Introduction

Homeless Management Information Systems (HMISs) have become standard fixtures in a growing number of communities around the country. With HMISs, jurisdictions can gather data on homelessness and service interventions over time. These longitudinal data can then be used to directly improve the effectiveness of the homeless shelter and service delivery system. HMISs are critical tools for policymakers seeking information about the extent and nature of homelessness as well as the effectiveness of resources invested to address the problem. While the expansion of HMISs presents an opportunity to affect homelessness at the local, state, and national levels, communities should be aware that in this rapidly changing technological environment, the quality of potential HMIS solutions varies.

This Consumer Guide is part of a national technical assistance (TA) initiative helping communities plan for, select, and implement HMISs that meet local service delivery and data collection objectives, as well as national policy goals.

What is a Homeless Management Information System (HMIS)?

HMISs are computerized data collection applications designed to capture client-level information over time on the characteristics and service needs of men, women, and children experiencing homelessness.¹ An HMIS may be an off-the-shelf product, a vendor-developed database application, or a community's homegrown software system. It is not a set of stand-alone program-specific databases designed to capture only information about clients served in one particular program. An HMIS is designed to aggregate client-level data to generate an unduplicated count of clients served within a community's system of homeless services – often referred to as the Continuum of Care (CoC).² HMISs can also cover a statewide or regional area, and include several CoCs. For those included in an unduplicated count, the HMIS can provide data on client characteristics and service utilization.

Congressional Direction

In 2001 Congress directed the U.S. Department of Housing and Urban Development (HUD) to collect unduplicated data on the extent of homelessness at the local level [*H.R. Report 106-988; Senate Report 106-410*]. The House Report states:

Local jurisdictions should be collecting an array of data on homelessness in order to prevent duplicate counting of homeless persons, and to analyze their patterns of use of assistance, including how they enter and exit the homeless assistance system and the effectiveness of the systems. HUD is directed to take the lead in working with communities toward this end, and to analyze jurisdictional data within three years. Implementation and operation of management information systems (MIS), and collection and analysis of MIS data, have been made eligible uses of Supportive Housing Program funds.

¹ The University of Massachusetts developed this definition. HUD has approved and adopted it.

² Continuum of Care (CoC) is a HUD term used to define a coordinated approach at the local level to deliver services to persons who are homeless. A CoC generally includes a full range of emergency, transitional, and permanent housing and service resources to address the various needs of homeless persons.

HUD's Plan of Action

HUD summarized its strategy in a report to Congress³ as follows:

The Department is implementing a comprehensive strategy that is responsive to congressional direction on improving the quality of data and analysis on the extent and nature of homelessness in the nation. In light of the goal set by Congress, HUD will work with jurisdictions to implement HMISs as a means of collecting unduplicated counts of the homeless and to analyze service use and the effectiveness of local systems in reducing homelessness. HUD will build a nationally representative sample of HMISs to prepare an Annual Homeless Assessment Report. A comprehensive TA program is being developed to facilitate the implementation and operation of HMISs and to develop a national sample. Finally, HUD plans to develop a homeless client-level Annual Progress report system for its McKinney-Vento programs using, to the maximum extent possible, data from local HMISs.

HUD began systematically working with local CoC jurisdictions on HMIS implementation in 2000, when HMIS was made an eligible Supportive Housing Program (SHP)⁴ use. Through the annual CoC funding application, HUD has gathered information on each jurisdiction's progress towards HMIS implementation. Based in part on this local information, HUD identified the need for targeted local technical assistance to help communities meet the 2004 congressional deadline.

In 2002, the Department of Housing and Urban Development (HUD) entered into a TA contract with Aspen Systems Corporation (Aspen) to provide HMIS assistance. Through the TA initiative, HUD is funding a range of activities nationally, including the provision of general and specialized HMIS trainings on planning, funding and implementing an HMIS. Information on HUD's strategy to improve information on homelessness at the local and national levels, as well as valuable HMIS TA materials are available on HUD's website: http://www.hud.gov/offices/cpd/homeless/hmis/index.cfm.

Overview of the Consumer Guide

This guide presents the results of the HMIS solution review – an effort to assess the different functional and technical capabilities of a wide range of HMIS solutions. The term "HMIS solution" is used to describe the various HMIS software packages and related services (e.g. customization, data migration, data hosting, training, and support) that are reviewed within this guide. Correspondingly, the term "solution provider" is used throughout this document to describe the developers and vendors that offer HMIS software applications and related services. The guide is organized into five chapters, a glossary, and appendices:

• Chapter One: HMIS Technology Elements and Architecture Options outlines the technology elements and options that are referenced throughout the guide.

³ Report to Congress: HUD's Strategy for Homeless Data, Collection, Analysis and Reporting, August 2001, p. 10.

⁴ The Supportive Housing Program (SHP) is a grant program funded through HUD's CoC competitive funding process. SHP funds can be used to support HMIS implementation and operation costs, either as a stand-alone supportive service only function, as a supportive service cost shared by all SHP grant recipients, or as an administrative cost pro-rated for reporting expenses. See the SHP grant guidelines on HUD's Web Site (www.hud.gov) for more information.

- **Chapter Two: Evaluation Framework** briefly defines the evaluation activity terms used to compile the information for Chapters Three and Four.
- Chapter Three: Solution Reviews presents general product descriptions and indepth review results for each HMIS solution.
- Chapter Four: Comparative Analysis offers a side-by-side comparison of the overall results, sorted by individual evaluation activities and specific evaluation criteria. Results are presented in narrative, tabular, and bar graph formats. As well, comparative cost of operations analysis based on four community examples is provided.
- Chapter Five: Overview of Other HMIS Solutions briefly describes the HMIS solutions that responded to an initial survey, but were not selected for an indepth review.
- The Glossary provides brief definitions for the technical terms used throughout this guide.
- Appendix A: HMIS Evaluation Methodology explains, in detail, the various methods employed in the review to identify, select, and assess the HMIS solutions.
- Appendix B: Master List of Identified HMIS Solutions identifies the 29 solution providers who received the initial HMIS survey.
- Appendix C: Description of Corporation Types describes five corporation types solution providers can be classified as, as defined by the Internal Revenue Service (IRS).

References are provided in the text for materials available on HUD's website previously referenced.

HMIS Solution Review Methodology

The HMIS solution review process began in October 2001 and concluded in September 2002. The review team designed a multi-phase process to identify and assess the many different HMIS solutions currently available on the market. The review team was comprised of 10 CSP staff members, interns and consultants. Review team members offered both program knowledge and technical competence to provide both depth and breadth to the results. To ensure independent, unbiased assessments, six team members were hired specifically for this project and did not have prior experience with any of the HMIS solutions being assessed. This process included four primary phases (see Table 1).

Phases	Description
Phase One—Initial Provider Survey The initial provider survey included information on over 280 specific topics related to software, support, consulting, training, pricing, technology, and company operations.	Fifty-seven solution providers were identified from a variety of sources. Based on review team inquiries, the field of solutions was pared to 29 providers that were believed to offer functional HMIS systems. The initial survey was sent to all 29 providers (listed in Appendix B), of which 21 responded. These 21 comprised the universe for additional consideration in this HMIS solution review.
Phase Two—Selection of Indepth Review Universe Eight selection criteria were used to determine if a solution was appropriate for the indepth review. Criteria included the capacity to handle case management over time; having specific demographic data fields; and the ability to provide an unduplicated count. HMIS solution providers were required to have an existing product and at least one multi-agency customer at the time of the survey. The specific criteria are outlined in Appendix A.	The eight selection criteria were applied to the initial survey responses; subsequently, each of the providers was contacted to verify the accuracy of the results. Eleven of the 21 providers were determined to be eligible for the indepth review. Results from the initial survey for the other 10 solutions are reported in Chapter Five.
Phase Three—Indepth Review The indepth review consisted of customer visits, provider visits, and a lab evaluation. Standards for the lab evaluation were developed for evaluation environments, activities, inputs (including a fictitious lab community and profiles for specific agencies, programs, clients and staff members), and evaluation criteria.	Each of the 11 solutions selected for indepth review were evaluated using a range of methods to gain a holistic perspective on each system. The lab evaluations represent the most intense evaluation component, from which all numerical scores reported in this guide were derived.
Phase Four —Compilation and Analysis of Results The results for the site visits were compiled in narrative form organized by the same evaluation structure used in the lab evaluation. The lab evaluation results were analyzed in tabular and graphic formats.	Results for each solution compiled from all three methods are reported individually in Chapter Three. Comparative results for all 11 solutions are provided in Chapter Four.

Table 1: Solution Evaluation Process⁵

How the Information Should Be Used

This guide is intended to help communities meet the congressional directive for data collection on homelessness and HMIS implementation. It provides useful information to assist readers during the HMIS selection process. **This guide does not endorse or recommend specific solutions, nor should it be used exclusively to select a system.** Communities' operational needs, system requirements, technical capabilities, and financial resources vary; therefore, communities must make their own independent HMIS decisions. Readers should use this guide to understand the range of products that are available and to narrow their search to those systems that have features and performance consistent with local requirements. The HMIS industry is a relatively new field within computer application technology. Some solution providers are entering the HMIS arena from other related technology fields, while others are beginning their businesses with HMIS solutions. As well, users' expectations and system functionality are also rapidly evolving. Because the field is so dynamic, one challenge for this project has been determining

⁵ The complete review process is described in much greater detail in Appendix A. The evaluation activities, criteria and scoring methods are described in detail in Chapters Two and Three.

how to analyze a constantly changing field; the solutions described in this guide are in constant flux as solution providers upgrade their systems. As the information presented here reflects the system at the time of review, information should always be verified. For instance, solution providers not considered eligible at the time of selection may later offer products that would have met the indepth review criteria. Therefore, systems should not be discounted based solely upon the information provided here.

For assistance with the broader HMIS implementation process, readers should review *Homeless Management Information Systems: Implementation Guide* available on HUD's HMIS Web site at http://www.hud.gov/offices/cpd/homeless/hmis/index.cfm. The Implementation Guide examines the overall implementation process. In order to gain a comprehensive picture of how to design, select, and implement an HMIS, communities should use both the Implementation Guide and this Consumer Guide.