are meaningful to both us and the people we care for and eliminating those that are not.

Solutions will not be easy, since the problems are entangled in the high cost of health care, reimbursement for our work, and obstacles to health care reform. But we can start by recalling the original purpose of physicians’ work: to witness others’ suffering and provide comfort and care. That remains the privilege at the heart of the medical profession.

Disclosure forms provided by the authors are available at NEJM.org.

From the Section of General Internal Medicine, Yale University School of Medicine, New Haven, CT (D.I.R.); and the Program in Bedside Medicine, Department of Medicine, Stanford University School of Medicine, Stanford, CA (A.V.).


DOI: 10.1056/NEJMp1609055
Copyright © 2016 Massachusetts Medical Society.

An audio interview with Dr. Rosenthal is available at NEJM.org

The New England Journal of Medicine
Downloaded from nejm.org at SAN FRANCISCO (UCSF) on April 27, 2017. For personal use only. No other uses without permission.
Copyright © 2016 Massachusetts Medical Society. All rights reserved.
PERSPECTIVE

Personal Health Budgets

At the time of the study, £1 was equivalent to $1.52. This table was adapted from the report on Evaluation of the Personal Health Budget Pilot Programme. Personal health budgets were used to pay for social and community-based services but not primary care and hospital services. The comparison group received social, community, primary care, and hospital services purchased by the NHS and were not eligible for well-being services. Well-being services include leisure, exercise, education, and training. Support services include support for activities of daily living, transportation, meals, and home care. Community nursing and therapy includes nursing, physical and occupational therapy, and rehabilitation services. Other community services include dental, podiatry, and mental health services in the community.

<table>
<thead>
<tr>
<th>Group or Comparison</th>
<th>Social and Community-Based Expenditures</th>
<th>Primary Care and Hospital Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well-being</td>
<td>Social Supports</td>
</tr>
<tr>
<td></td>
<td>pounds</td>
<td>pounds</td>
</tr>
<tr>
<td>Personal health budget group (N=1171)</td>
<td>510</td>
<td>2310</td>
</tr>
<tr>
<td>Traditional services group (N=1064)</td>
<td>0</td>
<td>2720</td>
</tr>
<tr>
<td>Difference in differences between groups</td>
<td>510†</td>
<td>-410</td>
</tr>
<tr>
<td>Subtotal differences between groups</td>
<td>240</td>
<td></td>
</tr>
<tr>
<td>Total cost difference</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*At the time of the study, £1 was equivalent to $1.52. This table was adapted from the report on Evaluation of the Personal Health Budget Pilot Programme. Personal health budgets were used to pay for social and community-based services but not primary care and hospital services. The comparison group received social, community, primary care, and hospital services purchased by the NHS and were not eligible for well-being services. Well-being services include leisure, exercise, education, and training. Support services include support for activities of daily living, transportation, meals, and home care. Community nursing and therapy includes nursing, physical and occupational therapy, and rehabilitation services. Other community services include dental, podiatry, and mental health services in the community.

†P<0.001.
‡P<0.05.

child with complex health needs have built a team of home-based providers offering flexible support according to the child’s fluctuating needs and purchased special equipment for learning, play, and mobility, in place of institutional care. One man with dementia used day-center funding to purchase a garden shed where he could safely spend time on his hobbies within sight of his caregiver when she was gardening. With these budgets, people gain flexibility to prioritize their choices. Other than primary and acute care, patients relinquish an open-ended commitment to home, community, and other long-term care services, while accepting greater responsibility for managing arrangements for their chosen services.

An independent research team used a difference-in-differences model to compare the year-before and year-after costs for a group of patients using personal health budgets with those of a group using traditional services and funding, randomly sampled from the same geographic areas. Overall, use of personal health budgets was cost-effective relative to traditional care and was associated with improved quality of life for patients and caregivers. The greatest savings (mean, £3,100 [4,650] relative to the traditional care group) were observed among patients with annual budgets of more than £1,000 (1,500). The subgroup with budgets of £1,000 or less saw a £170 (255) cost increase. NHS policymakers are therefore focusing the program on higher-need patients.

Patients with personal health budgets used fewer acute care services than their counterparts, instead increasing their personal expenditures on such social and well-being services as help from more flexible support workers, information technology, mobility equipment, physical activities, leisure, training, and education (see table). The evaluation was not designed to explain the observed relative reduction in acute care use, but the evaluators speculated that it might be attributable to a change in the mix of services and to patients’ increased control over their use.

There are challenges to implementing these budgets. Headlines in England have characterized budgets spent on horseback riding for a disabled child and a £7 (10) pedal-boat rental as public money being “spent on treats.” Some physicians have expressed unease regarding spending on untested, nonmedical services and about the perceived risks of fraud and of beneficiaries running out of money for needed services.

In practice, there are ways to promote good spending decisions and accountability. The NHS team meets with beneficiaries to review spending and outcomes within the first 3 months, with subsequent financial reviews and controls dependent on the budget’s size and the type of services purchased. Although most people spend their full budget, some have unspent funds that are returned at the end of the year. Transparency can be increased by having third-party organizations hold the budgets to pay for the services a beneficiary selects.

Self-directed care models are not entirely new to the United
States. Demonstration projects conducted under Medicaid waivers have permitted self-directed care for patients with long-term care needs, improving quality of life. Most such U.S. models, however, have been limited to the hiring and supervising of personal assistants for a specified number of hours per week. Whereas in England direct cash payment is possible, U.S. officials have been reluctant to relinquish such control to patients.

Medicaid waivers have been used to broaden the home- and community-based services offered, and some of these services appear similar to those purchased with personal health budgets in England. But service specifications and providers are tightly controlled in these Medicaid initiatives. For example, beneficiaries may be offered set hours for personal care, home-delivered meals, and standardized equipment. The English experience suggests that if offered a personal health budget, some people choose to focus resources on items such as custom-designed wheelchairs, even though they are left with less money for other services.

Adoption of more ambitious models that shift public funds to individual control would probably face political scrutiny in the United States, as it has in England. Yet the emergence of capitated health plans as nongovernmental intermediaries managing the finances and care of Medicaid and dually eligible (Medicare and Medicaid) beneficiaries may facilitate this approach, since such plans’ spending patterns may draw less public attention than those of government agencies.

Under the Affordable Care Act, 13 states are conducting demonstration projects in which health plans are responsible for managing overall expenditures for dually eligible patients. These plans can offer flexible benefits outside traditional health care and are providing some such as home modifications, appliances, and cell phones as part of a case-management approach for populations with complex needs. These plans could provide even greater flexibility and patient control. Plans could use service history to assess a patient’s expenses for home- and community-based services and then allow the patient to work with a case manager to develop a budget addressing personal needs and health goals.

As the U.S. system strives to redesign care for high-cost patients, we believe that greater consideration should be given to self-directed care, informed by lessons from international models. The evidence from England suggests that patients themselves can help to design higher-value care.

The views expressed in this article are those of the authors and do not necessarily represent those of AHRQ or the U.S. Department of Health and Human Services.

Disclosure forms provided by the authors are available at NEJM.org.

From the University of California, San Francisco (L.O., A.B.B.); and the Agency for Healthcare Research and Quality (AHRQ), Rockville, MD (A.B.B.).


DOI: 10.1056/NEJMp1606040
Copyright © 2016 Massachusetts Medical Society.

**Vitamin D Deficiency — Is There Really a Pandemic?**

JoAnn E. Manson, M.D., Dr.P.H., Patsy M. Brannon, Ph.D., R.D., Clifford J. Rosen, M.D., and Christine L. Taylor, Ph.D.

In recent years, numerous clinical research articles have concluded that large proportions of North American and global populations are “deficient” in vitamin D. Most of the evidence cited focuses on one of two observations: that many people have serum concentrations of vitamin D (i.e., 25-hydroxyvitamin D (25(OH)D)) below 20 ng per milliliter (50 nmol per liter), which the Institute of Medicine (IOM) estimated in 2011 was the appropriate level; or that supplementation with 600 to 800 IU per day — the IOM Recommended Dietary Allowance (RDA) for adults — or more fails to achieve serum concentrations above 20 ng per milliliter in some study participants. Such conclusions, however, are based on misinterpretation and misapplication of the IOM reference values for vitamin D. Because such misunderstandings can have adverse implications for patient care, including unnecessary vitamin D screening and supplementation as well as escalating health care costs...