

A complex process – test results and patient safety

Suzanne Creed discusses some of the key medico-legal risks and necessary safeguards in managing test results in general practice

MANAGING TEST RESULTS is a fundamental role of general practice teams. Every day, GPs and practice nurses order a variety of screening and diagnostic tests that inform diagnosis and ongoing treatment decisions. It is estimated that over 20 million investigations are managed annually in Irish general practice. Inadequate communication of test results to referrers and suboptimal arrangements for follow-up are widely acknowledged patient safety issues.^{1,2,3} The World Health Organization has identified that diagnostic errors occur in 5-20% of doctor-patient encounters and suggests that most people will encounter a diagnostic error in their lifetime.⁴

Managing test results in general practice is a complex process. It involves multiple members of the practice team, depends on effective practice systems and external providers, and requires timely and clinically appropriate communication of results to patients.

Failure to follow up on test results can significantly compromise patient safety and threaten the overall quality of care provided, potentially leading to delayed diagnoses, missed treatment opportunities and avoidable harm. In 2024, close to half of all claims brought against Medisec GP members involved a delay in diagnosis. Allegations related to a delay or failure to diagnose often involve the management of test results as a common contributory factor.

Ethical and professional responsibilities

The Medical Council's *Guide to Professional Conduct and Ethics for Registered Medical Practitioners* (9th Edition) clearly sets out a doctor's responsibilities in relation to ensuring safe patient care.⁵ 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 outlines specific guidance regarding 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."

Safe robust systems

Like many other risks in general practice, safe management of test results requires robust systems that are well-designed to reduce the risk of human error and prevent harm to patients. The key steps in the safer management of test results include:⁶

- Ordering of laboratory tests
- Obtaining the sample
- Administration of samples

Case study: David and Dr B

- David, a 78-year-old patient, following a recent MI, had a stent inserted. He was commenced on dual anticoagulation therapy and a proton pump inhibitor (PPI). He attended the practice a few months later for a chronic disease management (CDM) review and had a full blood count (FBC), HbA1c and urea and electrolytes (U&E) taken
- Later that evening, the laboratory phoned the practice and spoke to Dr B to communicate a haemoglobin result of 8.1g/dl

- Transport of samples to the laboratory
- Managing the results returned to the practice
- Clinical review of results
- Results actioned or filed
- Patient is monitored through to follow-up.

Errors can occur at any stage of the test results process, potentially jeopardising patient care.

Communication failures

Poor communication or miscommunication can occur at any point in the patient's test results journey, from ordering the test to receiving and communicating the result with the patient. For example, a clinician might request a test but fail to document it clearly on the appropriate request form or in the clinical notes. Communication issues can also occur when test results are not promptly shared with the requesting clinician, patient or other healthcare professionals involved in their care, or when the patient is not informed about the need for follow-up.

Case scenario

Fortunately, in the case of David and Dr B (outlined in the case study above), the telephone call from the laboratory was put directly through to Dr B, and the low haemoglobin result was managed effectively and efficiently by his GP.

What happens in your practice when the laboratory phones with an abnormal result? Does the receptionist take a message, or is the call put directly through to the requesting GP?

Non-clinical staff may not understand the significance of a critically abnormal result. Hence all urgent results phoned to the practice should be put directly through to the requesting GP or their deputy. It is best practice to avoid relying on communicating such results via 'a task' on your software system, as such critically urgent information may get overlooked.

Timely review and action of all test results is key to ensuring patient safety. Ideally, results should be reviewed by the requesting clinician who has overall governance of the results. Practices should also consider setting up a 'buddy system' for clinician cover when on leave or absent from the practice.

When employing a locum at the practice, it is essential to

consider how the handover of patient care will take place. You may wish to consider holding a brief 'exit interview' or meeting to discuss significant issues, particularly any critical test results or referrals that may require follow-up to ensure safe and seamless continuity of care.

Are you familiar with what to do if you get contacted in an out-of-hours (OOH) scenario, when the patient concerned is not a patient of your practice? GPs and GP trainees should also familiarise themselves with out-of-hours policies and procedures concerning the communication of critically urgent results to patients when working in OOH.

HSE guidance

The Laboratory Services Reform Programme recently released detailed guidance on communicating laboratory results that may require urgent action.⁷ The document highlights the importance of prompt communication and clear responsibilities, outlining the distinct but interconnected roles of both laboratory staff and laboratory users. Key responsibilities in the guidance concerning GPs include:

- **24/7 contact availability:** GPs should provide contact details for themselves or a qualified deputy, available 24/7, to respond to critical results – even outside normal hours
- **Patient identification:** All lab requests should include key patient identifiers such as forename, surname and date of birth, PPSN and current address, if possible. As an additional safeguard, including the patient's (or representative's) phone number with consent can be a useful backup if the lab is unable to contact the GP
- **Clinical details:** It is essential to provide appropriate clinical information to enable the laboratory staff to determine if a result is critical or not
- **Anticipated critical results:** Where a critically abnormal result is anticipated, it is essential to highlight the level of urgency and appropriate clinical details and proactively check the reporting platform for results rather than rely solely on lab communication
- **Primary communication method:** Secure electronic communication systems, such as Healthlink, are the main method for receiving lab results, including critical ones. Users should ensure robust systems are in place to ensure timely review and action
- **Additional communication:** Laboratories may provide additional communication (eg. calls or messages) for critical results; hence, they require up-to-date contact information as outlined above to facilitate this communication
- **Email limitations:** Email alone is not acceptable for critical communication due to lack of 24/7 monitoring.

This document supersedes previous guidance and emphasises the importance of strong, effective two-way communication, which is vital for patient safety. Full details of the document can be found on the HSE website.

Communication with patients

Good communication with patients is fundamental to patient-centred care. Keeping the patient well informed about the purpose and nature of tests, the clinical urgency, and how the results will be communicated are all essential aspects of effective communication and shared decision-making. When obtaining a blood sample, it is an ideal opportunity to confirm that the correct demographics and contact details are recorded on file. Practices should

never rely on a policy of 'no news is good news' as a means of communicating results with patients.

Failure to adequately follow up on a patient could result in a delay in diagnosis or treatment of a clinically significant condition. Practices should have a reliable tracking system in place to ensure follow-up for any patient who requires further clinical review or repeat testing. All communication efforts to contact the patient, such as phone calls or text messages, should be clearly documented in the patient's clinical record.


Clinical audit and quality improvement

Regular review and auditing of test result management processes can highlight areas requiring improvement. Monitoring indicators such as the number of missed or delayed results, results not communicated to patients and patients lost to follow-up can enhance improvement efforts and strengthen patient safety.

These efforts, along with fostering a patient safety culture where open communication is encouraged and staff are supported to report errors without fear of retribution, are essential for effective test results management and high-quality, safe patient care.

Conclusion

Managing test results in general practice is an integral part of everyday work. It is an essential part of healthcare delivery that directly affects patient safety and the quality of care provided. By recognising the challenges and adopting best practices, general practice teams significantly enhance their test results management system. Key aspects of an effective strategy include robust protocols, effective communication, timely review and follow-up of patient results, active patient engagement and a culture that prioritises patient safety.

Now might be an opportune time to review your current test results systems. Taking this step can significantly improve patient safety and reduce the risk of avoidable harm to your patients. 

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Medisec has a suite of educational resources and sample protocols available to support you in enhancing your test results system. Please get in touch with a member of our team if you wish to discuss further.

References

1. Watson J, Salisbury C, Whiting PF, Hamilton WT, Banks J. I guess I'll wait to hear' – communication of blood test results in primary care a qualitative study. *British Journal of General Practice*, 2022 <https://bjgp.org/content/bjgp/early/2022/07/11/BJGP.2022.0069.full.pdf>
2. Grant S, Checkland K, Bowie P, et al. The role of informal dimensions of safety in high-volume organisational routines: an ethnographic study of test results handling in UK general practice. *Implementation Sci* 12, 56 (2017). <https://doi.org/10.1186/s13012-017-0586-8>
3. Singh H, Schiff GD, Graber ML, et al. The global burden of diagnostic errors in primary care *BMJ Quality & Safety* 2017; 26: 484-494
4. World Health Organization, Patient Safety (2023) <https://www.who.int/news-room/fact-sheets/detail/patient-safety>
5. Medical Council, Guide to Professional Conduct & Ethics for Registered Medical Practitioners, (9th Edition 2024): <https://www.medicalcouncil.ie/news-and-publications/publications/guide-to-professional-conduct-and-ethics-for-registered-medical-practitioners-2024.pdf>
6. Medisec Factsheet, Test Results – Steps to Safer Management of Test Results (2024). <https://medisec.ie/wp-content/uploads/2024/05/Factsheet-Steps-to-Safer-Test-Results-Management-Jan-2024.pdf>
7. HSE, The Laboratory Services Reform Programme, ADVICE NOTE, Communication of Laboratory Results Likely to Require Urgent Action (June 2025): <https://www.hse.ie/eng/about/who/cspd/lsr/resources/communication-of-laboratory-results-likely-to-require-urgent-action.pdf>