

consent by the institutional review board at The University of Texas MD Anderson Cancer Center.

**Results** | A total of 36 191 individuals responded to the question of CT for LCS, and 36 209 individuals responded to the chest radiography question. The percentage of individuals who received CT scans for LCS was more than 1.5 times higher in 2015 than in 2010 (2.1% vs 1.3%;  $P < .001$ ) (Figure 1A), while the use of chest radiography for LCS was not significantly different (2.7% in 2015 vs 2.5% in 2010;  $P = .22$ ) (Figure 1B). A similar trend in the use of CT was observed among many subgroups stratified by smoking or eligibility status. Figure 1A shows the rate of CT scans significantly increased for never-smokers (1.2% vs 0.8%;  $P = .03$ ), low-risk smokers (2.7% vs 1.5%;  $P < .001$ ), and high-risk smokers (5.8% vs 2.9%;  $P < .001$ ). In addition, significant increases in the rate of CT were observed among high-risk smokers who did not meet the age eligibility criteria (Figure 2A) and those who met the age eligibility but were not heavy smokers (Figure 2B). No significant trend in the use of CT was observed for individuals older than 74 years (Figure 2C).

**Discussion** | Our analysis of LCS-related survey questions in national survey data showed 3 interesting patterns when comparing the screening rate between 2001 and 2015. First, we found a significant but small increase in the use of CT among individuals who met the eligibility criteria of LCS. This pattern of intended use of CT scans exhibits a slow uptake and underuse of a screening technology with established effectiveness. Second, a temporal rise in the use of CT for LCS was also found among individuals who did not meet the eligibility criteria; this unintended spillover raises concerns about overuse. To what extent the increasing use of CT for LCS was driven by recently released guidelines or simply reflected a rising trend of CT use in general needs to be explored in future research.<sup>5</sup> Finally, the use of chest radiography remained stable despite its lack of effectiveness in LCS, which may reflect primary care physicians' knowledge gap regarding the latest scientific discovery in LCS.<sup>6</sup>

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**Published Online:** January 30, 2017. doi:10.1001/jamainternmed.2016.9016

**Author Contributions:** Dr Shih had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

**Study concept and design:** Huo, Shen, Shih.

**Acquisition, analysis, or interpretation of data:** All authors.

**Drafting of the manuscript:** Huo, Shen.

**Critical revision of the manuscript for important intellectual content:** Huo, Volk, Shih.

**Statistical analysis:** Huo, Shen.

**Obtained funding:** Huo, Shih.

**Administrative, technical, or material support:** Huo, Shih.

**Supervision:** Volk, Shih.

**Conflict of Interest Disclosures:** None reported.

**Funding/Support:** This work was supported by the Duncan Family Institute, a fellowship from The University of Texas MD Anderson Cancer Center's Halliburton Employees Foundation (Huo), and the National Cancer Institute (Shih; R01 CA207216).

**Role of the Funder/Sponsor:** The funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

**Additional Contributions:** The authors thank Gary Deyter, technical writer from the Department of Health Services Research at The University of Texas MD Anderson Cancer Center, for his editorial assistance. He received no compensation for his contributions beyond that provided in the normal course of employment.

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## COMMENT & RESPONSE

### Where Is the Geriatrician?

**To the Editor** We have read with great interest the article by Munson and colleagues<sup>1</sup> in a recent issue of *JAMA Internal Medicine* exploring the use of prescription drugs associated with fracture risk in patients with fragility fractures. At the time of fracture, about three-quarters of patients were receiving at least 1 drug associated with increased fracture risk. The prescription pattern did not substantially change following the fracture event.

These findings clearly indicate that the quality of care is at best suboptimal in patients with fragility fractures, who are typically characterized by advanced age, multiple and often chronic clinical conditions, polypharmacy, and social issues. We agree with Munson and colleagues<sup>1</sup> about the need to reshape the current models of care to facilitate interdisciplinary exchanges.<sup>2</sup> The World Health Organization has indeed solicited the adoption of multidisciplinary for a more efficient management of frail and multimorbid elderly patients.<sup>3</sup> At the same time, it is quite odd that, in the virtuous communication circle envisioned by Munson and colleagues,<sup>1</sup> geriatricians are completely neglected. There is no doubt that the complexity of older patients, including those with fragility fractures, urges the implementation of models of coordinated and integrated care.<sup>2</sup> It appears nevertheless paradoxical that the development of such models is

invoked without acknowledging the long-standing success of orthogeriatrics. Last but not least, medication review as part of comprehensive geriatric assessment has shown to reduce the prescription of potentially inappropriate drugs, especially of those acting on the central nervous system and the cardiovascular system.<sup>4</sup>

We realize that there are still too few geriatricians, and this often leads to the delegation of their tasks to other specialists who may not possess adequate expertise for dealing with the multifaceted medical needs of geriatric patients.<sup>2</sup> We are also aware that other disciplines may appear more appealing and remunerating than geriatrics.<sup>5</sup> Nevertheless, we believe that more consideration should be given to the special expertise geriatricians have attained over years of clinical practice and research in the management and treatment of frail older persons.<sup>2</sup> It does not appear justifiable to continue underestimating the importance of the geriatric discipline in a world that is globally aging. This is particularly frustrating if we consider that the hypothetical solutions of integrated care proposed (but not yet tested) by Munson and colleagues simply try to mimic what has already existed in geriatrics with long-time success.

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**Conflict of Interest Disclosures:** Drs Cesari and Marzetti are geriatricians. No other conflicts are reported.

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**In Reply** Our article<sup>1</sup> highlights that in aggregate little changes to reduce the potential fracture risk associated with prescription medications after a fragility fracture among older adults in the United States. The population put at-risk (ie, proportion of people exposed to potentially harmful medications) does not change. That aggregate finding masks, however, that the specific individuals exposed may change because some people cease harmful drugs while others begin them.

Drs Cesari, Calvani, and Marzetti point out that we did not discuss the potential role of orthogeriatrics, which is a multidisciplinary care model drawing orthopedic and geriatric specialists together in the hospital management of older adults who

fracture, in providing better quality medication management. In fact, we did not shed light on any of the potential factors that might influence whether an individual has his or her medications adjusted to mitigate risk. Our goal was to determine whether prescribing patterns change following a fracture before we sought explanations for any observed changes. As it turns out, the magnitude of change is small and subsequent studies may be hard pressed to find factors associated with greater likelihood of lowering of prescriptions associated with harm, although we will try. Future studies of orthogeriatric programs might also consider including potentially harmful medication exposures the year after fracture as an additional outcome measure to address the hypothesis by Drs Cesari, Calvani, and Marzetti that this model of care or that geriatricians more generally might provide a solution.

A larger point, however, is that while there is enthusiasm and evidence of benefit for the orthogeriatric approach,<sup>2,3</sup> these programs are unlikely to address the problem of medication-associated fracture risk in the United States as it currently exists. Why? Geriatricians (because of their small number) and orthopedists (as surgeons) are unlikely to be the outpatient prescribers for the vast majority of older adults at risk for fracture. For example, fewer than 2000 geriatricians are among over 600 000 physicians who write prescriptions under the Medicare Part D program or 0.3% (analysis of public use Medicare Part D Prescriber Summary File, CY 2014; <https://data.cms.gov/Public-Use-Files/Medicare-Provider-Utilization-and-Payment-Data-201/465c-49pb>). Even among elderly adults with multimorbidity in the United States, fewer than 1% see a geriatrician as their predominant ambulatory health care provider.<sup>4</sup> The challenge is, therefore, how to enable any physician, nurse practitioner, or physician assistant who may be prescribing for older adults, regardless of their specialty, to adjust their practice to address the special risks and needs of older adults.

Specialist groups certainly have contributions to make in those efforts, especially in assuring that others have the training they need and pointing out when we fall short. This is one among many potential strategies worth exploring to assure that prescribing for older adults improves in the future.

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**Conflict of Interest Disclosures:** None reported.

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## Questioning Feeding Tubes to Treat Dysphagia

**To the Editor** In a Perspective in a recent issue of *JAMA Internal Medicine*,<sup>1</sup> Dr Albert describes a vulnerable elderly woman who developed dysphagia for liquids after hip fracture repair. A temporary nasogastric tube was promptly placed. When dysphagia persisted, discussion turned toward permanent tube feeding.

Nothing is presented to explain why this patient suddenly developed dysphagia. Recent intubation, narcotics for pain, other new medications, and being fed by strangers while recumbent are candidate causes, and all are reversible.

Decisions with sick and frail elderly patients often involve a choice between an aggressive strategy (ie, burdensome treatment with better chance of longer survival) or a palliative strategy (ie, treatment for comfort and dignity with a higher chance of a sooner death). This was not such a decision. No evidence suggested that this patient would live longer with tube feeding. Evidence strongly suggests survival is not prolonged in patients with severe dementia.<sup>2</sup> There is no evidence about frail elderly women with unexplained dysphagia in the days after major surgery.

Her care team warned “about the risk of potential aspiration and pneumonia with taking food and liquids by mouth.”<sup>1</sup>(p1431) This would be more significant if tube feeding reduced that risk. To the extent that aspiration pneumonia is caused by contaminated oral secretions or by gastropulmonary regurgitation, tube feeding is not a biologically plausible preventive measure. Furthermore, weak evidence shows no reduction in the risk of aspiration pneumonia as a result of tube feeding in any group of adult patients.<sup>3</sup> In fact, enteral nutrition is generally cited as a risk factor for aspiration pneumonia.<sup>4</sup>

The patient was carefully fed by hand and died of “failure to thrive”<sup>1</sup>(p1432) in what seems to have been a week at home.

This patient’s situation was undoubtedly far more complex than can be presented in a brief essay, and it does seem that she received optimal care. But suggesting to the family that tube feeding reduces the risk of aspiration pneumonia or improves the chance of longer survival is at least misleading and, poorly phrased, could verge on the coercive (for example, “We can let your mom get pneumonia or starve to death, or we could put in a feeding tube”).

I believe a truer thing to say is, “Your mom’s not doing well now. You may be thinking about a feeding tube, but there’s no real evidence that it will prolong her life or prevent pneumonia.”

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**Conflict of Interest Disclosures:** None reported.

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**In Reply** I appreciated the thoughtful insights of Dr Finucane, regarding my article “Response to a Patient’s Failed Swallowing Study: Decisions Regarding Feeding Tubes and Dysphagia,”<sup>1</sup> and am glad to have the opportunity for further dialogue.

Dr Finucane noted that there was no clear etiology described in the vignette regarding the cause of this patient’s dysphagia. In this case, and in many others, there was no single clear, reversible etiology for the problem—medications were minimized, volunteers were present to assist with eating, and days had passed since intubation and anesthesia exposure. It is my clinical experience that in these cases, unrelated to end-stage dementia, we are likely unmasking a low-level chronic dysphagia that was present prior to hospitalization. Data suggest that there is a large population of community and nursing home residents with a certain level of dysphagia at baseline.<sup>2</sup> This chronic problem is only worsened by illness, debility, and the potentially reversible etiologies noted above.

I agree with Dr Finucane’s assertion that feeding tubes will likely not prolong or change the trajectory of the lives of these frail, vulnerable patients compared with conservative interventions for dysphagia. The unfortunate reality for patients who are hospitalized is that they may not have the time to recover sufficiently during their acute hospitalization for their swallowing function to normalize before discharge. This underscores the critical need for careful discussion, anticipatory guidance, and shared decision-making with patients and family, who need to understand and accept the known risks associated with dysphagia as they transition out of the hospital. This was the purpose of describing risk of aspiration with oral intake in the narrative—not to steer the family toward a feeding tube, but rather to provide education and guidance and to enhance shared decision-making. This allows a clearer transition plan to be created regarding related issues such as location of subsequent care, establishment and documentation of code status, and understanding of future goals of care.

Finally, it is worth noting that the lived experience of a palliative care consultant in this case is different than that of the primary care physician, geriatrician, or hospitalist, who is likely having the first conversation about dysphagia and feeding difficulties with the patient and family. In fact, most of these primary palliative care moments will likely happen with no interaction with a specialist at all. It is essential that all health care providers have some level of comfort with this and other discussions that focus on shared decision-making and goals of care. As Dr Finucane stresses, care must be given to discuss options while also providing clear guidance to families about why certain options are not being offered. A palliative care specialist is typically engaged when there are more