


Office of Developmental Programs

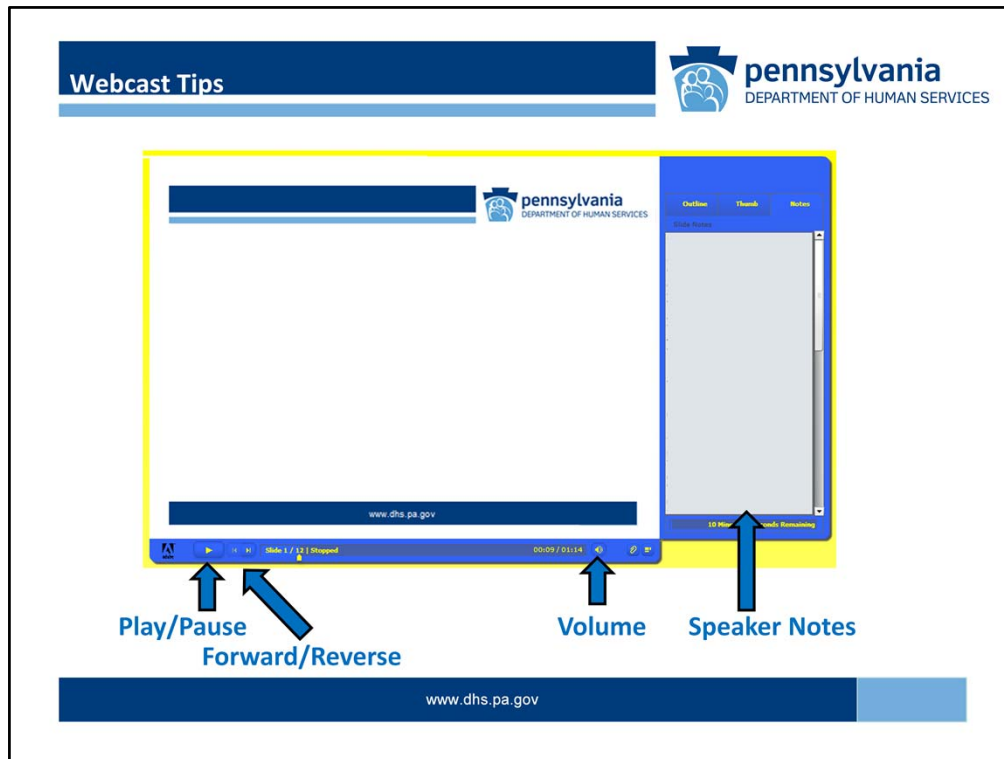
**Module 102, Using Information and
Tools for Quality Management, Part 2**

Course #: ID-2017-44



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Music only.




This webcast includes spoken narration.


To adjust the volume, use the controls at the bottom of the screen. While viewing this webcast, there is a pause and reverse button that can be used throughout the presentation.

The written version of the narration appears to the right of the screen.

Objectives: Module 102, Part 2



- Analyzing data
- Displaying data
- Reporting data



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Welcome to Module 102, Part 2, the second of a two-part webcast focused on Using Information and Tools for Quality Management.


This Using Information and Tools for Quality Management webcast is part of ODP's broader series of lessons covering ODP's core philosophies, operational components and business practices as well as the second in a series of lessons within ODP's QM Certification Program. Through this program, ODP staff and stakeholders expand their understanding of QM and their skills in applying QM to support and enhance the lives of individuals with an Intellectual Disability and/or Autism. If you are new to ODP, you and your supervisor may want you to revisit this webcast and complete ODP's QM Certification Program at a future time.

The objectives for Module 102, Part 2 include learning how to:


Analyze data
Display data, and
Report data

Let's talk first about analyzing data.

Data Analysis Tips



- Review and correct data before beginning your analysis
- Leave enough time for analysis
- Keep the analysis simple




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You will want to make sure to review and correct the data as needed before you begin your analysis. This will enable you to be confident in the results, as well as saving you time and effort if an error is discovered later in the process.


But also make sure you leave enough time for the analysis itself. And, keep the analysis simple.

Please note that you do **not** need to apply data analysis to all data. Some data simply need to be tracked and readily available to provide to regulatory agencies and others upon request. Other data need to be monitored to inform decision-making and to ensure good performance is sustained. In this way, the organization is able to quickly pick up and proactively address any undesirable variations.

Analyzing and Displaying Data



- Highlight useful information
- Reach conclusions
- Support decision-making



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The goal of data analysis is to highlight useful information, reach conclusions, and support decision-making. During this process, you must make important choices about which information should be emphasized, minimized, or even left out of the analysis.

Information you have collected that contains numbers is quantitative data.


If the information you collected consists of words, then it is qualitative data.

It is important to remain focused on the questions you are trying to answer and the relevance of the information to these questions.

Analyzing and Displaying Data



- Tables
- Pie Charts
- Bar Charts
- Pareto Charts
- Line Charts



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There are a variety of quality management tools that can be used to analyze and display data. These tools include:

- Tables
- Pie Charts
- Bar Charts
- Pareto Charts, and
- Line Charts

Data Table

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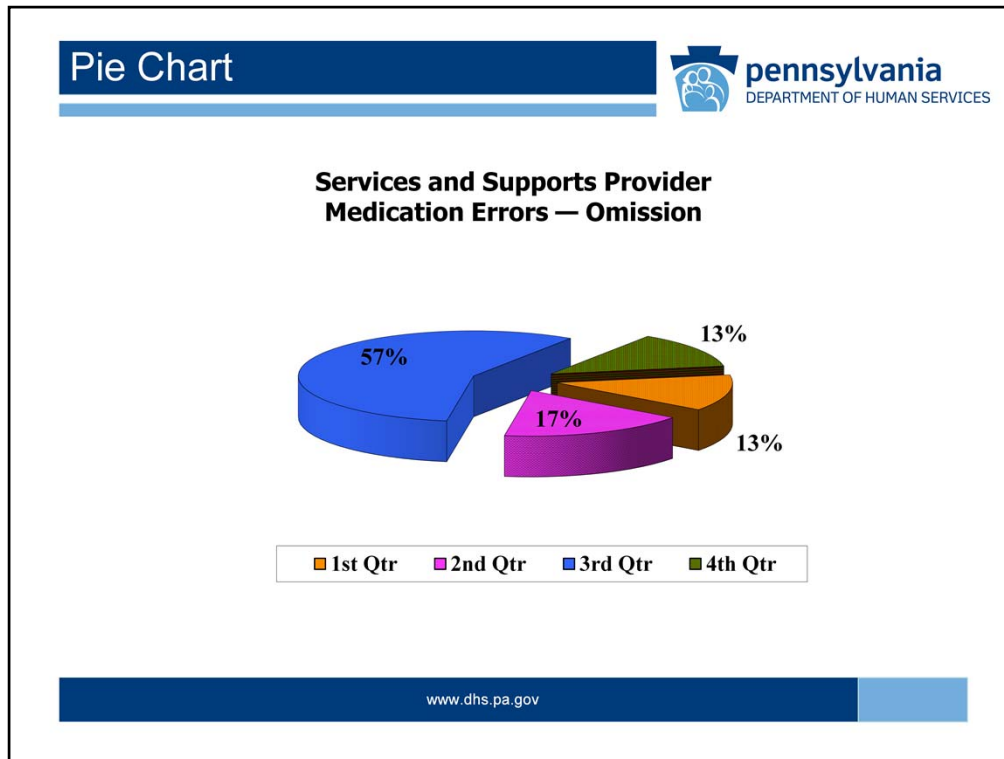
Consolidated Waiver

Data pulled 10/26/12 Data Warehouse IM Cube - No State Centers, no individuals w/o county of registration	2010-11		2011-12	
	15,587		15,727	
Abuse	1,820	7%	1,869	7%
Death	249	1%	259	1%
Emergency Closure	69	0%	99	0%
Emergency Room Visit	9,260	37%	9,885	38%
Fire	57	0%	46	0%
Hospitalization	3,487	14%	3,632	14%
Individual To Individual Abuse	4,613	18%	4,808	18%
Injury Requiring Treatment Beyond First Aid	602	2%	648	2%
Law Enforcement Activity	1,185	5%	1,231	5%
Missing Person	212	1%	202	1%
Misuse of Funds	565	2%	547	2%
Neglect	1,503	6%	1,506	6%
Psychiatric Hospitalization	986	4%	914	4%
Reportable Disease	48	0%	46	0%
Rights Violation	273	1%	298	1%
Suicide Attempt	22	0%	19	0%
TOTAL	24,951	100%	26,009	100%

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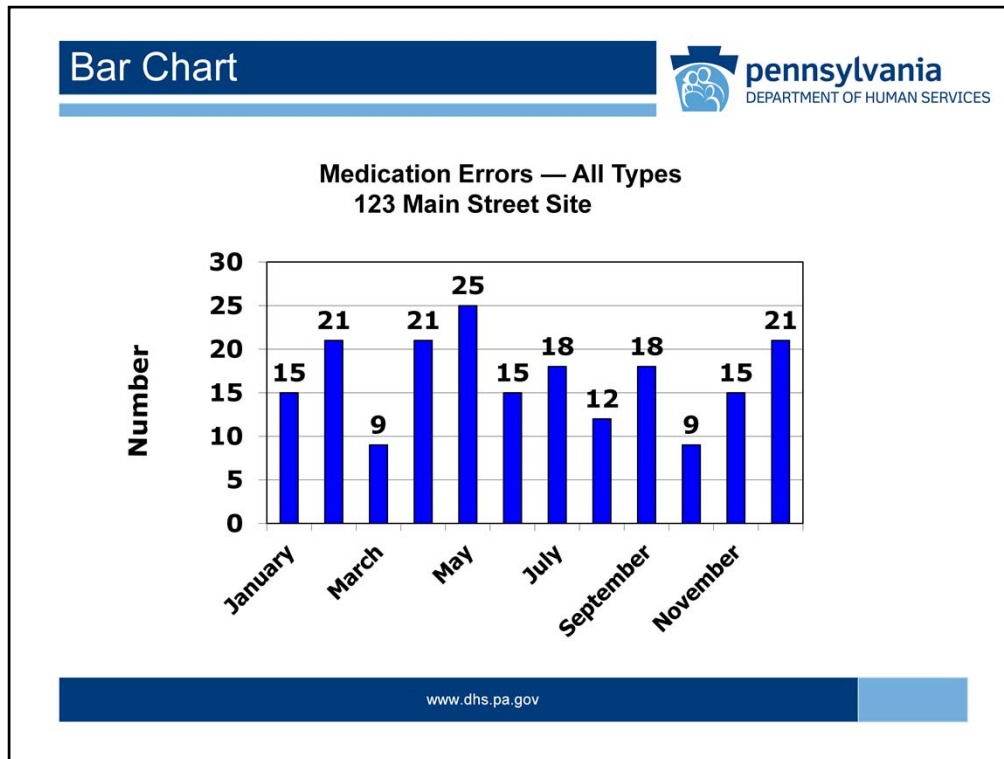
In this slide, we see an example of data being displayed in table form. The categories in this data table include types of incidents in the Consolidated Waiver for Fiscal Years 2010/2011 and 2011/2012.

A data table helps you organize all your information in one place and is often used to create lists of items with categories.



An example of a Pie Chart is shown on this slide. This Pie Chart displays a provider's percent of medication errors by omission for each quarter. Analysis shows a significantly higher percentage of medication errors in the 3rd quarter. This enables the organization to focus on what might have been different in the 3rd quarter and take action accordingly.

- Pie charts provide the advantage of functioning as a visual aid to help look at statistical information and examine and interpret the data. Using different colors, pie charts divide information into sections resembling pie slices. Each slice is accompanied by a percentage and the size of the slice changes accordingly.
- Pie charts use percentages to illustrate quantities. The effectiveness of pie charts for examining percentages lies in the viewer's immediately understanding what you intend to communicate.

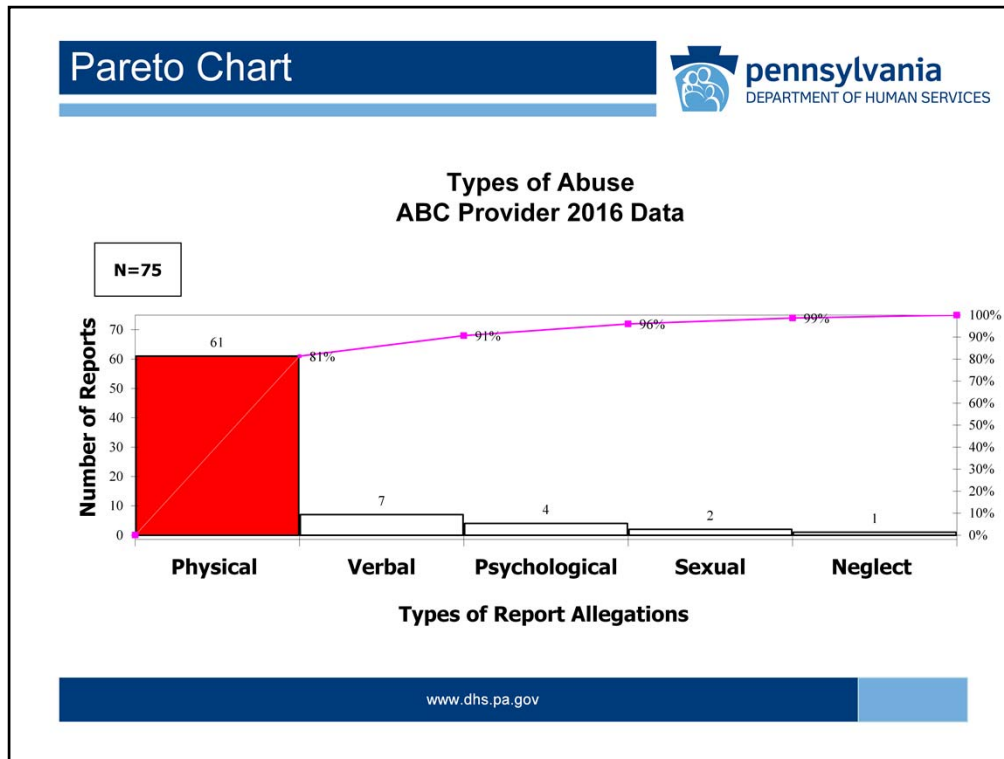


An example of a Bar Chart is shown on this slide. This Bar Chart displays the number of medication errors of all types for each month for the 123 Main Street Site. Analysis of this monthly data shows relatively little fluctuation; however, it would be helpful to examine the data more closely, looking at additional factors regarding specific types of medication errors, to better identify opportunities for improvement.

Bar Charts show a record in column form so, over a period of time, comparisons of the recorded information can be clear to see.

Bar Charts:

- Summarize a large data set in visual form
- Clarify trends better than do tables
- Estimate key values at a glance
- Can be easily understood, and
- Provide information for predicting patterns

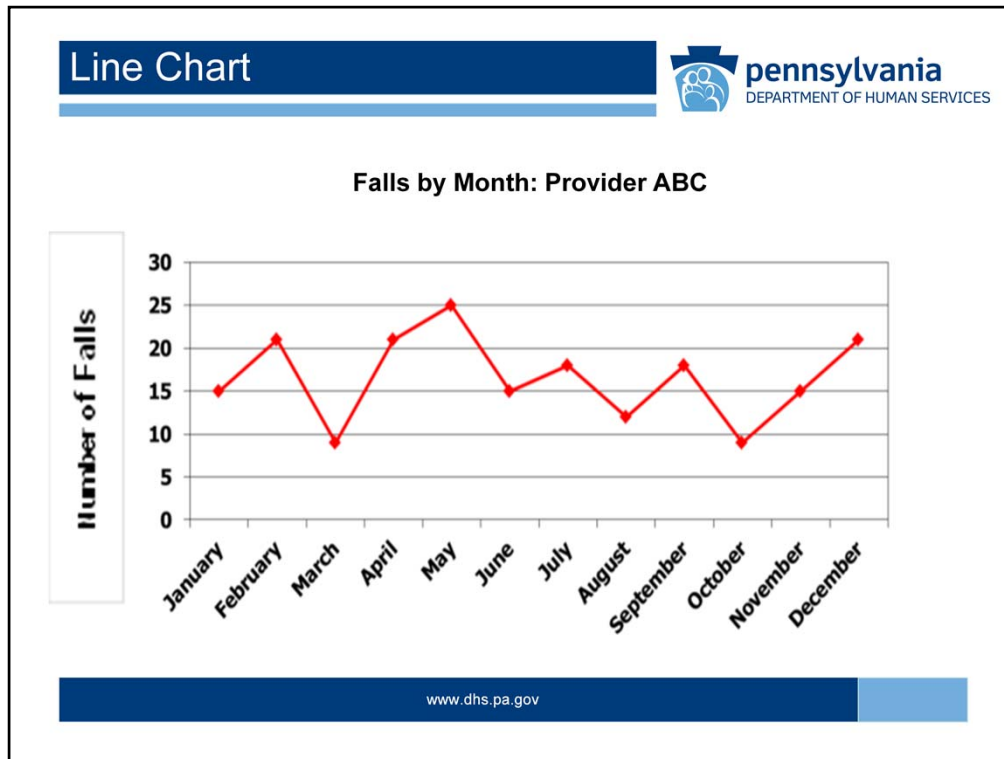


This slide shows an example of a Pareto Chart. This Pareto Chart displays types of abuse report allegations for ABC Provider in 2012. Analysis shows that physical abuse allegations were the most prevalent during this reporting period. Based on this information, the organization should focus its resources on further examination of circumstances surrounding these reported allegations of physical abuse.

This chart reflects the proven Pareto principle: 20% of the sources cause 80% of the problem.

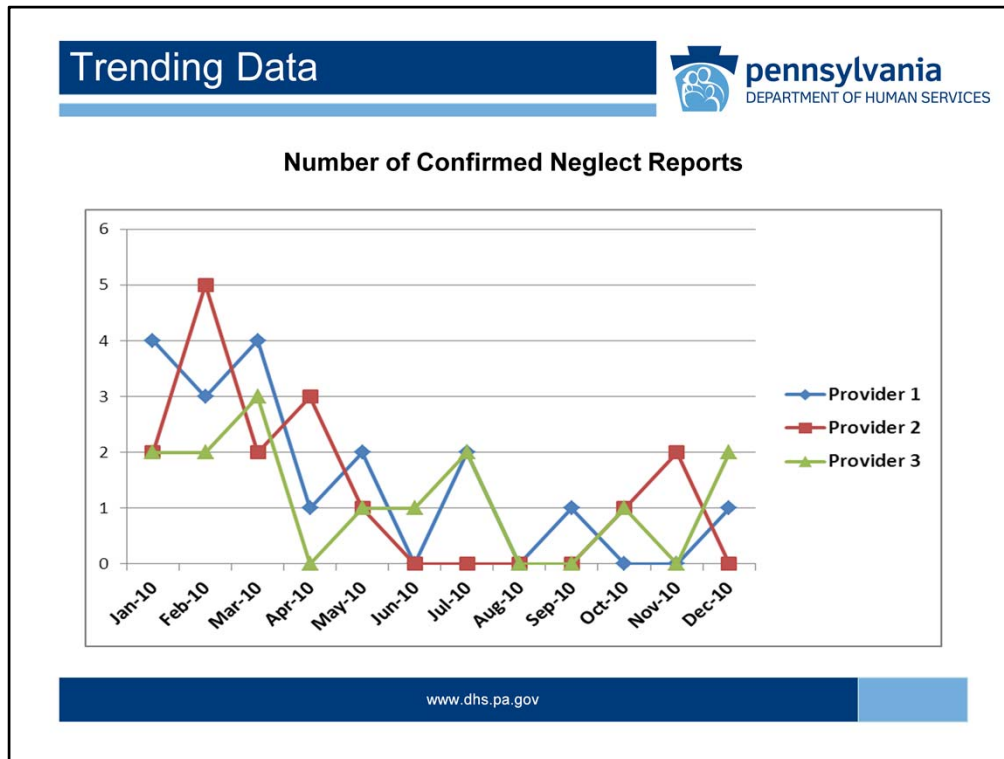
Key applications of the Pareto Chart also include:

- Studying different problems or variables
- Arranging data into categories
- Ranking each category by importance, and
- Looking for the *vital few* causes, not the *trivial many*



An example of a Line Chart is shown on this page. This chart displays the number of falls by month at Provider ABC for an entire year.

Line Charts, also known as Line Graphs, display information as a series of data points connected by straight line segments. It is a basic type of chart common in many fields. A line chart is often used to visualize a trend in data over intervals of time. Thus, the line is often drawn chronologically, as in the case above.



Regardless of the type of tool you choose to use, one of the important aspects of data analysis is looking for patterns and trends over a period of time. When analyzing data for trends and patterns, be sure you have enough data points to review. For instance, include at least 12 months of data whenever possible. In the above example, we see the results of tracking three providers relative to Confirmed Neglect Reports each month. The overall trend shows a decrease over the course of the year.



Trending data also helps us to understand variation in the process being measured. To understand what variation means, we need to first recognize that there is always variation in data. Take, for instance, something as simple as the daily temperature or as complex as the success of a surgical procedure.

However, variation can be viewed in two different ways:

Either as an indication that something has changed over time, as detected through trending of data, or as random variation that does not mean a change has occurred.

Types of Variation

- **Common Cause**
Stable, predictable
- **Special Cause**
Not stable, not predictable



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That is why understanding the nature of the variation is paramount in decision-making about improvement efforts.


To further explain variation, let's discuss two types of variation in patterns:

Common Cause Variation occurs in every process. A process with common cause variation is stable and predictable. An example of common cause variation could be noting the time it takes you to drive to work everyday. Your daily trip takes the same amount of time, give or take a few minutes.

Special Cause Variation is not part of the usual process. The variation is due to special circumstances. This type of variation in the process is not stable and cannot be predicted. The variation can have a positive or negative effect on a process. Understanding which effect the variation has on a process will help an organization determine the direction it needs to proceed. Using our same scenario, your typical daily trip to work is extended by 30 minutes one day because you came upon an accident.

It's best to avoid a knee-jerk reaction to the identification of a special cause. In our example, for instance, changing the route you drive to work because an accident occurred on one day is not warranted, and may result in an adverse outcome such as extending your drive to work time overall.

What Next?



You've developed performance measures,
collected, displayed, and analyzed data ...


Now it's time to develop a report.

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We tend to spend most of our time developing a measurement, collecting, displaying, and analyzing data, but spend little time in disseminating the results of the evaluation to the appropriate audiences.

Even the most rigorous data analysis can lose its impact if presented or reported in an ineffective manner.

Data Reports




- Effective visuals
- Findings using concise language
- Description of follow-up activities



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Good data analysis reporting requires an appropriate format that uses effective visuals and communicates findings in clear, concise language. Data analysis results should be organized in such a way that the audience is able to find the most important information easily. This means presenting findings first and fleshing out details in the body of the report.

During the data analysis process, you may conclude that progress has been made in achieving an objective or that you are not on track because of identified barriers. Based on this information, follow-up activities should be described in the report about how you plan to sustain achievement and continue progress or what will be done to overcome the identified barriers.

Report Template		
		
Name of Report		
Name of Entity:	Date:	Submitted by:
Focus Area:		
Objective:		
Performance Measure and Data Source	Findings and Analysis	Plan-Do-Check-Act (PDCA) Cycle Follow-up
www.dhs.pa.gov		

Let's look at an example of a data report template.

In the example, you see that relevant information is listed in the top sections of the report. What we would like to focus on, however, are the three columns labeled *Performance Measure and Data Source*, *Findings and Analysis*, and *Plan-Do-Check-Act (or PDCA) Cycle Follow-up*.

The performance measure and data source should be listed in the first column.

The *Findings and Analysis* column should incorporate the data and data analysis. In this section, you would display available data using an appropriate tool such as a bar chart or line graph. Beneath the data display should be a written explanation about what the data mean. Are you on track to reach your objective? If not, why not? Have you identified barriers in achieving your objective?

And finally, the *PDCA* column should describe follow-up activities about how you plan to sustain achievement and continue progress or how barriers, if present, will be addressed. As you may recall from training Module 101, PDCA is the four-step model used by many organizations, including ODP, to carry out change. Just as a circle has no end, the PDCA cycle should be repeated again and again for continuous improvement.

A data report can be formatted in various ways but should always, at a minimum, include the components described above.

Employment Report							
Employment Workgroup - 2 nd Qtr Report FY 11/12							
Performance Measure	Findings and Analysis						PDCA Cycle Follow-up
# of people who have paid work Data Source: Employment Tracking Excel Spreadsheet	Center	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
	X	113	113	113	112	113	110
	Y	45	45	43	43	42	42
	Z	147	149	147	147	147	148
	Total	305	307	303	302	302	300
The target objective to increase the number of people with paid work by 1%, to 305, was not achieved. By the end of this quarter, the centers had 300 people participating in the employment workforce. The reasons for this include an aging and declining center population, and a number of those employed being transitioned to the community.							
Teams will examine vocational interests and potential increases in employment opportunities at ISP 90 day as well as annual reviews.							
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On this slide is an actual quality management report developed by ODP's State Centers' Employment Workgroup. The report has been consolidated and abbreviated for space considerations but, as you can see, it includes the important components of Performance Measure, Findings and Analysis, and PDCA Cycle Follow-up.

The Performance Measure section indicates that what we want to look at is the "number of people who have paid work." This is a Quality Improvement (QI) Measure, and the objective is to "increase the number of people who have paid work by 1%." In this case, the target for the workgroup is 305 people who have paid work.


The Findings and Analysis section shows the data collected since the start of the Fiscal Year, including the 2nd Quarter which is the focus of this report. The data are displayed in a table; however, it could also be displayed in a Line Chart, Bar Chart, etc., for different visual effects. Under the Table is an explanation of the data. In this case, the objective was not achieved and the reasons are provided.

The PDCA Cycle Follow-up section states what will be done to address the situation. In this case, vocational interests will be examined at 90-day intervals as well as annually.

This format assists the reporter in organizing and displaying the data and results clearly and concisely, and provides the audience with a compact visual aid for understanding the contents.



Everyday Lives: Values in Action
Information Sharing and Advisory Committee (ISAC)
Recommendations, Strategies, and Performance Measures



2016

<https://www.myodp.org/mod/page/view.php?id=11946>

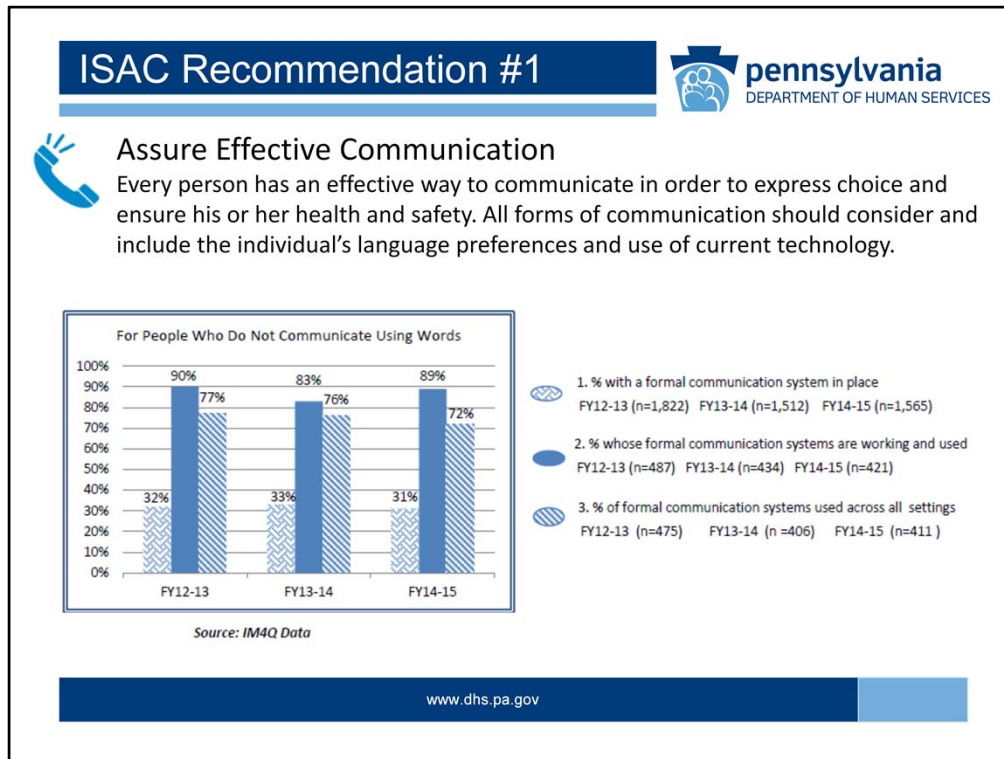
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An organization has a need to communicate broadly about its Mission, Vision, Values, and priorities using a report of its performance at a system level. As we discussed in an earlier Module, one way ODP achieves this communication of aggregate data is through its report on Everyday Lives: Values in Action ISAC Recommendations, Strategies, and Performance Measures, first disseminated in December 2016. Access this report on MyODP.org, *Everyday Lives Publications*, by using the link displayed on this slide.



In preparing this document, ODP and the Information Sharing and Advisory Committee (ISAC) reviewed and analyzed available performance data from multiple data sources. Based on their findings and analysis, the group discussed and agreed upon a list of priorities for improvement. The next step was to choose measures demonstrating baseline performance statewide in achieving each priority. Using quality management data sources and tools we've discussed in these Modules, ODP and the ISAC plan to continue to collect, display, and analyze performance data in each priority area over time to evaluate and disseminate our system's progress in applying improvement strategies.

Let's look at some examples of baseline measures ODP and the ISAC members chose to disseminate statewide performance.



Assuring Effective Communication was identified by ODP and the ISAC as the first priority, Recommendation #1, because every person must be able to communicate effectively in order to express choice and to ensure his or her health and safety. The performance measures chosen by the group to establish baseline data are:

Of people interviewed who do not communicate using words,

- the percent who have a formal communication system in place,
- the percent of those whose formal communication systems are working and used,
- and the percent whose formal communication systems are used across all settings.

Data to inform these performance measures is gathered using one of ODP's major data sources described previously, Independent Monitoring for Quality, or IM4Q. As you may recall, IM4Q is a structured interview process conducted by teams of individuals with disabilities and their families. This data collection methodology also provides an example of how a random, representative sample of individuals enrolled in ODP's programs is interviewed each year in order to understand system performance.

The bar chart included in ODP's 2016 ISAC Report shows carefully selected results in this area for FY12-13, FY13-14, and FY14-15. In FY14-15, of the people interviewed who do not communicate using words, 31% had a formal communication system in place. Of those who had a formal communication system in place, 89% had systems that were working and used, and 72% had systems used across all settings.




Let's consider another example. Locate Recommendation #3 in your copy of the ISAC Recommendations, Strategies, and Performance Measures Report. ODP and the ISAC chose Increasing Employment as a major priority, Recommendation #3, recognizing that employment is a centerpiece of adulthood and that the benefits of employment for people with disabilities are significant and the same as for people without disabilities.

In gathering and displaying baseline data for all of us to understand how well the system is performing in this area, data from the National Core Indicators (NCI) data source was used. As we've discussed previously, these data are gathered through Pennsylvania's IM4Q interview process.


Once again, data from three fiscal years are displayed in this bar chart. Notice that the source of the data is clearly identified as the NCI PA Adult Consumer Survey. The measures presented show that in FY14-15, 15% of the people surveyed had a paid job in the community, 31% would like to have a paid job in the community, and of those who would like a paid job in the community, 24% had an employment goal in their individual support plans.

Through the sharing of this information, ODP and the ISAC foster alignment across all those who can influence this outcome—ODP staff, individuals, families, advocates, Administrative Entities, Supports Coordination Organizations, Providers and other interested parties—who are encouraged to work together at the same time to achieve positive results.

ISAC Recommendation #11



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Increase Community Participation

Being involved in community life creates opportunities for new experiences and interests, the potential to develop friendships and the ability to make a contribution to the community. An inter-dependent life, where people with and without disabilities are connected, enriches all of our lives.

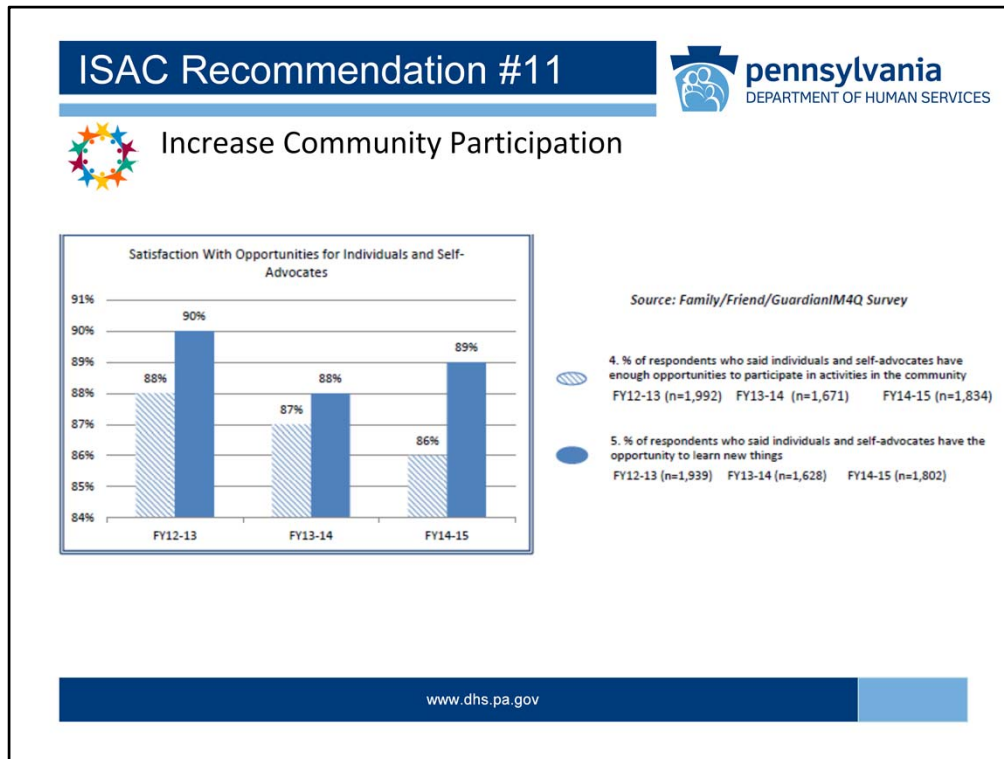
2. Weekly Participation in Community Activities Harris Poll Comparisons					
	Harris 2010: People Without Disabilities	Harris 2010: People With Disabilities	Independent Monitoring 2013	Independent Monitoring 2014	Independent Monitoring 2015
Visit with friends, relatives, and neighbors	65%	54%	54% (n=5,485)	51% (n=4,938)	50% (n=4,949)
Go to restaurant	41%	20%	43% (n=5,456)	44% (n=4,960)	43% (n=4,956)
Go to worship	28%	24%	27% (n=5,318)	27% (n=4,661)	28% (n=4,765)

Source: IM4Q Data

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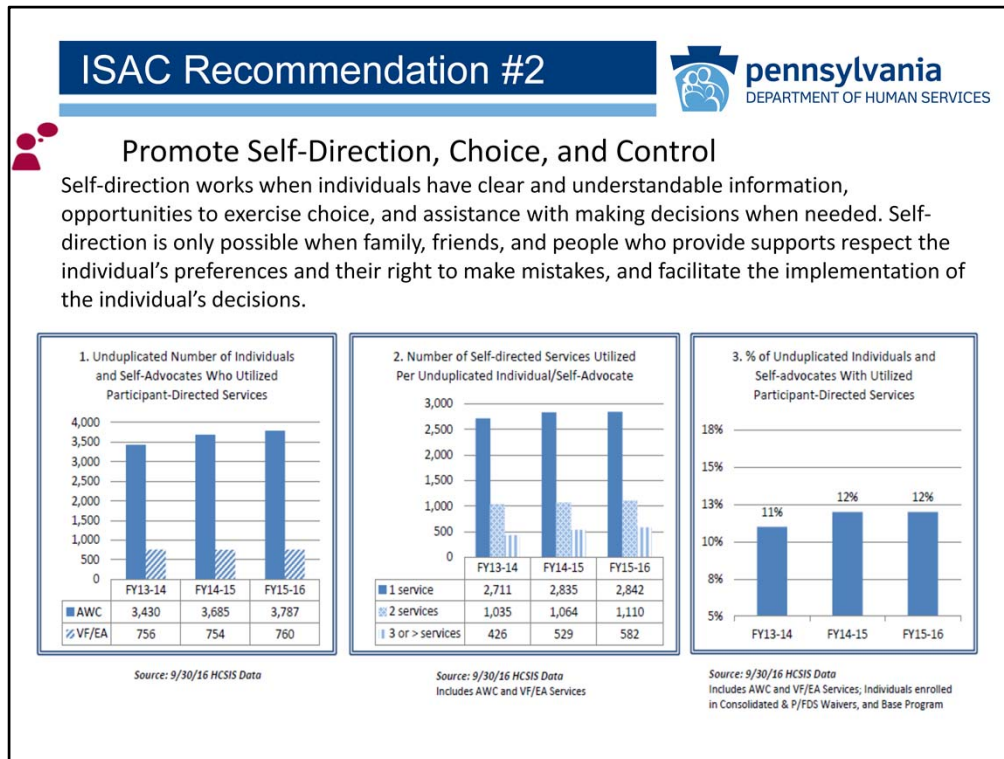
A major goal for our system is to build opportunities for individuals with developmental disabilities to participate in their communities. Being involved in community life creates opportunities for new experiences and generates potential to develop friendships. When people with and without disabilities are connected, all our lives are enriched.

When presenting data on this Recommendation #11, Increasing Community Participation, ODP uses a data table appearing in the Annual Statewide IM4Q Report. A large amount of information is displayed using this approach. Data appearing in the first two columns were obtained from a 2010 Harris Poll and show how often people without disabilities and people with disabilities in the general population participate in community activities. Then data obtained through IM4Q interviews for three fiscal years is offered for comparison. Take some time to study the results in this table.



In addition to using data from other sources to assist in comparing and analyzing performance, it is also important to obtain varying perspectives on the same question.

To assist in gathering this information, IM4Q teams interview families, friends, and/or guardians of individuals receiving services. For example, in FY15-16, 86% of respondents said individuals had enough opportunities to participate in activities in the community, while 89% said individuals had the opportunity to learn new things.

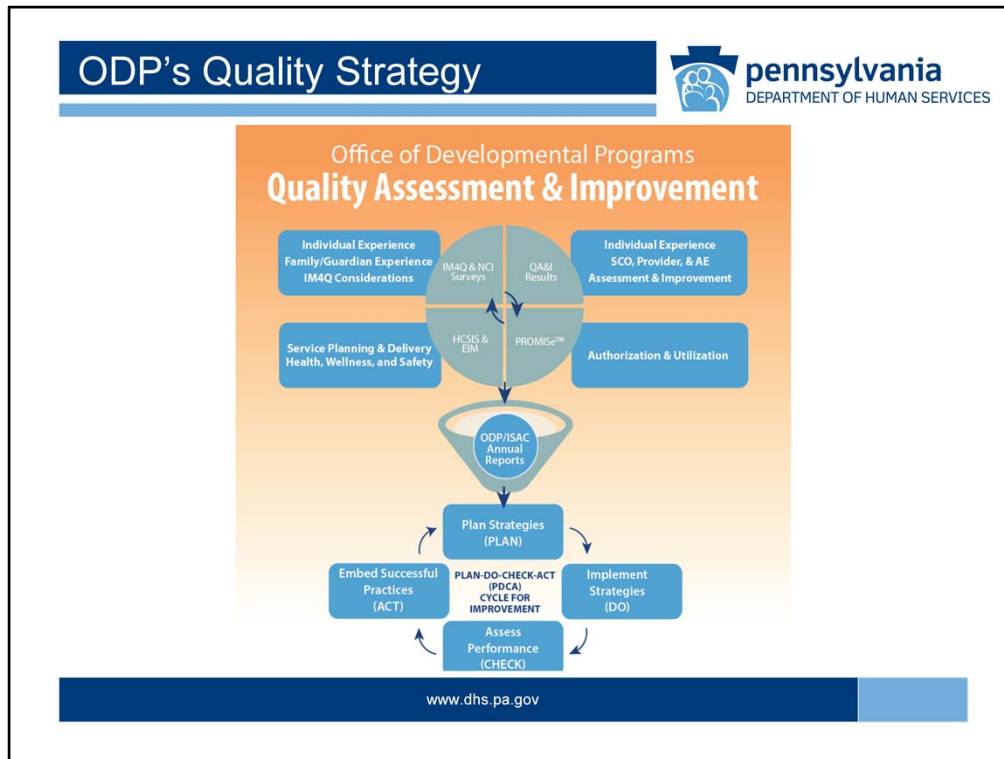


In Recommendation #2, Promoting Self-Direction, Choice and Control, ODP chose to use data from another data source we haven't yet considered, the Home and Community Services Information System, or HCSIS.

The focus of this recommendation is to support individuals and their families to learn about and use a model of services in which individuals hire and direct all or some of their own employees and services.

Data from HCSIS are used to understand how many people ODP serves who use self-directed services, how many services people who use this model direct, and what percent of all people ODP serves are engaged in this approach.


As you can see on review of these bar charts, in FY15-16 4,547 people enrolled in ODP's programs offering this option used one of the two available self-direction models. 2,842 people self-directed one service, 1,110 people self-directed 2 services, and 582 people self-directed three or more services. Finally, the percent of people in programs where this option is available who used this service model was 12%.




Annually, ODP and the ISAC will incorporate data results gathered from many data sources, including IM4Q and NCI Surveys, QA&I Results, HCSIS, EIM, and PROMISE, among others. These data will be analyzed and presented graphically to evaluate and disseminate system results in achieving ISAC recommendations for quality improvement.

ODP, AEs, SCOs, and Providers can use this additional report to better understand statewide performance, factors contributing to or presenting barriers to success, and strategies the state plans to implement. Notice that in the infographic depicted on this slide, once again ODP reminds all stakeholders of the importance of the Plan-Do-Check-Act, or PDCA, Cycle for continuous improvement.

ISAC Recommendation #9



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Improve Quality

Together we must plan and deliver services and supports that adhere to our values, measure person-centered outcomes, and continuously improve an individual's quality of life. All stakeholders must be engaged in the process of measuring how well services assist people in achieving an everyday life.

Strategies:


1. Finalize and disseminate ODP's updated Quality Management (QM) Strategy Bulletin.
 - Communicates ODP's mission, vision, and values.
 - Establishes the purpose of Quality Management in ODP.
 - Describes ODP's QM structure, processes, and tools.
 - Defines expected quality outcomes based on ODP's *Everyday Lives* and the Home and Community Based Services (HCBS) Quality Framework.
 - Outlines roles and responsibilities for ODP and stakeholders to maintain and improve quality.
 - Establishes the ISAC as ODP's stakeholder Quality Council.
 - Establishes *ODP's QM Certification Curriculum* as part of building system capacity in applying quality management principles and practices across the systems.


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Locate Recommendation #9 in the ISAC Report. You may have noticed that for each of the 13 recommendations identified in the document, ODP and the ISAC developed and documented Strategies for improvement all stakeholders can learn about and implement depending on their respective roles and responsibilities within our system.

Recommendation #9 includes Strategies that support ODP and all of our system partners to continuously improve quality. As you review these strategies, you'll see that the QM Strategy Bulletin we've been discussing, with all of its components, the QM Certification Curriculum...

ISAC Recommendation #9



**Improve Quality**

2. Develop and disseminate an ODP annual report to show the implementation of approved recommendations and strategies across the system.
3. Create a provider profile to assist individuals, self-advocates, and families to make informed choices about providers and services.

Performance Measures:

1. ODP's QM Strategy Bulletin is updated and disseminated.
2. Number of ODP and stakeholder staff who achieve ODP QM Certified status (Source: MYODP.org).
3. ODP develops and distributes an annual report.
4. ODP develops and maintains an online provider profile.
5. ODP, in collaboration with the ISAC, uses all available data and identifies the need for new data collection to measure and improve performance.


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...and the Annual Report we have been reviewing are all components of ODP's plan to continuously build system capacity in quality management, evaluate system performance in areas critical to our success and improve quality.



The quality management processes just described for ODP would be followed to identify and communicate strategic objectives, initiatives, and key performance measures within any organization.

Roles and Responsibilities of Leadership



- Work with staff to develop and submit local performance measures, targets, and data profiles
- Communicate with and educate staff about the organization-wide priorities, and statewide and local performance
- Analyze and report progress in meeting objectives routinely
- Work with and support staff to implement relevant initiatives

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Ongoing monitoring by all stakeholders in the system should occur to determine whether current performance in key identified areas meets expectations. Monitoring is a team effort in which leadership must:

- Work with staff to develop and submit local performance measures, targets, and data profiles
- Communicate with and educate staff about the organization-wide priorities, statewide and local level performance, initially and ongoing
- Analyze and report progress in meeting objectives routinely
- Work with and support staff to implement relevant initiatives, when performance deviates from expectations, to trigger improvement within the part of the organization they lead

Recommendation #9: Improve Quality



Information Sharing and Advisory Committee (ISAC)
ODP's Stakeholder Quality Council



Together we must plan and deliver services and supports that adhere to our values, measure person-centered outcomes, and continuously improve an individual's quality of life. All stakeholders must be engaged in the process of measuring how well services assist people in achieving an everyday life.

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While the ISAC will continue to serve as the entity that provides sustained, shared leadership and a platform for collaborative strategic thinking for the ODP system at large, strategies will continue to evolve as counties, administrative entities, supports coordinators, service providers, advocates, and others work in partnership to improve services. In Module 103, we will discuss how ODP's Quality Management Plan and Action Plan processes contribute to developing and achieving the improvements desired.

Electronic Resources



Everyday Lives: Values in Action
Information Sharing and Advisory Committee (ISAC)
Recommendations, Strategies, and Performance Measures



<https://www.myodp.org/mod/page/view.php?id=7775>

Quality Management Resources

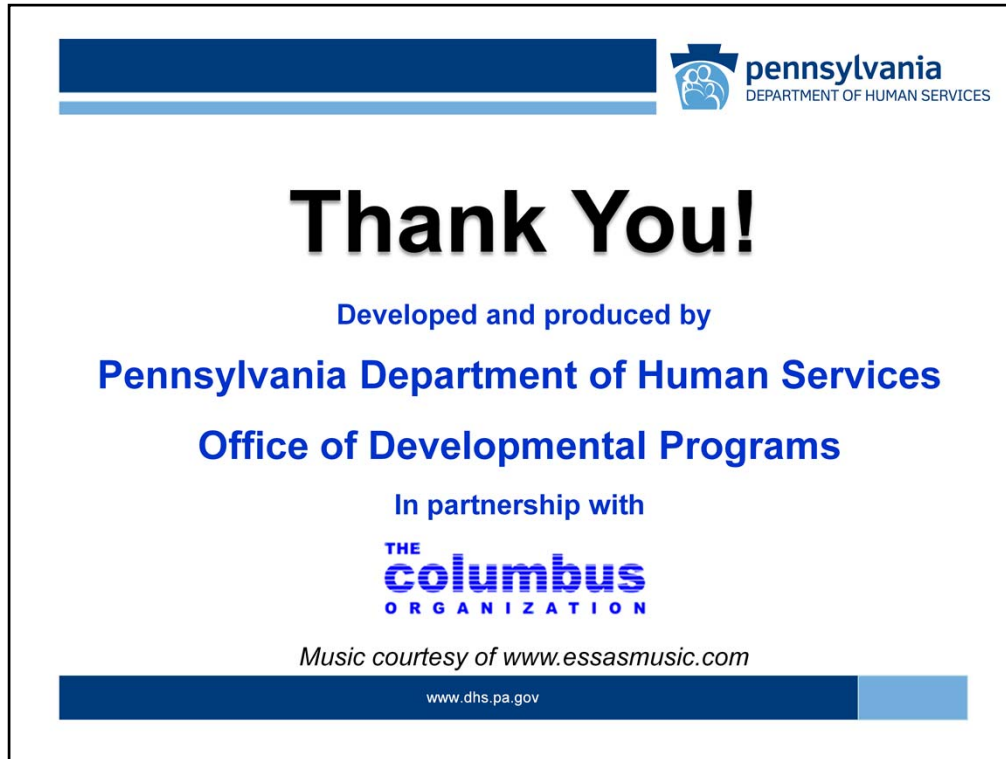
<https://www.myodp.org/course/index.php?categoryid=264>

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Electronic resources supporting this Module are available online on MyODP.org at the links provided on this slide. If you have not yet received a user name and password to access MyODP, instructions for obtaining a login are on the website's home page.

This concludes Part 2 of Module 102, Using Information and Tools for Quality Management.

Both Parts 1 and 2 are second in our series of QM Modules for Certification. Now that you have viewed this presentation, we suggest that you meet with your supervisor to discuss in more detail the information provided in this webcast and your roles and responsibilities for quality management within your position.



This webcast has been developed and produced by the Pennsylvania Department of Human Services, Office of Developmental Programs in partnership with The Columbus Organization.

Thank you for participating in this lesson.