

Delay in Treatment: Failure to Contact Patient Leads to Significant Complications

February 1, 2013

Shapiro DS. Delay in Treatment: Failure to Contact Patient Leads to Significant Complications. PSNet [internet]. 2013.

<https://psnet.ahrq.gov/web-mm/delay-treatment-failure-contact-patient-leads-significant-complications>

Case Objectives

- Know that failure to properly act on abnormal test results is a significant patient safety issue.
- Appreciate that failing to contact a patient about abnormal test results is a source of successful malpractice claims.
- Learn the legal standard that is applied to a failure to contact a patient about test results that require follow-up action.
- Describe some steps that might reduce the harm from failure to act on abnormal test results.

The Case

A 21-year-old woman presented to the emergency department (ED) with heavy vaginal bleeding. She was admitted to the obstetrics and gynecology (OB/GYN) service for management. She received a blood transfusion and a Depo-Provera injection (a hormone to stop the bleeding), and was discharged home the next day. As part of the evaluation for her vaginal bleeding, a chlamydia test was performed in the ED. This test returned positive the day after the patient was discharged.

Per a standard protocol, the positive laboratory result was sent through the electronic medical record (EMR) to a nurse who worked in the OB/GYN clinic. She followed standard procedure and tried to call the patient using the contact number in the EMR. No one answered, and the nurse called again on each of the next 4 days, but there continued to be no answer. She notified her clinic supervisor who noted the result, but made no further attempts to contact the patient.

One week later, the patient presented to the radiology department for an ultrasound that had been scheduled at the time of the initial hospitalization. The ultrasound technician did not notice the abnormal test result or the fact that the chlamydia infection had not been treated. The following day, a different OB/GYN clinic nurse tried to call the patient with the ultrasound results, and again no one answered the

phone. She sent a letter by mail to the patient with both the ultrasound and chlamydia results. The patient received the letter and came to clinic 2 weeks later (now 26 days after her initial presentation) where she received appropriate antibiotics for the chlamydia infection (a single dose of azithromycin).

Despite this treatment, she developed fevers and abdominal pain and presented to the ED. She was diagnosed with chlamydial pyosalpinx (infection of the fallopian tubes) and peritonitis. This severe form of chlamydial infection likely developed because of the delay in treatment. The patient needed to be admitted to the hospital for intravenous antibiotics. The patient was discharged 3 days later and was expected to make a full recovery, although there is some risk of long-term complications including infertility and chronic pelvic pain.

The Commentary

The process of arriving at an accurate diagnosis often involves many steps in a complex system, and errors can occur at any step along the way. It is perhaps most frustrating and tragic, however, when the ball is dropped in the final step: the patient presents in a timely manner, the clinical evaluation is performed well, appropriate tests are ordered, the tests are performed correctly within an appropriate interval, the results are diagnostic and transmitted to a clinician, and then the final step—the clinician and patient executing a treatment plan—does not take place.

That is what happened in this unfortunate case. The patient's phone number did not work. Her address was correct, but a letter was not sent until 11 days after the culture turned positive. Then the patient did not return for treatment for another 2 weeks, by which time significant harm had occurred.

Cases where there are simple lapses in the system are heart wrenching because the errors are so clear and easy to understand, and the consequences can be fatal. Twenty years ago, a prominent physician touchingly related his daughter's death from cervical cancer years after an abnormal Papanicolaou test was not properly acted on.⁽¹⁾ More recently, national publicity was accorded the Rory Staunton case in New York City, in which abnormal test values (an elevated white blood cell count with a very high percentage of "bands") were reported from the lab after the 12-year-old boy had been discharged from the emergency department (ED). These important results were not communicated to his parents or his primary care physician, who were in contact with each other three times the next day. By the time he was brought back to the ED, it was too late to reverse the course of the boy's streptococcal sepsis, and he died.⁽²⁾

Usually these tales are buried in confidential malpractice settlement agreements. When they reach the light of day, however, they are powerful, and the errors are easily understood by the public, legislators, and juries. The parents of Rory Staunton have engaged a medical malpractice lawyer and are urging New York lawmakers to pass legislation to require hospital EDs to disclose and discuss the results of children's laboratory tests with their parents before discharge.⁽³⁾

After an important test result is produced, the final stage in the diagnostic process itself involves several steps. The clinician must see the test result, interpret it correctly, and determine an appropriate response, and that response has to be effected—which includes contacting the patient and ensuring the patient carries out the treatment plan. We already know this process has flaws—a recent AHRQ WebM&M

commentary addressed the significant proportion of abnormal test results received by office physicians that are not seen or acted on, mainly as a result of system problems including time pressure and cognitive workload.⁽⁴⁾ In particular, in one study of primary care practices, 6.8% of errors in the testing process involved failure to inform the patient of the result.⁽⁵⁾

The same issues afflict handling of abnormal test results for inpatients, of which some 20% to 62% are not properly followed up.⁽⁶⁾ The challenge is even greater with tests that are completed after the patient has left the ED or inpatient floor, because of the loss of continuity engendered by the transfer from inpatient to outpatient systems. In a study of three specific laboratory tests obtained in an ED (one of which, like this case, was chlamydia cultures), results arriving after the patient had left were not followed up one-third to three-fourths of the time.⁽⁷⁾ Inadequate communication between inpatient and outpatient physicians is all too common and certainly was a factor in the Rory Staunton case.⁽⁸⁾ In this case, it does not seem attempts were made to convey the test result to the patient's primary care doctor (although it is not clear whether the patient has one).

Partly because of the challenges above, health care systems may provide diagnostic test results directly to patients as well as their primary physicians. Some electronic medical record systems allow patients to access their test results after their physician releases them, and some release certain test results to patients without physician review after a specified period of time. Proposed federal regulations would require clinical laboratories to release test results directly to patients if requested.⁽⁹⁾ The federal Mammography Quality Standards Act has long required facilities that perform mammograms to send a summary of the written report "directly to the patient in terms easily understood by a lay person."⁽¹⁰⁾ Data provide some support for giving patients access to their test results.⁽¹¹⁾

The literature does not appear to offer any evidence-based patient safety measures proven to prevent harm by decreasing the incidence of failed contacts. Nonetheless, when the patient is not contacted and serious harm results, the malpractice system will almost always hold the health care provider and/or his organization responsible.

There are few data on the incidence of malpractice cases related to inadequate patient notification and the amount of the resulting malpractice payments and costs. One study found that delays in diagnosis are the fastest-growing type of malpractice claim, and one-fourth of these claims concern the failure to follow up test results.⁽¹²⁾ Historically, the scenarios well known to those working in the malpractice system include: (i) findings on radiographs, usually done in an ED, that are missed by the clinician treating the patient but are discovered when a radiologist reads the film later; (ii) other ED test results, like the ones in this and the Rory Staunton cases, that come back after the patient has left; and (iii) outpatient biopsies or other test results that are indicative of cancer and not pursued.

Prior malpractice cases do not provide specific guidance, applicable to all circumstances, regarding precisely what must be done to try to contact a patient about an important test result. In general, the malpractice "standard of care" might be described as what a reasonably careful health care provider or facility would do in the same circumstances. It is determined on a case-by-case basis by unique juries deciding cases involving unique facts; therefore, what can reasonably be expected will depend on the details of the clinical situation, the patient, and the means available to reach the patient. The type of

test—radiological, biochemical, microbiological, tissue pathology, etc.—should not matter per se, only the clinical implications.

However, a general, common-sense principle can be deduced from review of a number of such cases, plus related cases involving patients who do not appear for an important scheduled follow-up appointment or test and must be contacted to come in. The effort that must be expended should be proportionate to the importance of contacting the patient—i.e., the harm that could result should the patient not be reached. And the window of time in which contact should be made depends on the time urgency of the patient's condition (or expected condition if action is not taken). An immediate, life-threatening medical problem requires an immediate strong effort to reach the patient, while a condition that would not cause appreciable harm if unaddressed for weeks—and even then would cause only minor morbidity if untreated—obviously requires much less effort and urgency. If blood cultures drawn in an ED turn positive after the patient has been discharged, for example, a vigorous effort should be mounted to contact the patient as soon as possible to prevent death from sepsis. By contrast, for the positive vaginal chlamydia culture in this case, a letter would have been an appropriate second step when the phone call on the first day did not reach the patient.

What means should be used to try to reach a patient? The standard of care requires one to utilize the means that a reasonably careful health care provider or organization would use in a similar situation. In this case, the patient's address was correct, and a letter did eventually reach her. When she could not be contacted the first day by phone, a letter should have been sent then, rather than 11 days later. If the telephone and mail contact information are insufficient, and the need is important enough, what else should providers try? I am unaware of any malpractice cases that have addressed the Internet specifically, but future juries might well conclude the Internet is a readily available source of information and communication that a reasonably careful health care facility should utilize. Internet phone and address directories could be consulted just as printed ones can be. Search engines can uncover an individual's online footprint, and social media and other sites might provide clues to a patient's contact information or whereabouts (e.g., place of work). Some sites might even enable a message to be transmitted without violating HIPAA. Whatever is done should be documented in the medical record for the usual reasons: to communicate to others what has been done and to provide written or electronic documentation in case the failure to contact becomes the subject of a lawsuit.

From a legal perspective, patients have a duty to participate in follow up as well. A jury can find them negligent if they do not do what a reasonable patient should do, such as respond appropriately to a message about an important test result. Here too there are no specific rules or guidelines: the determination is made case by case. In this case, it is not known what the letter that was sent to the patient said, but if it conveyed an appropriate sense of urgency the patient could be considered negligent for waiting 2 weeks to return. Perhaps providing inaccurate contact information might even be considered negligent in some circumstances. Most states use the doctrine of comparative negligence, which asks the jury to determine the percentage of the harm that is attributable to the patient's own negligence. The award is then reduced by that percentage.

Despite the absence of evidence-based measures proven to decrease the incidence of failed contacts with patient and prevent harm, some suggestions can still be offered to clinicians and health care organizations ([Table](#)):

1. Engage patients in following up on pending tests, by educating them about the tests and their importance, when the results will be available and how to obtain them, and what to do after that. The ED discharge instructions given to Rory Staunton's parents contained a line for pending tests and a phone number to call to obtain the results, but the line was left blank. Electronic personal health records can permit patients to view their test results directly, along with a message or instructions from the doctor when appropriate, an important advance.⁽¹³⁾ Enlisting the patient's participation in the diagnostic process may be the single best method of reducing the harm from failure to act on abnormal test results.
2. Obtain or verify contact information, preferably including more than one contact method, each time a patient is seen (registered) or a test is ordered or performed. When I drop off my car at my mechanic, I am always asked the best way to reach me that day. Health care organizations can do the same. If the patient cannot be reached by the available contact information, try other means including online sources as warranted by the clinical importance of contacting the patient.
3. Assess how reliably individual patients are likely to be contacted and customize your approach. For example, consider holding some patients in an ED until all important test results expected within a reasonable time are returned and reviewed, or scheduling a follow-up appointment to review test results with a patient.
4. Use an electronic medical record to provide an alert when the patient needs to be contacted. The alert could appear when a patient contacts the facility for any reason. In this case, there was a lost opportunity when the patient came to the radiology department a week later for an ultrasound, because the radiology personnel did not know there was an important clinical need that needed to be addressed.
5. Continue to develop and improve electronic systems to track test results and ensure they are reviewed and acted on. Hospitals and EDs should develop systems to inform outpatient providers in a timely and reliable manner of care provided, tests pending, and how to obtain the results.
6. Document all that is done.

Take-Home Points

- A significant number of abnormal test results from outpatient, inpatient, and ED areas are not properly acted on.
- Failing to contact a patient about abnormal test results that require follow up is a clear error that can result in a successful malpractice claim.
- The malpractice standard of care requires an effort to contact patients about abnormal test results that is proportionate to the harm that might occur without proper follow up.
- Two steps that could reduce the harm from failure to contact patients about abnormal test results are engaging patients in following up on pending tests and routinely obtaining or verifying contact information.

David W. Shapiro, MD, JD

Editor, *Professional Liability Newsletter*

Faculty Disclosure: *Dr. Shapiro has declared that neither he, nor any immediate member of his family, has a financial arrangement or other relationship with the manufacturers of any commercial products discussed in this continuing medical education activity. In addition, the commentary does not include information regarding investigational or off-label use of pharmaceutical products or medical devices.*

References

1. Swan HJC. Kath. Ann Intern Med. 1992;117:1049-1050. [\[go to PubMed\]](#)
2. Dwyer J. An infection, unnoticed, turns unstoppable. New York Times. July 11, 2012. [\[Available at\]](#)
3. Dwyer J. Death of a boy prompts new medical efforts nationwide. New York Times. October 25, 2012. [\[Available at\]](#)
4. Moore RC. No news may not be good news. AHRQ WebM&M [serial online]. August 2012. [\[Available at\]](#)
5. Hickner J, Graham DG, Elder NC, et al. Testing process errors and their harms and consequences reported from family medicine practices: a study of the American Academy of Family Physicians National Research Network. Qual Saf Health Care. 2008;17:194-200. [\[go to PubMed\]](#)
6. Callen J, Georgiou A, Li J, Westbrook JI. The safety implications of missed test results for hospitalised patients: a systematic review. BMJ Qual Saf. 2011;20:194-199. [\[go to PubMed\]](#)
7. Greenes DS, Fleisher GR, Kohane I. Potential impact of a computerized system to report late-arriving laboratory results in the emergency department. Pediatr Emerg Care. 2000;16:313-315. [\[go to PubMed\]](#)
8. Dunn AS, Markoff B. Physician–physician communication: what's the hang-up? J Gen Intern Med. 2009;24:437-439. [\[go to PubMed\]](#)
9. Department of Health and Human Services. CLIA program and HIPAA privacy rule; patients' access to test reports. Federal Register. 2011;76:56712-56724. [\[Available at\]](#)
10. Mammography Quality Standards Act, Section 263b(f)(1)(G)(ii)(IV). [\[Available at\]](#)
11. Giardina TD, Singh H. Should patients get direct access to their laboratory test results? An answer with many questions. JAMA. 2011;306:2502-2503. [\[go to PubMed\]](#)
12. Gandhi TK, Kachalia A, Thomas EJ, et al. Missed and delayed diagnoses in the ambulatory setting: a study of closed malpractice claims. Ann Intern Med. 2006;145:488-496. [\[go to PubMed\]](#)
13. Tang PC, Lansky D. The missing link: bridging the patient–provider health information gap. Health Aff (Millwood). 2005;24:1290-1295. [\[go to PubMed\]](#)

Table

Table. Steps organizations can take to reduce the malpractice risk associated with following up test results.

1. Engage patients in following up on pending tests
2. Obtain or verify contact information at each visit
3. Customize the approach to patients based on their anticipated reliability
4. Use the electronic medical record to provide alerts when patients need to be contacted
5. Develop electronic systems that track test results
6. Document all that is done

This project was funded under contract number 75Q80119C00004 from the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services. The authors are solely responsible for this report's contents, findings, and conclusions, which do not necessarily represent the views of AHRQ. Readers should not interpret any statement in this report as an official position of AHRQ or of the U.S. Department of Health and Human Services. None of the authors has any affiliation or financial involvement that conflicts with the material presented in this report. [View AHRQ Disclaimers](#)