POLICY BRIEF

The Royal New Zealand College of General Practitioners
Te Whare Tohu Rata o Aotearoa

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Managing patient test results

Managing patient test results in general practice is a complex task. It involves all members of the practice team, relies on the systems of both a general practice and that of an outside provider, and requires the communication of results to the patient in a timely, clinically appropriate and meaningful manner.

The highly administrative nature of test result management can feel bureaucratic at times, but it is a critical part of a patient's diagnostic work-up and the results often have significant implications for the care patients receive.

The complexity involved means that errors can occur, and these have sometimes resulted in patient harm.

This paper looks at the standards that apply, a number of Health and Disability Commissioner (HDC) cases involving test result management, and aims to provide advice and assistance with the development of better systems to support GPs and their practice team.

Practice standards

The College has published two sets of quality standards for general practice: The Foundation Standard represents what is considered to be the minimum legal, professional and regulatory standards for general practice. Practices on the CORNERSTONE® programme are accredited against the *Aiming for Excellence* standard.

Both *Aiming for Excellence* (Indicator 24) and the Foundation Standard (Indicator 23) include requirements to have effective systems for the management of clinical investigations.

As the Foundation Standard states:

"Practices must operate a reliable and defined process for recording and managing clinical investigations. There should be a clear indication of what action was initiated on all reports to enable correct tracking and management. The principle is that patient reports are not lost in the system and are processed to ensure the right people get the right information within the time frames identified by the practice. For every report or test there must be a person in the practice responsible for management and tracking. Good practice requires that practices should keep a record of telephone conversations with patients about test results, noting the date and who advised the patient."

Both sets of Indicators include the same criteria, which are that:

- There is a policy describing how laboratory results, imaging reports, investigations and clinical correspondence are managed.
- All incoming test results or other investigations are sighted and actioned by the practice team member who requested them, or by a designated deputy.
- Patients are provided with information about the practice procedure for notification of test results.
- The practice can demonstrate how they identify and track potentially significant investigations and urgent referrals.
- A record is kept of communications with patients informing them about test results.

Key messages

- The highly administrative nature of test result management can make it feel like a bureaucratic task at times, but it is a critical part of a patient's diagnostic work-up and the results often have significant implications for the care patients receive.
- GPs are reliant on the other members of their practice team and the quality of their practice management systems and also, to a lesser degree, on the cooperation of their patients.
- Whether a practice is CORNERSTONE® accredited or meeting the Foundation Standard, there are indicators and criteria relating to the management of patient test results that all practices need to meet.
- There are a number of HDC cases which have looked at the management of patient results in general practice, and found practitioners and health services wanting.
- Some of the HDC's findings have been controversial, but there is some common ground between the views of the profession and the views of the HDC.
- It may be useful for GPs to review recommendations made by Dr Ian St George and Dr Richard Medlicott with their practice colleagues, to make sure all those involved have the same understanding of their respective responsibilities.

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HDC cases

Three recent cases

1. A case[1] involving a 21 year-old patient who presented to his GP with flu-like symptoms, achy bones and a headache. The GP referred the patient for blood tests. The test results were received on a Friday, and were abnormal. In particular, C-reactive protein was markedly elevated, and the blood count and renal function tests were abnormal. The GP intended to have a practice nurse contact the patient to advise him of the results and to ascertain his current condition, but he forgot to ask the nurse to do this. The patient was suffering from a systemic viral illness and his condition deteriorated over the weekend, eventually resulting in severe acute demyelinating encephalomyelitis and tetraplegia.

   Although the HDC did not determine that the harm was a result of the GP's oversight, he found that the GP breached the Code of Health and Disability Services Consumers' Rights because of his failure to inform the patient of the test results and to follow-up in a clinically appropriate manner. The HDC also made an adverse comment about the medical centre for not having a formal process in place for tracking urgent results.

2. A case[2] involving a patient with a history of high grade cervical abnormality and two cervixes. Over a period of several years since 2008 the GP took cervical smears from both cervixes and sent them to laboratories for analysis, each time attaching only one referral form. After each referral only one report was received, reporting a normal result. In July 2012 two reports were received, with a report indicating a normal result being followed by a second report indicating an abnormal result. The abnormal report was mistakenly filed by practice staff as a duplicate. Notably, during this period the practice was amalgamating with another practice, and two Medtech databases were being merged and it was reported that there had been a lot of duplication of results because of this. By this stage one of the cervixes bled on touch and had a lumpy appearance. The GP made a referral to a gynaecology clinic and attached the normal result. The patient was assessed as "low grade" by the clinic. She had not been seen by the clinic by November 2012, so returned to her GP and requested a referral to a private gynaecologist. She underwent biopsy in December and was informed she had cervical cancer and underwent a radical hysterectomy.

   The HDC was critical of the GP for failing to ascertain whether there should have been two sets of results after sending two specimens. The HDC was also critical of the practice for not having a robust laboratory tracking system or protocol for test result checking and filing, and stated that the merger of two databases did not preclude the practice of this responsibility.

3. A case[3] involving a patient whose anaemia was not appropriately investigated or managed by either of two GPs in two different practices. In this case multiple blood test results (including those conducted as part of a clinical trial, and forwarded to one GP by the trial clinicians) revealed slightly low haemoglobin levels over a period of several years. In December 2013 a further blood test revealed a significantly abnormal haemoglobin level of 82g/L, but the GP who ordered this test did not act on the result until 14 February 2014 – when he was reminded for a second time by his practice nurse. At this point further investigation revealed that the patient had a malignant tumour in his stomach. Sadly, he died later that year.

   The HDC found both GPs breached the Code of Health and Disability Services Consumers' Rights and stated that "…doctors owe patients a duty of care in handling patient test results, including advising patients of, and following up on, abnormal results. The primary responsibility for following up abnormal results rests with the clinician who ordered the tests." The HDC also made an adverse comment against both practices for their failure to have in place written policies for test result management.

Precedents established in older cases

Such cases are not uncommon. In a 2008 paper[4], former Commissioner Ron Paterson expressed concern about the volume of cases involving mismanaged test results, concluding that doctors have a duty of care in handling and following up.

Cases cited in this article included:

- A woman presenting in the 14th week of her second pregnancy who had an abnormal result for syphilis serology (TPHA (-) and RPR (+)). The GP intended to discuss the results with her at the next antenatal visit (scheduled for 20 weeks) and arrange further testing, but the patient did not attend. At 27 weeks she delivered a stillborn foetus, which had died from chronic foetal infection. The woman was found to have active syphilis infection[5].
- A woman with a slightly painful breast mass that could not be aspirated, and a history of fibrocystic disease and recurrent breast cysts. This patient was referred by her GP for mammography and an ultrasound scan and advised that she would be contacted if there was something wrong. The report was expected within three weeks. Nine weeks after the mammogram, the patient contacted the medical centre to enquire about her results without success. A month later (ie 13 weeks after the mammogram), having still heard nothing, the patient called the medical centre again. The practice nurse obtained the results (which were abnormal), and notified the patient. In this case the HDC stated that "In my view any test ordered where the doctor has reason to suspect a cancer diagnosis requires a proactive follow-up by the referring doctor"[6].

"The primary responsibility for following up abnormal results rests with the clinician who ordered the tests." – HDC

We also note a further case where the HDC stated that *"… the onus for patient notification (by the doctor) is stronger when serious pathology is suspected"*[7]. In that case, a GP correctly suspected that a lump on a patient's neck was clinically suspicious of malignancy. He requested blood tests and a throat swab to rule out other causes of neck swelling and considered referral to an ENT to be appropriate following receipt of a normal blood test result. The blood test results were normal and a nurse conveyed this information to the patient. The GP was not notified of the test results and did not arrange a referral to ENT.

Concerns about the HDC's findings

Some of the HDC's findings have raised considerable disquiet amongst the profession. In a chapter of *Cole's medical practice in New Zealand*[8], Dr Ian St George, a GP, highlights some of the concerns about the standard of care expected by the HDC:

- Patients have some responsibility for following up on their own test results, and for doctors to assume all of this responsibility is paternalistic and infantilising.
- Developing appropriate systems to minimise error is costly.
- GPs, particularly when they are employees, should not be held accountable for practice systems beyond their control to change.
- The HDC's expectation that GPs follow-up proactively when there is "a cancer diagnosis" or "suspicion of serious pathology" is open to wide interpretation.
- The ability of GPs to provide continuous care is being challenged by the ongoing fragmentation of services.

These concerns are understandable, and tensions between the views of the profession and the HDC are likely to remain.

However, the College is of the view that there is also some common ground and agreement on some of the steps that GPs can take to minimise the risk of patient harm.

Guiding principles

In 2005 the College published a second edition of its guide to *Managing patient test results: minimising error*[9], which outlines some valuable guiding principles for GPs. This resource encourages practices to:

1. Create a culture where patients and staff can raise concerns about problems with processes and errors, acknowledging that mistakes can happen. Be hard on systems, but easy on people.
2. Develop a system to audit and improve the management of patient test results
3. Have a clear, documented policy covering:
   - patient notification
   - the process for tracking and managing tests ordered including identifying missing results (particularly significant results)
   - staff responsibilities (including results interpretation)
   - actions and follow-up

   all in a clinically appropriate and timely manner.

The resource also attempts to help clarify when proactive follow-up is necessary. It states that:

"Significant results are those where subsequent follow up is essential and the risk to the patient of not following up is high, for example breast biopsy results. A significant result could be either a normal or abnormal result – it depends on the clinical picture."

Practice recommendations

Dr St George also agrees that there is common ground between the HDC's views, and those of the profession. In his piece in *Cole's* he makes a number of recommendations, including the following:

1. If you request a clinical investigation, you should tell your patient why the clinical investigation is recommended and when and how they will learn the results.
2. All the relevant parties should understand their responsibilities clearly.
3. If you are responsible for informing the patient, you should:
   - Inform the patient of the system for learning test and procedure results, and arranging follow up.
   - Ensure staff and colleagues are aware of this system.
   - Inform patients if your standard practice is not to notify normal results and obtain their consent to not notifying.
   - If other arrangements have not been made, inform the patient when results are received. This is especially important if the results raise a clinical concern and need follow up.
4. Identifying and following up overdue results is an essential, but difficult, office management task. Your system* should ensure that test results are tracked successfully. Such a system might be a paper file or computer database that identifies:
   - high risk patients
   - critical clinical investigations ordered
   - dates of reports expected
   - date of expected or booked follow up patient visits.
5. The patient's medical chart itself might be flagged in some way to aid this tracking process.
6. It can sometimes be difficult to contact a patient by telephone, and sometimes they do not attend planned follow up appointments:
   - The number and intensity of efforts to reach the patient by telephone should be proportional to the severity and urgency of the medical problem. All attempts to contact the patient should be documented.
   - If the patient fails to attend an appointment, or you have been unable to speak to them directly about test results which raise a clinical concern, then send a letter to the patient advising them of the action they should take.
7. If you order investigations it is your responsibility to review, interpret and act on the results. If you go off duty before the results are known, you should alert the incoming doctor that there are results outstanding. Further, you should check the results when you are next on duty.

* Both *Aiming for Excellence* and the Foundation Standard require that practices use electronic records for managing and auditing patient information.

Dr Richard Medlicott, the College's Medical Director has some additional suggestions:

1. Use the task allocation system in your PMS to automatically add a task in the future to check a result has been received. This may be for all tests, or tests that you have determined to represent a higher risk (for example, cytology, radiation and troponin-T).
2. Use a Patient Portal to send results to a patient after filing. However, you should always use other systems to notify the patient of any results requiring action. The consent process you use for the Patient Portal should be explicit about how it will be used with respect to results notification.
3. Ensure that any results requested by a locum are forwarded to a permanent staff member once the locum leaves.

To eliminate mishandling of patient test results, GPs remain reliant on the other members of their practice team and the quality of their practice management systems and also, to a lesser degree, on the cooperation of their patients.
And even with all of these factors aligning, human error remains possible. However there are some concrete steps that GPs can take that will help to minimise risk. These include ensuring that their practice meets the standards outlined in *Aiming for Excellence* and the Foundation Standard, and also reviewing the advice from Dr St George and Dr Medlicott with practice colleagues and considering whether they have the same understanding of respective responsibilities.

References

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Further information

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Foundation Standard

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If you have any questions about this issue, or would like to express a view on this topic, please contact the College's policy team: policy@rnzcgp.org.nz

The Royal New Zealand College of General Practitioners is the professional body that provides training and ongoing professional development for general practitioners and rural hospital generalists, and sets standards for general practice.

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