tions about cost and quality and to the delivery of care “grounded in the philosophy of caveat emptor.” We believe that inappropriate self-referral and the overuse of generously reimbursed procedures are primarily caused by informational asymmetries and a poorly designed compensation system, not commercialism per se. Improvement in patients’ incentive and capacity to shop for cost-effective medical services would discourage unscrupulous behavior and lead patients toward ethical clinicians who offer superior value by embracing their fiduciary duty to patients.

There are practical concerns associated with any health care reform effort, including those that are market-driven. Currently, it is difficult to amass and disseminate meaningful outcome data. In the absence of risk-adjusted deductibles and risk-adjusted disbursements into health savings accounts by third parties, high-deductible health plans may be disproportionately attractive to healthy persons. But the authors provided no proof that increased competition for health care services will destroy professional ethics. The current health care marketplace, replete with inequitable fee-for-service reimbursement and virtually no risk-adjusted outcome data, brings out the worst in clinicians. Any improvement in consumers’ ability to shop for medical care can only improve this situation.

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In Reply: We are encouraged that Dr. Herzlinger and Mr. Falit value the importance of professionalism. We agree that increased competition with transparency will promote professional ethics. Especially in a competitive marketplace, because of information asymmetry, uncertainty, and the need for a trusting relationship between physician and patient, health care will always need to rely on physicians acting in their patients’ best interests.

We did not express opposition to health care competition per se, but rather to a specific form of competition core to the “consumer-driven” approach that encourages patients to shop for discrete health services to find the best match of quality and costs. The biggest challenge in health care today is to improve the value of coordinated care for patients with multiple and complex illnesses, requiring a relationship over time and a system of care. Indeed, we applaud efforts to promote organized systems of care competing for the allegiance of patients and held accountable to public and private payers for quality and cost performance. We are concerned that “retail shopping” by specific (usually procedure-based) service will inevitably lead to compromise in professional duties to patients, even if that is not the intent.

For example, direct-to-consumer advertising by pharmaceutical companies, which is often misleading, does not give us confidence that a system featuring robust competition among physicians will not similarly result in misleading information and self-promotion when clinicians are engaged in head-to-head retail competition for individual customers. Current service-line competition by hospitals does not give us confidence in this approach.1

Reinforcing professional ethics is needed in health care delivery reform and we appreciate the constructive engagement on an important topic that is often ignored in discussions of health care reform.

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Data Error in Study of Moderate-to-Vigorous Physical Activity From Ages 9 to 15 Years

To the Editor: In our article “Moderate-to-Vigorous Physical Activity From Ages 9 to 15 Years,”1 an error occurred in the programming syntax used to clean the accelerometer-determined physical activity data for age 12 years and age 15 years. A subsample of days that should have been deleted as invalid (implausible total count relative to counts on valid days) was retained for some individuals. For the analysis sample at age 12 years, this had the effect of altering the moderate-to-vigorous physical activity (MVPA) estimates of 164 individuals and excluding 3 individuals. For the analysis sample at age 15 years, this had the effect of altering the MVPA estimates of 90 individuals and excluding 2 individuals. One additional individual at age 12 years was eliminated from this analysis because the revised score was identified as an extreme outlier (weekday MVPA >450 min/d). The estimated levels of MVPA at age 12 years and age 15 years increased slightly, but the statistically significant findings of decreases in daily MVPA for boys and girls...
between ages 9 and 15 years were not altered. Corrected text, tables, and figures are included in the Correction section of this issue of JAMA.

Although correcting the data errors resulted in small changes to many of the reported point estimates, none of the basic findings changed significantly. We apologize for any inconvenience that might have resulted from these errors.

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CORRECTION


On page 295, in the abstract, the second sentence of the Results section should be “Weekday MVPA decreased by 37 minutes per year, while weekend MVPA decreased by 39 minutes per year. By age 15 years, adolescents were only 24 minutes more active per weekday and 36 minutes per weekend day. Boys were more active than girls, spending 18 and 4 more minutes per day in MVPA on the weekdays and weekends, respectively. The rate of decrease in MVPA was the same for boys and girls. The estimated age at which girls crossed below the recommended 60 minutes of MVPA per day was approximately 13.2 years for weekday activity compared with boys at 14.9 years (95% CI, 13.0-13.4) compared with boys at 14.9 years (95% CI, 13.3-13.9). As model 3 indicates, children from low-income families were more active at age 9 years on weekdays and weekends than were children from higher-income families (188 vs 178 minutes per weekday and 183 vs 175 minutes per weekend day). Income status was unrelated to changes in weekday or weekend activity. Both children from low-income and higher-income families spent more time in MVPA at age 9 years on weekdays than on weekends (mean [SD] difference, 4.56 [22.56]; 95% CI, 2.59-6.53; t(506)=4.55; P<.001), although girls were equally active during the week and on weekends (mean [SD] difference, 0.02 [19.56]; 95% CI, −1.69 to 1.73; t(506)=0.03; P=.98). As shown in Figure 3, girls were below the recommended 60 minutes of MVPA on weekdays at approximately 13.2 years (95% CI, 13.0-13.4) compared with boys at 14.9 years (95% CI, 14.5-15.6); and for weekend activity, girls were below the recommended 60 minutes of MVPA at 12.7 years (95% CI, 12.5-12.9) compared with boys at 13.6 years (95% CI, 13.3-13.9).

On pages 300-302, the sixth and seventh paragraphs in “Results of Growth Curve Analyses” should be “For weekend activity, sex and BMI percentile had similar effect sizes (0.10 and 0.09, respectively), although the effect size for children from low-income families was somewhat smaller (0.07). Boys spent 18 more minutes per weekend day in MVPA than girls did; children from low-income families spent 10 more minutes per weekend day in MVPA than children from higher-income families did; and a 10% increase from the approximate mean BMI percentile of 65 was associated with 3 fewer minutes of MVPA per weekend day for 9-year-old children.

Children from low-income families had faster linear decreases in MVPA on both weekdays and weekends. Children with lower BMI percentiles had faster linear decreases in MVPA on the weekends. Also, the weekday MVPA of children living in the Midwest and South decreased at faster rates than children living in the West and Northeast. In general, these effects, although significant, were quite small. For example, the decrease in MVPA time each year for children in low-income families was approximately 1 minute more per weekday and 4 minutes more per day on the weekends compared with children from higher-income families. Similarly, a 10% decrease from the approximate mean BMI percentile of 65 was associated with an additional less than 1 minute per day per year decrease in MVPA on weekends. Regional differences accounted for an additional decrease in weekday MVPA of less than 4 minutes per day per year.”

On page 302, the second sentence in the first paragraph of the Comment section should be “At 9 years, almost all children were well above the recommended 60 minutes of MVPA on both weekdays and weekends, but by 15 years only 32% met the guidelines on weekdays and only 18% on weekends.”

On page 303, the second sentence in the last paragraph of the first column should be “Another strength derives from our use of objective accelerometer measurement of physical activity in a much larger sample with a higher mean adherence rate for wearing the monitor over 7 days (52%) than the recent NHANES study (26%).”

The corrected Table 1, Table 2, Table 3, Table 4, and Table 5, and Figure 2 and Figure 3 appear herein.

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