Labs need to evolve at the speed of healthcare

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Complications in U.S. healthcare are reaching a critical point. They include escalating costs, complex and inefficient delivery systems, patient safety matters, and a looming shortage of providers—especially in primary care. The burden on healthcare providers is further intensified by the rapidly expanding set of clinical laboratory tests. Beyond the sheer volume of available tests and the indications and limitations of each, providers are faced with having to interpret the astounding volume of data that is yielded.

Clinical laboratorians are in a unique position to assist these providers, by leveraging their exclusive resources. Their particular knowledge of clinical laboratory practice enables them to add remarkable value as a consultant-partner. Through their expertise in the diagnostic advantages and limitations of each test, they can advise on test selection and appropriate utilization. Through their mastery of the intricate analytical process, they can help interpret the results and recommend further courses of treatment. Laboratorians can even help develop test-ordering algorithms to standardize best practices on a greater scale. Through partnership, they can inform topics that are widely unfamiliar to optimize efficiency, resource allocation, and patient care.

We need to engage as members of the care team

While many laboratorians are already involved in these kinds of value-adding activities, more action is needed to advance our practice in line with the changing healthcare system. For example, in the field of genetics, the availability of data is increasing at a disproportionate rate. As this happens, the gulf widens between the information that many physicians have and the information that they need.

> *"In a recent study, 54% of academic family physicians reported that they were not knowledgeable about genetic tests." (Fam Med. 2013 Apr;45(4):257-62)*

This includes tests that are widely available today, such as those that analyze tumors based on mutations for personalizing therapy. Looking ahead to the not-too-distant future, these tests will become even more specialized. They'll include more advanced measures that can sequence individuals' genomes to diagnose disease, assess disease risk, and guide on appropriate preventative measures. This points to the dramatically rising need to ensure that laboratory data is appropriately leveraged and applied to patient care.

These developments create new ground for clinical laboratorians to engage as members of the care team in entirely new ways. As laboratorians have an unprecedented opportunity—and responsibility—to take a more direct role in patient management, their role will become more vital than ever. I believe this significant change will be greatly challenging and rewarding.

We need to internalize a greater purpose

As an example of a profession that has transformed in a similar way, we can look to the clinical pharmacist. Leaders from within their industry made a concerted effort to evolve from a "medication-dispensing model" to a "patient-centered care model ensuring the safe and effective use of medications in all patient care settings." (Pharmacy Practice Model for Academic Medical Center. University Hospital Consortium, Washington, D.C., 2010).

This kind of transformation, from transactional to consultative, does not happen overnight. It is a deliberate process that often requires a reinvention of roles and values, a change in perception of those in the profession and those outside, a shift in the rules of healthcare organizations or even legislature, and a reshaping of compensation arrangements for professional activities.

> *"The benefits of a successful transformation are numerous. They include a new scope of professional activities that advance the level of responsibility and expectations for an entire profession."*

I recall a recent example, when a senior internist at a medical conference in my own university stated that she now entrusts much of the pharmacy management of her own patients to the clinical pharmacists. Transformations like this are about people envisioning a completely new value proposition, demonstrating their commitment across disciplines, and challenging themselves to expand into new frontiers.

We need to own self-innovation

Clinical laboratorians have an important road ahead, in order to transform from being centered on products (i.e., lab test results) to higher-level patient care. They'll earn support, face resistance, and can't be afraid to fail—much like their pharmacist counterparts. They'll have to help fellow clinicians answer burning questions, like, "Can laboratorians be trusted with this responsibility?" and "Can it become a routine, professional expectation industry-wide?"

To help, organizations like Roche and the American Association for Clinical Chemistry (AACC) are addressing this transformational challenge right now. They are launching initiatives focused on education, strategy, and outreach, to elevate the perception and status of the clinical laboratorian. Their goals are to facilitate the expansion of the clinical laboratorian into a highly consultative healthcare role.

I believe these are critical initiatives for the profession, at a very critical time.

> *"Our expertise is becoming needed in constantly increasing ways."*

Laboratorians have always had an important role, as the bridge between basic scientific discovery and its clinical application. Yet today, in the face of extraordinary complexities throughout the system, our role will need to extend beyond providing clinical excellence and valuable insights to facilitating healthcare.

I am asking every laboratorian to embrace this challenge, not just to excel professionally but to maximize your impact throughout a system that so desperately needs you.

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