

THE QUADRUPLE AIM: RADIOLOGISTS AND PHYSICIANS IN THE CENTER

Raymond K. Tu MD, MS, FACR

The “Quadruple Aim” has recently gained attention as health care stakeholders have identified growing challenges to physician experience and burnout. Physician suicide is two-fold higher than the general population, and more common with older physicians. [1] Physician resilience, engagement, and work-life balance are recent additions to the patient-focused triple aim of patient access to care, excellent patient experience, and cost containment: don’t waste resources, do good and respect the patient. [2] Though less apparent than facing the sharp end of the medical error arrow, the need for a creative and healthy provider environment should be considered essential to a successful physician experience. This article summarizes 10 practice strategies for physician success and engagement, the Quadruple Aim. [3]

First, successful physicians require patients; hospital-based physicians need access to an ample supply of hospital beds. A successful practice is more likely at locations with many patients able to reach the provider (physically or virtually), and at a hospital with ample resources for procedures and beds to admit. Washington, DC, for example, has the second highest number of beds per capita in the country. [4]

Second, a practice needs a robust information technology system that collects and reports physician quality metrics accurately — especially critical now that these metrics are publicly available. Inaccurate and incomplete public reporting of one’s work may unfairly underrate an otherwise 5-star physician. The third strategy is participation in a culture of safety; consider automated alerts identifying unsafe conditions (e.g., automated flags for iodinated CT contrast allergy, warnings for duplicate erroneous laboratory orders).

Valued physician input, the 4th essential, narrows the quality gap — for instance, advocating for clinical decision support. Remember, the ideal patient encounter involves a patient receiving exactly the care they need (no more and no less), which includes an appropriate amount of radiation dose exposure. Access to a highly resourced practice or hospital, the 5th essential, could reduce errors and stress, and encourage physician engagement with the excitement of excellent equipment and technology. The 6th essential, collaboration with academic partners, enhances one's skills and lifelong learning to maintain your relevance — teachers become learners.

The 7th essential promotes patient safety, as providers maintain vigilance and apply updated guidelines in order to achieve optimal quality and safety benefits; for example, adherence to the ACR Practice Parameters, some of which are researched and co-authored by ASNR volunteer physicians. Frustration reduction is the 8th essential. For instance, patients may have a condition outside a practice or hospital's primary scope of service; a prearranged process to address navigation barriers to referral centers will reduce provider dissatisfaction, erosion of patient care, and can enhance workforce retention.

The 9th essential, prevention and wellness visits, would include showcasing your organization's marquee programs — such as specialized low radiation dose equipment, and accessible diagnostic and screening program for prevention and early detection concordant with the ten essential health benefits identified in the Affordable Care Act. Finally, the 10th essential element, building programs to support quality improvement, are mandated by accredited facilities awarded deemed status by The Joint Commission (TJC). An interventional radiology pain management program that assesses, manages and treats pain and provides alternatives to opioid prescribing fulfills the TJC Practice Improvement (PI) standard 02.01.01, EP 19.

Radiologists are aptly positioned to collaborate with our clinical colleagues to enhance successful physician engagement strategies. Radiologists understand process maneuvering, given their technological and clinical expertise. Radiologists that are seen as positive and energized collaborators will create a motivated milieu, and potentially foster a sense of willingness to contribute to the overall success of the collective medical staff. We encourage physician leaders that are engaged with success — shifting the focus from the negative to the positive viewpoint of engagement, the Quadruple Aim.

References

1. Duarte D, El-Hagrassy JM, Castro e Couto T, Gurgel W, Fregni F, Correa H. Male and female suicidality: a systematic review and meta-analysis. *JAMA Surg* 2020;155(8):721-722.
2. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health and cost. *Health Aff* 2008;27:759–69.
3. Sikka R, Morath JM, Leape L. The quadruple aim: care, health cost and meaning in work. *BMJ Qual Saf* 2015;24:608–610.
4. <https://www.kff.org/other/state-indicator/beds-by-ownership/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

