For convenience of international readers this is an automatically generated English translation of the Dutch management summary in the Risicoprofiel Diagnostisch proces. This English management summary is not part of the official report.

Management Summary

In brief

Making an accurate diagnosis is important as it forms the basis for appropriate treatment. However, the diagnostic process is complex and sometimes suboptimal. This can lead to diagnostic errors with serious consequences for the patient. This risk profile identifies different types of diagnostic errors. The working group provides recommendations to various parties to reduce the likelihood of diagnostic errors.

Principle

Every patient should be able to rely on a diagnostic process that provides a high probability of a quick and accurate understanding of their symptoms. The resulting diagnosis forms the basis for an appropriate treatment.

Background

Incorrect, missed, or delayed diagnoses, referred to as diagnostic errors, occur regularly. The American National Academy of Medicine estimates, based on extensive literature research, that every patient will experience a diagnostic error at least once in their lifetime. The complexity of the diagnostic process makes diagnostic errors difficult to investigate, and findings should be interpreted with caution. For example, it is inherent in the diagnostic process that some diagnoses are not immediately made. A disease, for instance, may develop over time. For example, a patient may have the flu during their first visit to the doctor, which later develops into pneumonia. Therefore, a change in diagnosis during the diagnostic process is not always a diagnostic error. Furthermore, the healthcare provider must distil relevant information from all symptoms and findings during the diagnostic process. There is always a risk of missing a diagnosis (underdiagnosis) but also a risk of excessive diagnostic testing (overdiagnosis). When the cause of the diagnostic error lies in a suboptimal diagnostic process, it is considered a preventable diagnostic error. Preventable diagnostic errors can have serious consequences for the patient and are a significant cause of healthcare-related harm. Therefore, addressing this issue is an important step in improving patient.

Research on diagnostic errors

Different methods were used to investigate diagnostic errors for this risk profile:

- Analysis of serious adverse event reports.
- Analysis of safety incident reporting (SIR).
- Analyses of diagnostic errors base on a questionnaire for physicians.
- Analyses of diagnostic errors base on a questionnaire for patients.
- Literature research.

Key findings

This risk profile shows that diagnostic errors occur frequently in adverse event reports and are frequently encountered by both physicians and patients. The diagnostic errors studied often had severe consequences and were mostly considered preventable. Diagnostic errors occur in all medical specialties and various disease presentations, and often have a human cause. The risk profile indicates that diagnostic errors arise in situations where the diagnostic

process is challenging. Examples include atypical disease presentations, language barriers, and patients with multiple concurrent chronic conditions (multimorbidity) or older patients.

Diagnostic errors occur primarily in the following areas:

- Clinical reasoning, when the diagnosis is not recognized due to non-specific symptom presentation or multimorbidity.
- Additional testing, including not ordering the appropriate diagnostic tests and inadequate interpretation of the supplementary tests.
- Follow-up of abnormal test results, where the results do not reach the primary healthcare provider due to transfer of care, incomplete information or non-supportive technical designs of electronic health records (EHRs).
- Care transition resulting from multidisciplinary care and/or (mis)communication between healthcare providers.

Patients also identify the medical history (anamnesis) and physical examination as significant causes. They report feeling unheard, experienced inadequate physical examinations, or incorrect conclusions drawn based on the gathered information.

Recommendations for Improvement

To minimize the risk of diagnostic errors, recognize potential errors in a timely manner, and prevent healthcare-related harm, the working group highlights improvement opportunities for various stakeholders:

- Healthcare providers should be exposed to diverse disease presentations to recognize different presentation. This can be achieved, for example, by learning from diagnostic errors and receiving active feedback.
- Diagnostic physicians can support healthcare providers/treating physicians in selecting the appropriate diagnostic tests and interpreting them in relation to the patient's symptom presentation. Direct communication between diagnostic and treating physicians contributes to this by enabling knowledge sharing or transferring patient-related information.
- Healthcare institutions can prioritize the diagnostic process by systematically identifying risks and implementing improvements. Pages 36 and 37 of the report provide publications for inspiration. Additionally, it is crucial for healthcare institutions to implement a well-functioning system for following up on abnormal test results.
- The government can facilitate the development of an integrated electronic health record (EHR) to ensure the transfer of clinical information.
- EHR developers should facilitate data exchange, including diagnostic tests results, between healthcare institutions and national patient registration systems. The EHR can play a significant role in supporting the follow-up of both diagnostic tests and patients.
- Scientific associations can collect and share risks identified by healthcare institutions with their members. This includes frequently missed disease presentations. Moreover, they can prioritize research questions related to the diagnostic process, thus supporting research organizations in financing studies that are crucial for optimizing the diagnostic process.

Why Take Action Now?

Although preventable diagnostic errors can have serious consequences for patients and are a significant cause of healthcare-related harm, they remain an understudied topic within patient safety. By gaining more insight and attention to this issue and actively implementing improvement initiatives, avoidable diagnostic errors and healthcare-related harm can be reduced.