**Commentary: Quality vs. conformity** 

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A prevailing metric of surgical quality within healthcare systems striving for recognition as highly reliable organizations is conformity to established pathways of care delivery. Deviation from the agreed upon standards raises concern for suboptimal or potentially unsafe medical care. A common example is adherence to early recovery after surgery (ERAS) protocols with the understanding that complications are reduced corresponding with shorter lengths of stay. On a grander scale, establishment of textbook surgeries for common operations extrapolates similar concepts throughout the country. It was alarming to see that only 26% of pulmonary resections in a large, contemporaneous, administrative database achieved each of six tenants defining a textbook operation as reported by Kulshrestha et al.

This implies that the majority of surgically treated patients with lung cancer received inadequate care. If true, the authors' suggestion that rates of non-textbook care should divert patient flow and reimbursement to surgeons and systems with greater adherence to scientifically supported guidelines deserves greater attention. Perhaps, significant gains in patient care will be realized as a greater proportion of lung cancer resections are performed in compliance with textbook procedures.

As definitions of textbook operations are drafted, it is crucial that these guidelines are supported by evidence rather than just expert opinion. While we have hailed the mantra of evidence-based medicine for the past 4 decades, the majority of our consensus statement papers still rely heavily on level C evidence of expert opinions rather than solid data. Readers understand the limitations of guidance based solely on level C evidence and adjust their practices accordingly. Suggesting that patients, payers and referring physicians use compliance with opinion-based textbook operations risks encouraging

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group think rather than practice of evidence-based medicine. It is notable that the most frequent

criteria for which an operation fell out of compliance with the textbook definition was the evaluation of

less than 10 mediastinal lymph nodes. While most would agree that collecting more lymph nodes is

better, the recommendation for at least 10 mediastinal lymph nodes was based on consensus opinion.

Interestingly, the most relevant prospective data addressing the issue argues to the contrary.

Guidelines informing patient care, defining textbook operations and directing patient flow should be

based on solid evidence.

Apart from the hypotheticals, Kulshrestha et al. demonstrate that adherence to textbook procedures

correlated with improved long-term outcomes.

It is important to remember that defining criteria of textbook operations included the absence of 30 day

mortality, absence of a prolonged length of stay, absence of an unplanned readmission and that

substandard lymph node dissections were closely associated with sublobar resections. Superior

outcomes associated with textbook operations may have been influenced by selection biases that could

not be accounted for with propensity matching due to the lack of granularity of the large administrative

database.

As we consider insisting on conformity, we should be certain that our guidelines and definitions of

textbook operations are driven by data and that congruence with textbook operations actually improves

outcomes rather identified a healthier patient population.

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