

HUD is taking the admirable first step of asking communities to put their HMIS data to work through the implementation of eight new *System Performance Measures (SPMs)*. In our work to help regions get these SPMs submitted by the August 15th deadline we have made several observations that we felt were worthy of sharing. These opinions are strictly our own and are being shared with the hope that we can better align our collective efforts in interpreting and executing the goals of the HEARTH Act and Opening Doors.

Insufficient Guidance

It would have been helpful to have answers to the following questions when we first started this process:

- 1) Is the output supposed to be one report or several?
- 2) When are the SPMs actually going to be due?
- 3) How are the results going to be submitted to HUD?
- 4) What are the national benchmarks that we should be emulating locally?
- 5) What data quality issues should regions focus on in preparation for these measures?
- 6) How are regions supposed to know if the vendor coded the report properly?
- 7) How should we be using these measures to help improve upon local practices?

Overly Complicated Business Rules

The complexity of the business rules for these measures is staggering! And, the more complicated the reporting rules are, the higher likelihood there is for mistakes to be made among vendors. This is more problematic than poor data quality as it is a harder issue to identify and correct and can have farther reaching effects. Take a minute to review the specifications found [here](#) to see just how complex the business rules are.

Measures Are Looking at Data of Different Types Together

Family and individual homelessness need to be looked at separately as the dynamics of each are very different. Family homelessness, on average, tends to be of a longer duration but with fewer returns back into the homeless system than that of individuals. Looking at both in unison only clouds the picture. We would encourage regions to look globally at their SPMs but to also look at them by target population (individuals or families) and subpopulation (veterans, chronic, young adults, elders, etc.) to provide context as to what is driving the numbers.

Measures are Skewed by a “Lookback Stop Date”

Using a set Lookback Stop Date of 10/1/2012 will inadvertently cause the average Length of Homelessness to increase as we move further away from that date. We suggest that if there is to be a stop date then it should be a variable based on the start date of the reporting period (ie three years before the report start date) and not a set date.

Reliance on Self-Reported Information

Self-reported information is not as reliable as empirical evidence. A data warehouse with

comprehensive coverage should not need to look at self-reported information of first time homeless (element 3.17.1.A, *approximate start date of homelessness*) as this information can be pulled in from the client's first appearance into the homeless system. There are opportunities to validate other responses such as mental health status by checking if the client has a record in a PATH project; and veteran status by using the VA's SQUARES web service.

Different Data Universe for Different Parts of the Same Report

Measure 2 - Returns to Homelessness is to include data from two years prior to the current period whereas other measures are over the current period. All SPMs with the exception of Measure 4 are to only include data from the Lookback Stop Date of October 1, 2012 forward. Since the first step for most reporting systems is to define the data to be reported over, it would make sense to not force measures with different data universes to have to be run as a single report.

Measures (as Specified) May Adversely Impact System Performance

The way the specs read requires a huge amount of "looping" and is akin to running a query for every day from the Lookback Stop Date of 10/1/2012 until the end of the reporting period. This is to be done for every single client. The results from these 1000+ queries are then to be summarized in order to derive a *total length of homelessness* for each and every client. The same process is repeated for every client with any activity during the reporting period and then the results of each of these processes are then to be averaged. This process can consume a tremendous amount of system resources and may adversely impact the user experience.

Measures Allow for Poor Data Quality to Persist

While we appreciate that data quality is an ongoing struggle, system reporting is an opportunity to put measures and controls in place to fix poor data quality. However, *the reporting logic articulated within the specifications allow for bad data quality to persist*. If vendors code around this poor data for measure 1 then they also should have to code around it for any other report. This is not a sound practice. Examples of this from the programming specifications include...

- *"Bed night dates selected in step 1 can be negated by overlapping HMIS records indicating more definitively that the client is in another type of housing "further along" in the CoC."*
- *"count each date for a client only once even if the client was present in multiple projects on that date."*

Simtech's approach has been to highlight data quality issues so that they can easily be resolved. The [Destination at Exit Audit](#) and the [Overlapping Episodes Report](#) would fix both of these issues

Reliance on Users Entering in a Valid HUD-Assigned CoC Code

This approach ignores the fact that SPMs may be run for other reasons and for other geographies then just the HUD CoC. CoC boundaries will also tend to shift over time as CoCs look to consolidate, or take on regions from a balance of state CoC. This field is often free-form text in a HMIS system which results in mistakes when keying in the data. To avoid this, regions could set

up one project per operating location, and use GPS coordinates for projects that service clients living on the street. Regions can then be determined at report run-time.

No Tools to Check the Work of Vendors

HUD provided [three pages of written instruction](#) to grantees on how to check the work of their vendors. This deviated from the well-received approach of producing HMIS Vendor Test Kits that was used for both the Annual Performance Report and the ESG CAPER. The impact of not having the proper controls in place to ensure the programming specifications are clear and accurate, and the tools to check a programmer's work against, are apparent in the example below. To help ensure accuracy of our own reporting logic, Simtech developed reporting logic both in HomelessData.com and in Excel-based distributed reporting tools and compared the results. Below is an example of matching output from both for SPM #2 – Returns to Homelessness.

Example of Report Output from HomelessData.com for SPM #2

System Performance Measure 2: Returns to Homelessness

	Total Number of Persons who Exited to a PH Dest.	Number Returning to Homelessness in Less than 6 Months	Number Returning to Homelessness from 6 to 12 Months	Number Returning to Homelessness from 12 to 24 Months	Number Returning to Homelessness in 2 Years
Exit was from SO	0	0	0	0	0
Exit was from ES	127	14	6	13	33
Exit was from TH	9	0	0	0	0
Exit was from SH	0	0	0	0	0
Exit was from PH	229	0	0	1	1
Total Returns to Homelessness	365	14	6	14	34

Matching Count Figures Derived Using an Excel Tool*

Exit from...	# Exited to Perm. Housing Destination	# of Clients Returning to Homelessness							
		Less than 6 Months		6 Months to 1 Year		13 to 24 Months		All Returns Within 2 Years	
		Months	%	Year	%	Months	%	Years	%
Street Outreach	0	0	-	0	-	0	-	0	-
Emergency Shelter	127	14	11.0%	6	4.7%	13	10.2%	33	26.0%
Transitional Housing	9	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Safe Haven	0	0	-	0	-	0	-	0	-
Permanent Housing	34	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Rapid Re-Housing	195	0	0.0%	0	0.0%	1	0.5%	1	0.5%
Totals	365	14		6		14		34	

* Rapid Re-Housing was split from Permanent Housing in the Excel Report. We also split individuals from families so that each subpopulation can be looked at in isolation.

Conclusion

Regions may seek to localize the approach taken with the HUD System Performance Measures (SPMs). Items for consideration include...

- Develop a discussion template [such as this one](#) drafted for the City of Springfield, MA to support the work of subcommittees and guide the group towards data-driven decision making.
- Ask the vendor to allow for the SPMs to be run for each target population (youth, veterans, chronic, etc.). As discussed within Opening Doors, regional subcommittees need to be able to focus their remediation strategies on a particular subpopulation.
- Develop mechanisms to increase reliance on empirical evidence rather than self-reported data. Caveats should be articulated when relying on self-reported data for measures.
- Fix the source of the data quality issues whenever possible. Coding around bad data quality is poor practice as it requires the same workarounds to be implemented for every report.
- Review SPMs with context in mind. Additional questions to ask include:
 - What are neighboring regions seeing for results?
 - What were our results for last quarter?
 - How was the data quality then versus now?
 - Can we trust that our vendor's results are accurate?
- Consider the availability of housing stock and other resources as well as the lack of resources in neighboring communities.
 - Are the number of newly homeless impacted by a significant number of people coming to our region from other areas?
 - Should we be reallocating resources? What resources are we missing?
- Use the SPMs to facilitate both discussion and calls for action. Questions to ask when reviewing the SPMs include...
 - Who are the frequent users of services that we should be targeting resources to?
 - Are the results from one subpopulation (i.e. families) skewing the results of another (i.e. individuals)?
 - What data quality issues do we need to overcome?
 - Which projects are missing from our analysis?
 - How can we prevent people from falling into homelessness?
 - Are institutions "dumping" their clients into the homelessness-response system by failing to plan for their exit?
 - What other analytical tools and reports might we add to improve upon our work?