

ASHA's National Outcomes Measurement System (NOMS)

Report User Guide Speech-Language Pathology Registry

March 2024



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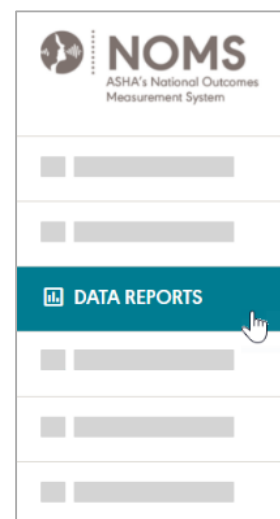
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What Is NOMS?

The National Outcomes Measurement System (NOMS) is a voluntary data collection registry that illustrates the value of speech-language pathology services and enables clinicians to improve the quality of those services.

The key to the NOMS Speech-Language Pathology Registry is the use of ASHA's Functional Communication Measures (FCMs) and optional patient reported outcome (PRO) measures. Based on an individual's treatment plan/Individualized Education Program (IEP), clinicians choose FCMs and PROs and answer related questions at admission to and again at discharge from speech-language pathology services. The difference in the calculated FCM and PRO scores depicts the amount of change in communication and/or swallowing abilities after speech and language intervention.

As a NOMS participant, you have access to online reports comparing your organization's data with the national benchmarks. Benchmarking is a powerful tool that allows for a detailed comparison of your patients and the services you provide compared to a national standard. This information can help you improve the quality of your care and demonstrate the effectiveness of your services.



Login to NOMS

To access the NOMS data collection and reporting tool, go to <https://nomsregistry.asha.org/login> and login with your ASHA website credentials.



Watch [this video demonstration](#) for an overview of the SLP Healthcare Registry reports.

Run a Report

1. Click **Data Reports** in the left menu.
2. Select your report criteria (i.e., the time period and the facility or facilities).



Tip: The system allows you to generate reports that include data from withdrawn facilities. Facilities that have a status of withdrawn are labeled as such in the drop-down menu.

3. Click **Run Report**.

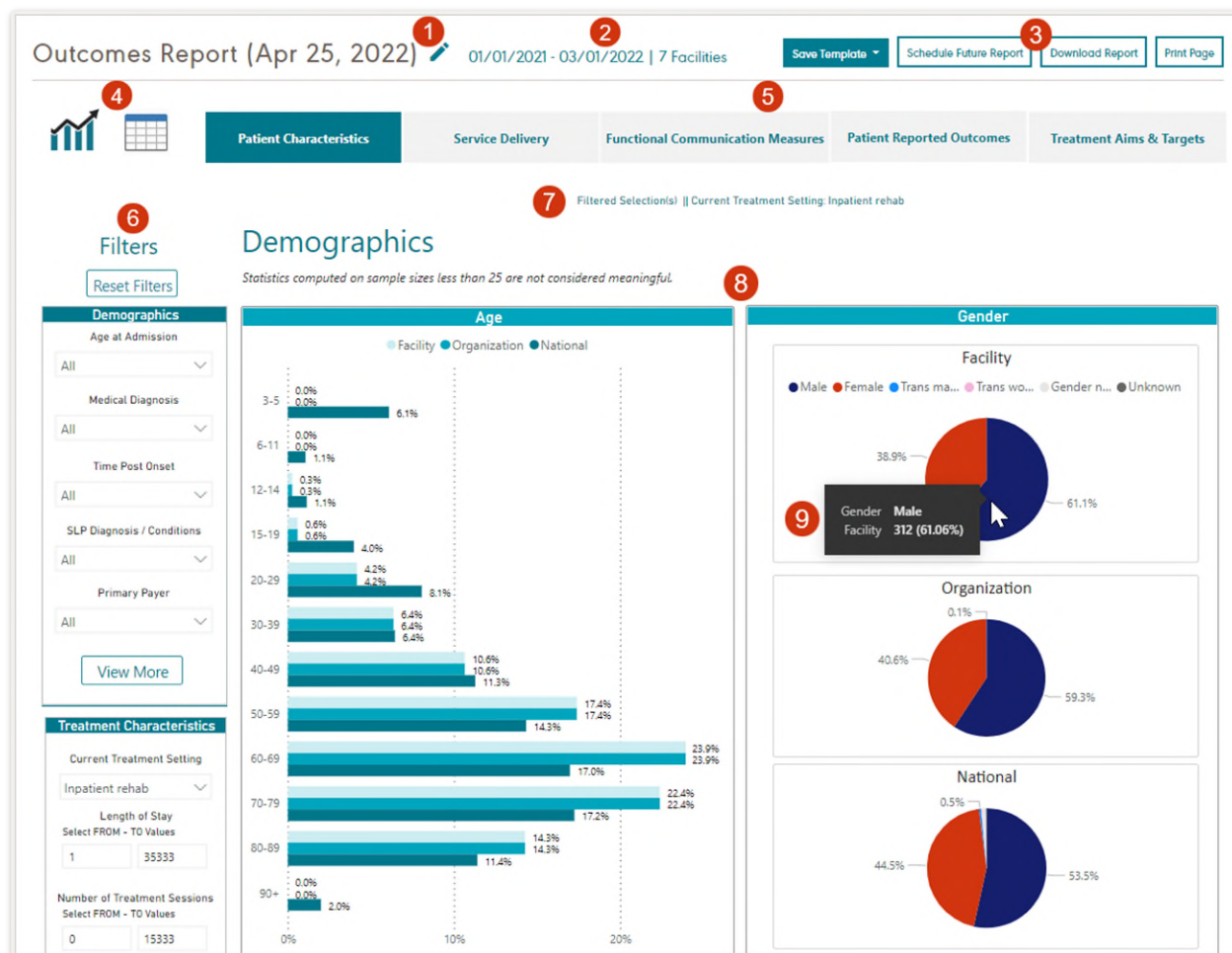
The screenshot shows a web interface titled "DATA REPORTS". Underneath, there is a section "Create a Report". It contains two dropdown menus: "Choose Time Period" with "Last month" selected, and "Choose Facilities" with "x All Facilities" selected. Below these is a teal "Run Report" button.



Tip: Only patient records that were discharged from NOMS during the selected time period will be included in your report. Patient records are available for inclusion in NOMS reports 1 day after the discharge is submitted to the NOMS system.

Navigate a Report

The NOMS reports are interactive dashboards. See screenshot below for more information on various sections of the report dashboard.



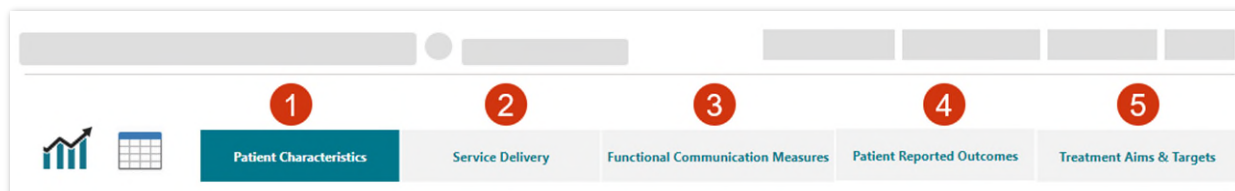
- 1 The default name of every report is “Outcomes Report” with today’s date. Click the pencil icon to edit the name.
- 2 Click here to view the report criteria in more detail.
- 3 Save, schedule, download, and print reports using these buttons.
- 4 Click the table icon to view the data as tables. Click the graph icon to view the data as graphs and charts.
- 5 Use these tabs to view the various pages of the report.
- 6 Apply one or more filters to your dashboard to refine your results.
- 7 Applied filters are displayed at the top of the report.
- 8 The widgets show the facilities’ and organization’s outcomes as well as national benchmarks.
- 9 Hover over the graphs and charts to view more information.



If your organization is registered as a single facility, the facility and organization data in the report will be the same.

Reports at a Glance

Your NOMS data reports are organized into 5 sections or tabs.



Each section includes a series of widgets (i.e., graphs, cards, or tables) highlighting information about:

- 1 **Patient Characteristics**: Age, gender, race/ethnicity, diagnosis, etc.
- 2 **Service Delivery**: Treatment setting, length of stay, treatment sessions per week, etc.
- 3 **Functional Communication Measures**: Average change in percent functionality, progress by severity, etc.
- 4 **Patient Reported Outcomes**: Self-assessed progress, treatment satisfaction.
- 5 **Treatment Aims & Targets**: Information about what was addressed in treatment.

Each widget provides three levels of data:

- One for the facility/ies that you selected when generating your report
- One for your organization as a whole
- One for the national benchmarks



When you first generate a report, data from all patients (regardless of setting or diagnosis) will be included. To limit your report to a specific treatment setting, population, and so forth, use the filters in the left menu. The data for all widgets in your report (i.e., across the five main sections) will dynamically change based on the filter(s) selected.

All active clinicians, subscribers, and subscriber proxies at each organization have access to their facility and organization’s data as well as the national data in the NOMS data reports.

- Clinicians can generate a report for the facilities for which they have submitted data.
- Subscribers and subscriber proxies can generate a report for any facility at the organization.
- Clinician proxies do not have access to reports.

Patient Characteristics

The **Patient Characteristics Tab** provides key demographic information about the individuals receiving SLP services at your organization and nationally. These data can assist with practice management by giving you detailed information about how many patients were discharged during a selected timeframe, what types of diagnoses your patients had, what funding sources were most used, and so forth, compared to the national averages.

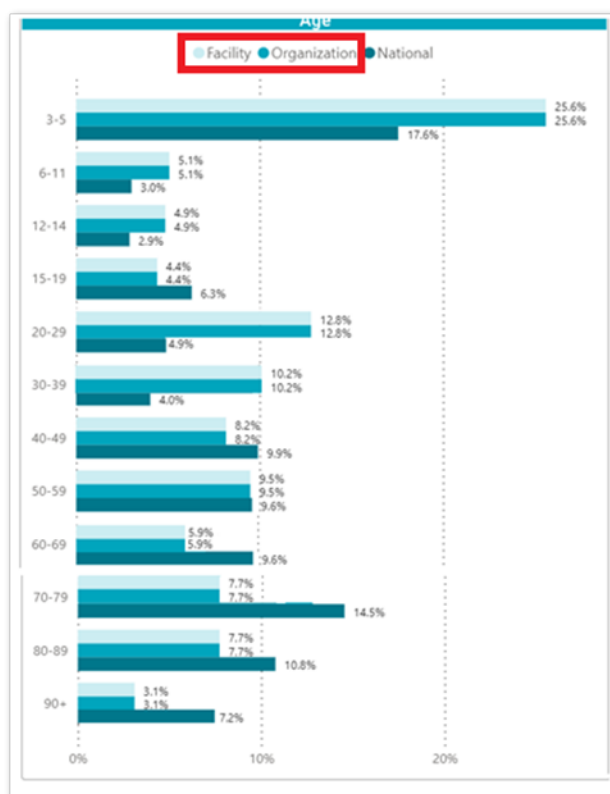
Demographic information can provide important insights into how your patients may vary from the national averages and help to

- identify and address differences in care for specific populations,
- determine populations that do not achieve optimal outcomes, and
- promote the delivery of patient-centered care.

When interpreting your data, start by looking for differences in patient characteristics. For example, compared to the national data, patients within your facility and organization may be younger, may have a longer time post onset, or may have more comorbidities.

Patients with different demographic, social and/or confounding factors may experience different outcomes regardless of the quality of care provided. It is important to consider these factors when analyzing your data.

In the chart on the right, we see that most of the patients receiving SLP treatment at this facility and organization tend to be younger than those receiving services nationally. These demographic differences may account for differences in treatment outcomes. Therefore, you may want to consider filtering your report by specific age ranges at admission. Risk-adjusting by age or other patient characteristics increases the likelihood of a more accurate comparison of this organization’s outcomes to the national benchmarks.



Service Delivery

The **Service Delivery Tab** provides information about the frequency, intensity, and dosage of SLP treatment that an organization typically delivers.

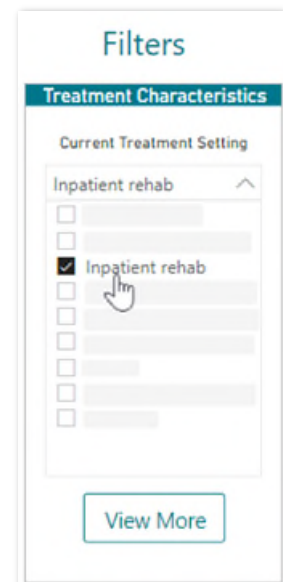
Treatment parameters such as setting, episode duration, and number of visits are important considerations when examining an organization’s overall performance. For example, hospital administrators often use length of stay as a performance indicator for hospital efficiency.

In the chart below, we see that this organization’s length of stay in SLP treatment is roughly 10 days more than the national benchmark (67.4 days compared to 57.1 days nationally).



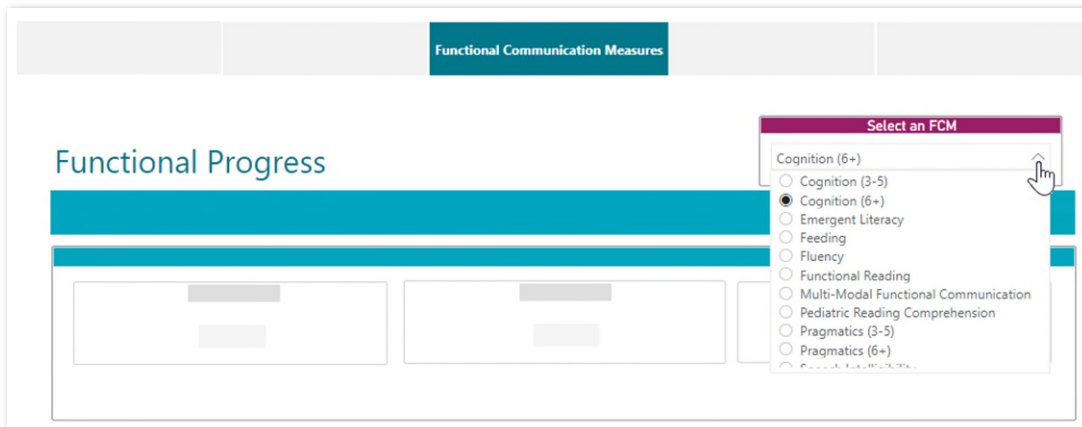
When you encounter differences like these, you may want to filter your reports by treatment setting or other service delivery or patient variables to limit your comparisons to patients with a similar case mix nationally.

When we filter this report by the current treatment setting of **Inpatient rehab**, we see the large difference in length of stay disappear (see chart below). Now, this organization’s length of stay in SLP services is slightly shorter (15.3 days) than the national benchmark (16.1 days).



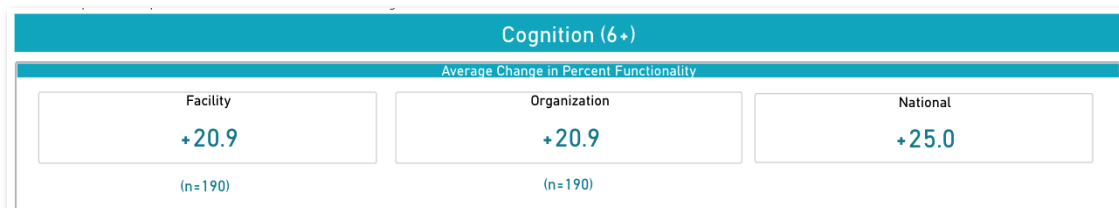
Functional Communication Measures

The **Functional Communication Measure Tab** presents information about the amount of progress patients make after SLP treatment. Data are presented for one FCM at a time. When you first click on the tab, it will default to the Cognition (6+) FCM. Use the FCM selector box to view a different FCM.



Tip: The FCM selector box will only change the information presented on the Functional Communication Measures tab. To filter the entire report across all five tabs (e.g., patient characteristics, service delivery), use the filters in the left menu.

The first widget in this section, **Functional Progress**, starts with broad information about progress and provides average change in functionality for the selected FCM.



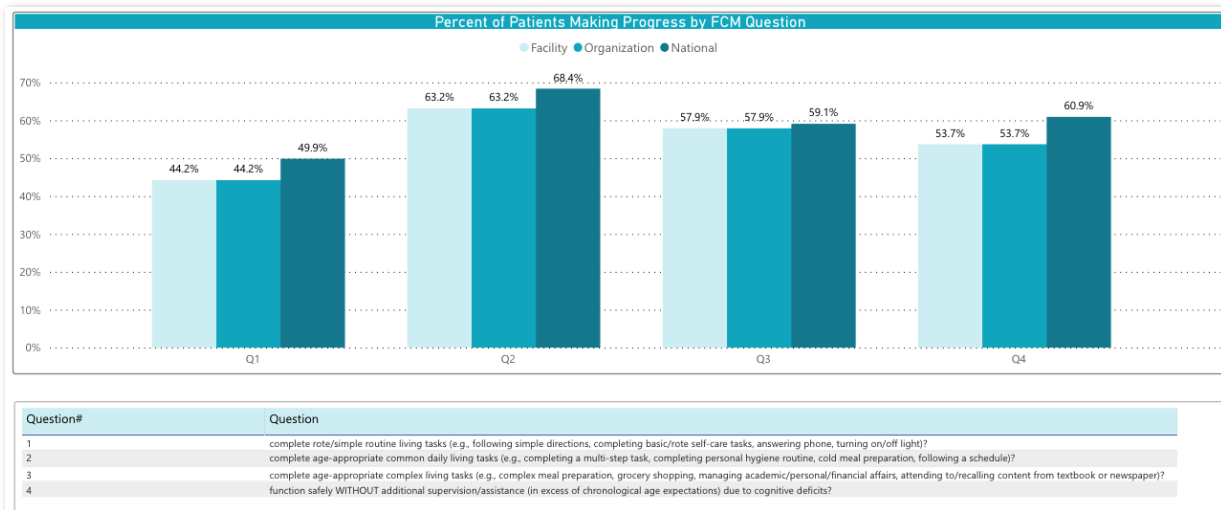
In the chart above, you can see that, on average, this organization’s patients had a 20.9% gain in functionality after SLP treatment compared to a national average of 25.0%. Positive change in functionality reflects improvement, whereas a negative change reflects worsening of condition.



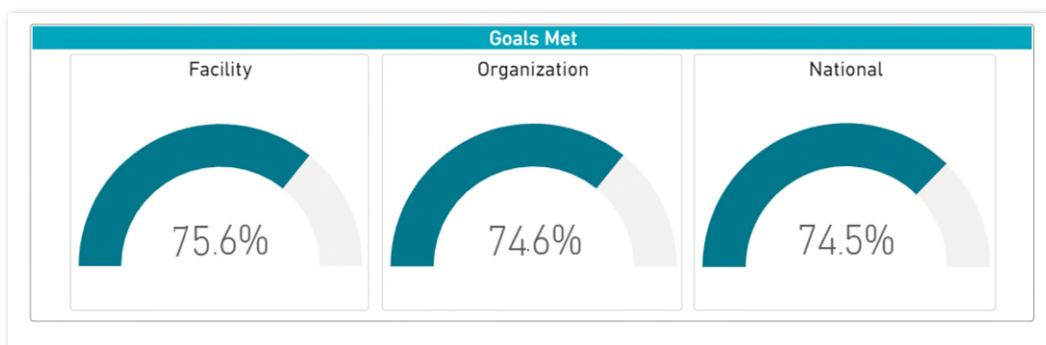
There is no single expected amount of change for any FCM. Average change in functionality is likely to be affected by several factors, including treatment setting, time post onset, age, medical diagnosis, amount of treatment, and so forth. Be sure to use the filters in the left menu to account for these factors. Use the national benchmarks to provide a reasonable proxy for typical amount of change.

The next widget, **Percent of Patients Making Progress by FCM Question**, provides more detailed information about the selected FCM and examines the different constructs or aspects that contribute to overall level of functionality. This information can help you begin to examine and explore discrete areas reflecting change and can help you target quality improvement efforts. It is important to remember that functional progress and clinical efficiency can be affected by a variety of factors; these analyses are just a starting point.

The graph below shows the percentage of patients who made progress on each individual FCM question for cognition. In this example, most of the organization’s patients made progress on question #2 (63.2%), whereas the fewest patients made progress on question #1 (44.2%).



The **Goals Met** widget shows you the proportion of patients who met their goals for the selected FCM. In this widget, we see that roughly 75% of patients being treated for cognition at this facility and organization met their treatment goals. This same trend was seen at the national level.

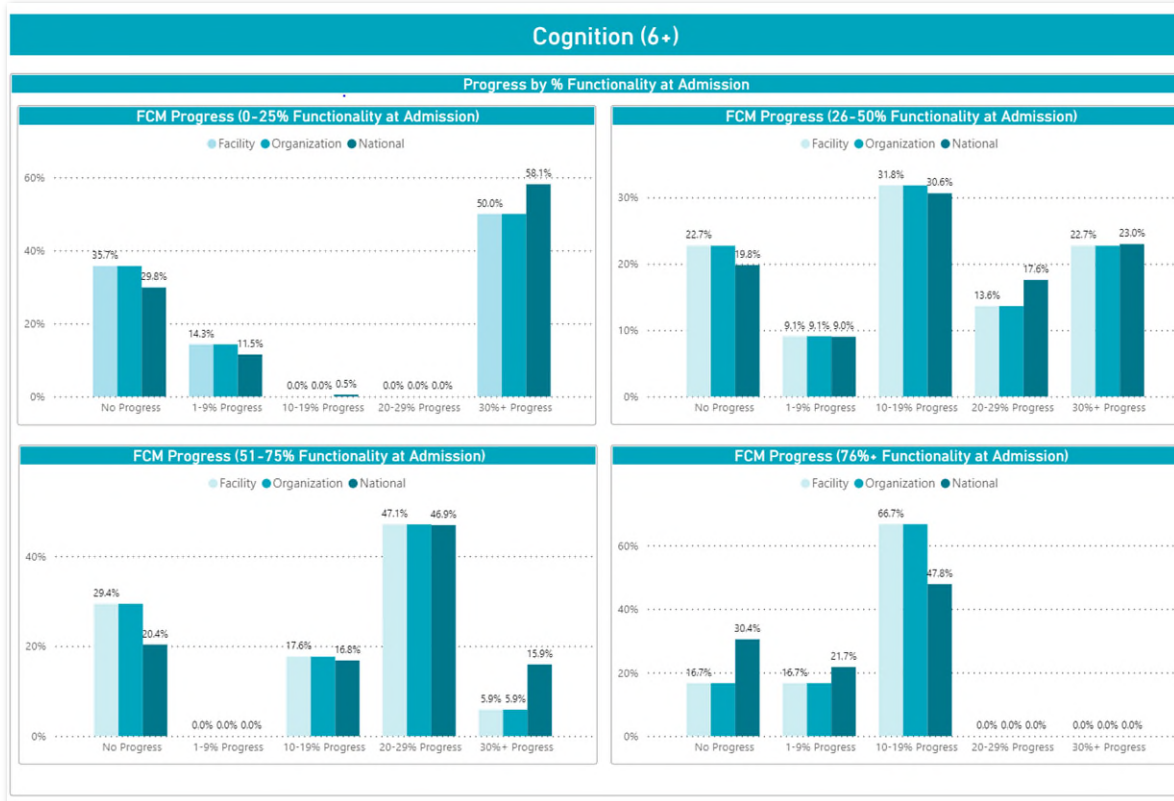


The three widgets in the **Progress by Severity and Service Delivery** section examine additional patient and service delivery variables (e.g., functional status at admission, amount of treatment) and show how these factors contribute to patient outcomes.

The **Progress by Percent Functionality at Admission** widget helps you understand the effect of patient severity on FCM progress. Each graph in the widget represents a range of initial FCM

scores (e.g., 0%–25%, 25%–50%) and displays the percentage of patients who made progress and how much progress they made within that severity range.

In the example below, half of this organization’s most severe patients (i.e., 0%–25% functionality at admission) demonstrated a 30% or more gain in their cognition FCM score from admission to discharge. Among those who were the least severe at admission (i.e., 76%+ functionality), most (66.7%) showed gains of 10%–19%.



In NOMS data collection, for each FCM that you score, you are also asked to indicate the primary service delivery model used to address that clinical area (e.g., swallowing, speech intelligibility). The **Progress by Predominant Service Delivery Model** widget presents a set of graphs separating patients by that selected service delivery model (e.g., individual, group, training/consultation) and shows the proportion of patients making various degrees of progress.

In the example below, only group and individual treatment were the predominant service delivery models used for this FCM.



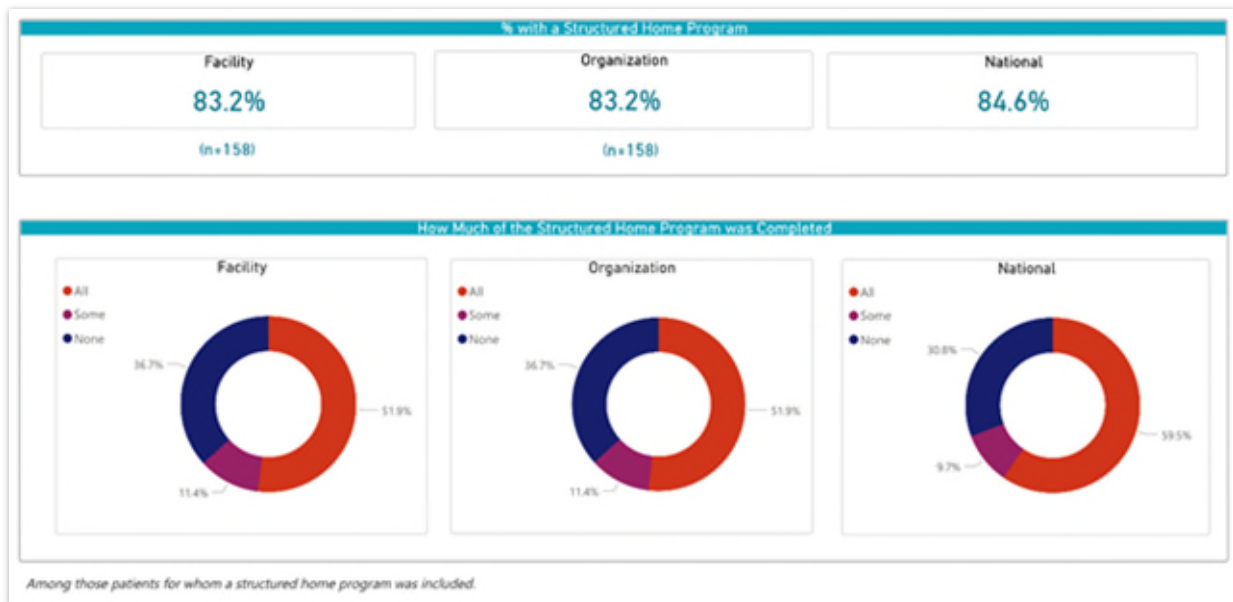
The **Progress by Amount of Treatment** widget details the average amount of treatment sessions and hours that patients received based on their corresponding progress category. Analyzing patient progress by the number of sessions and hours spent in treatment can provide an overview of an organization’s clinical efficiency.

In the table below, we see that patients who made no progress in this organization received approximately 5.4 SLP sessions and 3.2 hours of treatment, whereas those who made 20%–29% gains in functionality received 10.6 SLP sessions and 7.1 hours of treatment for this FCM. These data can be powerful when answering questions from consumers and payers about prognosis, expected outcomes, and how much treatment will be needed to show functional progress.

Progress Category	Progress by Average Number of Treatment Hours and Treatment Sessions							
	Facility (n)	Facility (Hours)	Facility (Sessions)	Organization (n)	Organization (Hours)	Organization (Sessions)	National (Hours)	National (Sessions)
No Progress	52	3.2	5.4	52	3.2	5.4	16.4	26.5
1-9% Progress	18	3.4	7.2	18	3.4	7.2	4.0	7.3
10-19% Progress	42	5.3	11.6	42	5.3	11.6	73.5	189.9
20-29% Progress	28	7.1	10.6	28	7.1	10.6	5.3	8.8
30%+ Progress	50	6.3	8.2	50	6.3	8.2	4.6	6.7

The **Home Program & Education** section shows the percentage of patients who received a structured home program targeting the selected FCM and, when applicable, how much of that program was completed. Structured home programs completed outside of SLP treatment sessions can provide additional practice, reinforce progress, promote generalization of newly acquired skills, and encourage caregiver involvement in the treatment process.

In the example below, although the percentage of this organization’s patients who received a structured home program was similar to the national data (83.2% and 84.6%, respectively), fewer of the organization’s patients completed the entire program (51.9%) compared to the national benchmark (59.5%).

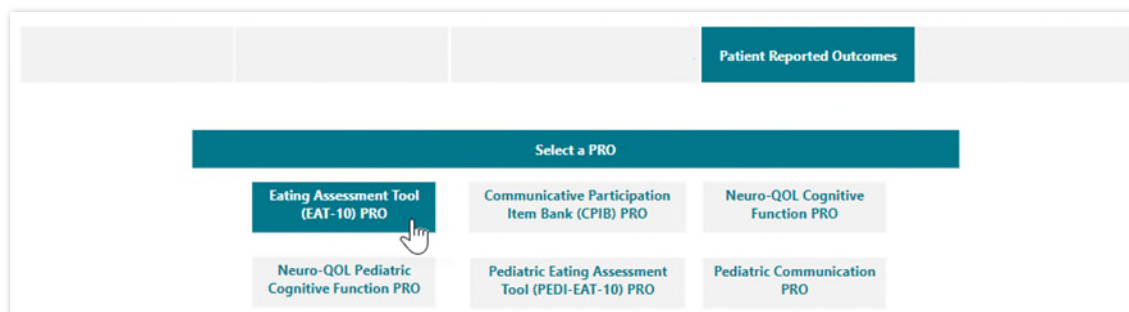


Patient Reported Outcomes

Patient reported outcomes (PROs) and treatment satisfaction data can be important indicators of the impact of treatment on daily life and serve as a gauge of treatment success. The **Patient Reported Outcomes Tab** presents information for one PRO measure at a time. To view patient reported data, you must FIRST select the PRO measure you are interested in.

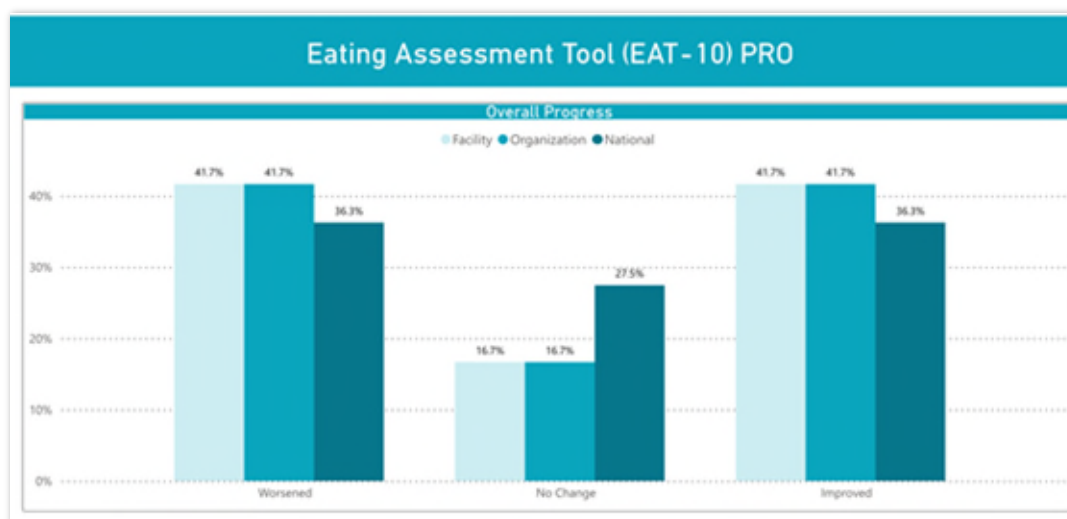


Tip: Selecting a PRO will only change the information presented on the Patient Reported Outcomes tab. To filter the entire report across all tabs, use the filters in the left menu.



PROs are optional for reporting in NOMS. It is important to note that these data may not be reflective of all patients receiving SLP treatment at your facility, at your organization, and at a national level.

The first widget, **Overall Progress**, provides a summary of self-assessed patient progress after SLP treatment for the selected PRO measure (e.g., whether patients felt their condition improved, worsened, or did not change because of treatment). In the chart below, 41.7% of the patients in this organization felt their swallowing improved after SLP treatment compared to a national average of 36.3%.



The next widget, **NOMS Satisfaction Survey Questions**, provides detailed information about different aspects of patient satisfaction (e.g., whether the patient felt that they were involved in treatment planning, received education about their swallowing or communication problem). The widget provides an overview of how strongly patients agreed or disagreed with each statement. These data can help inform consumer choice and be a used for developing quality improvement initiatives and organizational marketing efforts.

In the chart below, most patients in this organization (75%) and nationally (73.1%) agree or strongly agree that they were actively involved in their treatment plan (upper left chart).

However, more patients at this organization (75%) felt that their swallowing improved because of SLP treatment than did patients nationally (65.6%) (lower left chart).

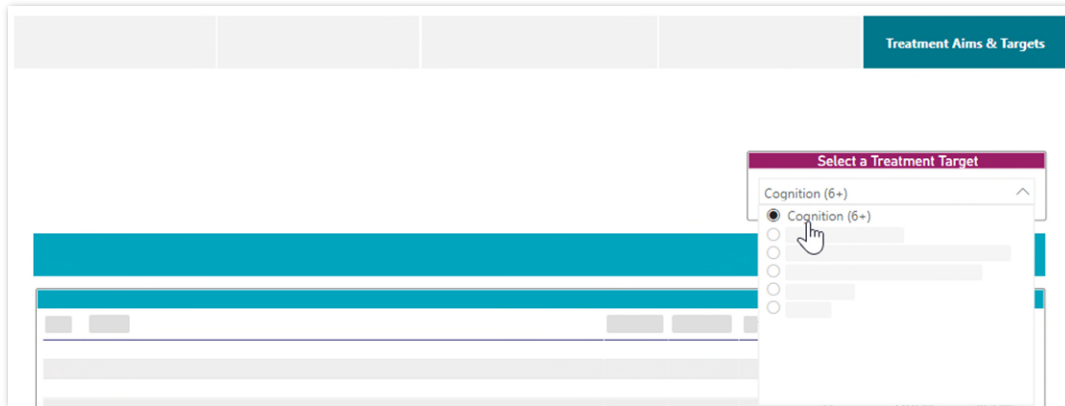


Treatment Aims & Targets

This section of your NOMS report provides an overview of the treatment aims and targets for the following FCMs:

- Cognition (6+)
- Speech Intelligibility
- Spoken Language Comprehension (6+)
- Spoken Language Expression (6+)
- Swallowing
- Voice

When you first open your report and click on the **Treatment Aims & Targets Tab**, it will ALWAYS default to the Cognition (6+) aims and targets. Use the selector box to view a different FCM's aims and targets.



Tip: The treatment target selector box will only change the information presented on the Treatment Aims & Targets dashboard. To filter the entire report across all five sections, use the filters in the left menu.

Treatment aims and targets help describe what occurred during the episode of care and can help you

- better understand your organization’s treatment patterns,
- identify additional treatment options/targets for patients with a given treatment goal/aim, and
- determine topics for clinical training.



Collecting information about aims and targets is a first step in understanding what happens in treatment, and to what extent different treatment ingredients facilitate change in function. However, it is important to note that these data are optional for reporting in NOMS and may not be reflective of all the treatment aims and targets focused on during SLP treatment at the local and national level.

The **Treatment Aims & Targets** widget displays the proportion of patients who had the specific target included in their treatment program and provides a legend for the aims that correspond to individual targets in the table.



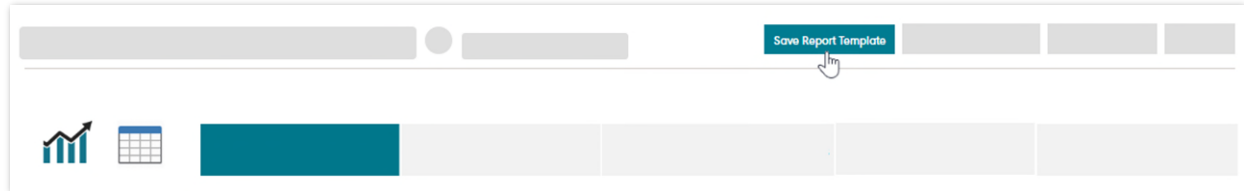
Tip: The selection of treatment aims and targets is dependent upon each individual’s needs and treatment goals. However, you can use the FCM Progress Filter in the left menu to examine which targets are associated with FCM progress.

Other Report Features

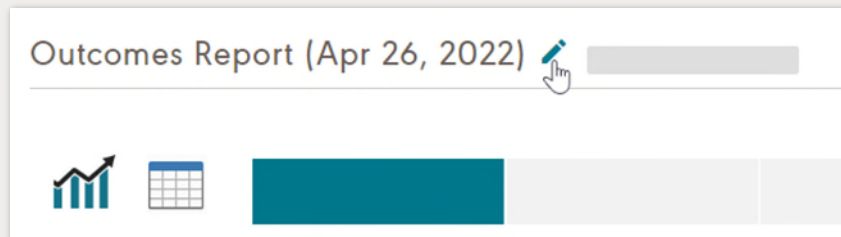
The NOMS system has several new features that allow you to easily save your report template, schedule a future report to run, download the data from an existing report, or print a report.

Save a Report Template

The NOMS system allows you to save the report criteria and filters as a template so that you can easily generate a report with the same criteria and filters in the future. To save the report template, click the **Save Report Template** button located at the top of the report.



Tip: Consider renaming your report with a descriptive name before saving the report template. Click the pencil icon next to the report name to edit the name.



You can access saved report templates from the Data Reports landing page. Saved reports are user specific. Therefore, the report templates that you save will only be accessible by you.

DATA REPORTS

Outcomes Report

Q4 Outcomes Report

Saved Report Templates

Name	Date Created	Last Run	Next Schedul...	Actions
Outcomes Repor...	01/18/2022	01/18/2022		Open Download Schedule Delete
Q4 Outcomes R...	12/21/2021	12/21/2021		Open Download Schedule Delete

When a saved report template is viewed at a later date by using the **Open** or **Download** icons, the system will re-run the report criteria. Keep in mind that if the report criteria include a standard time period (i.e., Last month, Last quarter, Last year, or Previous 30 days), then opening or downloading the saved report template will generate a new dashboard for the reflected time period.

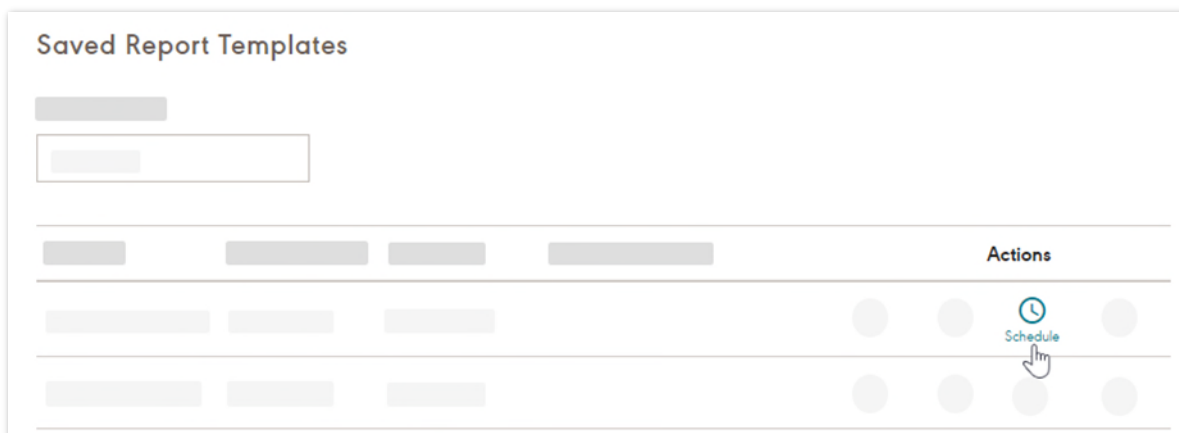
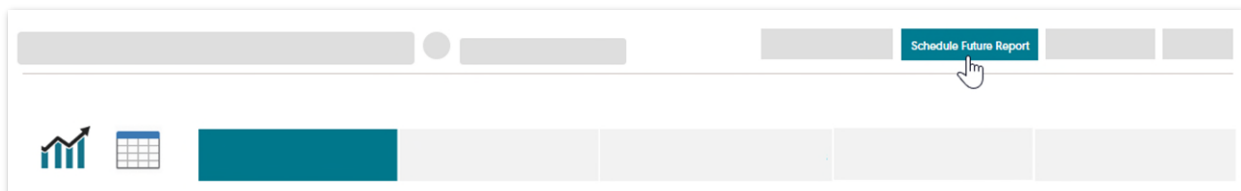
For example, if you create a report template in August and you choose a time period of last month, the dashboard will give you the data for the month of July. If you save that template and open it in September, the dashboard will give you the data for the month of August. If the report criteria include a custom time period, then opening or downloading the saved report template will re-run that custom time period, which will result in a report with the same data and results every time you open or download it.

If you open a saved report template and make changes, you can save, which will update the existing template, or save as a new template.

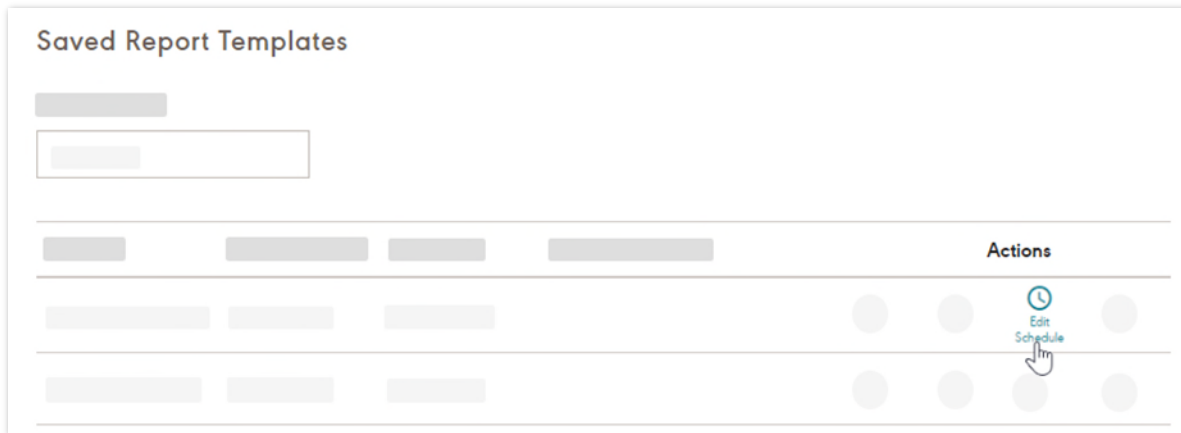



Schedule a Report Template

You can schedule a report by clicking the **Schedule Future Report** button at the top of the report or by clicking the **Schedule** button under your saved report templates.



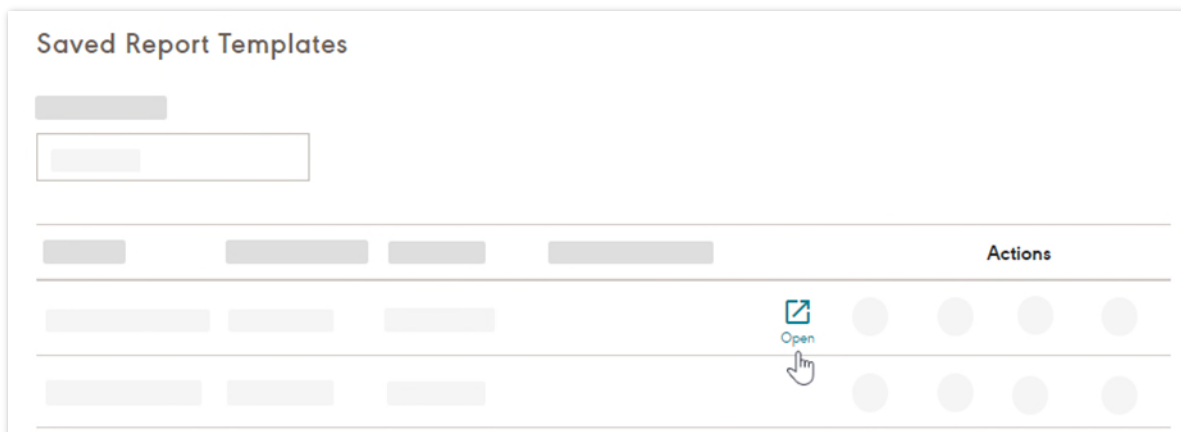
You can edit the report’s schedule, if desired, from the Data Reports landing page or by clicking the button at the top of the report dashboard.



 **Tip:** You cannot schedule a future report with a custom date range. You may only schedule a report with pre-defined timeframes (i.e., Last month, Last quarter, Last year, or Previous 30 days).

Once scheduled, NOMS will generate the report following the schedule and will email you when the report is available. To view the report:

1. Click the link in the email.
2. Login to NOMS.
3. On the pop up menu that appears click the button download the report.
4. To view the interactive dashboard for the scheduled report, click the **Open** icon from the Data Reports landing page.



Similar to when you open or download a saved report, when you schedule a report, the system will re-run the report criteria. Keep in mind that if the report criteria include a standard time period (i.e., Last month, Last quarter, Last year, or Previous 30 days), then opening the scheduled report template will generate a new dashboard for the reflected time period.

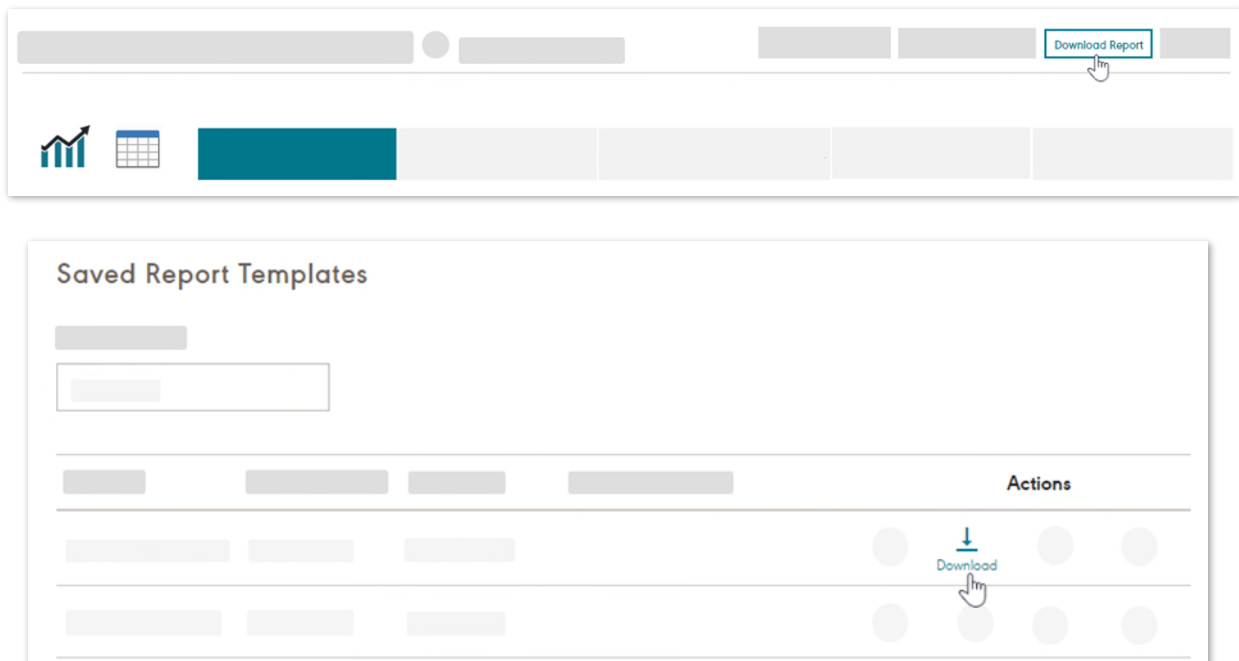
For example, if you create a report template in August and you choose a time period of last month, the dashboard will give you the data for the month of July. If you schedule that template to be generated in September, the report will give you the data for the month of August.



Tip: Scheduled reports are user specific. The user who scheduled the report must be the one to open the link for the scheduled report from the email and log into NOMS. If you wish to share a report with someone who is not an SLP at your organization, we recommend that you assign the individual to a Subscriber Proxy role. For specific instructions on how to add a subscriber proxy, refer to the steps outlined in the Add New Users section of the [Subscriber User Guide](#).

Download a Report

You can download the tables for a report into a **CSV** or **PDF** file format by clicking the **Download Report** button at the top of the report or by clicking the **Download** icon on the saved report template list.



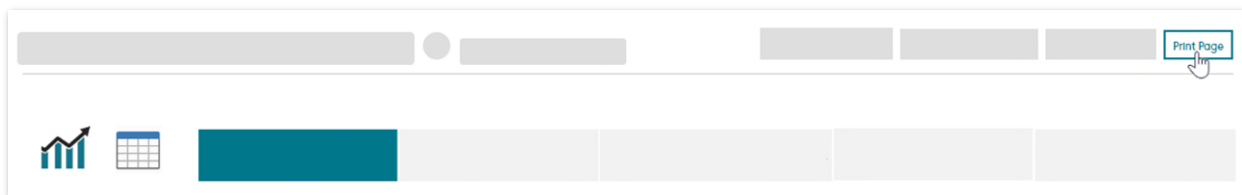
Any filters that you applied to the report dashboard will be reflected in the downloaded CSV or PDF report.

If you select **CSV** as the file format for the downloaded report, the system will download a zip file to your computer containing a separate CSV file for each visualization from the report. This option is best used if you would like to download tables from your report in a format that makes it easy to generate your own charts and graphs.

If you select **PDF** as the file format for the downloaded report, the system will download a PDF file to your computer containing all the tables in your report.

Print a Page of the Report

You can print the current page by clicking the **Print Page** button located at the top of the report dashboard.



We recommend choosing the option **Print to PDF** from the pop-up menu to save the page rather than printing the hard copy.



Tip: Screenshots are a great way to share specific graphs and charts from a report and include them in presentations. Use your computer's screenshot software to capture an image of the graph or chart.

Troubleshoot My Report

This section covers frequently asked questions related to the reports. Email NOMS@asha.org for further assistance.

I submitted data to NOMS, but there are no data in my report.

This can occur if there are no discharged facility data that meet the report criteria and/or filters. Try expanding your report criteria, removing any applied filters, or discharging patient records.

I generated a report, but I only see national data in the graphs and tables.

This can occur if there are no discharged facility data that meet the report criteria and/or filters. Try expanding your report criteria, removing any applied filters, or discharging patient records.

I generated a report, but there are no options in the filter drop-down menus.

This can occur if there are no discharged facility data that meet the report criteria and/or filters. Try expanding your report criteria, removing any applied filters, or discharging patient records. If you still do not have sufficient facility data but would like to filter or analyze the national data, [contact NOMS staff](#) for assistance.

My colleague forwarded me an email with a link to a NOMS report, but the report does not appear when I log into NOMS.

Downloaded and scheduled reports are user specific. The emails that the NOMS system send to you with links to reports can only be successfully opened by the user who requested them. These emails cannot be forwarded to other NOMS users.

I'd like to perform my own data analyses on my organization's data. How do I get access to the raw data for my organization?

Subscribers and subscriber proxies can download all discharged patient records that have been submitted for their organization from the Patient Records page in NOMS. See the **Download Organization Data** section of the [Subscriber User Guide](#) for instructions.

My non-SLP administrator would like to access my organization's NOMS data report. How do I grant access to my administrator?

Subscribers can grant administrative and other non-SLP staff members access to the NOMS report tool by assigning them the **Subscriber Proxy** role. A subscriber proxy can log into NOMS and generate reports for any facility registered with the organization. For specific instructions on how to add a subscriber proxy, refer to the steps outlined in the **Add New Users** section of the [Subscriber User Guide](#).

Why are my patient outcomes different than the national benchmarks?

There may be patient characteristics that exist prior to the episode of care (e.g., age, medical diagnosis, payer) as well as service delivery variables (e.g., treatment setting, length of stay) that may impact differences in outcomes. To enable a fair comparison of your patient outcomes with the national benchmarks, start by identifying any differences between your patients and the patients receiving SLP services nationally and then filtering for these differences.

How can I use my data to improve my services?

National data can help you identify patterns of care and improve SLP services. For example, in the screenshot below we see that preschool children at this organization are not making as much progress as the national benchmarks in spoken language expression. Upon further examination, we also see that only one third (35.4%) are receiving a structured home program and 37.5% are completing all of their home program. In comparison, nationally 86.2% are receiving a structured home program and 72.9% are completing all of their home program. These data—as well as other data such as number of sessions and hours of treatment—can help identify key areas in need of further clinical training, treatment planning, and so forth.

