Methods | Administered by the National Center for Health Statistics, the National Ambulatory Medical Care Survey (NAMCS) samples office visits with physicians to create nationally representative estimates of outpatient care (n = 473,132 visits from 2001 to 2013). We identified visits to specialist physicians and divided these into surgical and medical specialist physicians. We first examined unadjusted trends from 2001 to 2013 in the proportion of visits with NP or PA involvement (ie, an NP or PA saw the patient with a physician or an NP or PA saw the patient without a physician), using multiyear intervals owing to sample size. We then examined visit characteristics associated with higher likelihood of NP or PA involvement in recent years (2010-2013), using a logistic regression model controlling for all listed visit and patient characteristics (Table) to generate adjusted percentages. The University of Pittsburgh Human Research Protection Office judged this study exempt from review.

Results | Among visits to surgical and medical specialist physicians, the proportion involving an NP or PA increased from 3.3% in 2001 to 2003 to 6.9% in 2010 to 2013 (P < .001) and 2.4% to 5.8% (P < .001), respectively (Figure, A). Similar growth in NP or PA visits was observed for new and return visits (Figure, B) and for all visit reasons (ie, acute problem, routine chronic, peripersonal) (Figure, C). Among visits with NPs or PAs, the proportion of visits where the patient did not also see a physician increased from 12.3% to 21.4% (P < .001).

Adjusting for other visit and patient factors, the proportion of 2010-2013 visits involving an NP or PA varied significantly by visit reason (4.9% of routine chronic visits vs 9.3% of presurgical and postsurgical visits; P < .001 for category), patient comorbidity (10.6% of visits among patients with ≥4 chronic conditions vs 5.6% with no chronic conditions; P < .001 for category), and region (4% of visits in the Midwest vs 9.6% in the Northeast; P < .001 for category) (Table). The adjusted proportion of 2010-2013 visits involving an NP or PA ranged from 4.0% to 8.5% across specific specialties identified in the Table (P = .86).

Discussion | Involvement of NPs and PAs in the care of patients of specialist physicians increased over the past decade, but growth slowed in recent years, and visits involving NPs or PAs remain a small proportion of overall specialty visits. Contrary to our hypothesis, growth was observed in unadjusted analysis not only for return and routine visits, but also for new patients and acute visits. Rates of NPs or PAs seeing patients without a physician also seeing the patient increased. In adjusted analysis, NPs or PAs were disproportionately involved in care of patients with greater medical complexity, requiring further work to understand if this reflects team-based care, coding artifact, or other explanations. These findings are particularly notable given that NPs and PAs in specialty care receive shorter formal training than specialist physicians, with specialty-specific training entirely on-the-job in some fields.

Our study is limited in that NAMCS samples visits to nonfederal office-based physicians and reflects only care that occurs among NPs and PAs sharing rosters with physicians. As such, our results may underestimate total involvement of NPs and PAs in specialty care but should accurately reflect trends in NPs and PAs providing care in conjunction with specialist physicians. Our findings have implications for the specialty workforce, and the impact on access to specialty care and its quality should be evaluated.

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Association Between Indolent Descriptions and Vegetable Consumption: Twisted Carrots and Dynamite Beets

In response to increasing rates of obesity, many dining establishments have focused on promoting the health properties and benefits of nutritious foods to encourage people to choose healthier options.1 Ironically however, health-focused label-
Table. Example Vegetable Descriptions by Condition

<table>
<thead>
<tr>
<th>Indulgent</th>
<th>Basic</th>
<th>Healthy Restrictive</th>
<th>Healthy Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamite chili and tangy lime-seasoned beets</td>
<td>Beets</td>
<td>Lighter-choice beets with no added sugar</td>
<td>High-antioxidant beets</td>
</tr>
<tr>
<td>Rich buttery roasted sweet corn</td>
<td>Corn</td>
<td>Reduced-sodium corn</td>
<td>Vitamin-rich corn</td>
</tr>
<tr>
<td>Sweet sizzlin’ green beans and crispy shallots</td>
<td>Green beans</td>
<td>Light ‘n’ low-carb green beans and shallots</td>
<td>Healthy energy-boosting green beans and shallots</td>
</tr>
<tr>
<td>Zesty ginger-turmeric sweet potatoes</td>
<td>Sweet potatoes</td>
<td>Cholesterol-free sweet potatoes</td>
<td>Wholesome sweet potato superfod</td>
</tr>
<tr>
<td>Twisted garlic-ginger butternut squash wedges</td>
<td>Butternut squash</td>
<td>Butternut squash with no added sugar</td>
<td>Antioxidant-rich butternut squash</td>
</tr>
<tr>
<td>Slow-roasted caramelized zucchini bites</td>
<td>Zucchini</td>
<td>Lighter-choice zucchini</td>
<td>Nutritious green zucchini</td>
</tr>
<tr>
<td>Tangy ginger bok choy and banzai shiitake mushrooms</td>
<td>Bok choy and mushrooms</td>
<td>Low-sodium bok choy and mushrooms</td>
<td>Wholesome bok choy and mushrooms</td>
</tr>
<tr>
<td>Twisted citrus-glazed carrots</td>
<td>Carrots</td>
<td>Carrots with sugar-free citrus dressing</td>
<td>Smart-choice vitamin C citrus carrots</td>
</tr>
</tbody>
</table>

Discussion | Labeling vegetables with indulgent descriptors significantly increased the number of people choosing vegetables and the total mass of vegetables consumed compared with basic or healthy descriptors, despite no changes in vegetable preparation. These results challenge existing solutions that aim to promote healthy eating by highlighting health properties or benefits and extend previous research that used other creative labeling strategies, such as using superhero characters, to promote vegetable consumption in children. The present study showed that labeling vegetables with indulgent descriptors could increase vegetable consumption in adults: using the same indulgent, exciting, and delicious descriptors as more popular, albeit less healthy, foods. This novel, low-cost intervention could easily be implemented in cafeterias, restaurants, and consumer products to increase selection of healthier options. Though we were...
unable to measure how much food was eaten by patrons individually, people generally eat 92% of self-served food, regardless of portion size and food type. Further research should assess how well the effects generalize to other settings and explore the potential of indulgent labeling to help alleviate the pervasive cultural mindset that healthy foods are not tasty.

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Efficiency and Interpretability of Text Paging Communication for Medical Inpatients: A Mixed-Methods Analysis

Today, inpatient health care teams typically communicate via paging technology on dedicated, single-purpose devices despite the advancements in mobile communication technology. Text paging has been identified as inefficient and disruptive,1,2 and even with implementation of novel technology, concerns about communication quality and safety persist.3 We investigated text page message content and structure with particular focus on efficiency and safety.

Methods | We used a mixed-methods approach to analyze the content of text page messages generated at an academic tertiary care hospital on an internal medicine service. We included electronic messages relating to care of specific patients that were sent or received by physicians, nurses, students, and ancillary staff using a web-based text paging system allowing bidirectional messaging to dedicated devices. We sampled 3 blocks of 200 electronic messages and used an iterative coding and memo process to develop an analysis of message themes and attributes using a modified case study approach.4 One investigator (A.L.) read, coded, and wrote memos based on sampled messages until reaching thematic saturation. Our team refined preliminary codes, and a second investigator (B.C.) used the codebook to code messages independently (unweighted Cohen κ score [κ = 0.81; z = 64; P < .001]).