

Pre-Visit Laboratory Testing

Save Time and Improve Care

Developed in partnership with



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How Will This Toolkit Help Me?

Learning Objectives:

1. List STEPS needed to implement pre-visit laboratory testing
2. Describe how to maximize patient compliance with the pre-visit laboratory process
3. Identify ways to delegate computerized order entry to the appropriate care team members





Introduction

Pre-visit laboratory testing involves ordering patient laboratory tests at the time of the current appointment to be completed before the next appointment. Prospectively identifying the necessary pre-visit lab tests for the next visit allows the patient and physician to have a face-to-face conversation about lab results and options for care during the next visit.^{1,2}

^{R3} This process eliminates the need to review results later, **saving time** and improving patient care.

Pre-visit laboratory testing is a component of **pre-visit planning** described in detail in a separate toolkit.

Five STEPS to Implement Pre-Visit Laboratory Testing

1. Use a Visit Planner Checklist to Preorder Labs and Other Needed Tests for the Next Visit

2. Delegate Electronic Order Entry

3. Schedule the Next Follow-up Appointment

4. Arrange for Tests to Be Completed Before the Next Visit

5. Empower Team Members to Manage the Inbox



1

Use a Visit Planner Checklist to Preorder Labs and Other Needed Tests for the Next Visit

A visit planner checklist enables the physician to indicate the interval until the next appointment and schedule any associated labs. It should be quick and convenient to use, requiring no more than a few seconds of physician time. The visit planner is most useful if customized to the practice or an individual physician or specialty. For example, at the end of an office visit, a physician may schedule a patient with diabetes to return in 3 months to

complete a fasting blood sugar and hemoglobin A1c (HbA_{1c}) before the visit. The result will be available to the patient and physician at the following appointment.

If patients miss the lab appointment, the appropriate team member can call them, invite them to come in for the test that they missed and, when appropriate, remind them of their upcoming appointment with the physician. This phone call can serve as a safeguard to reduce no-shows for office visits. The reminder call can also alert the team when the patient cannot keep their appointment with the physician so they can open up that time slot for another patient.

Visit Planner Checklist: Order Sheet for Patient Visits

(MS WORD, 49 KB)

Q&A

I am overwhelmed by the process of selecting a diagnosis code for each test ordered. Do you have any suggestions?

When creating the visit planner, pair each test with the most frequently used diagnosis codes for that test. You can then easily check the appropriate diagnosis code for each patient, alleviating the need in most circumstances to search through a long list for the appropriate diagnosis code. Some practices work with their IT department and/or electronic health record (EHR) vendor to create an electronic checklist version.

I commonly order bundles of tests. Can the visit planner help with this?

Yes, you can create “order sets” or bundles of tests grouped by condition. Order sets simplify the ordering process and reduce the likelihood of missing laboratory tests. For example, when using an order set, a single checkmark provides diagnosis codes along with orders for an entire panel of tests. For a patient with diabetes, an order set could include orders and corresponding codes for HbA_{1c}, lipid profile, urine microalbumin/creatinine ratio, and creatinine blood test.

Is it desirable to have a nurse call the patient 1 week in advance of the appointment to arrange the needed orders?

Some organizations hire a nurse to review the patient's chart 1 week before the appointment and then use standing orders to identify the appropriate lab tests as an alternative to the physician doing the pre-visit lab ordering. On the surface, this involves extra work because another clinician is reviewing the record and developing an understanding of the patient's needs, and risks inaccuracy because protocols will not trigger all of the necessary tests. However, ordering pre-visit labs is still more efficient and patient-oriented than completing the laboratory tests after the appointment.

2

Delegate Electronic Order Entry

As described in STEP 1, using a visit planner checklist should only take a physician a few seconds. Entering the same information found on the checklist into a computer may require 1 to 2 minutes. Several minutes more per task can add up to hours per day.^{3,5} **Delegating electronic order entry** to another clinical team member allows physicians to focus on providing high-quality patient care.⁴

Which team members can enter orders during pre-visit planning?

According to the Joint Commission, any licensed, certified, or unlicensed team member, including registered nurses, licensed practical nurses, medical assistants, and clerical personnel, may enter orders at the direction of a physician. This includes orders based on standard office protocols or standing order sets that have been approved by the practice or organization. Team members who are not authorized to “submit” orders should leave the order as “pending” for a certified or licensed team member to activate or submit after verification. The authority to pend vs activate or submit orders varies based on state, local, and professional regulations. While the Centers for Medicare & Medicaid Services (CMS) is silent on who may enter orders, in general, CMS considers [diagnostic test order requirements](#) met if there is an authenticated medical record by a physician supporting their intent to order the tests. Again, this may vary by state, local, and professional regulations.

Q&A

Does pre-visit laboratory testing require hiring additional team members?

No; however, it shifts how and when the work is completed. Pre-visit laboratory testing requires less team member time. For example, without a pre-visit lab process in place, the patient sent for a lab test after the visit may need to call for results. The receptionist or call center fields the call and passes the message to the nurse, who discusses the matter with the physician. The physician must then review the chart for clinical details and communicate back to the nursing team about the next steps. The nurse then tries to contact the patient, which may require multiple attempts. Pre-visit lab testing avoids these steps.

3

Schedule the Next Follow-up Appointment

Scheduling patients for their next visit at the conclusion of the current visit saves time, promotes continuity, and may improve adherence to follow-up visits.⁴ It also signals to patients that you want to see them again and will plan ahead to make their visit as meaningful as possible.⁵

Many practices find that scheduling 1 year or more in advance [saves the care team time](#). Some patients will have to call to reschedule, but this is less work for both patient and practitioner than a system that requires all patients to call to schedule their next visit.

Some practices that choose not to book 1 year or more in advance instead create a system to store appointment times and associated lab requests and then contact the patient 2 weeks before the due date to schedule both the appointment and any pre-visit laboratory tests. Others will send the patient a postcard asking the patient to call in. While these approaches require more “touches,” they are reasonable alternatives for clinics that do not schedule a year in advance.

Q&A

Does pre-visit laboratory testing result in more no-shows?

Not at all. Pre-visit laboratory testing, especially when coupled with an automated reminder, often decreases the rate of no-shows in a practice. Implementing an automated or manual reminder system that contacts patients via phone call, letter, email, or text message gives patients the opportunity to confirm that they will be present at their next visit or indicate that they would like to reschedule.



4

Arrange for Tests to Be Completed Before the Next Visit

While scheduling patients for their next office visit, simultaneously schedule any labs or additional tests and scans before the next office visit. Some organizations arrange for patients to have lab testing a few days before their appointment with the physician. In contrast, others have developed processes for rapid turnaround of the lab testing and results so that the patient may come for the lab test earlier on the day of their appointment with the physician. Each approach aims to have the lab results available at the visit so the physician and patient can discuss them face-to-face.^{1 R2 R3}

Monitoring a condition at appropriate intervals through pre-visit laboratory testing allows the patient and physician to complete all management decisions during a visit. This is more efficient than having the results return slowly to the office, generating multiple phone calls and additional follow-up work for the physician and care team to conduct.^{4 R6}

Q&A

[How can I accommodate my patients who don't want to take an extra day off from work to have laboratory tests done?](#)

Many health care organizations have extended laboratory hours that allow patients to come in before work, after work, or on weekends. In addition, some health care organizations allow patients to have labs drawn at a satellite facility closer to their homes. Many labs allow patients to schedule their blood draw, providing extra flexibility.

[We use a commercial laboratory that holds future lab requests for only 2 weeks. How would we implement pre-visit laboratory testing?](#)

Pre-visit laboratory testing saves the clinical practice sufficient time to be worth the investment of working with commercial laboratory vendors to hold orders for 12 months or more. Alternatively, your EHR might enable you to place future orders, which could be released by a clinical team member 2 weeks before the patient's upcoming visit.

Can this same process be used for other tests?

Yes, your practice can use the same process for x-rays and other diagnostic tests to achieve the same efficiencies and improvements in patient safety and patient engagement. For example, the care team is less likely to miss a test or overlook results when a mammogram or follow-up chest x-ray is scheduled to occur before the next appointment.



5

Empower Team Members to Manage the Inbox

Team members can use [physician-established protocols](#) to review results and forward only those that are abnormal to the physician. This way, the physician reviews most labs only once—at the time of the appointment. This is known as “just-in-time” information processing. For example, suppose a team member reviews a patient’s lab results for urgent abnormalities before a visit and finds none. In that case, the physician will only need to review the results once at the time of the patient’s visit.^{2 R3 R4}

Q&A

How should we approach pre-visit laboratory testing for patients with new or unexpected medical issues that require additional laboratory testing after a visit?

New or unexpected issues identified during the visit will happen on occasion. However, you generally want to design your processes to manage the *majority* of situations. If your system is running smoothly, you can handle the occasional variation, such as the need for post-visit labs.

Some labs will hold onto samples for a few days and allow the care team to order add-on tests at the time of the visit. For example, if your lab will hold onto samples for 3 days, you should work with patients and care team members to schedule pre-visit labs within 3 days of the scheduled appointment.

What if the patient's pre-visit laboratory testing yields an abnormal result?

The team generally handles abnormal results according to established protocols and reviews abnormal results with the physician. For example, suppose a patient has a newly elevated blood sugar result. In that case, the care team will discuss with the physician, who may order additional tests prior to the appointment and refer the patient to the diabetes educator. This approach provides an opportunity to advance the clinical evaluation ahead of the appointment. Depending on the nature of the abnormality, such as a new cancer diagnosis, the protocol may require the physician to inform the patient personally of the result. Again, if the system is running smoothly in general, an occasional abnormal result will not present a large challenge.

Our practice's EHR now automatically releases results to patients via the patient portal. How will this impact pre-visit laboratory testing?

Given new federal requirements announced in 2021 that require immediate release of all lab results to patients, it is possible for results—even urgent abnormal results—to be made available to patients before physicians have a chance to review and discuss the results with the patient. It is important to make patients aware of this new process and reassure them that their physician will review and discuss all results at their upcoming appointment. The physician will address anything flagged as abnormal at the appropriate time.

Conclusion

Scheduling future appointments and pre-ordering needed laboratory tests before the next visit sends the right message to patients—their care team is proactively preparing for their next appointment to ensure efficient use of time at each visit.⁶ Patients who are more actively involved in their own care generally experience better health outcomes and regularly obtain preventive care, such as having lab work done at the appropriate intervals.⁴ Additionally, this approach encourages the team to take a more active role in reviewing laboratory results to support the physician during a visit.

Pre-Visit Laboratory Testing: Implementation Checklist
(MS WORD, 50 KB)

Measure the Impact of Pre-Visit Labs
(MS WORD, 96 KB)



“Pre-visit lab through point-of-care testing saved our clinic \$25 per visit in physician and staff time.”

—J. Benjamin Crocker, MD; Internal Medicine, Ambulatory Practice of the Future

How Much Time and Money Will Pre-Visit Laboratory Testing Save My Practice?

Use this calculator to estimate the amount of time and money you could save by implementing pre-visit laboratory testing in your practice. Enter the amount of time (minutes) per day spent by physicians and team members on activities that could be eliminated by pre-visit testing. Results should be verified for your specific practice and workflows. Calculations are for demonstration purposes only. Actual savings may vary.



AMA Pearls

Make clinical decisions with the patient at the appointment in real time.

Testing before the visit gives patients the opportunity to discuss any changes in condition and treatment with their physician face-to-face.

Organize care (including lab testing) around an annual comprehensive care visit.

By organizing multiple components of care around a single visit, your patients save time, and so do you.

Extend the “pre-visit paradigm” to other tests.

Apply the same pre-visit testing approach to x-rays and other diagnostic tests. Planning ahead to schedule diagnostic tests offers the same efficiencies and improvements in patient safety and patient engagement and allows patients to discuss their results with their physician face-to-face.



Further Reading

Journal Articles and Other Publications

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- Crocker B, Lewandrowski EL, Lewandrowski N, Gregory K, Lewandrowski K. Patient satisfaction with point-of-care laboratory testing: report of a quality improvement program in an ambulatory practice of an academic medical center. *Clin Chim Acta*. 2013;424:8-11. doi: [10.1016/j.cca.2013.04.025](https://doi.org/10.1016/j.cca.2013.04.025)

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3. Gottschalk A, Flocke SA. Time spent in face-to-face patient care and work outside the examination room. *Ann Fam Med*. 2005;**3**(6):488–493. doi: [10.1370/afm.404](https://doi.org/10.1370/afm.404)
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