



County of Los Angeles – Department of Mental Health

Office of the Medical Director



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ACCESS IMPROVEMENT PROJECT

Nationally great concern surrounds difficulties in accessing mental health services but few solutions exist. Los Angeles County Department of Mental Health (LACDMH) stakeholder groups identified long wait times for appointments as a significant problem for our community. In response to this high priority concern, LACDMH launched the Access Improvement Project to assist directly operated and contracted clinics to decrease waiting times. Management principles and continuous quality improvement techniques were applied to improve the ability of DMH sites to more quickly meet needs of clients for high quality mental health services. Murray, Tantau & Associates provided consultation, and the following clinics were pilot sites: Arcadia MHS, Didi Hirsch Community MHC, Edelman Westside MHC, Greater Long Beach Child Guidance, Hollywood MHC, Northeast MHC, Pacific Clinics, and West Central Family MHC. (See Appendix for a summary of “best practices” implemented by pilot sites) This toolkit was developed based on what was learned during the pilot process with the goal to spread AIP strategies and practices throughout DMH.

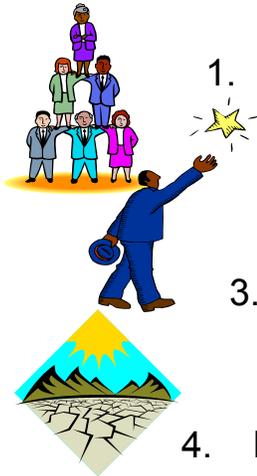


KEY CONCEPTS

- Long waiting times can lead to dissatisfied clients, stressed employees, increased risk for adverse outcomes, and the provision of fewer direct services.
- The purpose of access improvement strategies is to treat clients without delay and provide services when they are requested and needed.
- Matching supply and demand maximizes the clinic's ability to provide services. Supply is available clinical staff time and demand is requests for services.
- Any system is perfectly designed to get the results it gets. Every organization operates with its own resources, within a particular environment and culture. In order to successfully decrease or eliminate delays, changes in the system need to be made with an awareness of the characteristics of that system.
- High quality services are client-centered. Systems can be better designed to improve clients' access, satisfaction, and outcomes.
- Appointmentless (walk-in) systems can decrease wasted staff time, which can occur when clients fail to keep appointments (FTKA). In community mental health settings, fail to keep rates commonly approach 50%. Routine high FTKA rates illustrate limitations of traditional appointment systems.

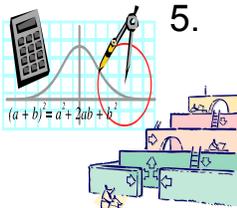
The 12 Step Model

FOR IMPROVING ACCESS TO MENTAL HEALTH SERVICES



1. Build an Access Improvement Team to implement the following steps:
2. Develop and champion goals through the clinic, e.g. eliminate delay, decrease rate of missed appointments
3. Develop systems to measure delay, fail to keep appointment (FTKA) rate, supply, demand for new services and follow up services

4. Drain the lake, i.e. eliminate wait list/backlog



5. Choose strategies for increasing supply by improving efficiency of clinic procedures
6. Design a “walk-in” intake system based upon predicted service demand



7. Adopt strategies for maximizing service provision, e.g. groups (rehabilitation, medication and support), 100 day medication follow up for stable clients, utilization review, close cases when warranted



8. Explain and champion strategies throughout clinic
9. Experiment with changes on a small scale



10. Measure after each change to assess the results



11. Spread successful changes throughout clinic & system



12. Celebrate! Disseminate strategies throughout the system

12 Step Model for Access Improvement



TOOLS

STEP 1: BUILD AN ACCESS TEAM

IDENTIFY TEAM MEMBERS:

- **SYSTEM LEADER:** Someone with authority over the areas affected by planned changes, e.g. Program Manager
- **DAY-TO-DAY LEADER:** Staff member who coordinates AIP activities and communication, assures change is implemented, oversees data collection
- **PSYCHIATRIST LEADER:** The active involvement of psychiatric staff in all stages of the change process is crucial
- **CLINICIAN LEADER:** Clinician who participates in the change process and champions innovations with other line clinicians
- **SUPPORT STAFF LEADER:** Individual with responsibilities for office operations, scheduling, and front office procedures. Many changes will impact the administrative support functions

Note: Be sure that your team includes a member who is proficient in Microsoft applications such as Word and Excel.

OPERATION:

- Set aside sufficient and regular time for meetings (many pilot clinics met weekly for an hour)
- Identify consultants and other information resources
- Maintain on-going communication with other clinic staff and management
- Learn AIP concepts and strategies
- Develop procedures to collect baseline data
- Address staff concerns (change can be difficult)

STEP 2: TEAM DEVELOPS AND CHAMPIONS GOALS

- Set specific goals, e.g. eliminate backlog, reduce FTKA rate by 50%
- Present theory, rationale, and goals to clinic staff
- Solicit staff input and integrate their ideas

STEP 3: DEVELOP MEASUREMENT PROCEDURE:

Measure delay, missed appointments, supply, demand for new services, & follow up

USE AIP MEASUREMENT TOOLS

The most critical aspect of Access Improvement is **measurement**. In order to plan for better service, the clinic staff must know the demand for intake services (the number of callers and persons who walk-in each day requesting first appointments) and the demand for follow-up services (the number of clients placed into a treatment track). Using the measurement tools provided in the appendix will assist in this process. Make your measurements as simple and as frequent as possible, especially at the beginning, to ensure accurate data.

FLOW MAP

Develop a flow chart showing how clients enter your system and move to various treatment or referral options. This chart can be compare with the flow chart when the project is completed.

IDENTIFY TEAM MEMBER WITH COMPUTER SKILLS

Data collection is facilitated with use of data management software like Excel. The data collection tools in the appendix use Excel. Graphed data present results in a powerful and compelling form for both team members and others.

DEVELOP DATA COLLECTION PROCESS

Refer to the “Measurement Toolkit for Mental Health” included in the Appendix.

STEP 4: DRAIN THE LAKE

- Eliminating the waiting list is an important step in achieving better access.
- Most of the clinics participating in the pilot found it useful to eliminate the backlog of waiting clients over a several month period. Managers, clinical and support staff all devoted additional time temporarily to this effort until all clients were seen. This strategy gives the clinic a “clean slate” from which to launch Access Improvement tests.
- Choose one or more days per week to see clients without appointments. Inform clients who call to request appointments of the walk in procedure. Ensure sufficient staffing based on previous demand measures. Once procedures are established the clinic can choose to expand by adding additional appointmentless days.
- Temporarily devote maximum clinician time to completing intakes. Many clinics allocate two or three intakes per clinician per week. While you are draining the lake, this number temporarily will increase.

STEP 5: PLAN STRATEGIES FOR INCREASING SUPPLY BY EFFICIENT PRACTICE

- Develop support staff operations to minimize clinician “housekeeping” functions.

This is a very important concept. In order for clinicians to focus on providing direct service, support staff should pull and file charts, make appointments, perform basic triage, and answer phones. Another example of clinic efficiency, would be a nurse answering telephone calls for a physician about side effects, in order for the MD to have more time for medication evaluations.

- Set up centralized scheduling
- The reception office should have calendars that include scheduled appointments and available (bookable) hours for all clinicians. It’s more efficient to have front office staff make and change appointments.
- Close cases whenever appropriate
- Identify inefficiencies specific to your site and use creativity to address problem areas.

STEP 6: DESIGN AN EFFICIENT APPOINTMENTLESS INTAKE SYSTEM BASED UPON PREDICTED SERVICE DEMAND

- Make the first visit count by providing clinical assessment, financial screening, and treatment (including prescribing medications) during the first visit. Consumer “orientations” before intake are not reimbursable and divert staff time from ongoing care.
- Create appointmentless systems.
For the mental health client population, keeping appointments can be a challenge, thus our high “no-show” (FTKA) rate. Clinics have found that offering same or next day intakes without appointments to be the best way to care for clients and reduce no-shows.
- How do appointmentless systems work?
You measure demand and then have a team(s) available (clinicians, physicians, and support staff) to manage whoever comes into the clinic on certain scheduled days/times.

Many of our consumers have problems keeping appointments. Patients with a history of FTKAs can receive services when they need them. Those who prefer and keep appointments can see other staff or be placed in groups.

- Ensure supply of personnel matches demand pattern.
If you know how many clients will be coming to the clinic each day, you can budget staff to meet their immediate needs. Be sure to have some clinicians on stand-by in case demand fluctuates.
- Identify the necessary degree of flexibility.
Some clients can keep appointments and they should be encouraged to do so. Most others, however, may need some type of walk-in clinic opportunity.

STEP 7: DESIGN STRATEGIES FOR MAXIMIZING FOLLOW-UP EFFICIENCIES:

These ideas are ways a clinic staff can manage patients who have completed intake and enter the “treatment” stream. Individual therapy appointments can be problematic because they eat up staff time and increase the risk of FTKAs. In order to make appointmentless systems work, you must know how much time your staff has available to see clients (bookable hours). Without this information, follow-up plans may fail. Having a centralized (ideally computer based) appointment program is essential.

- Create medication and psychosocial rehabilitation groups*
- Focus on time-limited treatment whenever possible
- Refer to self-help resources
- Identify stable clients for 60 and 90-day medication follow ups
- Establish utilization review for treatment frequency and continuation
- Close inactive cases
- Review telephone procedures and design more efficient systems
- Implement walk-in (appointmentless) follow-up visits: having patients walk in for follow up care can be an excellent strategy for reducing no-shows and seeing large numbers of clients efficiently.
- Promote continuity of the provider;
- Locate staff or functions that collaborate in nearby space;
- Make staff schedules available to front staff or other clinicians for better coordination.

* It is important for managers to periodically review clinicians’ caseloads to evaluate whether clients might be better served by a group or other treatment option in order to ensure that clinician time is utilized effectively.

STEP 8: TEAM EXPLAINS & SUPPORTS STRATEGIES

- Provide regular graphical reports to staff.
- Arrange for presentations by consultants.
- Have open discussions with clinic staff.

Clinic staff will need to know what changes have been attempted and the results. Encourage ongoing input and innovative ideas.

STEP 9: EXPERIMENT ON SMALL SCALE

- Set time-limited tests.
Do not be afraid to fail or change direction. Efficient clinic management is an experiment needing continuous enhancement. Even a daylong trial of a new method is OK.
- Select one of pre-existing clinic teams for trials.
Some clinics have a highly efficient and cohesive group that continually out-performs other staff. This group might be a place to start some of the experimental intake and follow-up strategies.

STEP 10: CONTINUOUSLY MEASURE TO ASSESS RESULTS

STEP 11: SPREAD SUCCESSFUL CHANGES

STEP 12: CELEBRATE & SPREAD SUCCESS

- Have a party celebrating excellent work and innovation. Everybody appreciates praise.
- Prepare a new flow chart and compare it with the “old” one.



APPENDIX

ACCESS IMPROVEMENT PROJECT

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ACCESSS IMPROVEMENT PROJECT

BEST PRACTICES

Note that each example listed below was successfully implemented by one or more of the participating pilot sites.

ELIMINATE DELAY BETWEEN DEMAND AND THE RESOURCE

Strategies:

- Reduce the backlog
- Make the first visit count
- Reduce the fail to keep appointment (FTKA) rate

Examples:

- Divide the backlog among the clinicians and “just do it”
- Combine MD evaluation with the clinician intake
- Combine triage and intake
- Combine triage, intake, and medication evaluation
- Schedule one return visit at a time
- Use medication and FTKA groups
- Make telephone reminder calls to reduce FTKAs
- Direct predictable FTKAs to a group appointment

REDUCE DEMAND FOR UNNECESSARY VISITS

Strategies:

- Predict both external and internal demand
- Promote continuity
- Reduce return visit rates
- Improve “graduation” rates

Examples:

- Supply three months of medication to stable clients
- Close inactive cases
- Develop discharge protocols or agreements with hospitals and other referral sources
- Implement a medication clinic for FTKAs
- Transition stable clients to groups
- Use psychosocial treatment modalities to further stabilize/support clients
- Use brief treatment models when appropriate
- Allow telephone sessions for stable clients

INCREASE SUPPLY

Strategies:

- Use of support staff to maximize clinician time to provide direct service
- Office efficiencies
- Groups
- Use of technology
- Improve the referral process
- Review time off policies/bookable hours

Examples:

- Hire bilingual clerical and clinical staff whenever possible
- Explore clinic hours
 - Extend hours, if possible
 - Consider alternative schedules for staff
- Selectively use student interns
- Care coordinators screen and prepare client for the MD/clinician
- File room
 - Make a person responsible for the file room
 - Enforce associated policies
 - Re-file all medical records by the end of the day
- Consider the use of appointment cards
- Ask clients to arrive 15 minutes before their appointment
- Make one person responsible for all tasks related to intake paperwork
- Pre-assemble charts for initial evaluations
- Use consult forms to improve internal communication
- Inspect and route telephone calls correctly at point of entry
- Verify client's address and telephone number with every contact
- Keep staff roster and telephone list for easy communication and in-house referrals
- Co-locate staff whenever possible for ease of communication
- Provide medication groups for FTKAs
- Provide medication groups for stable clients
- Implement a centralized scheduling and or electronic scheduling system
- Promote the use of e-mail and voice mail for communication
- Update/write guidelines or flowcharts for staff making appointments to improve telephone screening and transfer
- Request time off 2-4 weeks in advance with management review and a clear plan
- No schedule changes without management approval

ACCESS & OFFICE EFFICIENCY

Measurement Tool Kit for Mental Health

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Measurement Tool Kit

As an organization or practice moves from a dissatisfying current state to the vision of a new state, by definition it must change what it does and how it operates. The “High Leverage Changes” or the “Change Package” is a set of known changes that have been successful in similar environments in moving a group from their current state to an improved future state.

How then, will we know that making these changes actually results in an improvement? To answer that fundamental question, the organization or practice will need a set of measures, collected over a period of time that demonstrate, in a temporal fashion, that the changes actually result in improved outcomes. This binder offers an overview of the key measures for access and office efficiency specific to mental health, an instruction kit, a simple tool to record those measures, and a grid that offers timeline guidelines for measurement collection.

What to Measure

The following key measures will help teams understand the current situation and measure progress on goal. For simplicity sake, measures have been divided into that demonstrate improvements in access, efficiency, and outcomes.

Access Measures

- Delay
 - Third next available appointment
 - Future open capacity
 - Percent appointments made today on today's schedule
- Demand
 - True demand
- Case Load/Panel size
- Continuity
- Capacity (Supply)
 - Provider FTEs
 - Expected productivity (appointments per session)
- Appointment availability
- Fail to keep appointment (FTKA) rate

Efficiency Measures

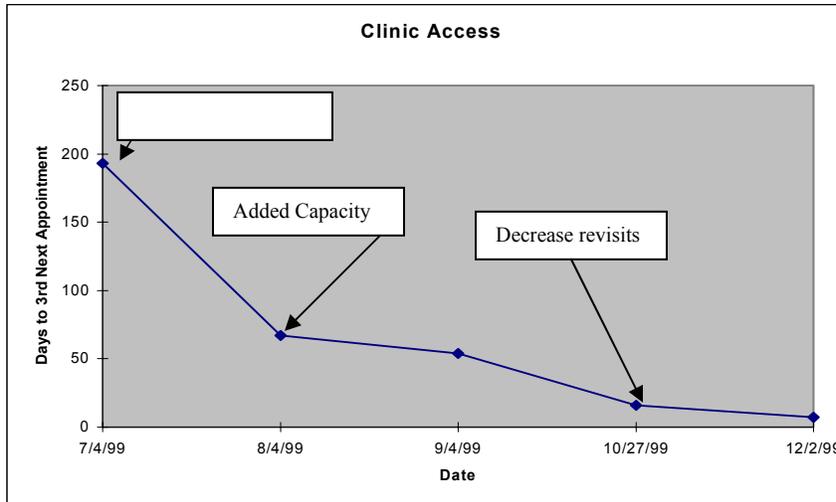
- Cycle Time
- Flow Mapping

Outcome Measures

- Client Satisfaction
- Staff Satisfaction
- Provider Satisfaction
- Health Outcomes
- Financial

MEASURES

Measurement is an important tool to understand the performance of the current system, identify the primary areas upon which to focus attention, set goals for improvement, and to assess the results of changes made. Annotated run charts, such as the example below left, are an excellent way to accomplish the above tasks. This graph shows performance of the system



over time and identifies key events. The key events include both the changes made and any other circumstances that could affect performance. Measurement should be used to speed improvement, not to slow it. A team should employ just enough measurement to know whether the changes they are making are leading to improvement, but not so much to become buried in the measurement

process itself. Consider the following ideas to make measurement simpler and more effective.

PLOT DATA OVER TIME

Improvement requires change and change is a temporal phenomenon. Much of the information about a system and how to improve it can be obtained by plotting data—access delays, cycle time, client satisfaction—over time and observing trends and other patterns. That is why an annotated run chart works so well to both display and to analyze data.

FOCUS ON THE MEASURES DIRECTLY RELATED TO YOUR AIM

If the aim is to reduce length of time the client spends in the clinic on the day of an appointment, collect data measuring the success of that aim. Plot the components such as process time (time spent with a provider) and wait time (non productive or value-added time). Measure various steps in the process, such as registration, or time to fill out forms. Plot and analyze this data.

USE SAMPLING

Sampling is a simple, efficient way to understand how a system is performing without having to engage in overwhelming data collection and analysis. When large system changes are desired, the variety of conditions included in the sample, rather than sample size, is the primary concern. Sampling is especially important if an organization does not have an electronic data collection system. To save resources, rather than obtaining data for each client, try obtaining data for every 20th client or for clients entering the department at set times during the day (such as at 9:00 A.M., 11:00 A.M., 1:00 P.M., and 3:00 P.M.). This data can be collected daily, and summarized weekly.

INTEGRATE MEASUREMENT INTO THE DAILY ROUTINE

Useful data is often easy to obtain without relying on the information system. Develop a simple data collection form and make collecting the data part of someone's job. Use sampling to reduce the time burden.

CREATE GRAPHS

Graphs are used to convey information on a team's progress and whether their goal has been achieved. The aim of any visual display is to present the greatest amount of information in the smallest space using the least amount of ink.

USING THE DATA TOOL

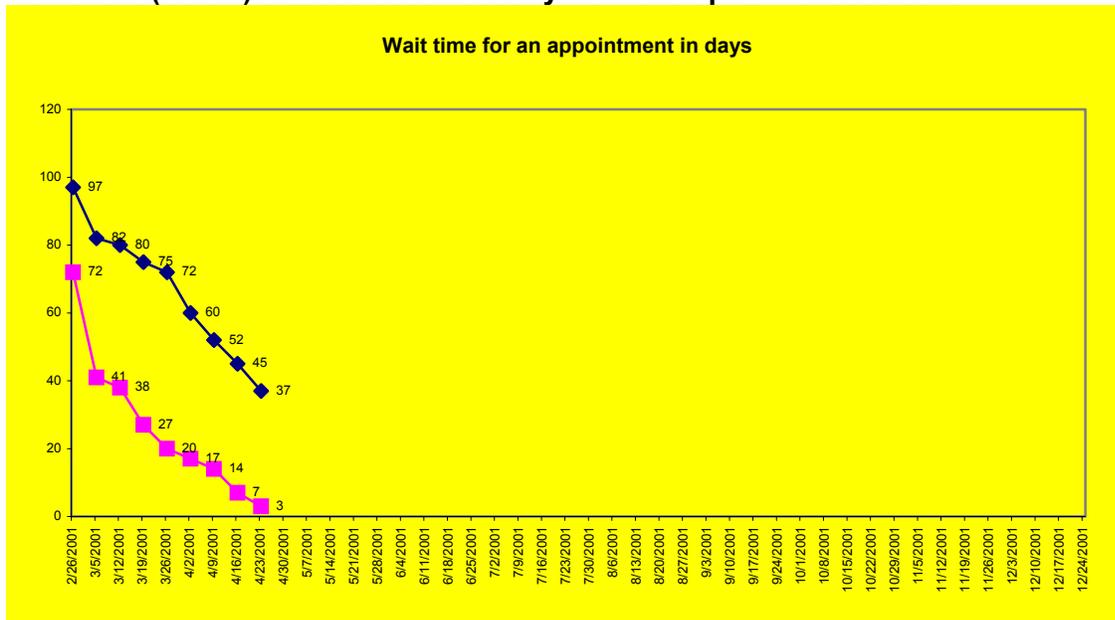
The data tool is designed to allow easy conversion of raw data into run charts—without needing much experience or proficiency with creating graphs. The tool automatically creates run charts when raw data is entered into a corresponding spreadsheet. Follow these easy steps to create run charts from raw data.

1. Open the data tool by double-clicking on the data tool icon.
2. Select the tab that is designed for the specific measures: wait time for an appointment, demand, no show, caseload, etc. Click once on the tab.
3. Enter the raw data into the spreadsheet as close to the corresponding date as possible (see example below).
4. Click on the corresponding graph and note how the raw data entered in Step # 3 is now presented graphically on a run chart (see example below).
5. Use this same procedure on the other tabs of the data tool.

Raw Data entered in spreadsheet

Date	Provider A	Provider B	Provider C	Provider D
2/26/01	97	72		
3/05/01	82	41		
3/12/01	80	38		
3/19/01	75	27		
3/26/01	72	20		
4/02/01	60	17		
4/09/01	52	14		
4/16/01	45	7		
4/23/01	37	3		
4/30/01				
5/07/01				

Run chart (below) created automatically from the spreadsheet above:



ACCESS MEASURES

Delay measures

Delay measures depict the length of backlog and the amount of future available capacity.

- Third available appointment is particularly useful at depicting the amount of backlog remaining.
- Future open capacity conversely shows how quickly capacity is opening in the future.
- Percent appointments made today on today's schedule indicates the degree to which today's demand is being seen today

Together, they indicate to teams their progress on creating future capacity and reducing backlog.

Third next available appointment

The most basic measure of access is the number of calendar days to the third next available appointment. It is simply the third next available appointment offered by the scheduling system as the scheduling system is set up today. The third available appointment is used—rather than the first or second—because it is a better reflection of system availability; the first or second next appointment may be available due to a cancellation or some other event. It is important that this measure be an indicator of when an appointment is available by easy, barrier-free means, not by begging the provider or nurse for an earlier appointment. As the team tests strategies and simplifies the scheduling system, a drop in the third available appointment will track these changes.

To find the third next available appointment, select one or two specific appointment types to track, such as an intake appointment or medication return visit. Count the number of days from a selected reference day to the day when the third next appointment of the selected type is available. Record this number and graph it. Also record on the graph, any corresponding strategies that were tested, or work circumstances, so that it is clear how the tests relate to the measures. Do this on the same day at the same time.

Example:

- Every Wednesday at 10:00 A.M., the designated receptionist looks for the third next available appointment of the specified type.
- The first available appointment is Thursday, a recent cancellation, which s/he ignores. The second is three days from now, but that one is also ignored. Finally, the third appointment is found.
- She/he counts the number of calendar days between today and the third next available appointment.
- Therefore, if today is Wednesday the 2nd, and the third next available appointment is Friday the 14th, s/he enters a twelve next to the entry on the data tool spreadsheet for February 2nd.
- The following Wednesday (the 9th) at 10:30, the third available is found to be ten calendar days away using the same method. On Wednesday the 16th, the receptionist finds the third next available appointment to be 6 days away, and on Wednesday the 23rd, the third next available appointment is 3 days away.

The run chart and spreadsheet section on the next page depict this example. Simply typing the data into the data tool spreadsheet creates the run chart.



Data Tool Spreadsheet

2-Feb	12
9-Feb	10
16-Feb	6
23-Feb	3

Future open capacity

This measure is simply a determination of the number of open appointments, expressed as a percent of the total number of appointment slots, within a specified period. The usual period is four to five weeks. This data is especially important when the third available appointment data approaches “today.” It is therefore, a more sensitive indicator of access.

- Determine how many total (open and full) appointments slots a provider has within the specified amount of time (A).
- Then, count how many of those are open (B).
- Divide the number of open slots (B) by the total number of slots (A) to obtain the percent of future open availability.
- Graph this data on a run chart similar to the third next available appointment run chart.

Therefore, if a provider has 440 appointments slots (filled and unfilled) in a four-week time, and 220 of them are not filled, then future open capacity is 50%. It may mean, however, that tomorrow is only 10% open, and twenty-five days from now is 90% open.

Percent appointments made today on today’s schedule

This measure indicates how much of today’s work is actually being done today, and is an extremely important parameter to track. Ideally, the scheduling system can report on this measure. Otherwise, staff must perform this task manually. To calculate manually:

1. Determine how many appointments were made today for each provider no matter where/when scheduled (A).
2. Count how many appointments were added to today’s schedule today (B).
3. Divide today’s added appointments (B) by the total number of appointments made today (A).
4. The answer is the percent appointments made today on today’s schedule.

Therefore, if there were thirty appointments made for Provider A today, but only ten were added on to today’s schedule, the percent of appointments made today on today’s schedule is .33, or 33%.

Demand Measures

Demand data is a key measure in an Advanced Access System. When matched with capacity data, it can help determine whether a provider has more demand than s/he can reasonably manage, or if s/he has excess capacity. This information is also useful to formulate recruiting and marketing strategies. It will help teams decide which strategies to test first. For example, if demand clearly outstrips supply, providers should use strategies to gain capacity and reduce demand before attempting the hard work of backlog reduction.

True demand

True demand is the number of clients who request a specific provider or type of service (for instance, medication evaluation, on any given day no matter if, when, where, or by whom they are seen. Demand varies from to day to day, and seasonally, too. It is extremely important to track this data over time so trends and variation can be determined. This allows a practice to develop plans to meet demand.

To measure demand, any person scheduling an appointment must keep a daily record (tally) of the following items for each provider. If a client indicates they do not yet have a preferred provider, an “any “ provider log should be used for these requests. Use the following calculation to determine true demand.

$$\text{True demand} = A1 + A2 + A3 + A4 + D$$

- A1 = Total appointment requests called into your office on any given day (regardless of what day the appointment is actually assigned)
- A2 = Total number of walk-in appointment requests on a given day
- A3 = Total number of clients requesting an appointment through other methods/venues (e-mail, fax, add-ons, etc.)
- A4 = Deflections (i.e. to other clinics or agencies)
- D = Total number of follow-up appointments or return appointments generated today (and scheduled for the future)

Please note that some demand is generated externally (A1, A2, A3, A4) by clients and other venues, while some demand is created internally by providers (D).

The true demand inventory (below) is based on today’s demand no matter when, if, where, or by whom the client is seen. Schedulers always record demand in today’s column, or on today’s page only. The demand is then totaled and entered into the appropriate day on the data tool spreadsheet. Merely entering the data into the spreadsheet creates a corresponding run chart.

True Demand Inventory

Date: _____

Mental Health Clinic	Appointments requested today regardless of what day they scheduled (external)	Walk-ins (external)	Other Venues (external)	Deflections	Any follow-up appointments or returns generated today (internal)	Total
	A1	A2	A3	A4	D	A1+A2+A3+A4+D
Provider A						
Provider B						
Provider C						
Provider D						

Case Load/Panel Size

Advanced Access advocates responsibility for the caseload or panel, versus accountability for the appointment slot. A group or individual's ability to do all of today's work today is directly related to the size of their caseload. Caseload is the number of unique clients for whom a provider is accountable. "Unique" means if a single provider sees a client eight times in one year, the client is counted only once for purposes of caseload size. The caseload appropriate for an individual provider will depend on several factors: how often a provider is in the office, the risk associated with caring for a specific population of clients, and the provider's scope of practice. Caseload, therefore must be adjusted for age, sex, and acuity of the client population.

Caseload is routinely expressed as the number of unique clients seen in the last eighteen months. The 18-month period is used, because it captures clients who are seen at greater than yearly intervals. When querying the computer system or database for this information, remember it is not simply the number of clients seen in the previous eighteen months (or client count), but the number of unique clients seen. If a computer system records the provider responsible for a client, this information should be easy to obtain. However, until continuity becomes a system property, a client may appear on several providers' caseloads. In this case, tiebreaker logic is used to determine which caseload the client should be on. Common tiebreakers are the provider seen most often, or the provider seen for intake, or case management. Track caseload at prescribed intervals, as it may change based on death, location changes, or other changes.

Caseload is an important tool for anticipating demand. Experience shows that a certain percent of the caseload will request care on a given day. Therefore, demand is formally linked to caseload size. A large caseload will create demand commensurate with its size. Managing caseload (adjusted) is an important way to level demand across a system of providers and to shape demand on a daily basis.

Continuity (Match)

Continuity is a measure of the probability that clients will see their own provider when requesting care. It is based on retrospective data. It does not refer to the number of clients on a given provider's schedule. Rather, from the client's perspective, it is the likelihood they will see their own provider. Looking at a specific provider's schedule and calculating the percentage of clients on that schedule for which that provider is accountable can lead to a false measure of continuity. Even if all the clients on that schedule "belong" to that provider, this is a measure from the clinician's perspective. During this scheduled time, many other clients could have been seen by someone else or at somewhere else.

Therefore, measure continuity from the client's perspective:

- Of all client visits to a particular site over a specific period (usually a month), how many of those clients had continuity (a match or linkage) to their designated provider?
- The numerator is relatively simple. It is the number of Provider X's clients who saw Provider X for their visit.
- The denominator is a little more complex. It requires the team to define total visits in terms of venue and period.

$$\frac{\text{The number of Provider X's client visits to Provider X}}{\text{The total number of Provider X's clients' visits (to the system)}}$$

- Last, measure retrospectively, using client visit activity over the previous month. Measuring daily can be deceptive as it may fail to capture the activity of the clients whose provider is absent that day.

SUPPLY (CAPACITY) MEASURES

Supply is the measure of provider capacity or availability. Advanced Access systems rely on adequate and flexible capacity. It is helpful to think of supply in three dimensions:

- Macro Supply—the number of providers and how many hours they work
- Deployment of supply—the way the macro supply is spread throughout the day, week, month and year
- Process of supply—defining the work and who should do it to optimize supply

Provider Full Time Equivalent (FTEs)

The number of providers available, in FTEs, is the most basic measure of supply.

- Count the number of FTE providers in the office on a daily, weekly, and monthly basis.
- Record this data on a chart.
- Compare this capacity data to demand data.

This data is often surprising and offers insight into demand and capacity management. For example, the chart may show four provider FTEs available on a Monday, traditionally the highest demand day. Alternatively, the data may reveal seven provider FTEs on Thursday, one of the lower demand days. This indicates a need to manage provider days off in a different way to better match supply and demand.

Expected productivity/appointments per session

After determining the number of FTE providers available in a given period, it becomes important to measure and know how many client visits per specific period each provider is capable of seeing in the present system. This is the next finer cut at macro capacity. It is a rough calculation of approximately how many appointment slots (or hours of availability) each provider, or a system of providers, has available. Stop at any point in the calculation to determine the expected daily, weekly, monthly, or yearly capacity of each provider. Add all the providers' data together to arrive at system capacity. The calculation is a simple multiplication exercise:

- Slots per hour X hours per day = appointments per day
- Appointments per day X days per week = appointments per week
- Appointments per week X weeks per year = appointments per year

The answers to these simple equations give important information, especially when compared to true demand. For example in the chart below, if the demand for a provider averages about 125 appointments per week, and the average capacity is 96 (4 x 6 x 4), then a capacity/demand mismatch is obvious. The team can then decide if, when, and how to add capacity, and conversely, how to reduce demand to bring the capacity/demand equation into better balance.

Expected	Productivity	Chart			
Provider FTE	Average Appts/hr A	Hours/day B	Days/Week C	Weeks/Year D	Total Appointment Capacity/Year AxBxCxD
Dr. Green 0.8 FTE	4	6	4	50	4800
Provider Pink 1.0 FTE	2	6	5	48	2880
Case Manager Gray 0.8 FTE	1	6	4	50	1200
Total FTE: 2.6					

No show rates

This measure is important since “fail-to-keep-appointments” are wasted capacity, capacity that cannot be assigned to another client. To calculate no show rates, tabulate the number of not kept appointments (no shows) by day or week, and by provider or system of providers. Express this either as a simple number or a percentage of total appointments. Enter the % no shows by week into the data tool spreadsheet. This will create a corresponding run chart to track the trend. Often computer systems track this very useful information and provide reports on request.

PRODUCTIVITY

Another dimension of capacity is productivity. As in the previous examples, it is important to know the number and capacity of provider FTEs. In addition, it is important to track how providers become increasingly productive, and thus increase capacity due to the access and efficiency changes implemented in their offices.

The productivity measure often makes providers uncomfortable and they may mistrust the data. Therefore, it is crucial to understand what goes into these numbers to allay provider concerns, and so that analysis of whether a change is an improvement is readily understood and trusted. In this case, it is helpful to come to a mutual understanding of the meaning of productivity. Does it mean billable hours? Does it mean hours spent in direct care of clients whether billable or not? Is it client count? Next, it is important to set new productivity standards based on this new and shared definition of productivity.

In many organizations, the current definition of productivity is billable hours. For example, productivity can be measured as a percentage of filled hours to billable hours. In a sense, this captures both potential capacity (productivity or potential space) and how much of that is filled. Therefore, a way to examine productivity is encounters (filled hours) divided by potential hours worked (billable hours). While this definition can and will evolve over time, it is a good place to start as a baseline number. Any changes in definition and in efficiency can be tracked against this baseline number. The data generated on most organizations’ productivity reports is easy to enter into the data tool spreadsheet on a monthly basis. This spreadsheet then creates a run chart to visibly track the trends.

EFFICIENCY MEASURES

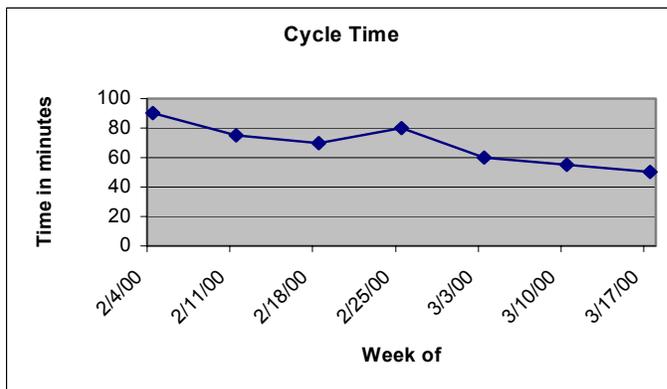
Efficiency measures are key in determining the flow and timing of the current process. The measures help teams decide what changes to test to improve process flow, and to determine if these changes are an improvement.

CYCLE TIME

Cycle time is the recommended measure to assess the status of, and later improvements in client flow and process efficiency. It is simply the time from when a client enters the office or clinic until the client leaves. Some prefer to use the appointment time, since it may be easier to collect. However, remember the time the client actually enters the office is the time that actually matters to the client. Cycle time is divided into the following subsets, each depicting an important aspect of the process:

- Time from check-in to rooming
- Time from rooming until the client sees the provider
- Time with the provider
- Time with nurse or others in follow-up (including any delays)
- Time at ancillary departments (including delays)
- Time from last clinical contact through check-out (including delays)

It is important to track cycle time not only to measure progress on the efficiency strategies, but to make sure clients are not getting appointments easily only to languish in the waiting room.



Keep the data collection simple by first just measuring from arrival to checkout. If a problem is detected at this macro level, then dig deeper into the subsets to isolate and eventually alleviate the problem. Clinics and offices without an information system that easily tracks client arrival times can still gather this information manually by sampling a statistically significant number of clients, usually about five clients per day. Since the 10 a.m. and 3 p.m.

appointment times tend to run behind, be sure to include these times and three others spaced throughout the day.

- Pre-select the sample clients/times for a smoother daily process.
- Record (either on the client's chart or a data collection sheet) the time each pre-selected client enters the office.
- At the end of the visit, the last staff person to interact with the client (whether it is the billing person or the receptionist who schedules a return appointment) records the time the client leaves the office.
- Calculate the average cycle time per week per provider.
- Graph it on a run chart and watch the trends.

If a site is only doing the macro-level cycle time measure, it is important to conduct a separate analysis of face-to-face contact time between client and provider. This data will be helpful when establishing accurate appointment slot durations and intervals.

FLOW MAPPING

Flow mapping is simply a process to identify and clarify every step of a process in order to improve that process. With flow mapping accomplished, the team can then discuss, test, and implement ways to improve processes within the daily flow of work, thus becoming more efficient. It is often surprising how different people hold different views of the key steps of a process.

Learn to use flow mapping by starting with something seemingly simple that everyone knows how to do, such as brushing teeth or making pizza.

- Record each of the process steps on a separate sheet of sticky paper.
- Put the steps in the right order.
- Be sure to record who is responsible for each step.
- Add forgotten steps.

By the end of the exercise, the team should agree on the steps, the order, and who is responsible.

Now move on to a work process and use the same steps. When all agree on the steps and the order, analyze the process:

- Are there steps that have become obsolete? If so, eliminate them.
- Who is doing the steps, and are they the right person for the task? If not, determine who should do the task, always leveraging the constraint.
- Is there a simpler, less complex way to do the process?
- Minimize hand-offs.
- Construct a new way, test, and then implement it.

SUCCESS MEASURES

A major goal of any Advanced Access System is to enhance the success and quality of an organization. Therefore, it is important to measure success in terms of client, provider and staff satisfaction, and clinical and financial outcomes. Many organizations already have systems in place to measure these important parameters of success. Be sure to monitor each of these established measures, or begin to measure these important parameters in order to measure the ultimate success of the Advanced Access work. Adapt current measures to reflect the intrinsic paradigm shift of Advanced Access. For example, client satisfaction measures should include wait for an appointment, wait at an appointment, and continuity with the provider of choice, in addition to the typical questions.

*The **Mental Health Measurement Grid** on the following page summarizes the many measures used in an Advanced Access System. Use it as a guide to quickly reference the purpose of the measure as well as a recommendation on who should collect the data, and how often it should be collected initially and in a maintenance mode.*

MENTAL HEALTH MEASUREMENT GRID

MEASURE	MEASURE SHOWS....	INITIAL FREQUENCY	MAINTENANCE MODE
ACCESS MEASURES			
DELAY			
Third next available appt. in calendar days (by provider and/or by appt. type)	Backlog reduction and appt. availability	Weekly until goal is met	Monthly
DEMAND			
True Demand	Today's work or # of requests for care today	Daily for first four weeks	One week per month or sample
Caseload Size	Number of clients accountable for	Monthly	Monthly
CONTINUITY	A measure of the probability that patients will see their own provider	Monthly	Quarterly
CAPACITY (SUPPLY)			
Provider FTEs	Number of providers on the team	Once for baseline	Quarterly
Expected productivity	Number of appts. per day, week, month, year	Once for baseline	Quarterly
Productivity	Billable hours or hours spent in direct care	Monthly	Monthly
Fail to keep rate	No show rate expressed in %	Weekly for first six-eight weeks	Monthly to Quarterly
EFFICIENCY MEASURES			
Flow Mapping	Process redesign	Initially	As needed to redesign system
Cycle Time	Length of process	Daily sample for first month	Monthly sample
OUTCOME MEASURES			
Success			
CLIENT/CONSUMER SATISFACTION	Degree of client delight	Initially	Annually; more often if possible
STAFF SATISFACTION	Staff morale	Initially	Annually; more often if possible
PROVIDER SATISFACTION	Provider morale	Initially	Annually; more often if possible
HEALTH OUTCOMES	Clinical efficacy	Initially	Annually; more often if possible
FINANCIAL OUTCOMES	Productivity and Efficiency	Initially	Annually; more often if possible