The Consequences of "Just Say Yes"

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Citation

R Tello. *The Consequences of "Just Say Yes"*. The Internet Journal of Radiology. 2002 Volume 3 Number 1.

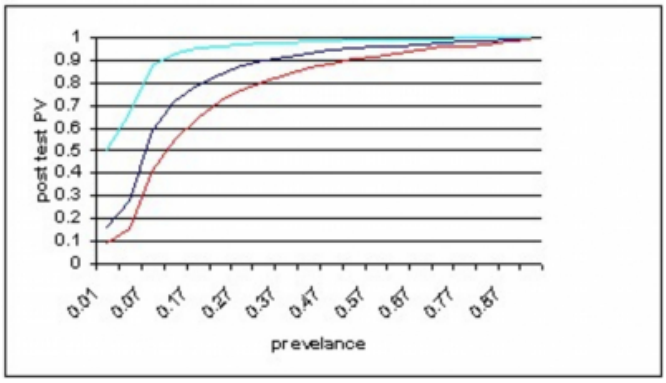
Abstract

Unfortunately, well over 10 years of a “just say yes” philosophy applied, not just in a clinical realm, but in academic realms, is now paying off with grave and dire consequences. While “just say yes” is an effective means of expediting and efficiently obtaining imaging studies for patients, this works when the referring physician is an adequately and competently trained clinician, referring cases for which they have already performed some pre-screening evaluation. In particular, these patients have already undergone a physical exam and historical evaluation by their referring physician that allows them to have a reasonable differential diagnosis of limited scope constructed and then referred for appropriate tailored imaging studies. By removing the radiologist in a primary non-teaching academic center, this allows efficient imaging studies that have been reasonably and appropriately ordered to be performed and to be readily and rapidly interpreted. Though this may allow some unnecessary imaging, particularly as technology evolves, and the referring clinical services are not adequately educated, generally the indication for studies is valid and the efficacy and consequent predictive value positive is high.

This phenomena is demonstrated in figure 1, where after performing the history and physical exam, the pre-test probability is elevated into the range of greater than 1 in 10, which then guarantees a very high predictive value positive for tests with sensitivities and specificity's greater than 90%. In these centers, as newer imaging studies come into play, education must be performed by the radiological services in order to minimize overlapping redundancy. In an academic center where this philosophy does expedite imaging often minimally trained or minimally supervised house staff orders these studies. Hence their ability to be able to order expensive imaging modality without adequate pre-screening, history, or clinical evaluation by the house staff, effectively creates a very low pre-test probability. In this situation regardless of high sensitivity and specificity of these tests, the net effect is that the predictive value positive or negative is consequently significantly diminished in these studies. This creates inefficiency and diminishes the efficacy of these studies when applied in a clinical center.

Figure 1

Figure 1: post test predictive value positive for tests with sensitivities and specificity's of 90, 95 and 99%.

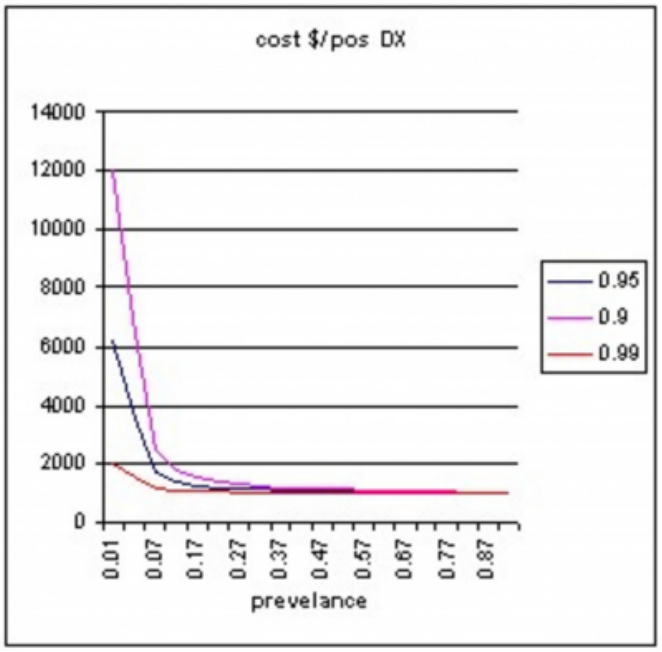


The commensurate increased cost to the health system becomes so burdensome that this effect is cascaded exponentially as these house staff who had a diminished opportunity to develop adequate clinical skills are then moved into the community practice setting and consequently order these studies as primary diagnostic tools. Consequently insurers are imposed with the burden of having to pay for many unnecessary tests to find the positive or valuable positive test and, even then, the positive tests require additional imaging because the predictive value positive is diminished to a degree that even a positive test has specious validity. In particular, this creates data that allows insurers to justify not reimbursing for imaging because of the low predictive value positive. This is demonstrated in figure 2 where the cost per diagnosis versus the pretest probability for test with sensitivities and specificity's of 90, 95 and 99% are presented. Note that even for a test with 95% sensitivity and 95% specificity if the pre test probability is less than 1 in 10 then the cost per diagnosis is over $6000 when the cost of the test is $1000. In

addition, the impact cascades to the individual insurance participant who then has to pay the burden of many unnecessary tests for those that are justified and necessary.

Figure 2

Figure 2: Cost per diagnosis for tests (at $1000/test) with sensitivities and specificity's of 90, 95 and 99%.



Consequently “just say yes” has trained a new cadre of physicians to rely on clinical imaging and testing as a means of evaluating patients without interjecting judgement to elevate the pre-test probability, and generated data to allow insurers to not reimburse for imaging studies without prior approval. As the baby boom population will age and enter into their primary medical needs stage of life, the commensurate impact is already being felt as many towns are re-evaluating the contracts for their workers in education, police and fire having to contend with significantly increased health insurance premiums. The social consequences of this will cascade into the Medicare system where the government may find itself having to monitor individual physicians practice behaviors in concert with other insurance purveyors. This would likely result in preventing certain physicians from having access to imaging without oversight as a means to try to maintain control over these expenses.

One can view a “just say yes” versus appropriate moderated imaging philosophy as the equivalent of resource management and harvesting. Whaling was highly successful for a very limited period of time; because the economics of the equation indicated that complete acquisition of the whale oil was economically more effective if done rapidly and efficiently with the net proceeds then being invested in other monetary investment funds. This resulted in the net decimation of the population of the whales rather than the potential alternative of a sustainable maintainable harvest. The sustainable harvest economic philosophy, though it has a better overall long term philosophical outlook and perspective, does suffer from the aspect that, by maintaining a sustainable harvest, no individual is able to necessarily maximize their harvest at any point in time, rather the generational resource is maintained. Similarly, imaging must be viewed similarly and either we can allow complete pillaging of this resource with this current generation of radiologists taking the monetary funds reaped from this philosophy and investing them in the stock market with the next generation no longer having access to this resource. Alternatively we can acquire a sustainable harvest philosophy that allows the burden to be more economically spread. Clearly, the latter is preferable and as such the interjection of radiology, especially in academic centers, is a serious issue that should be reconsidered seriously.

In addition, “just say yes” has, in the academic center, trained a generation of clinical physicians to view radiology as strictly a diagnostic tool without need for any expert intervention and as such the radiologist is viewed, in more and more academic centers, as a superfluous intermediary. Many clinical physicians have since expressed that interpretation is viewed as a technical skill rather than as a consultation. If we wish to see a new generation of imaging where radiologists are not viewed in a consultation fashion, but merely as technicians, and their income, livelihood and resources are regulated by actuaries in an insurance system then we should continue “just say yes” for another 10 years. We can hope that the current generation of retiring radiologists can be benevolent enough to understand when they cannot access the imaging that they or their family needs in the next decade.

References

Author Information

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