The Laboratory Services Reform Programme

ADVICE NOTE

Communication of Laboratory Results Likely to Require Urgent Action

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Clinical Practice Guidance Document Cover Sheet

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Note this document replaces *Communication of Critical Results for Patients in the Community National Laboratory Handbook* (October 2019).

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The Laboratory Services Reform Programme offers the following advice:

Critical result.

For the purpose of this advice note a **critical result** is a result that the laboratory can identify as reasonably likely to require urgent action OR a result where it is reasonably likely that there may be serious consequences for the health of the patient if the result is overlooked.

Additional communication.

For the purpose of this advice note **additional communication** refers to communication other than the formal report of the laboratory result in electronic or printed format. This may include one or more of the following, direct face to face communication (rounds or at MDT), a note in the patient's medical records, telephone call, email or other appropriately confidential electronic communication. The laboratory is responsible for choosing the appropriate pathway for additional communication and for the accuracy of the content of additional communication. If the content of additional communication is provisional and subject to qualification by further analysis this should be communicated clearly.

Responsibility for follow up of laboratory results

The primary responsibility for follow up action on any laboratory test result rests with the person who requested the test. Prior to requesting a test, the practitioner is responsible for ensuring that a process is in place to ensure that they or another competent team member, is available to receive and act on the result when it becomes available. The requestor is also responsible for giving the laboratory a clear indication if there is exceptional urgency or importance associated with processing a particular sample. The timeframe within which they, or a team member, follows up to seek the test result should take account of their clinical assessment of the need for urgency and the time within which a result is likely to be available.

1.1 Advice for Laboratory Users

1. Hospitals are expected to operate rotas that are available to the laboratory and that identify a person(s) competent to accept and act on critical results on patients at all times.
2. As noted in "**General recommendations for managing access to HSE and HSE funded Laboratory Services**" (2024). "*General Practitioners and other registered healthcare practitioners who practice outside of the HSE and HSE affiliated facilities and who are entitled to use HSE laboratory facilities should provide the laboratory with a contact number(s) so that they, or a deputy competent to act on the result, can be contacted 24 hours per day 7 days per week. This is required to allow the laboratory to alert a person able to take responsibility for care of the patient in the event that sample analysis generates a potentially critical result including when these results are obtained outside normal practice hours*".
3. Laboratory users should expect that the contact details provided may be tested as a drill by the laboratory at intervals (for example annually) to verify that the communication pathway works as expected.
4. A laboratory user should ensure that any laboratory request has adequate patient identifiers. For all patients at all times this includes the Forename, Surname and Date of Birth except in exceptional circumstances where these identifiers cannot be established immediately. For patients in hospital the request should include the unique identifier used in the hospital and their location at the time of sampling. For patients who are not in hospital at time of testing this should

when possible include the Personal Public Service Number (PPSN) and the address where the patient is staying at that time. This provides an essential fail safe if other methods to manage a critical result fail.

5. It provides a useful additional protection for the patient if the patient consents to the provision of their phone number (or the phone number of someone who can act on their behalf) to accompany the laboratory request. It is valuable if this can be recorded on the laboratory information system or patient administration system. This provides an important back-up if, for any reason, it proves impossible to contact the laboratory user regarding a critical result.
6. Laboratory users should provide appropriate clinical details. If appropriate clinical details are not provided with the laboratory request, the laboratory may not be able to determine that a result is critical.
7. If a laboratory user has reason to consider that, the result of a laboratory test they intend to submit is likely to generate a critical result it is essential to inform the laboratory of the urgency and provide clinical details. They should check the reporting platform for a result at a time when they may reasonably expect the result to be available. They should not depend on additional communication pathways from the laboratory.
8. The primary method for receiving a laboratory result, including critical results, is receipt of a laboratory report. This should generally be through a secure electronic communication system. Laboratory users should ensure that all laboratory results are reviewed and acted on as appropriate in a timely manner.
9. For critical results, the laboratory user should anticipate that the laboratory may provide additional communication as a support to the laboratory user and requires contact details (as above) to facilitate this additional communication.
10. An email address for the user is not appropriate as a sole means of contact for additional communication regarding critical results as email inboxes are generally not monitored 24/7.
11. Use of secure email or other messaging system may be appropriate as one way to provide additional communication regarding a critical result if the recipient can respond to confirm receipt in a reasonable timeframe.
12. If a user cannot provide a pathway for receipt of additional communication of critical results during all hours when the laboratory is operating the service, a laboratory may consider declining to provide service to that user.
13. Where the laboratory has issued a critical result via electronic means to a monitored receipt system and can establish that the result has been viewed additional communication is often not required.

1.2 Advice for Laboratories

1. Each laboratory should have a procedure outlining their process for the communication of critical results. Pathways for internal and external communication, within and outside of routine hours, and the escalation pathways in each circumstance should be defined
2. As noted in "**General recommendations for managing access to HSE and HSE funded Laboratory Services**". "*For healthcare practitioners practicing outside of HSE or HSE*

affiliated services the laboratory should maintain a record of practice, specialty and contact details for all those for whom it provides services"

3. Laboratories should consider establishing a process for periodic testing of a sample of contact details for receipt of additional communication of critical results. Testing communication to contact details provided in the evening or over weekends would be a suitable way of verifying that pathway is effective when required. If most users are contacted from time to time with critical results periodic testing may not be required.
4. In relation to their scope of service, laboratories should define as clearly as possible what constitutes a critical result for the populations they serve. It may be appropriate to define this differently for different groups/locations within the population served.
5. The laboratory should ensure that critical results are communicated through the primary communication pathway as soon as is practical after the result is available and verified. Issue of a critical result through the primary pathway should generally not be delayed by holding the result until after additional communication is complete. Exceptions to this may apply.
6. When it is necessary to communicate a critical result before a final result is ready for authorisation the laboratory should indicate clearly to the user that the result being communicated is provisional, that it may be modified in the final report and should give some indication of the degree of uncertainty that applies to the information provided.
7. Laboratories should define the timeframe within which additional communication is required after a result is identified as a critical result.
8. Where Multi-Disciplinary Team meetings occur this may be the appropriate forum for additional communication relating to some critical results that are less time sensitive.
9. It is suggested that the procedure for communication of critical results should include a categorisation of critical results such as A (within two hours), B (within 24 hours) and C (within 1 week). The timeframe within which additional communication should be provided should be considered.
10. For each type of critical result, the laboratory should define the pathway of additional communication from the person who first becomes aware of the result to the documented completion of additional communication. In general a first step may be to release the critical result to the primary electronic reporting platform immediately so that it is available to the user if they check the platform. Where it is possible to confirm that an urgent result has been viewed on the electronic reporting platform additional communication may not be required.
11. When communicating a critical result by voice the laboratory should record the person/role of the person taking the result and check that they have correctly received and understood the communication. If the result has already been reported electronically, the additional communication should indicate that the result is available and should be viewed on the reporting platform. Referring the person to the platform may mitigate the risk of error inherent in voice communication.
12. The laboratory should define the internal escalation pathway to be followed if the person authorised to initiate the additional communication of a critical result is unable to make contact with the laboratory user (or their representative) who requested the test. If communication of the critical result has not been achieved within a defined timeframe by the agreed procedure the escalation pathway should progress through appropriate steps defined by the procedure and finally to the Consultant Pathologist on duty for the laboratory to consider what if any exceptional measures may be required.

13. If reasonable efforts to contact the laboratory user (or person authorised to act on their behalf) has failed the Consultant Pathologist, or person they authorise to do so, should consider the clinical risk in the specific context and if exceptional measures are required. Following that assessment, options for exceptional measures may include:

    a) go to or request someone to go to the clinical area if the area is within the hospital where the laboratory is based
    b) contact the duty manager in the hospital or residential care facility where the patient is based
    c) contact the patient (or designated contact person) directly and advise them to attend a convenient ED
    d) contact the Ambulance Service to ask if they can assist
    e) contact the Gardaí to ask if they can assist

2 Background

In 2019 the National Clinical Programme for Pathology issued a document **"Communication of Critical Results for Patients in the Community National Laboratory Handbook".** Since that time there have been significant changes in healthcare practice and pathways of communication. This document replaces that document.

Most clinical laboratories operate on a 24/7 basis. In many cases tests, including tests from outside of the hospital where the laboratory is based, for example samples from General Practice, are processed in the evening (typically up to 8 pm) or on weekend days or holidays. At any time that the laboratory is processing samples it may happen that a critical result is generated. Clinical details are important in this situation. If the laboratory was provided with reasonable clinical details a laboratory practitioner with appropriate training and experience may be able to assess a result is not critical. The decision regarding a requirement for urgent intervention on the basis of a critical result is a decision for the clinician with primary responsibility for the care of the patient, in the context of their overall care. This decision may be supported by advice from the laboratory service as appropriate.

The primary responsibility for follow up action on any laboratory test result rests with the person who requested the test. The timeframe within which they follow up to seek the test result should take account of their clinical assessment of the need for urgency and the time within which a result is likely to be available. Almost all laboratories now communicate results electronically. Access to the platform on which they can view results is the primary method for follow up of test results. Releasing results (authorisation) to the electronic platform available to the users as quickly as is practical is the principal method of communicating results, including critical results. All other communication is as an addition to this primary method of communication. Results should be released to the reporting platform as soon as is practical. In general, laboratories should not delay release of results to the electronic reporting platform to support other, additional methods of communication such as telephone call or email. Exceptions to this may apply. In general it is preferable that the result is released and noted for subsequent additional communication. This is facilitated if laboratory information systems have the capacity to queue authorised/released results for further action so that retaining paper based lists for follow up after release is not required. If an additional report is required after discussion a supplementary report with an additional interpretive comment may be issued. (Note this is a supplementary report not an amended report unless the content of the original report is modified).

Effective and timely two-way communication between laboratory users and the laboratory services they use are essential to support patient safety. For this to work effectively both laboratory users and laboratories have obligations to fulfil. Many of these obligations in relation to are outlined in the Recommendations on Access to HSE Laboratory Services (2024) including the requirement for a register of users and contact details for each user.

In the context of the changed and rapidly changing circumstances of laboratory and clinical practice, this document sets out general guidance. Each laboratory should prepare a procedure that defines the critical results and action thresholds appropriate for the scope of their practice and the populations they serve. Different thresholds may apply to different population groups and different locations.

3 References

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