# Reducing Diagnostic Errors in Emergency Medicine

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While atypical presentations or rare conditions can be the subject of litigation, most medico-legal cases concerning emergency department doctors still involve common diagnoses such as missed appendicitis, acute coronary syndromes, complications from infections or missed foreign bodies in wounds.

In contrast to other specialties medico-legal cases in emergency medicine mostly involve diagnostic errors rather than errors in treatment, inappropriate care or equipment failure. Diagnostic error can be divided into delayed, wrong or missed diagnosis and all three occur in Emergency Departments.

Developing good critical thinking skills is a vital part of emergency medicine practice. Common diagnostic cognitive errors that occur in ED are anchoring (prematurely settling on a diagnosis and failing to take new information into account), premature closure (stopping too early in the diagnostic process), confirmation bias (only using new information that supports the current diagnosis), and search satisfaction (stopping a search as soon as an abnormality is found). Some junior staff working in emergency departments are yet to develop solid cognitive skills and the ability to instinctively identify red flags. When specialist emergency staff do not identify and personally review high risk patients it results in incorrect or delayed diagnoses. In the same token, senior doctors also need to remain aware that cognitive overload and the constant flow of interruptions in busy emergency departments can adversely affect their diagnostic skills too.

Where a diagnostic error has occurred, clues to the actual diagnosis can often be found in retrospect in the ambulance summary and in the nursing triage, which are taken prior to any sorting of information and medical characterisation of the illness. Conversely doctors need to be aware of ‘triage cueing’ where a final diagnosis is highly influenced by a speculative diagnosis included in the triage or where the patient was mistakenly given a less urgent triage category.

Emergency medicine doctors are at higher risk of involvement in cases of delayed diagnosis leading to adverse outcomes in life threatening illness. More common cases include sudden onset headache in middle age, misdiagnosed as migraine, late recognition of sepsis including necrotising fasciitis and meningococcal disease, and more recently delayed diagnosis of stroke beyond the window for intervention.

A lack of timely communication about urgent cases to treating specialists, particularly where patients need transfer to a tertiary

facility after hours, is a reason for litigation. A prime example is the patient with evolving spinal cord compression due to an epidural abscess or a cauda equina syndrome. Signs are initially subtle but delays in transfer until patients have established and usually irreversible neurological deficits will often lead to later legal proceedings.

Diabetics have a much higher than expected rate of involvement in medico-legal cases involving emergency medicine due to their increased risk of infection, high incidence of vascular disease and sometimes rapid unexpected deterioration with what would be an easily treated condition in other patients. Inadequate initial management of diabetic foot infections in the Emergency Department leading to later amputation is a common reason for patients to begin litigation.

Patients who represent with the same condition, often to multiple Emergency Departments and general practitioners are a well-known risk group but are still overrepresented in medico-legal cases. A senior doctor seeing these cases with an open mind regarding previous management is essential to alter the course of management.

Even in the era of the electronic medical record, documentation remains a pitfall. Inadequate documentation regarding examination of the area of concern, the lack of a written differential diagnosis or a specific diagnosis being made for non-specific symptoms (for example diagnosing gastroenteritis for non-specific abdominal pain that later declares itself as appendicitis) are common errors. Most importantly any documentation about the doctor's thought processes coming to their diagnosis and management greatly assists in providing a robust defence of their care.

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Any queries, contact MIPS