

Why Communication, Not Technology, Is Often the Weakest Link in Diagnostic Medicine

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Over the years, I have seen diagnostic laboratories invest heavily in technology, automation, and infrastructure, yet struggle with outcomes that technology alone could not fix. The missing element was often communication. Early in my career, I assumed that accurate reports spoke for themselves. If the numbers were correct, the job was done. It took time for me to realise how incomplete that thinking was. Diagnostic medicine does not exist in isolation; it exists within a clinical conversation. A report without context, interpretation, or dialogue is often only half useful. I remember situations where technically correct reports led to confusion simply because expectations were misaligned. Clinicians interpreted urgency where none existed, or missed significance where subtle patterns mattered. Those experiences made it clear to me that communication is not an add-on to diagnostics—it is central to its value.

As laboratories scale, communication challenges multiply rather than diminish. I have watched internal silos form quietly: pre-analytical teams unaware of clinical priorities, analytical teams focused on throughput, and reporting teams disconnected from how results were ultimately used. Externally, interactions with clinicians often become transactional—limited to queries and complaints rather than collaboration. I recall moments when a brief discussion clarified more than multiple amended reports ever could. Yet such conversations were often postponed because they did not fit neatly into workflows. Over time, this creates a subtle erosion of trust. Clinicians stop engaging proactively, and laboratories retreat further into processes. The irony is that most misunderstandings I have encountered were preventable—not through better machines, but through better conversations.

What I have learned is that strong diagnostic laboratories deliberately design for communication. They create spaces—formal and informal—for dialogue. They encourage teams to ask why a test was ordered, not just how it was performed. They empower pathologists and scientists to interpret, not merely report. In my experience, when communication improves, everything else follows: fewer errors, better clinical alignment, and more meaningful patient care. Technology enables diagnostics, but communication humanises it. Laboratories that recognise this shift move from being service providers to being clinical partners. That transition, more than any technological upgrade, defines maturity in diagnostic medicine.
