Comprehensive Usage of Data Analysis in Developing and Supporting 10-Year Plan

Homelessness in Quincy/Weymouth, Massachusetts

- Population[1]
  Quincy - 91,622
  Weymouth - 53,272
  99% urban
  1% rural
- Homeless Point in Time Count as of January 30, 2007: 256

Introduction

The Quincy/Weymouth Continuum of Care (CoC), located just outside of Boston, Massachusetts, has adopted the use of local evidenced-based practices to drive program and policy design. The CoC has made a commitment to the collection and analysis of longitudinal data, captured primarily in the local Homeless Management Information System (HMIS), to gauge the effectiveness of homeless programs and inform progress on their local 10-Year Plan to End Chronic Homeless[2]. The use of local HMIS data has directly impacted both changes in policy in the CoC and the development of housing to meet specific homeless client needs.

Specifically, Quincy is using their HMIS data to develop and support the goals stated in their 10-year plan to measure progress on four outcomes-driven initiatives:

- Reduce inappropriate discharges;
- Decrease cost of emergency services;
- Increase housing; and
- Improve regional collaboration and support.

Documenting Utilization

All agencies in the CoC are using the state-sponsored HMIS application. The majority of providers have been entering data for more than three years, with the largest shelter in the CoC recording data on clients dating back to 1998. To ensure quality data to support their commitment to data-driven decision making, Quincy also has implemented a regular audit protocol whereby program data is frequently monitored through comparisons to regularly performed point-in-time counts.

Preliminary analysis of data on clients served throughout the CoC found that about one-third of the homeless population were single individuals with a disability who used services over a long duration. This population, commonly defined as chronically homeless, also was found to consume more than half of the CoC's shelter resources. Based on these analyses, the CoC identified the need for more targeted solutions to better address the needs of the chronically homeless, and set about developing and implementing policies and housing to meet those needs.

Maximizing Accountability and Cost Savings

Using the four identified outcomes in the 10-year plan as a guide, Quincy's leadership council reviewed data on both the quantity and characteristics of the population they were serving

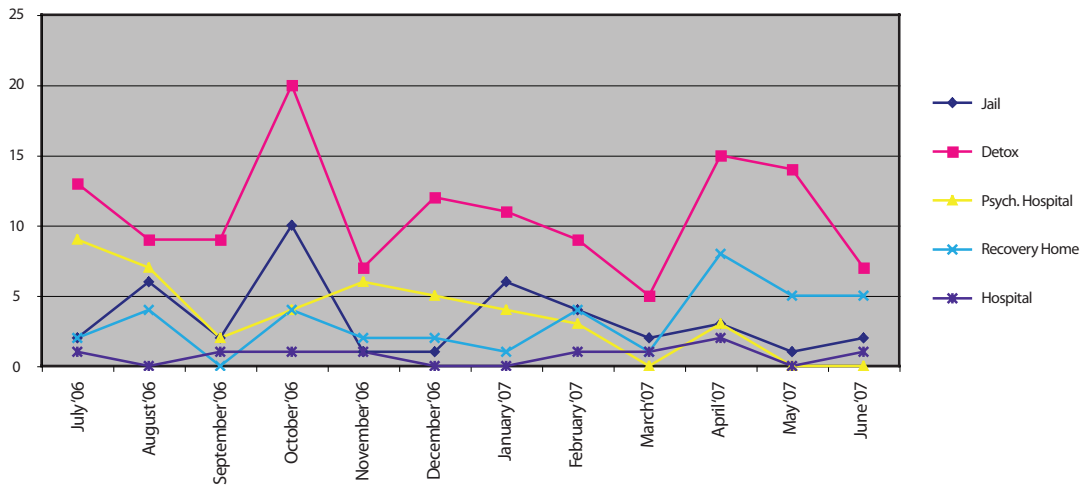
[1] 2007 Population Estimates, U.S. Census Bureau; www.factfinder.census.gov
[2] For a full copy of the report visit: www.ich.gov/slocal/plans/quincy.pdf

(i.e. the chronically homeless) and assessed trends in utilization to better understand how those persons were using services throughout their community.

Reducing Inappropriate Discharges

To address the goal of reducing inappropriate discharges, Quincy's providers documented prior state institution experience for all homeless persons in the CoC (see Figure 1). Analyses of the data found, 14 percent of clients had been involved with Youth Services, 22 percent with Social

FIGURE 1: INAPPROPRIATE DISCHARGES BY FACILITY TYPE



Services, and 49 percent with the Department of Mental Health. Armed with this information, the CoC approached the appropriate state institutions to present the findings and discuss discharge planning processes and policies. These discussions resulted in a change to discharge policies from state systems of care and funding for a new Housing First pilot project for young adults aging out of state systems.

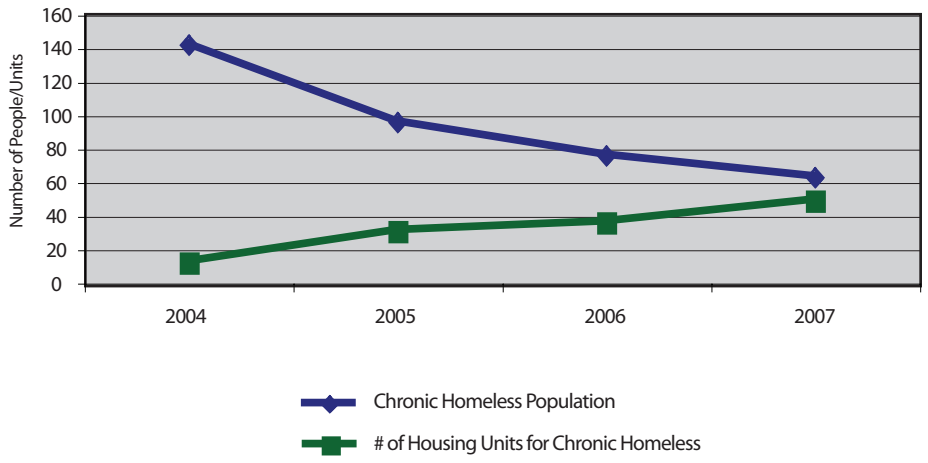
Reducing Other Costs

In an effort to lower the cost of emergency shelter services, the CoC implemented a Housing First pilot project, which included a formal evaluation[3] component that was prioritized towards chronic shelter users. The evaluation followed 12 women and evaluated the cost of shelter for each client before and after placement in the pilot project to determine if implementing a Housing First model within the CoC was more cost-effective than housing clients in emergency shelters. The evaluation determined that the annual cost of shelter per client was $14,600 pre-Housing, compared to $11,195 per client placed in the Housing First Pilot project. The resultant savings of $3,405 per client annually translated to an overall savings of almost $41,000 per year for those 12 women alone. The initial evaluation did not assess other potential impacts of the Housing First placements, such as client's perception of self-worth, increased income, or treatment stability. However, with the increase in the number of housing units available, the CoC was

[3] Quincy Housing First Interim Report 2006 http://www.mccormacktmp.umb.edu/csp/publications/QuincyHousingFirstInterimReport2006.pdf

able to show that Housing First was more cost-effective in their community, and as a result a 35-bed emergency shelter was closed due to lack of need.

FIGURE 2: CHRONIC HOMELESS POPULATION VS. HOUSING UNITS



The CoC also collaborated with the Quincy Medical Center to review hospital and emergency service use of the same 12 women pre- and post-12 months of housing placement. This review demonstrated both decreases in emergency room visits (a decrease from 22 percent while in shelter to 11 percent while in housing) and inpatient stays (dropped from an average of 44 days pre-placement to 4 days post-placement). Quincy Medical stated that the cost savings (based on actual billings) to the community from decreased usage estimated approximately $5,000 per client, or a total of $60,000 for the 12 women evaluated. Quincy compared these findings for accuracy to the Medical Expenditure Panel Survey (MEPS), a set of large-scale surveys of families and individuals, their medical providers, and employers across the United States[4] overseen by the Agency of Healthcare Research and Quality (AHRQ). MEPS is considered the most complete source of data on the cost and use of healthcare and health insurance coverage. An estimate obtained from the Medical Care Cost Equation Tool (MCCE) using the pre- and post-placement visits and average stays showed a more conservative savings of $47,124 for the cohort of 12 women — still a considerable cost savings to the CoC and community.

As a tool to assist in making informed determinations of chronic homeless identification and to aid in the cleansing of the data, the CoC also completed an analysis on the accuracy of determination of chronicity by intake workers. Intake workers used a yes/no indicator data element to document client chronicity. Then, to determine chronicity status based on client record detail, Quincy reviewed episodic, length of stay, disability, age, and household type data. To determine an episode, they analyzed entry/exit dates to determine the number and length of stays per client[5]. They used underlying disability information coupled with the U.S. Department of Housing and Urban Development's (HUD) presence of disability indicator to establish disability status, the Date of Birth to filter out clients under 18, and the lack of a household ID

[4] Agency for Healthcare Research and Quality MEPS, http://www.meps.ahrq.gov/mepsweb/
[5] Quincy defined an episode as any point in which there was a break between an exit date and a new entry date for 1 day or more.

as an indicator of individual status. At first glance, the comparison showed that intake workers were extremely accurate in determining chronicity – the aggregate numbers based on the yes/no indicator compared to the counts generated by the system was almost exact. However, when reviewed in greater detail, it was discovered that there was a great discrepancy between the clients the intake workers identified as chronic homeless and those clients whose record detail supported chronicity status. Additionally, the analysis captured clients who became chronic during the reporting time frame who were otherwise not identified through the yes/no indicator. As a result of this analysis, the CoC changed their intake forms to guide workers through the information necessary to accurately determine chronicity, increasing the accuracy of their chronic homeless identification and its underlying data. Agencies now have a better grasp on their chronic count and improved their overall data quality in the process.

Realizing Evidence-Based Policies

Demonstrated above were several examples of how the CoC was able to use evidence-based practices to measure the progress on their 10-Year Plan to End Chronic Homelessness. The Quincy/Weymouth CoC and other CoCs in Massachusetts using both HMIS and non-HMIS data, have also been able to accomplish the following:

- Identify sub-populations needing greater attention;
- Reduce emergency housing and non-housing costs;
- Show a demonstrable improvement in quality of life;
- Ensure the quality of data being reported on;
- Provide the media and funding sources with crucial facts and figures;
- Demonstrate the accomplishment of goals set in the 10-Year Plan;
- Improve the point-in-time counting strategy and reduce turnaround to less than one day;
- Facilitate conversations with state institutions to improve discharge planning; and
- Chart the build up of housing units and the corresponding decline in shelter beds.

Commitment for the Future

The CoC continues their commitment to use data to measure the progress on each of the goals of their 10-Year Plan and provide status updates on progress. The CoC and others in Massachusetts hope to use these and other findings to continue to improve local collaboration and to demonstrate there are solutions to homelessness through accountability and data-driven planning and decision making.

For More Information, Contact:

Matthew Simmonds
Simtech Solutions, Inc.
575 Washington St.
Canton, MA 02021
617-395-6669
matt@simtechsolutions.com

John Yazwinski
Executive Director/CoC Chair
Father Bill's and Mainspring
38 Broad St.
Quincy, MA 02169
jyazwinski@fatherbillsmainspring.org