The illusion of communication

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"The single biggest problem in communication is the illusion that it has taken place."
—George Bernard Shaw

We've moved from analog and film to digital and filmless in imaging, with much success to show for it. We are performing more studies today than ever before, and churning out reports much more quickly than ever before, too. But, a key adverse effect of this transition has been that we have, as a clinical specialty, stopped talking. We're more reclused and huddled up alone by our workstations, clinging to our speech mikes and glued to our worklists more than ever before. We decreasingly interact with other clinicians, let alone patients. Our interactions are more with our mouse clicks, HL7 messages and windows that fill our screens. There was a time in our specialty's past that we actually used to have meaningful conversations with our clinical colleagues. The ordering clinician who had noticed peculiar traits about Mrs. Smith, and had noted specific changes over a period of time that he wanted some clarity on. The surgeon who wanted to figure out the best plan for a procedure she was prepping for. These folks used to often walk down to the reading room with a stack of films, charts, anecdotes and observations—and we actually used to have a conversation, together trying to get at unravelling the case and the patient in front of us.

Doing better

In our rush to "do better" it seems we may be ending up doing more harm than good. We should not confuse "doing better" with *doing more*, and *doing faster*—which, essentially are volume-based metrics in imaging: reading more studies per defined time period, and churning the reports out at quicker report turnaround times. We may also, in this rush, be *doing ourselves in*. If imaging continues to be relegated to a mundane task of simply churning out reports for studies performed, we'll soon be replaced by cheaper, faster alternatives, whether these be human beings in a different part of the country or world, or computers with artificial intelligence in a server farm somewhere.

The alternative is really not just better, but a necessity. The alternative is, in many ways, a newer approach to something old – something we've known and pushed for silently, on the side, even as we were busy trying to get to that "zero worklist." And that's doing what we know is in the *best* interest of the patient. We need to engage in appropriate conversations with our clinical colleagues to attain a more holistic picture of the "patient's story," to collaboratively work together to come up with the best care plans. We need to ensure that we engage and intervene appropriately to ensure that appropriate imaging is ordered, performed optimally, and followed up on effectively. Doing good needs to be made easier, and it needs to be the focus of our efforts, and not just something we do on the side.

Physician consultants

Radiologists have always served as strong, albeit silent, patient advocates around imaging appropriateness. But as healthcare organizations move from fee-for-service models to fee for value, the value needs to be quantifiable and measurable so as to really matter. In guiding and defining the future of radiology, the American College of Radiology (ACR) continues to seek to affirm the role of radiologists as physician consultants.[1] The ACR's Face of Radiology campaign conveys to patients that the "radiologist is the physician expert in diagnosis, patient care, and treatment through medical imaging." This is an opportunity for us to really leverage communication and collaboration tools, contextually weaved into our clinical workflows, to

define, refine and fine tune the delivery of imaging services and their associated value.

Behavior change

Perhaps key to enabling the new norm of value-based imaging is to study the science of behavior change. Scientists know that rewards are positive stimuli that can impact everyday behavior.[2] Both primary (eg, food) and secondary (eg, money) rewards modulate simple behaviors (eg, eating) and more complex social interactions (eg, developing trust). If we extrapolate this to the everyday behaviors of the various individuals involved though the imaging value chain,[3] we realize that patients, ordering physicians, radiologists and specialists all have goal-directed behavior. Arguably, most clinicians actually embrace the "do not harm" oath, and really do want to do what is in the best interest of their patients and of themselves. We have traditionally been rewarding behavior that meets defined volume-based metrics. What is needed, however, is a redefined system that rewards value-based behaviors.

Innovation, at the end of the day, is about enabling behavior change, and leveraging better processes and technologies to make it easier to do the right things. A core focus on better communication and collaboration is critical, such that we enable behavior that enables collaborative care across care teams, focused around patients. Value needs to be linked directly to superior outcomes, improved quality, better satisfaction per dollar spent. We need more data transparency, including around utilization data, appropriateness and costs.

There's always an inherent fear that "we'll be wasting our time manning the phone and talking instead of reading studies." We need to leverage state of the art technologies to enable more streamlined and contextualized synchronous and asynchronous communication. We need streamlined unified communications, closed loop, cloud based intelligent algorithms, built into the workflow of clinicians and patients across the value chain. This calls for a more end to end approach around system design in being able to measure, quantify and present actionable information at the point of care, such that we can influence value based behavior.

Communication vs defensive medicine

Ineffective communication is associated with approximately 95% of malpractice suits and 2/3 of sentinel events.[4]

A New York Times article[5] pointed out that "To be sued less, doctors should consider talking to patients more." The article talked about the litigious culture leading to more "defensive medicine." Indeed, massive cultural revolution, incentivizing a move away from blind defensive medicine, is needed to address a number of cascading key trigger points in support of appropriate imaging.

It is not just the swell of patients' demands for more imaging, triggered in part by consumer directed marketing promoting the availability and benefits of procedures such as full body scans. Nor is it just the disturbing and proven relationship between physician self-referrals and higher imaging utilization,[6] perhaps to feed costs associated with acquiring expensive imaging equipment. Many physicians choose to and are taught to practice 'rule-out medicine' as opposed to actual 'diagnostic medicine' in fear of liability and expensive litigations from possible missed findings. According to a recent surveys,[7] the cost of defensive medicine is estimated to be in the $650-$850 billion range, or between 26 and 34 percent of annual healthcare costs in the U.S.

A thought provoking *NEJM* paper titled "The Uncritical Use of High-Tech Medical Imaging"[8] makes an interesting observation: imaging tests are most valuable when the probability of disease is neither very high nor very low but in the moderate range.

Various imaging utilization management systems have been enforced in various forms by insurance companies and radiology benefit management (RBM) companies. Prior authorization, prenotification and various forms of network strategies that focus on examination costs, total quality and practice guidelines have also had varying levels of success. Beyond more tailored tort reform, and an evolution in medical education and training, perhaps the most effective antidote to this trend is data and context driven communication – *intelligent personalized data* based on solid evidence-based medicine, presented tightly integrated into the decision support and physician order entry workflow, with the appropriate communication capabilities weaved into the workflow.

Ordering physicians want to do what is best for their patients, and presenting them with intelligent, personalized data around image order entry appropriateness, alongside easy access to relevant priors will work wonders.

This is difficult, but not impossible — and is a critical step towards meaningful value-based imaging.

"Honey, we need to talk"

Communicating effectively should not be seen as a task. It should be what we do, how we impart care, and how we improve quality, satisfaction and outcomes, and hence *practice* value-based care. It is an opportunity to improve our quality and service, to clarify our value proposition and to engage in dialogue that would actually positively impact a patient's life. Hedge less, communicate more.

Effective communication, whether between clinicians or between a clinician and a patient, should not be a power struggle, but a partnership. Effective communication leads to efficient collaboration. Efficient collaboration is both a process and an outcome in which shared interest or conflict that cannot be addressed by any single individual is addressed by key stakeholders, communicating together, with the interest to get to a shared goal of better care.

Inter-clinician communication is critical, but perhaps just as important, and often even more overlooked in imaging, is the need for better awareness, information sharing, and communication between the imager and the patient. The concept of patient engagement is not new – patients have been increasingly sharing the power and responsibility for care plans and treatment decision with healthcare providers. In 2008, the National Quality Forum (NQF) declared patient and family engagement to be one of the six national priorities to eradicate disparities, reduce harm and remove waste from the healthcare system in the United States.[9] Research has shown that patient- and family-centered care that incorporates shared decision-making can reap potential healthcare savings of $9 billion over 10 years. [9]The radiologist-patient interaction is one that starts with taking care of the patient experience through their care and ensuring better awareness and education around what imagers do, and what their imaging procedures are all about. It would be great to create reports that are clearer to the lay-person, with key images, and links to relevant curated educational material, and a contact number for the patient to speak to if needed. Interactions directly with patients at every opportunity possible should be greatly encouraged.

The report is today seen as the "end goal" of an imaging chain reaction, which often starts when an order is placed for an imaging study, or perhaps when a study is recommended or scheduled. Many confuse the report as our contribution to communicating and imparting our opinion on the case that was sent our way. This however is an illusion. The report is *one* form of communication, but is hardly what is *really* needed by the ordering clinician or by the patient. There should not be a 'one size fits all' approach to communication and collaboration, but rather an appropriate use of technologies that fit like a glove into desired workflows. This should be done to encourage "critical thinking" which entails active, focused, persistent, and purposeful communication between parties in the care continuum.

The problem with communication as it exists in healthcare today, is that we do not listen to understand. We listen to reply. We listen but do not hear. We look, but do not see. Perhaps we need to listen with our hearts, and see with our minds. Empathy is the key to better care, and the way to get there is through effective communication and efficient collaboration that is woven into the fabric of our care delivery workflows.

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