Government.

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# Table of Contents

- Background .....1**
- Missouri MIECHV Gateway .....1**
  - Overview .....1
  - Features .....1
  - Platform .....2
  - Pilot Testing .....2
  - Launch & Monitoring.....3
- Discussion.....3**



## Background

Continuous quality improvement (CQI) is a quality management method that encourages the review of performance, quality, cost, environment, and outcomes of a program or process within a program. The foundation of CQI is that through small-scale improvements, done continuously over time, there are measurable improvements in services for targeted groups.

The Missouri's Maternal, Infant, and Early Childhood Home Visiting (MO MIECHV) program is led by Missouri Department of Health and Senior Services (MODHSS). To deliver high-quality early childhood services, focus on broad programmatic strategies, and achieve desired program outcomes. MODHSS Home Visiting Program leads the seven participating local implementing agencies (LIAs) in collaborative CQI activities. The activities aim to encourage the LIAs to coordinate their CQI efforts across agencies and disseminate CQI knowledge. Three levels of CQI teams are staffed by MODHSS Home Visiting Program and LIA personnel and participate in quarterly meetings to address MO MIECHV CQI activities. Additionally, a quarterly quality newsletter communicates CQI focus areas (referred to as 'Action Alerts') to LIA personnel.

To complement and enhance the existing MODHSS Home Visiting Program CQI process, a quality improvement and information exchange website was developed. Beginning in early 2015 through June 2016, this website, the *Missouri MIECHV Gateway*, was designed, built, tested, and launched. This summary report shares the development, key features, and future potential of the *Missouri MIECHV Gateway* website.

## MISSOURI MIECHV GATEWAY

### Overview

The *Missouri MIECHV Gateway* web-based environment was developed to:

- support LIA personnel to self-identify program activities in need of quality improvement, and guide the assessment, planning, implementation, and evaluation of CQI initiatives;
- standardize and disseminate quality improvement training and resources;
- be an inclusive environment to virtually connect MO MIECHV LIAs, share CQI projects, network across agencies, improve CQI knowledge through training, and learn about CQI activities and initiatives; and,
- improve the scope and capacity for measurable change in organizational initiatives.

### Features

The *Missouri MIECHV Gateway* site offers users a unique environment that balances CQI training and practice. The CQI Process embedded within the site utilizes W. Edwards Deming's Plan-Do-Study-Act (PDSA) cycle of process improvement. The CQI Process enables LIA users to complete a self-assessment to receive a fidelity score (a measure of whether an intervention is delivered as intended) to identify areas where quality improvement work is necessary. Then,

users are guided to begin a CQI project, working through the PDSA stages to design, implement, evaluate, and finalize the CQI project. At the conclusion of a project, users create a CQI Storyboard that highlights the PDSA plan, lessons learned, and future directions and upload it into a shared site directory.

Additional key features of the *Missouri MIECHV Gateway* include:

- brief training tutorials on CQI methodologies and concepts;
- discussion and group forums;
- weekly webinars covering CQI methods, concepts, and management;
- a CQI glossary of frequently used terminology;
- encouraging site participation by enabling users to earn activity points and virtual badges for completing various site activities;
- weekly user polls;
- a searchable directory of community resources and listing of external CQI resources;
- access to MO MIECHV documents such as newsletters, forms, and meeting minutes;
- user profile management with social media themed integrations;
- a user-friendly design and navigation;
- available technical assistance, feedback forms, and live-chat with a *Gateway* site administrator

## Platform

The website server was developed and hosted in the Amazon Web Service cloud environment on a standard Windows 2012 platform. The site content was built using the open-source WordPress Content Management System (CMS) software. A secure HTTP over SSL domain name was registered. The CMS theme is optimized for use with mobile devices, tablets, and desktops. Lastly, to access and log into the site a user must have a unique username and password.

## Pilot Testing

From December 2015 through April 2016, three pilot usability tests occurred, to evaluate how successful the site is in navigating and directing new users who are unfamiliar with the application. The testing occurred to three defined groups consisting of: 1) faculty and staff from the university department; 2) administrators within the state department of health; and 3) supervisors and data managers within the local implementing agencies. Responses from the pilot studies were analyzed and further site improvements and enhancements were made after each round of pilot testing. The results of the three pilot testing groups were overall positive. The majority of reviewers ranked the site content pages in a desired manner and provided feedback for expansion or further development of the site content. The System Usability Scale mean score of the three pilot groups calculated as 71.63, ranking above the U.S. average of 68 (Sauro & Kindlund, 2005).

## Launch & Monitoring

The site was launched to LIA users in June 2016. Presently, there are 60 Gateway users. Site performance and activity are measured through integrated software capabilities. These activities include: CQI Storyboard submissions, site visits, weekly poll results, discussion posts, document downloads, user activity points, webinar participation, etc.

## Discussion

To our knowledge, a web-based environment aimed to create a culture of quality improvement and foster CQI for home visiting programs has not been previously reported. Given the focus on CQI priorities, the web-based portal has endless opportunities for expansion. We are grateful to the MO DHSS administrators who have fostered a robust collaboration and value this innovative development.