



## Diagnostic Error Part 1: Getting to the Correct Diagnosis Faster

### Patient Story (Fictional)

Lihaam, an 11-year-old girl from Afghanistan with limited English, presented to the Emergency Department (ED) at 7pm. She had poorly defined intermittent abdominal pain for a few days, with nausea, occasional vomiting but no fevers. She looked uncomfortable and was given Paracetamol, Ibuprofen and Oxycodone after rapid assessment. The ED was extremely busy, with reduced staff due to sick leave and limited breaks. Full assessment by a locum registrar revealed a prior history of intermittent constipation and that she had not started her periods. On exam, Lihaam had a soft abdomen with no rebound tenderness. Her urine and bloods were unremarkable (FBC/CHEM20/CRP). At handover to the night shift, the registrar reported that the diagnosis was consistent with constipation. As the pain seemed to have settled, Lihaam was later discharged with safety netting advice and a disimpaction course of laxatives. She returned the next day in extreme abdominal pain and was reviewed by a Senior Medical Officer and surgical registrar. An ultrasound revealed a torsed right ovary. Lihaam underwent emergency surgery to remove the non viable ovary.

\* Fictional story to illustrate key learnings

**Diagnostic errors: “missed opportunities to make a correct or timely diagnosis based on available evidence, regardless of patient harm”.**<sup>(1)</sup>

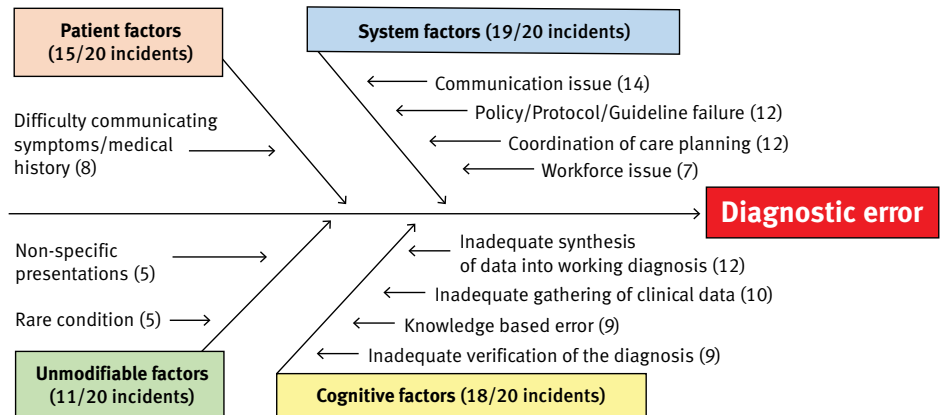
### QPQC Review

The QPQC reviewed 2018-2019 SAC1 paediatric clinical incident reports (n=26) and found diagnostic error was a contributing factor in 20 incidents. These included 15 incidents involving delayed diagnosis and 5 cases of wrong/missed diagnosis. Patient outcomes included 14 incidents of likely permanent harm and six deaths. Key demographics included:

- 70% involved children < 4 years of age
- 25% were children of Aboriginal and/or Torres Strait Islander backgrounds
- 20% presented to services in remote/very remote locations.

A complex array of factors were identified as influencing diagnostic errors in these events (Figure 1).

**Figure 1: Factors contributing to diagnostic error in Queensland Health SAC1 paediatric incidents (2018-19)** Adapted from the Clinical Excellence Commission’s “Root Causes of Diagnostic Error”.<sup>(2)</sup> Examples are most common issues identified.



### Lessons learnt

- 1 Diagnostic errors can occur due to a complex array of patient, system, cognitive and unmodifiable factors.** It is important to recognise and put safeguards in place to respond to these concerns (Table 1).
- 2 Be aware of vulnerable cohorts including very young children, children from Aboriginal and/or Torres Strait Islander backgrounds, culturally and linguistically diverse children and children in remote/very remote locations.** Local processes for escalation to senior clinical review of paediatric patients should be developed and implemented if any concerns.
- 3 Resist the urge to assign a diagnosis prematurely. In undifferentiated patients, acknowledging uncertainty is important.** A differential diagnosis is essential or the honesty to say “I don’t know, but this is my diagnostic plan”.
- 4 Clear communication with patients/families, and within teams is critical.** Actively listen to their concerns, particularly if the patient journey is not going as planned. Document your clinical decision making, acknowledge areas of uncertainty and share these at clinical handovers.

**Table 1: Questions to Consider When Making a Clinical Diagnosis**

Patient Factors	Communication	Are patient factors impacting my assessment? Who can assist?
System Factors	Communication: Team	Have I shared/updated all relevant clinical data in documentation and handovers?
	Policy/Protocol/Guidelines	Are there relevant policies, guidelines, and procedures to which I can refer?
	Coordination of Care	Do we have the right knowledge/skills for the patient’s condition? Who else could help?
	Workforce Issues	Are workforce pressures impacting my decisions (i.e. busy shift)? Do I need to escalate? Am I in the right frame of mind to make decisions (HALT – Hungry, Angry, Late, Tired)? Do I need a break?
Unmodifiable Factors	Rare/non-specific presentation	Have I considered atypical/rare conditions as part of my differential diagnosis?
Cognitive Factors	Knowledge base, data gathering/synthesis, diagnosis verification	**Cognitive Factors will be discussed in detail in Paediatric Matters Edition 9

### References

1. Singh H et al. Advancing the science of measurement of diagnostic errors in healthcare: the Safer Dx framework. *BMJ Qual Saf.* 2015;24(2):103–110
2. Clinical Excellence Commission, 2015, *Diagnostic Error: Learning Resource for Clinicians*, Sydney: Clinical Excellence Commission, Pg.42