



Testing times: Taking a closer look at your test results system

Ms Suzanne Creed provides advice on the best practice management of patient test results

Management of patient test results is critical to ensuring high-quality, safe patient care. Clinicians order a variety of screening and diagnostic tests that inform diagnosis, treatment decisions, and ongoing management of health conditions. Inadequate or poor communication of test results to referrers and inadequate follow-up arrangements are widely acknowledged patient safety issues.

The World Health Organisation's *Global patient safety report 2024* identified that diagnostic errors contribute to 16 per cent of preventable patient harm globally, often due to issues in patient-practitioner encounters, such as history taking, examination, and test interpretation.

Managing test results in healthcare is complex. It involves many members of the healthcare team, relies on a variety of internal and external systems, and the need to communicate results to the patient and members of the healthcare team in a timely and clinically appropriate manner.

Sub-optimal management of test results can lead to significant adverse outcomes for patients. These may include misdiagnosis or delays in diagnosis and treatment, in addition to increased morbidity and mortality.

While some patient harm can be overt and immediately obvious, harm as a consequence of poor test results management may only come to light some months or years after the event took place.

Professional responsibilities

The Irish Medical Council's (IMC) *Guide to Professional Conduct and Ethics for Registered Medical Practitioners* (9th Edition) clearly outlines a doctor's responsibility concerning safe patient care. Paragraph 11.3 states:

"As well as good standards of clinical care, safe patient care requires a well organised practice supported by robust systems, appropriate record keeping, organisation of rota and cover arrangements, among others."

The IMC also provides specific guidance in relation to the management and follow-up of test results. Paragraph 33.8 states:

"When discharging care to the patient's GP, the doctor who orders diagnostic tests or investigations must follow up on the results to ensure these investigations have taken place, results are followed up and appropriate action taken, including communication to the GP."

Challenges in test result management

Despite the critical nature of test result management, several challenges arise throughout the test results process in all healthcare settings:

- 1. Communication breakdown:** One of the most significant issues is the breakdown in communication between healthcare providers and patients. Miscommunication can occur at various stages, from ordering tests to delivering results. For instance, a clinician may order a test, but fail to communicate it clearly on the appropriate request form or in the clinical notes. Poor communication can also arise when the patient or other healthcare staff involved in the treatment of the patient are not informed of the result in a timely manner or the patient is not informed about the need for follow-up. In a hospital setting, this may arise when an inpatient has moved wards or been discharged before test results have been returned or where a patient has moved from inpatient to outpatient care, but a clear management plan is not documented in the clinical records
- 2. Overreliance on technology:** While electronic health records (EHRs) have streamlined many processes,

they are not infallible. Errors can occur due to system failures, incorrect data entry, or inadequate training of staff. The reliance on technology can lead to complacency, where providers assume that the system will manage results effectively without active oversight. For example, when reviewing laboratory results some IT systems highlight abnormal results in 'red'. When under time pressure a clinician may be tempted to develop 'workarounds' and only review 'red' abnormal results. In many instances, a normal result also requires action, eg, a PSA [prostate-specific antigen] result which is normal but rising or a haemoglobin result which is normal but falling. Hence only focusing on abnormal results may also cause patient harm.

- 3. Volume of results:** In busy clinical environments, the sheer volume of test results and other additional administrative duties can be overwhelming for clinicians. In the absence of dedicated protected time to manage these tasks, test results may get overlooked or delayed in review potentially posing a risk to patient safety.
- 4. Patient engagement:** Patients often play a crucial role in their healthcare journey, yet many are not adequately informed about their test results. This lack of engagement can result in patients being unaware of their health status or the need for follow-up care.

Practical tips: Enhancing patient safety and reducing your medicolegal risk

To mitigate the risks associated with test result management, you may wish to consider the following risk management strategies.

1. Establish clear protocols

Developing clear protocols for managing test results is essential. This includes defining roles and responsibilities for healthcare team members, outlining the steps for ordering, receiving, reviewing, and communicating results. A standardised approach helps ensure that all team members are aware of their responsibilities and that no steps are overlooked. Having a clearly defined protocol will also help to maintain standards, provide consistency, and reduce the likelihood and impact of individual error.

2. Effective, clear communication

Communication with colleagues: It is important to clearly document what investigations are required and why they are needed. This means itemising and documenting in the clinical file each individual test requested, eg, 'FBC, U&E, LFTs', rather than recording as 'routine bloods'. This will ensure that the person undertaking the test has clear instructions as to the exact test required. Similarly, when ordering radiology tests, all clinical information provided should be clear and unambiguous. The use of abbreviations such as 'Rt' and 'Lt' instead of using the complete words 'right' and 'left' can be more prone to error and are therefore best avoided.

Communication with patients: Good communication with patients is a key element of patient-centred care. When ordering a test, it is important that the requesting clinician explains to the patient the purpose and nature of the test and specifies the clinical urgency. During such discussions, it is an ideal opportunity to check that the correct patient demographics are on file and advise how and when such test results will be communicated. Healthcare organisations should never rely on a policy of 'no news is good news'. The patient's records should reflect the advice given to the patient including how to follow up on their results.

3. Tracking of test results

When designing a test results system, it is imperative to consider a robust tracking system. This will ensure all tests requested are returned as results. Failure to do so may result in missing significant test results potentially causing harm to patients. While technology can pose challenges, it can also enhance test result management when used effectively. Healthcare providers should ensure that their EHR systems are configured to alert them to abnormal results and that there are mechanisms in place for tracking results that require follow-up. Regular training on the use of these systems can help staff utilise technology to its fullest potential.

4. Clinical governance and follow-up

Failure to adequately follow up on a patient may lead to a delay in diagnosis of a clinically significant condition. The IMC has provided very clear guidance regarding clinical governance of test results as previously outlined. Where a clinician is absent from practice, or a locum is in place, the organisation should ensure that robust handover systems are in place so that no urgent abnormal results are overlooked or that the necessary immediate response/follow-up is delayed. It is imperative to ensure that a reliable system exists to follow up on any patient requiring further clinical review or repeat testing. Any communication regarding attempts to contact the patient, such as phone calls and text messages, should be documented clearly in the patient's clinical file.

5. Engaging patients

Engaging patients in their healthcare journey has multiple benefits including supporting decision-making, treatment options, and making effective lifestyle changes. Clinicians should ensure that patients are kept well informed, understand the importance of follow-up and encourage them to ask questions about their results. Regular reminders to patients to keep their contact details up-to-date will help reduce the risk of failed or missed communications regarding follow-up appointments.

6. Monitor and audit processes

Regular monitoring and auditing of test result management processes can help identify areas for improvement. Tracking metrics such as failure to communicate results, and the number of missed or delayed results, could inform quality improvement initiatives and help enhance patient safety.

7. Promote a culture of safety

Creating a culture of safety is essential to supporting patients and integral for effective test result management. Central to an effective safety culture is encouraging open communication among team members, allowing staff to report errors or near misses without fear of retribution, and fostering an environment where patient safety is prioritised.

In summary

The management of patient test results is a critical aspect of healthcare that directly impacts patient safety and quality of care. By understanding the challenges and implementing best practices, healthcare providers can greatly enhance their test result management systems. Clear protocols, effective communication, timely review of results, patient engagement, and a culture of safety, are all essential components of a robust test result management strategy.

References available on request