A VIEW FROM ABROAD

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The Commodity-Proof Radiologist

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From mid-September through mid-November 2015, I, the lead author, traveled throughout England interviewing British radiologists. (To view a video of these interviews, see the online version of this article at: http://dx.doi.org/10.1016/j.jacr.2016.11.001.) My purpose was to compare how radiology is practiced in the United States with how it is practiced in England. Perhaps, I thought, in doing so I could identify lessons American radiologists could learn and then import into their own practices and departments. After all, the American health care system is experiencing fundamental changes at the moment with respect to payment reform. So I wanted to learn all I could about the system in England and share my findings with ACR members.

Because my experience consisted entirely of interviewing hospital-based diagnostic radiologists, I will confine most of this article to dealing with that group and their position vis-à-vis American hospital-based diagnostic radiologists. As my interviews ran their course, one aspect of UK diagnostic imaging seemed appropriate to compare with American radiology at the Imaging 3.0® crossroads: the high level of value referring clinicians place on the diagnostic radiologist's diagnosis.

There are as many similarities as there are differences between the two countries when it comes to health care coordination. But one trait of diagnostic radiology as it is practiced in England stands out: radiologists in that country are, in most cases and no matter the setting, indispensable members of the patient care team. In other words, despite all of the pressures threatening to move the focus from the value English radiologists provide to the volume of work they produce, up to this point they have provided a high-value service. This shift away from providing a valued service can be termed "commoditization," and there is no doubt that the specter of commoditization looms over radiologists in England. Despite this danger, however, and notwithstanding gains made in the past few years by radiology in the United States, American diagnostic radiologists are not typically viewed as consultants by referring physicians quite the way they are in England.

CHALLENGES IN THE SYSTEM

Before any comparison can be drawn between American and English diagnostic radiologists, an examination must be made of the aforementioned pressures on radiology in England. Although American radiologists have experienced (and to some extent begun to reverse) many of the same stresses conspiring to tax British radiology—chief among them the rapid increase of imaging utilization—the operational circumstances under which radiology is practiced in the two countries are very different.

Because of this, any inspiration American diagnostic radiologists hope to gain from their overseas counterparts is tempered by the fact that systemic pressures in the United States constrain diagnostic radiologists' ability to deliver clinical opinions. First and foremost, diagnostic radiologists in this country are incentivized, primarily through their various reimbursement schemes, to complete their work lists and not necessarily act as gatekeepers of quality. Although the tide is beginning to turn with the CMS push toward value-based medicine, many US diagnostic radiologists have an uphill battle to fight when it comes to referring providers seeking out their clinical opinions.

For English diagnostic radiologists' part, it must be noted that although their health care system is structured in such a way as to encourage them to provide their clinical opinions either in person or by way of their reports, backlogs in UK hospitals and clinics present a serious issue. In other words, it is not as though the tighter coordination of care in the UK has resulted in streamlined services to the extent that there are not profound backlogs. A major reason for this, however, is that the United Kingdom trains significantly fewer radiologists per capita than does the United States. Indeed, a 2014 census of British clinical radiologists conducted by the Royal College of Radiologists (RCR) found that a severe shortage of radiologists exists [1]. Because of this, it is possible that tighter coordination with referring clinicians would not

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result in the same level of backlogs among American radiologists.

The responsibility for backlogs is shared by all of British medicine, including radiology. At a time when imaging utilization is escalating in the United Kingdom, British medical educators cannot keep pace with patient waiting lists. According to the RCR report, between 2012 and 2014, the number of newly trained consultant radiologists increased slightly, between 1% and 2%. However, during the same interval, "workload has increased substantially, as demonstrated by the continuing 10–12% yearly increases in numbers of imaging and radiodiagnostic…examinations" [1].

With 88% of departments unable to meet their reporting requirements during the census period, this represents a complex predicament. According to data from the National Health Service (NHS), between 2004 and 2014, "the overall number of tests has increased by 40 percent, representing an average growth of 3.4 percent per year." This significant rise in imaging utilization, coupled with the fact that, for instance, the volume of MRI scans increased by 220%, demonstrates why radiologists find themselves unable to keep up with a proliferating workload [2].

By comparison, studies suggest that imaging utilization in the United States is moving in the opposite direction. In a pair of studies published in 2013, the authors demonstrated either an outright decline in utilization rates or a slowing of the growth in utilization across a range of ages and modalities [3,4]. Although it has not been fully explored in the literature, these data suggest that locking into closer coordination with referring clinicians may not necessarily result in overwhelming backlogs for US diagnostic radiologists.

COORDINATED CARE

As a result of the twin pressures of utilization and training in the United Kingdom, patient wait times between when a referring provider requests a test and when the radiologist performs it can vary considerably depending on the modality. According to the NHS, for the sample date range of March 1 to March 31 2016, "the median period…varied greatly for the different tests, from the same day for X-ray, Fluoroscopy and Medical Photography, to 22 days for MRI" [5].

Despite these obstacles, American diagnostic radiologists may still draw lessons from both the close level of coordination that exists between their English counterparts and hospital-based referring clinicians and from the fact that general practitioners (GPs), who serve the same function as family practitioners in the United States [6], value not just diagnostic radiologists' findings but also their recommendations on further patient treatment and nonradiologic investigation [7]. The end product of this relationship is the actionable report, which, in combination with the direct consultative process, helps guide the referring clinician on next steps in the care process.

If US radiologists could recast themselves into this same consultant role, which has already been helped by legislation requiring providers to consult appropriate use criteria through the use of a clinical decision support system, they might be able to avoid becoming commoditized [8]. A recent study by Dickerson et al [9] seems to support this notion of the radiologist as consultant. Researchers found that in-person collaboration between radiologists and acute care surgeons resulted in substantial changes in patient management.

FINANCIAL PRESSURES

There are two plausible reasons why English referring clinicians value diagnostic radiologists' clinical opinions: the financial pressures inherent in the patient referral process and the traditional way in which diagnostic radiologists have been trained. The relationship between radiologist and referring provider has evolved since the founding of the NHS in 1948. One recent legislative decision influencing this symbiotic relationship was the establishment of clinical commissioning groups (CCGs) in 2012. CCGs are "clinically-led statutory NHS bodies responsible for the planning and commissioning of health care services for their local area" [10]. CCGs are made up of GP member practices. Each year, the NHS sets the prescribing budget for the CCGs [11].

The premise of CCGs is that GPs should have more control over spending decisions "as GPs see patients more regularly than other health care providers and so theoretically have a better understanding of their needs" [12]. Although more research needs to be conducted into the radiologist's relationship with the GP along financial lines, it is evident that because GPs have a great deal of responsibility for the care of their patients, including how much money is allocated by the CCGs to their GPs, it is in their interest to ensure that they are optimally making use of their finite resources.

One way of ensuring that resources are fairly apportioned is by finding a consensus among specialists as to the clinical indications.