HERITAGE PROVIDER NETWORK, INC.

Our Heritage
Your Health in Good Hands

APPOINTMENT AVAILABILITY STRATEGIES
Improve Workflow and Remove Waste

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Improving Primary Care Access

Improving the flow of work and eliminating waste ensures that the clinical office runs as efficiently and effectively as possible. Some reports estimate that up to 40 percent of clinical office work is redundant or otherwise wasted effort. Examples include staff taking messages and looking for a chart for a repeat phone call requesting a prescription refill, or preparing for an office visit and the patient doesn't show up for the appointment. This change idea addresses concepts aimed at improving work flow and recognizing and eliminating waste.

Changes for Improvement

Find and Remove Bottlenecks

A constraint, or bottleneck, is anything that restricts the throughput of patients into and through the clinic system. Constraints occur when the demand for a particular resource (e.g., rooms, providers, tests) or part of the system is greater than the available supply. If changes are made to improve parts of a system without addressing the constraint, the changes may not result in reduction of delays and waiting times for the entire system. To manage the constraint, the practice must first identify the constraint and then drive unnecessary work away from the constraint.

Every system has a constraint called "the rate-limiting step" (i.e., the step that determines the rate at which work passes through the system). This constraint usually has the most valuable and scarcest resources. The focus should be on optimizing the supply of the rate-limiting step, not on optimizing every resource in the system. The rate-limiting step should never be idle, ensuring that work flows smoothly through it.

It is often difficult to identify a constraint by evaluating the demand and the supply for each resource because these elements can be masked by constraints in other parts of the system. To identify the constraint, observe where the work is piling up, or where the queues are forming. Look for certain signals within the system, such as places where material or information is in short supply, or where patients or staff are waiting, to help identify constraints. Clinics usually expect that the physician is the constraint, but there may be other factors.

In a clinic setting, the primary provider is often the rate-limiting step because he or she does a number of things that uniquely add value to the system. Any work that the provider is doing that is not related specifically to his or her unique skills and expertise as a provider should be assigned to other members of the care team (see [Optimize the Care Team](#)).

Remove Intermediaries

Each care team member who is involved in the flow of the patient or information adds time to the process and increases the risk of error. If every prescription refill requires physician sign-off, eliminate the step of having the nurse review the request or devise a system that doesn't require physician sign-off for every prescription. Enable patients to check in directly with their care team, rather than going first to a centralized check-in area, to eliminate an extra step in the process.

Use Automation and Technology

Some technologic or electronic systems such as electronic medical records (EMR), copiers, faxes, phones, walkie-talkies, and computers can save time and improve work flow in the clinical office. For example, directly entering vital sign data into an EMR rather than writing the results on paper and later entering the data into the chart can improve work flow. Walkie-talkies can be used to improve communication among the care team. For example, in many offices nurses are not in direct view of the patient arrival area. Provide nurses and secretaries with walkie-talkies to communicate patient arrivals, or give nurses access to a computer that displays patient arrival information. Nurses and clinicians can also use walkie-talkies or phones to communicate unexpected patient needs.

Move Steps in the System Closer Together

The physical distance between steps in a process adds delays, and the physical location of people can affect processing time and cause communication problems. If the physical location of adjacent steps in a system are moved closer together, work can be directly passed from one step to the next, thereby reducing delays and decreasing the need for additional communication systems.

One example of moving steps closer together is to actually co-locate staff. Efficient, timely, and frequent communication is essential to the functioning of a care team. Staff that need to communicate regularly should be in the same physical location (for example, staff responsible for billing and insurance authorization). Sometimes clinics are even able to co-locate the scheduling and nursing staff with some creative architecture. This really enhances communication between the "front" office and "back" office staff.

Standardize Rooms, Equipment, Patient Flow, and Information Flow

Standardization means reducing unnecessary variation in a process. In an office practice, reducing variation in exam room layout, equipment, and supplies means that providers and staff don't have to waste time looking for needed items either before or during a patient visit. Standardizing the flow of patients and information ensures uniform, consistent, and reliable processes.

The important concept of open rooming is predicated on standardized exam rooms. Open rooming allows any provider to use any exam room any time it is available. This is in contrast to some traditional clinics, where exam rooms are assigned to specific physicians. For example, a clinic with a total of sixteen exam rooms assigns two rooms to each of its eight providers. On days when only five providers are in clinic, a traditional system would only use ten of the sixteen available rooms because the rooms are matched to particular providers. Standardizing all exam rooms leads to open rooming and allows all sixteen rooms to be used each day, maximizing the clinic's flexibility to rotate patients into available rooms, and thereby improving flow and decreasing waiting time.

To implement open rooming, the room set-up and inventory of supplies and equipment must be standardized in each room. Some clinics establish an initial standardization and then set up a room to test the new system and identify needed improvements. In some clinics, it helps to achieve physician buy-in to give providers a single drawer or shelf of their preference in the exam room.

It is also important to keep rooms fully stocked to minimize interruptions during the patient and provider interaction. First agree on the list of needed items and their placement in the room. Next, assign roles and responsibilities to keep the rooms fully stocked on a set schedule. Make this process as efficient as possible, and ensure that it is part of clinic policy and procedure.

In addition, ensure that each exam room has the standard equipment needed for the patient visit so that the provider does not need to interrupt the visit to call or look for needed and common equipment. For example, be sure that commonly used items such as thermometers, forceps, scales, oto/ophthalmoscopes, and blood pressure cuffs are located in each room. When there is a need for specific equipment or supplies, such as in certain specialty clinics, mobile equipment or special supply trays can be brought into the room as needed. This still allows for the standardized set-up of the rooms while also accommodating the need for specialized equipment or supplies.

Also, be sure that there are enough exam rooms for each provider. To be as efficient as possible, each provider must have enough rooms so that patient flow is optimized. This may vary by practice type and style. The idea is that a provider should always be in a position to move through the schedule from one room to the next, without waiting for a patient to be roomed. This means that the office staff must be able to keep one step ahead. If there are adequate rooms, the provider can be with the appointed patient while the staff deal with the needs of the previous and next patients.

To standardize patient flow, start by following patients through your office practice. Eliminate any variation in flow that is not directly related to patient need. When patient need dictates a variation in the pattern of flow, look for sub-groupings. Some practices have developed rooming protocols that dictate when some patients may skip some or all vital signs.

To standardize information flow, start by tracking the current flow of information through the practice. Tracking information flow is more difficult than tracking patient flow since the streams of flow diverge and new parts flow into the main current. Track one type of information flow to assess your opportunities. For example, follow the information flow for a request for prescription refill from the first time the phone rings until completion of

documentation and refill authorization or written/faxed prescription. Reduce the number of steps and people involved in the process. Improve turnaround time by using just in time processes.

Use Just in Time Processing

A typical approach to completing multiple daily tasks is to put some aside and process them later in a batch. An unintended consequence of batching is to increase the number of times patients contact our offices to repeat their request or to find out if the work has been done. Reducing turnaround time reduces the number of phone calls, thereby reducing the net amount of work for the office staff.

The time it takes to make a referral, conduct a patient visit, or phone in a prescription refill is the same if we do it now, in ten minutes, or five days from now. Performing tasks in continuous flow (or just-in-time processing) requires rapidly switching from one task to another. Just-in-time processing initially appears to take more work, but in fact results in less work. This is not an easy transition for all individuals and will require pilot testing. Performing all tasks immediately is not possible or appropriate as it would require constantly interrupting the flow of work. Practices must test the best balance between immediately addressing tasks versus interruption.

The following are some practical examples of just-in-time processing:

- **Attempt to do today's work today**, whether the work is scheduling appointments, answering messages, processing refills, or completing forms. A system that does today's work today takes care of each day's demand on the day it is generated. This ensures that the future is protected for tomorrow's work. Doing today's work today can reduce no-show appointments, rework, and repeat phone calls and messages.

- **Document the encounter during or immediately after the interaction**. Allowing time in the provider's schedule to document the patient encounter during the normal flow of the clinic prevents the backlog of documentation at the end of the provider's day. Such a process increases efficiency since the provider can more quickly recall the details of the visit at the time of the encounter rather than several hours later. Such a system requires adjustments in scheduling such as adding a few minutes to each appointment length so that documentation can be done either during or in between visits (see below) or by scheduling "pauses" (5 or 10 minute blocks of open time) during the course of the day that can be used for documentation or other non-visit related activities by the provider.

- **Attend to refills or messages between patient appointments**. Scheduling a few minutes between patient appointments or extending the scheduled time for an appointment for a few minutes enables the provider to answer phone or email messages, respond to questions from other members of the care team, or write or re-new prescriptions. This process reduces the need for interruptions during the patient visit or for batching such activities until the end of the day (see below Use Continuous Flow to Avoid Batching).

- **Do an interruption analysis**. Interruptions during a patient interaction with a provider can unnecessarily extend the visit and can potentially damage the quality of the interaction. A quick interruption analysis can help a practice pinpoint the causes of the interruptions (e.g., looking for equipment or supplies, answering phone calls, responding to a care team member's question, etc.) so that they can be minimized or eliminated. One simple method is for a provider to keep a list of all the interruptions that occur over the course of a morning or afternoon on one particular day.

Do Tasks in Parallel

Rigid sequencing of steps in a process means that a delay in any step stops the entire process. Parallel processing means that the overall process can continue even if one part is delayed. For example, an office that uses a protocol for influenza vaccination can give the shot to the patient before the provider encounter if the provider is delayed. To do parallel processing well requires some mechanism for team members to know that the essential elements of the work have been accomplished. A check list would serve this need.

Synchronize Patient, Provider, and Information

Synchronization entails organizing multiple processes so that they intersect at a specific agreed upon point in time. To eliminate delays and smooth the flow for both providers and patients during an office visit, the patient should be in the exam room ready for the provider at the same time that the provider is ready to see the patient, along with the patient record (including test results, preventive care screens, etc.).

The following are some specific ideas on how to better synchronize the appointment processes:

- **Be sure to start every appointment on time**. Agree on what a specific clinic appointment time means. If the registration desk doesn't open until 8:00 AM, there is no way the patient can be placed in a room, have his or her history taken, and be ready to see the physician at 8:00 AM. If all agree that an "8:00 AM appointment" means "physician sees the patient at 8:00 AM," then tasks can be synchronized around that point and waiting times can be reduced. While the concept is simple, the implementation is difficult. It means that the patient must be registered, roomed, and prepped by the point of synchronization (8:00 AM) so the provider can enter the room on time and have all the necessary information to begin the encounter. Some clinics successfully use the strategy of communicating two times to the patient: Arrival time for the important registration and rooming process, and appointment time for the actual encounter with the provider.

- Ensure that all needed information, equipment, and supplies are available for visit. Use a "chart check" as an inspection step prior to the synchronization point (physician entering exam room) to reduce the chances that physicians (a scarce resource) and patients (the key customer) will have to wait for necessary information (e.g., lab results or diagnostic tests, etc.) at the time of the visit.

- **Use rooming criteria to ensure the patient is prepared for the provider.** Rooming criteria check sheets help ensure that the patient is ready for the physician. Check sheets typically include such items as "shoes off" for a diabetes patient. This not only helps fully prepare the patient for the visit, but also aids float or cross-trained personnel when they come in to assist, assuring a standardized preparation for each visit.

Use Continuous Flow to Avoid Batching

Doing work as it occurs during the course of an office visit (e.g., doing documentation at the end of each visit) reduces the bottlenecks created by holding similar types of work to be done at a future time (batching). For example, some practices save all telephone calls, documentation, refills, etc., for the end of the day or session. This is referred to as batching.

With continuous flow, all work is accomplished as it presents itself and completed in one continuous action. Appointment times may need to be lengthened, or pauses placed in the schedule, to accommodate continuous flow and reflect a certain truth in scheduling. Continuous flow does not mean that time is added to the day, but that it is reallocated throughout the day.