



MONAHRQ<sup>®</sup> 5.0 Build 2

Release Notes

August 2014



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## 1 INTRODUCTION

**MONAHRQ<sup>®</sup>—My Own Network, powered by AHRQ**—is innovative, website-generating software available for free from the Agency for Healthcare Research and Quality (AHRQ). This desktop software enables any organization to quickly and easily create a website with understandable, evidence-based health care reports for use by providers, consumers, policymakers, and others to improve health care safety, quality, and affordability.

[An update to the latest version of MONAHRQ is now available for download](http://monahrq.ahrq.gov/monahrq_software.shtml)

([http://monahrq.ahrq.gov/monahrq\\_software.shtml](http://monahrq.ahrq.gov/monahrq_software.shtml)). MONAHRQ 5.0 Build 2 contains new enhancements and updated benchmark and base datasets, building on the redesigned software released in MONAHRQ version 5.0.

When installing MONAHRQ 5.0 Build 2, current MONAHRQ 5.0 Host Users will be prompted to upgrade to the latest version of software. Existing MONAHRQ 5.0 Host Users can accept the upgrade request and proceed through the installation process. Host Users new to MONAHRQ 5.0 and 5.0 Build 2 will be prompted through an initial installation process and will be able to upgrade to later versions thereafter.

Organizations that download, create, and host MONAHRQ-generated websites are referred to as “Host Users.” Examples include—

- State and local health agencies and public health departments
- Hospital associations, individual hospitals, and hospital systems
- Community or regional alliances and coalitions
- Quality Improvement Organizations (QIOs) and Regional Health Improvement Organizations (RHIOs)

Using MONAHRQ for public or private reporting supports AHRQ's mission to improve the quality, accessibility, safety, efficiency, and cost transparency of health care for all Americans. To produce health care reports, MONAHRQ can draw from local hospital inpatient and emergency department (ED) discharge data; evidence-based measure results from the Centers for Medicare & Medicaid Services' (CMS) Hospital Compare database, including the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) patient experience survey; and precalculated AHRQ Quality Indicators™ (QIs).

## 2 MONAHRQ<sup>®</sup> 5.0 BUILD 2 RELEASE UPDATES

Table 1 provides a summary of the new enhancements and features included in MONAHRQ 5.0 Build 2. See the following sections for more detail about each of the items listed below.

**Table 1. MONAHRQ 5.0 Build 2 Enhancements and Features**

Item	Build #	Release Date	Feature	Description
1	2	August 18, 2014	Added more CMS measures and removed one measure	The base data file has been updated to include 13 new CMS measures for comparison analysis, and display; one measure was removed.
2	2	August 18, 2014	Ratio measure—Comparison methodology update	The methodology has been modified to use the upper and lower confidence interval (CI) rates as the basis for comparisons.

Item	Build #	Release Date	Feature	Description
3	2	August 18, 2014	Data element mapping process during the data import	Data elements can now be added to mapping using a “drag and drop” process, rather than having to select from dropdown menus.
4	2	August 18, 2014	Ability to use custom regions for utilization reports	Reports of Inpatient Discharges across a population can now be aggregated by custom regions, rather than by county only.
5	2	August 18, 2014	Refresh of benchmark and base data	The latest benchmark and base data have been added to MONAHRQ. The May 2014 Hospital Compare dataset is now supported.
6	2	August 18, 2014	Improved content for the consumer website	The cost-related content in the website designed for consumers has been updated.

## 2.1 New CMS Measures

MONAHRQ 5.0 Build 2 includes 13 additional measures. The measures and their default MONAHRQ health topics are listed in Table 2 below.

**Table 2. CMS Measures Added in MONAHRQ 5.0 Build 2**

Measure Name	Topic	Subtopic	Identifier	NQF #
How long patients spent in the emergency department before leaving for their hospital room	Emergency Department (ED)	Throughput	ED-1b	0495
How long patients spent in the emergency department after the doctor decided the patient would stay in the hospital before leaving for their hospital room	Emergency Department (ED)	Throughput	ED-2b	0497
How long patients spent in the emergency department before being sent home	Emergency Department (ED)	Throughput	OP-18b	0496
How long patients spent in the emergency department before they were seen by a health care professional	Emergency Department (ED)	Throughput	OP-20	--
How long patients who came to the emergency department with broken bones had to wait before receiving pain medication	Emergency Department (ED)	Throughput	OP-21	0662
Patients who left the emergency department without being seen	Emergency Department (ED)	Throughput	OP-22	--
Newborn deliveries scheduled 1–3 weeks earlier than medically necessary	Emergency Department (ED)	Throughput	PC-01	0469
Catheter-associated urinary tract infections	Infections	Health care-associated	HAI-2	0138
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) infections	Infections	Health care-associated	HAI-5	1716

Measure Name	Topic	Subtopic	Identifier	NQF #
<i>Clostridium difficile</i> ( <i>C. diff</i> ) infections	Infections	Health care-associated	HAI-6	1717
Patients in the hospital who got the flu vaccine if they were likely to get flu	Infections	Health care-associated	IMM-2	1659
Returning to the hospital for any unplanned reason within 30 days after being discharged	Deaths and Readmissions	All Causes	READM-30-HOSP-WIDE	1789
Patients who developed a blood clot while in the hospital and did not get treatment that could have prevented it	Prevention and Treatment	Blood Clot	VTE-6	--

Table 3 shows the measure that was removed from MONAHRQ 5.0 Build 2 because it is no longer supported by CMS.

**Table 3. Retired CMS Measure Removed from MONAHRQ 5.0 Build 2**

Measure Name	Topic	Subtopic	Identifier	NQF #
Doctors should give surgery patients a prescription for treatment to prevent blood clots from forming after certain surgeries. Blood clots can lead to heart attacks and strokes and are one of the most common problems that people have related to surgery	Surgical Patient Safety	Recommended Care After Surgery	VTE-1	0218

## 2.2 Ratio Measure—Comparison Methodology Updates

The methodology has been updated to use the upper and lower confidence interval (CI) rates upon which to base comparisons, rather than using the exact average (e.g., a single data point). This new approach factors in the range of confidence and is more statistically appropriate.

## 2.3 Data Element Mapping Process Improvements During the Data Import

During the dataset import process, Host Users need to map the data elements in their input file to the MONAHRQ database fields. The MONAHRQ 5.0 Build 2 software has a more user-friendly and efficient interface that allows a Host User to drag-and-drop each data element next to the corresponding MONAHRQ data elements to complete the mapping process.

## 2.4 Ability To Use Custom Regions for Utilization Reports

MONAHRQ versions prior to 5.0 Build 2 computed hospital utilization data, such as the number of discharges and charge and cost data at the county level. MONAHRQ 5.0 Build 2 introduces an expanded utilization reporting path that allows Host Users to also create custom regions, and then generate utilization reports aggregated at the region level.

## 2.5 Refresh of Benchmark and Base Data

MONAHRQ 5.0 Build 2 is compatible with the May 2014 release of the CMS Hospital Compare database. It also includes updated benchmark and base data, including—

- National Utilization Benchmarks
- Geo Codes: ZIP and FIPS Codes
- Census Data—Area population file
- Dartmouth Atlas Data
  - Lookup\_HRR—List of HRR code numbers and the region title
  - Lookup\_HSA—List of HAS code numbers and the region title
  - ZipcodeAtlas—Map of ZIP Codes to HRR and HAS code numbers
- Clinical Classification System (CCS) labels

## 2.6 Improved Content for the Website Template Designed for the Consumer Audience

MONAHRQ 5.0 Build 2 includes updated and refined website content related to cost reports and measure definitions. The updates in the MONAHRQ-generated website and reports designed for consumers now offer plain language descriptions and definitions.

# 3 MONAHRQ® 5.0 DESKTOP APPLICATION FEATURES

MONAHRQ® 5.0 Build 2 continues to reflect the complete redesign of the desktop application and generated website that debuted in MONAHRQ 5.0. These elements are significant improvements over MONAHRQ 4.1 and earlier versions. The desktop application now allows Host Users to store and manage datasets, reports, measure, and website configurations in libraries. The generated website offers a new layout and reporting pathways for ease of use by website users. These features—included in both MONAHRQ 5.0 Build 2 and MONAHRQ 5.0—are described below.

## 3.1 Datasets Library

The Datasets Library contains all of the data input files that the Host User uploads into MONAHRQ. MONAHRQ enables Host Users to upload multiple input files for each dataset type to—

- **Easily manage data:** Host Users can reuse the same data to update an existing website or create a new website instead of reloading the same data each time. Host Users can also store multiple versions of the same input data file to cover different time periods. The Dataset wizard provides a seamless import experience, regardless of the type of input data file. With the Dataset wizard, the Host User can add, manage, and delete datasets to keep the website up to date.
- **Define and customize regions and hospitals:** Host Users can manage hospital geographic regions by mapping and creating geographic regions to organize the hospitals on their websites. Host Users can also select the region type (e.g., Health Referral Region or Health Service Area) and the States with whom they will be working.

### 3.2 Measures Library

The MONAHRQ Measures Library contains all of the measures supported by MONAHRQ and used for reporting. The Measures Library enables Host Users to—

- **Easily manage MONAHRQ-supported measures:** Host Users can customize the information associated with each measure for use in one or more websites. Host Users can also customize how measures appear in the reports by creating and assigning topics and subtopics. This capability will make it easier for a Host User to manage multiple websites.
- **Customize measure names:** Host Users can provide alternate names for a measure, such as a “plain language title” or “clinical title.” Customizing measure names will allow Host Users to create websites that are appropriate for different audiences.
- **Customize measure calculation attributes:** Host Users can customize measure calculation attributes within MONAHRQ. The measures’ calculation attributes available for customization include the Benchmark Value, Numerator and Denominator Suppression Thresholds, and the scale size of the analytic values displayed for the measure results. For example, customizing measure calculation attributes will allow a Host User to choose to report and display unique State benchmark data provided by the Host User, instead of using the mean value automatically calculated by MONAHRQ.
- **Customize measure display attributes:** Host Users can configure the display attributes for each measure, including the description, the footnotes, the score direction (i.e., whether higher or lower is better), and other attributes. Customizations made by the Host User are reflected in their MONAHRQ-generated website.
- **Edit and create topics:** Host Users can create a new topic if existing topics do not sufficiently classify the measure the Host User is adding. Host Users can also edit topic attributes, attach or assign a subtopic to a parent topic, and delete topics available for the website’s measures.

### 3.3 Reports Library

The Reports Library displays all of the reports available within MONAHRQ. The Reports Library enables Host Users to—

- **Easily manage reports:** MONAHRQ allows Host Users to preview sample reports. Host Users can also create custom reports by modifying the attributes of standard MONAHRQ reports.
- **Add a Hospital Profile Report:** Host Users can include a profile report for each individual hospital. The Hospital Profile Report includes the hospital’s address and a map of the location, the website URL, the type of hospital, and the number of beds. In addition, the Host User may choose to include results for measures of patient experience and quality, as well as utilization measures including Medicare charge and payment information for the top 25 Diagnosis Related Groups (DRGs) at that hospital.

### 3.4 Websites Library

Multiple websites can be created and stored in the Websites Library. Host Users can use the Websites Library to—

- **Easily manage multiple websites:** Host Users can create websites faster than previously possible with earlier versions of MONAHRQ. Host Users can save changes made to any MONAHRQ website template, then use that customized template with a different data source to create another website.
- **Customize websites:** Host Users can use the simple Website Creation component to—

- Customize the website design, including the font style, to match an existing website or meet their own branding guidelines
- Customize the “About Us” text on the site to describe their own organization
- Run a dependency check to identify errors that need to be fixed before the website is ready to be published
- Apply more robust search engine optimization strategies to add or update how the web pages are organized for better indexing
- Configure the website to gather information and analytics to understand others’ use of the MONAHRQ-generated website

### **3.5 MONAHRQ-Generated Websites**

When Host Users set up their MONAHRQ-generated website, they will need to define their intended audience for the website they are generating, as MONAHRQ provides audience-specific reports. The audience type defines the type of End User who will use the MONAHRQ-generated website and related reports. The two types of audiences are: consumers (the general public, consumers, and patients) and all audiences (e.g., providers, policymakers, researchers and analysts, and others who will have more knowledge of medical and statistical concepts and terminology.)

#### **Website Design and Theme**

Host Users can customize the look and feel of their MONAHRQ-generated website using the Website Theme section. Host Users can configure the theme, color schemes, and fonts, and upload logos and home page images.

#### **Reporting Paths and Hierarchy**

During the website generation process, Host Users select the reporting paths to display in their websites; the data or results that appear in the reporting paths come from the datasets that the Host Users choose when generating a website using MONAHRQ. Once the website is generated, the people who use the published website or reports (End Users) can follow two main paths to access the reports: (1) Quality Ratings, and (2) Utilization. In the Quality Ratings path, the End User can follow two subpaths: (1) Conditions and Topics, and (2) Hospitals. Within the Utilization path, the End User can follow two subpaths: (1) Service Use, and (2) Avoidable Hospital Stays. Each of these subpaths includes further breakdowns as well. MONAHRQ-generated websites are designed to make these subpaths available to the audiences for whom the reports in the subpaths are relevant and are likely to be understandable. In the two main pathways, the End User can further refine and customize their reports by expanding the topic areas, selecting county-level reporting within geographic parameters, or selecting rates of services for inpatient medical conditions and procedures.

### **3.6 MONAHRQ Installer**

MONAHRQ uses a wizard-based installer for an efficient installation process. This installer bundles the prerequisite software components needed to run MONAHRQ and will install any missing components if needed. It also allows updates to be installed to an existing version of MONAHRQ without having to replace or reinstall the entire software application.



## 4 SYSTEM REQUIREMENTS

### Operating Systems:

- Windows® XP 32- and 64-bit
- Windows Server® 2003 or higher 32- and 64-bit
- Windows® 7 32- and 64-bit
- Windows® 8 32- and 64-bit

### Disk Space:

- Microsoft® .NET Framework 4.0—850 MB for 32-bit systems, 2 GB for 64-bit systems
- Microsoft® SQL Server® 2008 R2 Express—2 GB for 32-bit and 64-bit systems
- MONAHRQ application—350 MB
- MONAHRQ data—Requirements vary depending on the volume of data regarding hospital discharges and ED treat-and-release records. Approximately 100 MB is typical, but up to 4 GB may be required.
- MONAHRQ-generated web pages—Typically 500 MB but up to 4 GB may be required

Although MONAHRQ can run on most desktop computers, the following specifications are recommended:

- 2 GHz processor speed
- 2 GB of memory

### Software Requirements:

- Microsoft .NET Framework 4.0.
- Microsoft SQL Server, 2005 or higher. If the Express Edition is used, Microsoft SQL Server Express Edition 2008 R2 is recommended due to its larger database size limit. This software may reside on a remote server.

## 5 INSTALLATION

For instructions on installing MONAHRQ® 5.0 Build 2, please refer to Chapter 2 of the *MONAHRQ® 5.0 Build 2 Host User Guide* and the *MONAHRQ® 5.0 Quick Start Guide for Host Users*.

## 6 TECHNICAL ASSISTANCE AND CONTACTS

Should you have any questions or comments about MONAHRQ, please contact the MONAHRQ® team via email at [MONAHRQ@ahrq.gov](mailto:MONAHRQ@ahrq.gov).