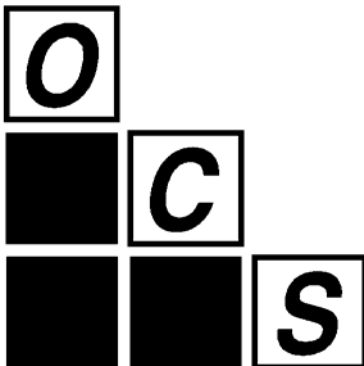


WHITE PAPER
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Building a Roadmap to
Analyze Your Information



OUTCOME CONCEPT SYSTEMS®, INC

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Introduction

OASIS, ORYX™, Adverse Events Reports, benchmarking, HHRGs, HIPAA – if you are feeling overwhelmed by the brave new world of information in home health you are not alone. In the last few years the home health industry has seen an unprecedented explosion of information and information needs. Managers are up to their ears in reports and data. Information is key to improving care and to succeeding in these PPS times, but how do you sort it all out and get to what's useful? This article provides you with a roadmap for looking at information, including what kind of reports you need, where to locate reports that can give this information to you, how often you should be looking at your information, and who should be looking at it within your organization.

What Do You Need To Know?

As agencies invest heavily in technological systems and software, vendors continually add new features to improve their products. The result—potential data overload. While more data can be intriguing to an analyst, an over-worked home health manager may view more data as cause for more headaches. One thing that can help is to narrow the number of possible information searches to the key questions you need to answer to be able to effectively manage your agency. I find that there are four basic questions to which providers are trying to find answers:

1. Is my agency in compliance with federal, state, and local regulations and requirements?
2. Are we able to identify patients with special needs that will require special staffing or higher expenses?
3. Are we making or losing money on our different programs and services?, and
4. Are we providing quality care?

These four questions provide a framework for thinking about what kind of information you need to succeed in the home health industry today. If we were to create a roadmap to sort through all the reports and information available to you, it would include information that helps you:

- Ensure data quality
- Understand your agency's case mix
- Determine the profitability of various programs and services
- Measure the quality of care provided at the agency

Ensuring Data Quality

With the advent of PPS, accurate completion of the OASIS assessments has become of paramount importance, since it drives reimbursement for your agency. Preventing problems in data accuracy is key to saving time and money. Promoting inter-rater reliability is an important part of ensuring that the OASIS assessment is done accurately. Many agencies have chosen to ensure consistency among clinicians by conducting audit visits – doing joint visits with a clinician and completing the OASIS SOC to see if it is being completed accurately. Other methods include describing a scenario and seeing how clinicians score it. Some agencies have found that it is useful to focus on training between nurses and PTs, since it has been found that scores sometimes come out quite differently depending on who is doing the scoring. Some agencies train clinicians using videotapes, and some use role-playing. Regardless of the method, this can

be fairly time consuming and expensive. Nevertheless, preventing a problem is well worth the training you put into it, since the cost of trying to correct a mistake can be much more expensive than preventing one.

For those who are responsible for data entry, understanding how to use the error messages generated by the software verifications is an important part of ensuring data accuracy. These verifications usually flag problems with OASIS answers that violate a rule, such as a birth date that is after the SOC date, or questions that have not been completed. Some verification packages are much more detailed in picking up mistakes than others. Also, failing to repair and compact the database, while seemingly simple, is amazingly common and one of the greatest contributors to data problems with the OASIS database.

Identifying a data accuracy problem is not always easy, but several things can help. Many agencies review the assessment for accuracy prior to data entry. While this does increase the time before submitting a RAP, it can pay off in more accurate HHRGs and HIPPS codes. Reviewing a daily listing of unverified assessments and tracking back to the clinician can also help to identify data problems. The final validation reports from the states offer you information on errors in the OASIS assessments, and you can correct these by looking up the “Error Messages and Description Guide” on the HCFA website.

Benchmark reports can help you identify areas where your agency appears to be different from the compare group overall. Some agencies report that by investigating their higher than average incidence of Unexpected Deaths on their Adverse Event report, they were able to identify that their nurses were not coding the M0 question related to unexpected death correctly. Reviewing your case mix benchmark reports for variations between your agency and the norm can help point out areas where you may have a data accuracy problem. You should review these reports with a critical eye toward noting if there are any surprises in the report. If it “just doesn’t seem right” it could be that you have a data accuracy problem, rather than a real difference in patient population.

Fixing a data problem once you have identified it depends on knowing the correct “Edit Type” to use in the software. Consult your user manual to find out the best way to correct an assessment that was submitted to the state.

Understanding Case Mix

Case mix reports give a snapshot of your agency, usually at the start of an episode of care. Reviewing these reports helps you understand what types of patients you are treating, your top service lines by diagnosis, the average case weight of your patient population, and the average length of stay. Reviewing a case mix benchmark report can help you understand how your patient caseload is different from that of other agencies.

Case mix is useful information to have for program planning where you want to know what kinds of services you should be providing, what your staffing needs are, and what educational needs your patients have that will impact your budget. Being able to monitor changes in your case mix over time can help you flag changes in your referral base, changes in your payer mix, and can help you anticipate changes in revenue.

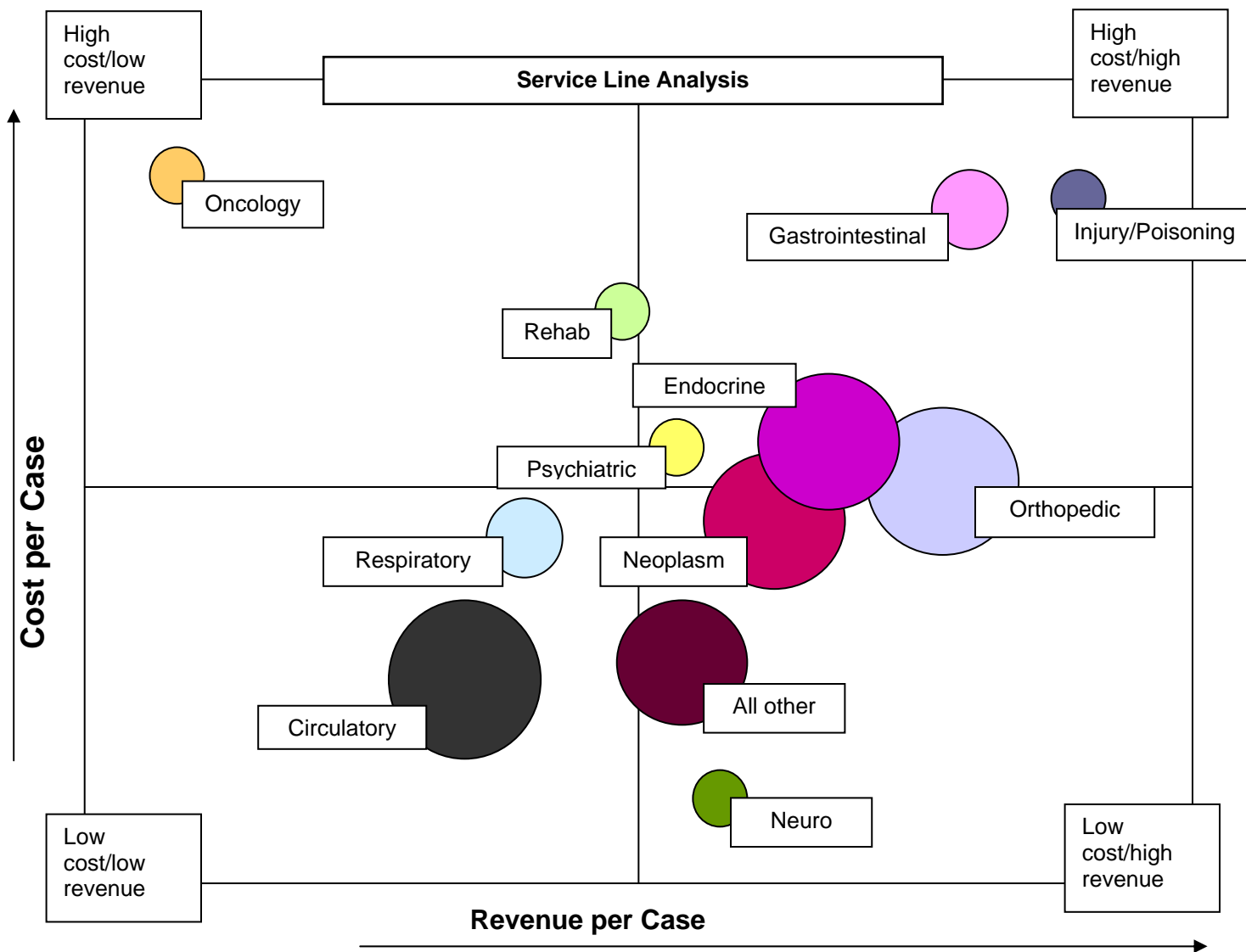
Determining Profitability

In order to determine if you are making or losing money on your services, first you must do a little research into your expenses. You will need to develop an estimate of the cost per visit for each of your disciplines. We suggest using the last six months of data, and adding up the salary and

benefits for your RN staff, PTs, OTs, home health aides and other staff. Next, you need to find the number of visits for each of these disciplines over the same time period. Your finance department should be able to provide you with this information. To determine your cost per visit you need to divide the overall expense per discipline by the total number of visits for each discipline. The number you arrive at is the number you will use in your calculations of the expense portion of the profitability ratio.

Next, you will need to identify the ratio of cost to charges for your non-routine supplies. HCFA has identified the recognized list of non-routine supplies and your finance department should be able to provide you with the cost of these supplies as a percent of charges. There are several relatively inexpensive software tools that you can get to help you project your profitability, by specific patient or by some aggregation of patients. For example, you will want to be able to identify the number of visits by HHRG, or by diagnosis. Ultimately, you will want to be able to identify those programs or service lines where you are making or losing money. It can help to put these into a 2X2 chart as in **Figure 1** below:

Figure 1

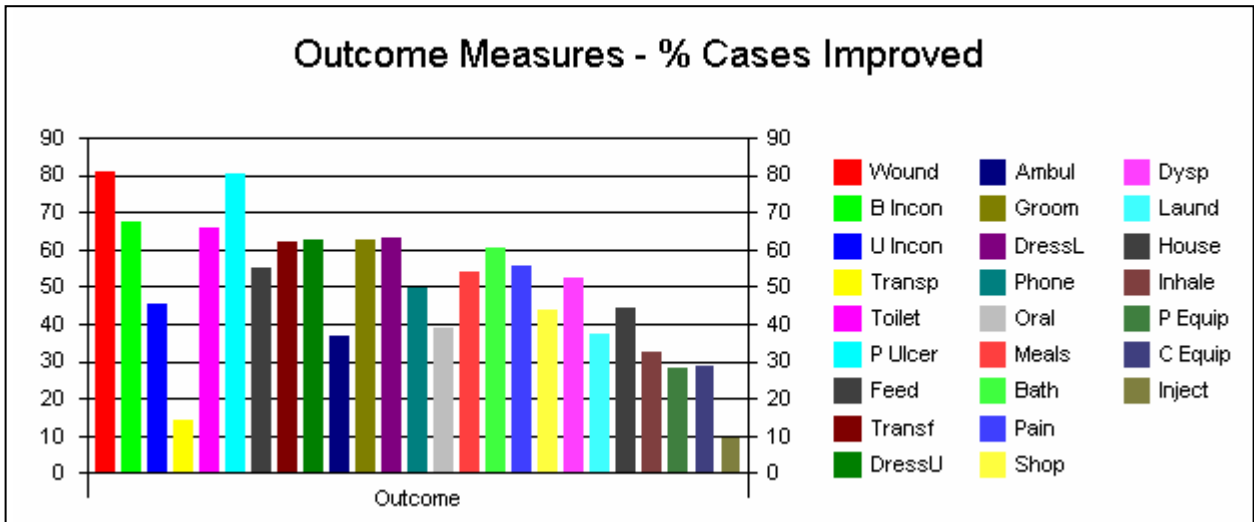


In this diagram, the bubbles represent the agency's programs or services, and the size of the bubble indicates the patient volumes for each of those programs. Those programs that are in the upper left quadrant are high cost and low revenue and are therefore not profitable programs. The agency will need to decide if they want to continue to offer these programs. The lower right quadrant shows those programs that are currently very profitable for this agency. They will want to identify ways to expand these programs, or, at the very least, protect them from their competitors. The programs in the upper right quadrant are currently high cost but high revenue. These programs represent an opportunity for the agency. If they can identify ways to lower their costs for these programs and move them into the lower right quadrant, the agency will overall be more profitable.

Quality of Care

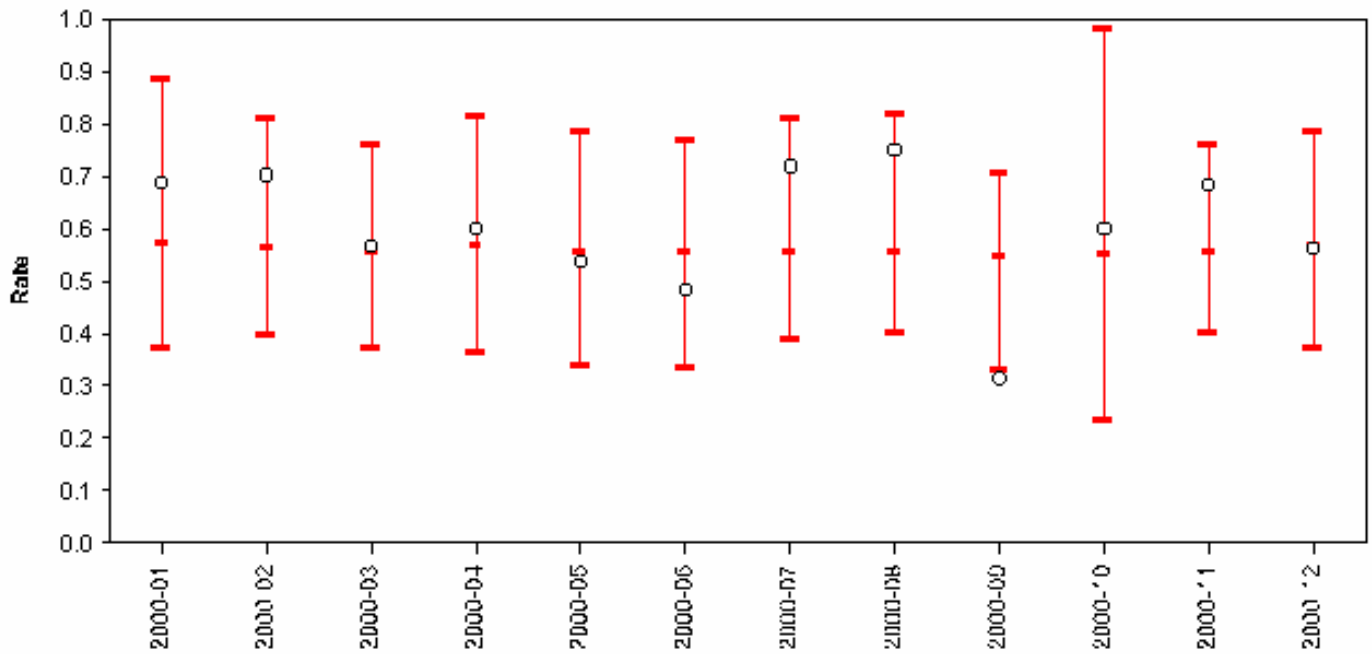
The OASIS assessment offers a valuable standardized tool for measuring outcomes in home health. An outcome is measured by comparing the score on the OASIS assessment at the start of an episode compared with the end. Patients can improve, stabilize, or decline, according to how the specific M0 question is answered. An example is M0700 – Ambulation/Locomotion. A patient at the highest level of functioning at start of care can not improve, nor can a patient at the lowest level of functioning at start of care decline. A patient who stays the same or improves is said to stabilize, which, for many home health patients, is considered to be a positive outcome. It is often helpful to show outcome measures in graphic form, as in **Figure 2** below:

Figure 2



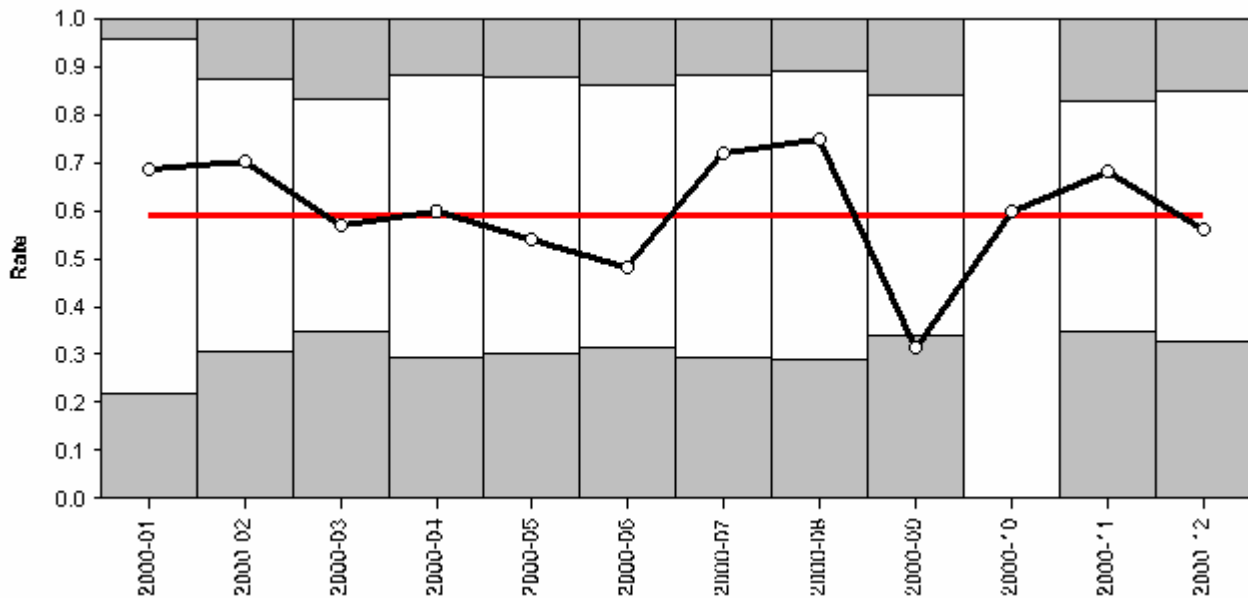
Comparing your agency's outcomes with those of your compare group through the use of benchmarking reports can be helpful to point out areas where improvement may be needed. **Figure 3** below shows an agency's outcomes each month for pain improvement compared to the national compare group.

Figure 3



The expected range for the compare group is depicted by a bar in the shape of the letter "I". As long as the agency's performance, shown by the small "o", is within the expected range, the variations in outcomes may be due to chance. The ninth month shows the agency with an occurrence outside of the expected range. This is something they will want to investigate further to see if it was as a result of a data problem or the result of a problem in care.

Figure 4



The chart in **Figure 4** is a control chart for improvement in pain for the same agency. The red line represents the agency mean for the measure and the black bar shows the agency's experience for each month. The black line is sometimes above and sometimes below the mean, however, in the ninth month, is below the lower control limit. Again, the agency will want to investigate what happened that month to understand if there was a problem in care.

Developing a Roadmap

The following charts show the types of reports you will want to view for each area of the framework, where to find them, who needs to see them and how often should you look at them. Please note these are suggestions only. Each agency will want to develop its own customized roadmap based on this outline.

Data Accuracy Reports				
Report	Purpose	Where to Find It	Who Needs to See It	How often
Unverified Assessments	Lists unverified assessments for a given time period, and clinician responsibilities.	OASIS reporting software Clinical records	Clinical Directors	Daily
Final Validation Reports	Lists results of the exported files and any errors that need correction.	State	Data entry coordinators Clinicians	As often as you export
Completed Assessments	Lists assessments for a given time period, patient ID, patient name, HHRG, Case Weight, and HIPPS code.	OASIS reporting software	Clinical manager Finance manager QI Director	Daily/weekly/ monthly
Case Weight Report	Lists case weights for patients for a given time period, by clinician.	OASIS reporting software	Clinicians	Daily/weekly/ monthly
Assessment Summary	Shows results of OASIS assessment for selected patients.	OASIS reporting software	QI Director	After each assessment or daily
Other Ad Hoc Reports	Can be built to meet additional needs for information.	OASIS reporting software	Clinical or Finance Directors	As needed

Case Mix Reports				
Report	Purpose	Where to Find It	Who Needs to See It	How often
HCFA's Case Mix Reports	Shows a snapshot of your Medicare and Medicaid patient population compared with national database.	HCFA's website	Clinical Directors QI Directors	Annual at first, then quarterly
OCS Case Mix Benchmark Reports	Shows a snapshot of your entire patient population compared with national, state, regional, system or type of agency.	OCS' Website	Clinical Directors QI Directors	Quarterly
OCS-OASIS Desk Top Case Mix Reports	Shows a snapshot of your entire patient population or a subset, for a given time period or trended over time.	OCS-OASIS Desk Top Reporting	Clinical Directors QI Directors	Monthly/quarterly /annually
Other, e.g. STAT2	Whatever the system's ad hoc reporting allows.	Clinical Software	Clinicians	As needed

Profitability Reports – used in calculation of expense/visit and overall profit margin				
Report	Purpose	Where to Find It	Who Needs to See It	How often
Utilization reports	Identify the number of visits per patient/diagnosis/HHRG for a given time period	General ledger, payroll system, OASIS reporting software	Finance Clinical directors	Monthly/quarterly
Expense Reports	Identify the expenses for various disciplines: RN, PT, OT, HH Aide Identify supply costs	General ledger, payroll system	Finance	Quarterly
Assessments Report	Identifies the HHRG and HIPPS codes for a given set of patients for a given time period.	OASIS reporting software, billing systems	Finance	Monthly/quarterly
Reimbursement calculator Reports	Calculates the expected revenue for a given patient, diagnosis, or HHRG for a given time period	Reimbursement calculator software	Finance Director Clinical Director	Monthly/quarterly or as often as needed

Quality of Care Reports				
Report	Purpose	Where to Find It	Who Needs to See It	How often
HCFA's Adverse Event Reports	Identifies incidence of Adverse Events, each of which must be investigated by the agency.	HCFA website	Clinical Directors QI Director	Quarterly
OCS Benchmark Outcome Reports	Shows clinical outcomes for your agency compared with national, state, regional, or agency specific norms for a given quarter.	OCS website	Clinical Directors QI Director	Quarterly
OCS Desktop Outcome Reports	Shows clinical outcomes for your agency or for a subset of your patient population for a given time period.	OCS-OASIS desktop reporting	Clinical Directors QI Director	Monthly/quarterly /annually
Patient Outcome Reports	Show outcomes for an individual patient at each assessment point so you can monitor trends.	OCS-OASIS desktop reporting	Clinicians	As needed for QI projects
ORYX Reports	Shows outcomes on specific indicators compared with specific norms for each month.	Performance measurement systems OCS website	Clinical Directors QI Director	Quarterly

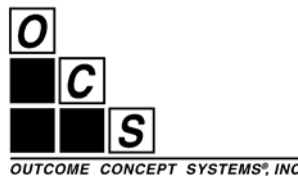
Recommendations

1. There is an old proverb that says, “to the man with a hammer, every problem looks like a nail”. Determine what questions you need to answer in your agency before spending time running reports and committing even more time to analyzing them. Avoid having a solution that is looking for a problem, and think hard about what problems you need to solve at your agency. Make sure that your hunt for information leads you to reports that provide you with the information you need to answer your most pressing questions.
2. Identify, in your agency, where you can find the kind of information you need. Many organizations are surprised to find out the reporting capabilities available to them in their existing software programs. Talk to your vendor about the reporting capabilities in their products, and get them to provide you with in-depth training in the reporting features. Attending user groups can provide you with real-life applications of the information available to you through your systems.
3. Develop a process for getting the reports that you need on an ongoing basis – and for analyzing them. Decide who will run the reports, how often they need to be run, and who needs to see them. Use an electronic calendar tool such as Microsoft Outlook to automate the process, and to provide you with visual (and audible!) reminders for what to expect to see when.
4. Take it one step at a time and don't get bogged down by information overload. Focus on the critical questions first, and identify the easiest way for you to get access to the information you need. It may help to break down the roadmap into sections, focussing one quarter on information that leads to data accuracy; and then focussing the next quarter on profitability, and so on.

Remember, if you don't know where you are going, any road can take you there. Understanding your ultimate goal – better information to manage your agency – and developing a roadmap to get you there will save you time, money and aggravation in the long run.

About Outcome Concept Systems

Outcome Concept Systems, Inc (OCS) is the pioneer in home care outcomes and benchmarking. OCS produces clinical documentation and software technologies to assess and quantify the effects or outcomes of home health services. OCS provides agencies with the tools they need to capture and graph outcome information, while allowing them to assess the costs associated with the outcomes achieved. OCS also owns the nation's largest and most comprehensive home care benchmark database, with more than 700 agencies actively submitting data. OCS' clients are given access to this database, in order to benchmark their agency's outcomes and utilization against system, state, regional and national norms, in addition to organizations with similar characteristics. OCS' performance measurement systems meet both CHAP and JCAHO accreditation.



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