

**Slide – Disclaimer:** No narration.

**Slide - Course Overview:** Having established your readiness and capacity to implement an Advanced Access environment and armed with Quality Improvement skills your team is now ready to determine where to start with quality improvement activities.

Your Quality Improvement Team members may prefer to complete the module as a group for discussion and planning. If not possible, working through individually before coming together to review in regular QI team meetings is an option. Before you begin please download the Practice Assessment tool from resources. it will help keep the process simple and on track.

**Slide – Learning Objectives:** Based on Health Quality Ontario's Advanced Access and Efficiency Workbook for Primary Care, success stories to date, and the experience of QI Coaches in the field, this module will guide you through the essential next steps. Conducting a detailed assessment of your practice and collecting data on key measures such as your annual supply and demand for appointments, how long patients are waiting for an appointment, how you see your patients will give your team the information needed to determine an improvement plan. This assessment is essential to identify where you can start to make changes that result in efficiencies and sustainable improvements that benefit your patients and your practice.

**Slide – Your Practice Profile:** This section of the module will guide you through the Practice Assessment Tool you downloaded from Resources. You will examine your purpose, provider and patient population characteristics, processes, and patterns and record in your Practice Profile. Use the Practice Assessment Tool to record all of the information you collect while working through this section; it will help your team determine where to start with your QI efforts. Keep it handy.

**Slide – Measures of Access:** As discussed, the key to improving access is balancing your supply of appointments with the demand for appointments. There are four different measures your team will use to better understand supply and demand and to guide your access improvements.

Annual supply and demand, which is calculated using the panel size equation, is the first piece of data your team will calculate using Form 1 in the Practice Assessment Tool It will give you the overall reading of how able your practice is to meet the demand for appointments on an annual basis. It is also useful to examining your daily supply, demand and activity, as the proportion of open appointments you have each day may vary, as you'll see by weekly data you collect using Form 2. This will help you better balance supply and demand on a daily and weekly basis by steering pre-booked appointments to low demand times during the week.

Third-next-available appointment is the gold standard for measuring the number of days your patients are waiting for an appointment. Your team will track third next available appointment each week on Your Practice Profile to see if the changes you are testing are leading to an improvement. Since advanced access is also about timely access and continuity - and a 'see your own and don't make them wait' philosophy, the continuity measure will be used by your team to make sure that you are not unintentionally compromising continuity in order to improve your third next available appointment. This is also tracked on Your Practice Profile.

We will now look closer at each of these four measures, starting with your annual supply and demand.

**Slide – Your Annual Demand & Supply:** Before you can improve your practice's access and efficiency by testing and implementing changes using the Plan-Do-Study-Act cycle, you need to thoroughly understand your current practice situation. The relationship between supply of appointments and demand for appointments is key. Assessing this will help you consider what changes you can implement to reduce delays, improve flow, as well as patient, provider, and staff satisfaction. The most important principle is "demand will vary/" by hour, by day, by season, and is often more predictable than the variation in supply. Measuring it over time reveals patterns that help you understand your practice and predict and plan.

I'll help you conduct a detailed assessment of your practice and collect data on key measures to determine your annual supply and demand of appointments. First steps first though, turn to Form 1 in the Practice Assessment Tool, we'll use it to guide you through these calculations.

**Slide: Assess Your Practice:** To understand the relationship between supply and demand within your practice, you need to complete this panel size equation. You'll be working with Form 1 in the Practice Assessment Tool so refer to it now. You can print it from the Resources area in the top right hand side of the classroom.

Calculating the difference between your annual supply of appointments and your annual demand for appointments helps you determine what you need to do to bring this into balance and improve access for your patients. Let's take Dr. Smith, for example, a solo provider with 2100 patients first figured out his expected annual demand. He knew he had 2100 patients (both rostered and non rostered) that he provides care to. Looking at office records from last year with his staff, he determined there were 1950 patients seen in the 12 months prior, for a total of 5965 visits in that same 12-month period. This equals, on average, 3 visits per patient per year to use in his calculation. He calculated his expected annual demand to be 6300 appointments.

On the annual supply side of things, he did a rough calculation to subtract holidays, vacations and education days to estimate that from the 52 weeks in the year he worked roughly 44 weeks. He had 10 minute appointment spots and adding up the time he had for appointments during the week, he figured out he had about 138, 10 minute units per week which gave him an estimated annual supply of 6072 appointments.

His annual supply and demand data showed he was fairly balanced.

Dr. Reynolds's patients; however, complain that it is very difficult to get an appointment with her. She decided to use the panel size equation to help her understand if her supply and demand is balanced. She currently works 47 weeks annually, takes 4 weeks vacation, and uses one week for various conferences. In the scheduler, she offers 120 appointments per week for scheduling patients. She thinks this should be enough appointment slots for his panel of 2500 patients. Using billing data, Dr. Reynolds looked at one year of visits and calculated her visits per patient per year to be 3.05. By inputting these numbers into the Panel Size Equation, Dr. Reynolds learned that her annual supply is less than her annual demand by 1985 appointments, or 42 appointments per week or approximately 8 appointments per day. Could this be the reason that patients are having a difficult time booking appointments? Next, you'll use the panel size equation to calculate your supply and demand for appointments.

**Slide – Your Panel Size Equation:** Now it's your turn to complete the panel size equation. Turn to Form 1 in your Practice Assessment Tool. Follow the tips to enter the numbers required to complete the calculation. You can pause the program while you do this, it will start here next time you log in. Your QI Coach has also posted answers to common questions in the Discussion Forum so check there for added direction or post a question for a QI Coach and they'll answer it. Record the completed information onto your Practice Profile.

**Slide – Is Your Practice Balanced:** What did you learn about your annual supply and demand?

If you discovered your annual supply of appointments is greater than your annual demand for appointments, you are ready to embark on achieving an Advanced Access working environment.

If your annual demand is greater than supply by a modest margin of 600 visits\* or less (\*600 visits is used as a guide based on our experience with other practices implementing Advanced Access), then consider increasing supply, decreasing demand, or do both. Many practices find looking for efficiencies helpful here as well. Achieving an Advanced Access working environment is within your reach provided you are motivated to change how you currently do things.

If demand is greater than supply by a larger margin Looking at ways to decrease demand and increase supply is essential. In a practice setting where demand is significantly greater than supply, a zero Third Next Appointment target is less realistic. Improving efficiencies in patient flow and non- appointment work will help also and we'll discuss those in the next section. By applying many of the principles and strategies of access and efficiency, wait times for patients/clients can still be significantly reduced, from weeks to days.

Using the annual demand and annual supply numbers from the panel size equation you can get a better understanding of how many appointments per week and per day your team would need make up in order to balance supply and demand. The PDSA cycle helps you test different ways of doing things in your practice that are effective in balancing supply and demand.

Remember Dr. Reynolds? She is in the office 5 days a week and calculated she would need to make up approximately 8 appointments per day to achieve balance. This is a lot of appointments each day and the likelihood of Dr. Reynolds reaching a zero Third Next Appointment target is less realistic. The team has decided to work towards reducing their Third Next Available appointment by 50% from their baseline of 16 days to 8 days. We'll walk through some of the strategies for improving access and efficiency in the next section. First, we must complete your practice assessment that will help you consider where you can start to make changes and test their effectiveness.

**Slide – Demand & Supply Tracking Form:** Regardless of which scenario you fit in, tracking daily demand, supply, and activity (the number of appointments completed on a given day) will help you understand the ratio of booked to pre-booked appointments needed to balance daily demand and supply. Collect enough Demand, Supply, and Activity data using Form 2 in your Practice Assessment Tool, over 4-8 weeks - the more the better, to find out the range of demand for each day worked. Make copies of the blank form for each week your team is tracking this data. Assign a team member to take this on, a front office staff is most likely the best person to do the tracking.

Let's look at how Jackie completed this form in Dr. Smith's office. It is Monday morning and Jackie is ready to record the internal and external demand, supply, activity and no-shows for the day. Dr. Smith

shortest appointment time is 10- minutes appointments and 30-minutes is the longest. Jackie takes a request for an appointment with Dr. Smith on the phone and marks down one tick in the external demand column. The next call is a patient who wants to book a physical with Dr. Smith. These are 30-minute appointments so Jackie marks down three ticks as external demand. Mrs. Jones stops by on her way out from her appointment with Dr. Smith to book a follow-up appointment. Jackie marks down another tick under internal demand. Jackie continues tracking the day's internal and external demand for appointments until the end of the day. At the end of the day, Jackie tallies the total internal demand and external demand for the day and adds those two together to record the total demand of 35 for the day. Jackie looked at the appointment schedule and recorded that Dr. Smith had a supply of 36 appointments for that day, counted the activity for the day as 35, and recorded 2 no shows.

**Slide – Dr. Mark Murray:** Dr. Mark Murray is widely published and is recognized as an international authority on the development of access systems in health care. Dr. Murray points out that...

"In an access model wherein, the task is to complete today's work today, a key determinant of daily success is the correct prediction of demand. Demand is often incorrectly measured by looking at past activity i.e. if we saw 125 patients on our practice on a specific day, we conclude that the demand for service was for 125 appointments. This actually measured the supply of services that we offered rather than the true demand for service on that specific day."

There are tips on measuring supply, demand and activity correctly on the daily tracking tool in your Practice Assessment Tool. Visit the Forum area to read virtual QI Coach responses to questions about collecting this data. You can also ask the virtual QI Coach your questions in the discussion Forum area.

**Slide – Summary of Your Daily Demand, Supply & Activity Data:** Once you have 4-8 weeks of daily data, record the data on Form 3 in your Practice Assessment Tool. You can see here the collated 5 weeks of data Jackie entered. When Jackie and Dr. Smith look at the collated data they notice the following. The greatest external demand is on Monday. There is a much lower external demand for appointments at the end of the week. Wednesday and Friday are days with lower supply. Jackie and Dr. Smith see that it would be helpful to have more unfilled spots in the schedule on Mondays to meet the larger external demand. They also decide that they need a higher proportion of pre-booked appointments on Thursday given the high supply of appointments and lower external demand.

At the beginning of every day, a balanced schedule has both unfilled and pre-booked appointments. Study the information in your completed summary table to understand your daily requirements for same day appointments. You can steer pre-booked appointments to low demand times during the week. For example, if Wednesdays typically have lower demand, booking staff can place more pre-booked appointments on that day. This data is critical and allows you to start testing the ratio of unfilled and pre- booked appointments each day. There is no standard ratio that works for all practices and teams that try to skip this step find they are guessing at where to begin.

**Slide – Third Next Available Appointment:** The third next available appointment data is a quick weekly manual data collection to measure the number of days a patient has to wait to get a routine, non-urgent appointment. First and second available appointments are not used, as they could be the result of a recent cancellation. If it is constant over subsequent weeks, it confirms that your supply and demand are in balance. If it is not constant, this may be due to a recent change in demand or supply of appointments caused from things such as vacation or flu season.

To capture, at the same time on the first day of the work week, pretend a patient has just called in for an appointment. Look ahead in the schedule for the third next available appointment slot and then count the number of days to that appointment and record it on the Practice Assessment Tool. Do not count saved appointments or carved out model appointments. In the sample shown here the third next available appointment would be 4 days. It is important to use a consistent method of data collection. Counting weekends is your choice, do or don't, just be consistent.

Often the person who books the appointments is the best person to collect this data. The third next available appointment is tracked weekly and will let you know if the changes you are testing in a PDSA cycle are resulting in the desired improvement. Many teams continue to track this data even after they have reached their goal to quickly alert themselves to changes in their access.

While we often talk about aiming for a third next available appointment of less than 1 day, as we discussed during the panel size equation, this will not be possible for practices whose expected annual demand is much higher than their expected annual supply. Use your baseline third next available appointment and your panel size calculation to help you set a target. Consider aiming for a 50% improvement in third next available appointment time. Dr. Reynolds's baseline third next available appointment was 16 days given the expected annual demand in comparison to expected annual supply; the team opted for a target of an 8-day TNA within 6 months.

**Slide – Continuity:** The continuity measure is the number of times patients are able to see their own provider relative. Our target is that 85% of patients from a multi-provider practice will see their own provider at each visit. We know that this generates fewer office visits and that continuity is good for patient care. Teams can use this measure to make sure they are not negatively impacting continuity when making changes to improve access to an appointment.

To calculate continuity, first identify the number of patient visits for each provider the patient saw in the practice during the past 30 calendar days. Dr. Reynolds's office staff looked back one month and saw there were 392 visits to the practice from her patients. 287 of these patient visits were with Dr. Reynolds. Using this calculation, we can see that Dr. Reynolds saw her patients 73.2% of the time, just below the 85% continuity target.

If your practice does not have multiple providers, we suggest you calculate the measure to establish your baseline and re-check your data every few months.

Keep track of your continuity measure on page 2 of the Practice Profile form in the Practice Assessment Tool.

Let's finish our Practice Assessment by looking at measures of efficiency next.

**Slide – Measure of Efficiency:** The principles of access and efficiency go hand-in-hand. Increasing efficiency in the everyday processes of your practice protects your time spent with your patients. This will also contribute to your supply as you will find areas in your schedule that may free up due to the elimination of wasted time and effort. There are two different measures your team will use to guide your efficiency improvements - cycle time and red zone time. Cycle time measures the amount of the time the patient is at the office for their appointment. It calculates the amount of time between the scheduled appointment time and the time the patient is walking out the door. Red zone time is the percentage of the cycle time spent in face-to-face contact with a member or members of the healthcare

team. The data for these measures is collected on Form 4 - the Primary Healthcare Patient Cycle Time form, found in the Practice Assessment Tool.

**Slide – Cycle Time:** Cycle time data will help the practice understand the patient flow, where waiting occurs, as well as, opportunities to improve efficiency and improve the process. The target is to have a cycle time of less than 60 minutes; many teams have been able to achieve this.

Patients can be asked to track the times on the tracking form throughout their appointment. Cycle time data is collected as often as is required to understand the length of patient visits when determining what change to make or if it has resulted in an improvement. Decide as a team the number of random samples required to inform your quality improvement team. Sample at different times of the day or days of week to identify when things are different. Collate your cycle time results and record it on page 2 of the Practice Profile form in your Practice Assessment Tool.

**Slide – Red Zone:** The target red zone time is of the office visit is spent face-to-face with the care team.

This measure is calculated from the cycle time data. On the cycle time form calculate the total number of minutes spent with members of the care team throughout the office visit.

From the patient's perspective, waiting is of little value and represents an opportunity for improvement.

**Slide – Cycle Time / Red Zone Example:** Let's look at an example. Fifteen patients were randomly asked to complete the cycle time form during their appointment with Dr. Smith. Dr. Smith and Jackie collated the data from the 15 forms and calculated the average cycle time, the time from when the patient checked in to the time they left the practice, as 58.9 minutes with a range for total cycle time from 27 minutes to 88 minutes.

Jackie entered 58.9 minutes onto page 2 of the Practice Profile.

Using the data from the fifteen completed cycle time forms, Dr. Smith and Jackie calculated the average time spent with the care team to be 15.9 minutes. The Red Zone time then was 27% in this example; the patient spent 73% of their visit not engaged with a provider.

Dr. Smith and Jackie realized they had lots of opportunities make changes to decrease the amount of time the patient had to wait during their visit. By looking at the data to identify where the longest waiting periods occurred.

**Slide – Clinic Walk Through:** The clinic walk through is a way for teams to get a better understanding of the patient experience. This information and insights from patients help identify improvement opportunities. Some teams complete this themselves, others ask a few patients to complete the clinic walk through using Form 5 and the 'how to' suggestions in the Practice Assessment Tool. Review the information at your team meeting and capture your reflections on the Practice Assessment Tool. What are areas you see that could be improved?

A patient/family satisfaction survey, Form 6, is also included in your Practice Assessment Tool as an optional way to capture their perspective. Form 7 provides a place for you to tally the survey results. Enter your findings in the space provided on the Practice Assessment Tool.

**Slide – Next Steps:** If you've met as a team and completed this module, you've done a lot of the heavy lifting. Understanding your practice will help you to determine how you will approach your advanced

access and efficiency strategies to balance your supply and demand. This baseline information will guide you through the process of completing a PDSA cycle to test whether the strategies you have chosen are effective and creating the change you intended. Completing the quick post-module assessment will help ensure you are ready to move on, always better to be ready than to waste time and effort learning you weren't.

In our next modules we will show you how to design and test solutions to help you to achieve advanced access.

**Acknowledgements:** No narration.