

Improving Diagnosis Accuracy in Medicine



Reading time:
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Diagnostic errors in medicine

"Diagnosis is one of the most complex and challenging tasks facing physicians. Despite our best intentions and efforts, the rate of diagnostic error in medicine is in the range of 10–15%."¹

The definition of a diagnostic error from a patient's perspective is the failure to:

- establish an accurate and timely explanation of the patient's health problem(s) or
- communicate that explanation to the patient.

Diagnostic errors can be classified as "diagnoses that are inaccurate, missed, or inappropriately delayed".

The key is communication; with patients (and their families), and colleagues – other medical practitioners, nurses and allied health staff. The recent landmark report by the National Academy of Medicine in the USA states that the diagnostic process hinges on successful collaboration between healthcare professionals, patients and their families and recognises that diagnostic safety is part of a team effort.

Diagnosis is vitally important and the possibility of being incorrectly diagnosed is of paramount concern to patients engaging in the healthcare system. Many of these are preventable and if not corrected will lead to patient harm.

As Sherwin B Nuland says "It is every doctor's measure of his own abilities; it is the most important ingredient in his professional self-image."²

Healthcare can be difficult and when it comes to diagnosing, you can be faced with many variables:

Patient variables

- Stage of disease
- How it manifests
- How it is perceived
- How it is described
- When help is sought

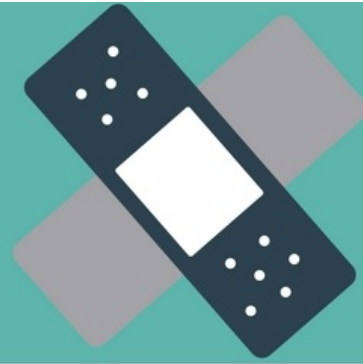
System complexity

- Disjointed care
- Communication barriers
- Production pressure
- Tight coupling
- Access to care and expertise

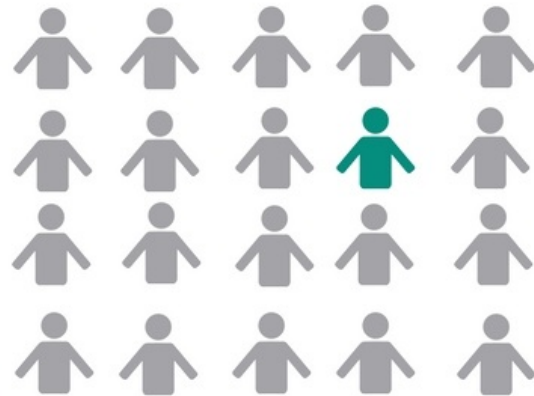
Physician variables

- Knowledge and experience
- Access to patient data, tests, consults
- Skill in clinical reasoning
- Stress, distractions, mood, time to think

Diagnostic error in medicine



Diagnostic error is the number 1 concern of patients



1 in 20 primary care visits involve preventable dx error

Number of dx error deaths every year in your hospital

10

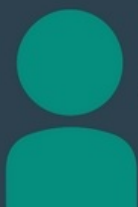


40.9%

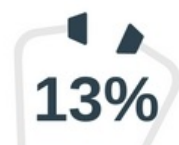
At 40.9% dx errors more often result in death than other allegation groups (40.9% vs 23.9%)

Rate of diagnostic error in medicine

10-15%



Percentage of patients presenting with common conditions

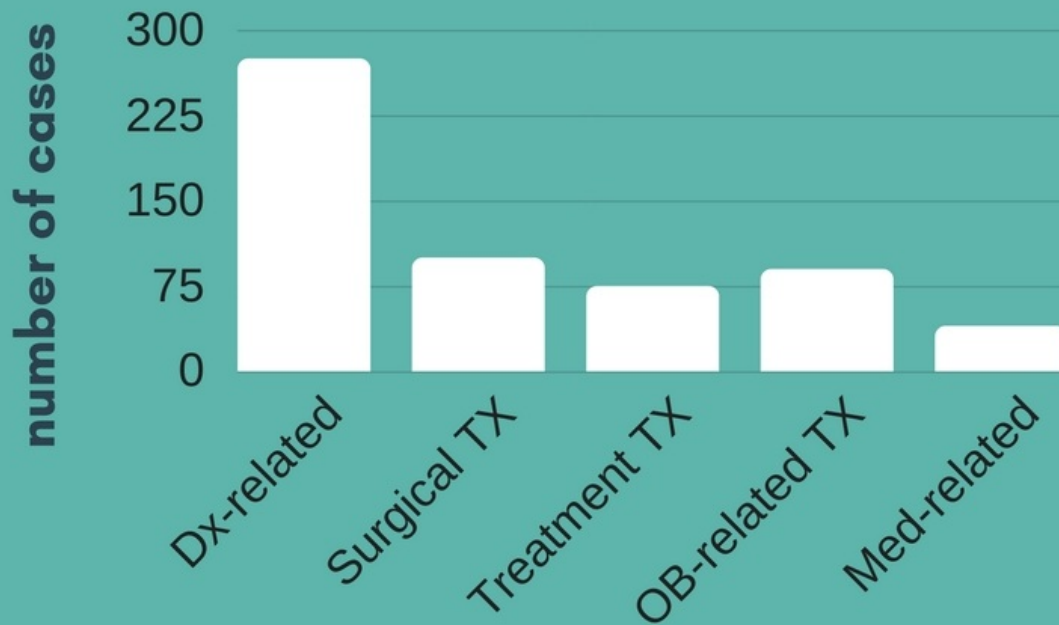




misdiagnosed by
interns



Diagnostic error = top allegation category



Diagnostic risk minimisation strategies to consider:

Test result communication

- With the patient
- With the lab and radiology
- With consultants
- Work in Teams. Make the patient a partner in the process
- Pay attention to the work environment: Reduce stress, allow enough time
- Improve communication

Healthcare systems

- Find and discuss diagnostic errors
- Address the common system flaws that contribute to diagnostic error: Lost test results, failure to follow-up, expertise not available
- Provide decision support resources
- Develop pathways for feedback
- Facilitate second opinions

Practitioners

- Be thoughtful and reflective
- Learn why diagnostic errors occur and how to avoid them
- Always construct a differential diagnosis
- Take advantage of second opinions
- Use decision support resources
- Make the patient your partner

Patients

- Be a good historian
 - Take advantage of cancer screening
 - Keep accurate records of your tests
 - Speak up – what else could this be?
 - Ask what to expect and how to follow up
 - Give feedback about diagnostic errors
- Members should be aware that not all diagnostic errors will result in patient harm or clinico-legal risk. Always contact MIPS to discuss scenarios and seek assistance.

Finally, always remember that an open and honest disclosure of errors including an expression of regret is a valuable tool to mitigate outcomes and should always be considered.

A handy mnemonic that might help you remember what to look out for when diagnosing:

VITAMINCCD

Vascular
Infections and intoxications
Trauma and toxins
Auto-immune
Metabolic
Idiopathic & iatrogenic
Neoplastic
Congenital
Conversion (psychiatric)
Degenerative

MIPS members may view Dr Mark Graber's webinar on Diagnostic Errors in Medicine [here](#)



Dr Mark Graber MD recently presented a webinar on Diagnostic errors in medicine. Dr Graber, considered the 'father' of diagnostic safety and recipient of the 2014 recipient of the John M Eisenberg Award for Individual Achievement in Advancing Patient Safety awarded by the Joint Commission and the National Quality Forum

"Improving the diagnostic process is not only possible, but it also represents a moral, professional, and public health imperative." Mark Graber MD

1. Crock, Carmel. Did I miss something? Acknowledging diagnostic error. MJA InSight. Issue 15. 24 April 2017
2. Nuland, Sherwin B. How we die: Reflections on Life's Final Chapter (New York: Vintage Books, 1995), 248

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