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Radiology and Patient Communication

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**Radiology and Patient Communication**

Communication with patients, a cornerstone of medical practice globally is anomalous in the specialty of diagnostic radiology in that communication is generally indirect. Radiologists receive imaging requests from referring clinicians and send written examination reports to the referrers, which excludes patients from direct communication. Direct patient communication has been proposed previously by eminent radiological authors such as Berlin, the doyenne of opinion on the topics of error and malpractice in clinical radiology [[[1]](#endnote-1)]. This practice, however, has never taken widespread hold internationally.

Notably, radiological screening programmes have always been an exception to this referrer-led communication pattern, having been early adopters of direct communication. Breast screening programmes usually communicate client test results directly to patients. Over twenty years ago, a survey of 400 patients regarding breast screening in the United States[[[2]](#endnote-2)] where results were sent directly to patients concluded that patients preferred a double-read delayed report with the results sent directly by post rather than an immediate single read report by a radiologist on the same day as their mammograms. It is interesting to note that the participants appear to have understood the benefits of the additional quality assurance that a second review of images would bring, valuing this over an immediate result. It is unknown whether the findings would apply today, with society’s current level of demand for immediacy and instant (although often incorrect) answers.

The language employed in written clinical communication is vitally important, especially when conveyed to a patient. An American survey [[[3]](#endnote-3)] analyzed 43 different template letters for the communication of mammography results were available from the American College of Radiologists and two transcription services. Using two established linguistic indices to analyze the letters, the authors concluded that the design and scope of the letters made them difficult to understand, in a manner that was proposed to be incomprehensible to half the US population of women. The findings were consistent with those of other authors in that much patient-centered material internationally is suggested to be written in styles that are discordant with reading levels of the general public. This paper raises the salient point that if radiology results are to be conveyed to patients, the information should be presented in a form that patients can comprehend. The discipline of radiology is pressed for time, with a noted workforce shortage. Many radiologists juggling competing demands, may be resistant to the notion of producing alternative "patient-focused" reports. If direct radiology communication with patients is to be adopted, then alternative plain language reports will be required.

Currently, it is unknown how many patients may want to receive results directly from a radiology department. It has been argued that this places a false demand on radiology which is already known to be under siege. In an Italian cross-sectional study involving 1171 patients attending for outpatient CT, Ultrasound or MRI examinations, 45% requested information about the results of the examination.[[[4]](#endnote-4)] There were no significant differences regarding sex or anxiety beforehand, or if the study was the first or a follow-up examination. Older patients enquired less frequently than younger ones, but the differences were not statistically significant. Educational levels were highly significant, with 36.4% of patients with an elementary school education asking for the results, compared with 41.5% with a middle school education and 55.1% with a high school education or university degree (p<0.001).

An alternative method of passive communication with patients will undoubtedly develop through the advent of widespread highly integrated electronic records with patient portals, where the patient's record as a whole (including test results) is visible for perusal. Whether patients fully realize the extent of their data available through online accessible medical records in the real world is not well understood. Patients appear amenable to receiving their results based on a study that presented simulated scenarios[[[5]](#endnote-5)]. Patients were asked to complete hypothetical clinical simulations to see whether they wanted to have direct access to their radiology reports, irrespective of the results. Findings show that most patients wanted the reports regardless of the findings, with more than 60% wanting immediate access to their radiology reports when the findings were normal. About one-half (47.2%) said they wanted immediate access if the findings were seriously abnormal, and 45% said they wanted immediate access if the findings were inconclusive.

Traditionally in the radiology literature, communication with patients is generally defined as conveying the result of the radiological examination. Communication is suggested to be a much broader concept that the transmission of a few lines of a report, raising the vexed and challenging topic of radiological discrepancy and error. Communication with patients about radiological errors, revised or appended diagnoses possibly with additional clinical information is also highly relevant. A 2005 editorial [[[6]](#endnote-6)] comments, with some validity, if patients have ownership of their test results from direct communication with radiologists, abnormal results are less likely to be overlooked. This knowledge potentially improves safety and patient satisfaction with services, as patients are co-customers along with referrers. A further commentary by Maskell [7] asserts that although radiologists know that a level of discrepancy is normal and expected within an opinion-based specialty, clinicians and patients have unrealistic expectations of the accuracy of radiological interpretation. Many patients still regard the discovery of a radiological discrepancy or missed diagnosis with hindsight (an everyday occurrence in clinical practice) as a "shocking and exceptional" event. Good quality communication through education and dialogue with patients and colleagues about error and the limitations of imaging would appear to be the only answer to misperceptions about radiological error within medicine and in the wider community.

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