in a 6-week summer program at Mount Sinai before matriculation to gain basic competency in cell biology, biochemistry, and genetics.

Admitted students will have to earn at least a B in all required courses and maintain a grade-point average (GPA) of 3.5, but they won't have to take the MCAT. The GPA requirement will help balance the importance of maintaining academic rigor with the need to relieve students of the burden of achieving the highest possible grades in every course. A senior thesis or its equivalent will be required, and students will be encouraged to take time off for scholarly or professional pursuits before matriculating. To reduce these students' risk of requiring a nonscholarly leave of absence, we'll enhance the guidance and advising provided between acceptance and matriculation.

We will continue to fill half of each entering class with traditionally prepared premed and post-baccalaureate students to maintain diversity. Metrics and outcomes in medical school, residency, fellowship, and careers will be tracked in a longitudinal study comparing these students with their traditionally prepared peers.

We believe this program, called FlexMed, could dramatically expand the educational, cultural, and socioeconomic diversity of entering classes and our health care workforce. By eliminating MCAT use, outdated requirements, and "premed syndrome," we aim to select students on the basis of a more holistic review of their accomplishments, seeking those who risk taking academically challenging courses; are more self-directed than traditional medical students; pursue more scientifically, clinically, and socially relevant courses; and pursue independent scholarship.

Finally, despite recent changes, the MCAT will maintain a focus on content (organic chemistry and physics) with little relevance to medical practice or translational science. Though the MCAT score has proved valid, reliable, and predictive, it's being used in unintended ways: as a surrogate for individual academic excellence and a metric for medical school rankings.

Moreover, medical schools' reliance on the MCAT leads students to devote much time and money to achieving the highest possible score and effectively excludes bright, creative, motivated students who aren't strong test takers. And just as chemistry courses dissuade minority students and women from pursuing premed preparation,[4] the MCAT may inhibit diversification of our applicant pool. Uncoupling premed preparation from the MCAT will encourage us to develop more appropriate criteria for admission.

Flexner's proposals for more structured curricula were right for his era and revolutionized the teaching, investigation, and practice of medicine. But we have failed him by allowing premedical curricula to ossify despite advances in science, clinical practice, and technology. Our times, too, require the objectivity, commitment, and courage to pursue better ways of preparing students for careers in medicine and biomedical science.

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The Opportunities and Challenges of a Lifelong Health System

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A health system's goal should be to optimize health and minimize disease burden over the life span, for both individuals and the population. Challenges to achieving this goal include health care's traditional focus on immediate outcomes, payment and incentive systems geared toward short-term goals, and an annual enrollment cycle for insurance and other health care choices.

Under the Affordable Care Act (ACA), the Centers for Medicare and Medicaid Services (CMS) and states will confront new time-horizon issues: given the new insurance exchanges as well as

Medicaid, the Children's Health Insurance Program, and Medicare, CMS will be involved in many people's insurance coverage for more of their lives. Increases in life expectancy mean that Medicare can anticipate insuring the average American for more than 15 years and many people for more than 20. For Americans with disabilities or chronic disease, Medicare and Medicaid can become lifelong insurers. Since Medicaid is expanding in many states and more than 40% of Americans born into the bottom quintile of annual family income remain there for life,[1] both state Medicaid programs and private Medicaid insurers may cover growing populations for long periods.

Insurers will therefore have greater incentives to enhance health trajectories and augment longitudinal integration of services. The former might require both routine wellness care and preventive care planning focused on long-term behavioral change and risk reduction. Extending coverage from years to decades also creates incentives to manage risk and assume accountability for population health outcomes.

Approaches to this challenge will be informed by our evolving understanding of how health and disease develop over the life span. Evidence shows that many chronic health conditions affecting adults and the elderly originate in exposures, experiences, and behaviors that occur early in life or even in utero. Health pathways have long time horizons, and health risks and interventions reverberate and compound over time.[2] This new understanding links risks associated with early adversity and stress to later chronic health conditions, and childhood obesity to adult-onset diabetes and heart disease. This evidence is also transforming the way we conceive and implement prevention and health promotion. Knowing who is likely to have heart disease or diabetes because of diet and exercise patterns and who is likely to have dementia or mental illness owing to early experiences creates new impetus for preemptive and preventive interventions and better integration of clinical and public health services.

Conflicting incentives are increasingly difficult to reconcile. Health insurance was designed to pay for unexpected and potentially devastating acute and catastrophic medical expenses over short time horizons. As chronic disease became more prevalent and risk had to be managed over longer periods, insurers began providing prepaid benefits for predictable elements of prevention or chronic-disease management. Although some employers now provide wellness programs and make other long-term investments in the "health capital" of their workforce, consumers' frequent movement from insurer to insurer reduces incentives for creating longitudinal health-promotion plans. The annual cycle on which consumers usually consider health coverage affects the way they think about health outcomes and costs. Consumers may also need new incentives, such as value-based insurance design (e.g., lower copayments for high-value services and higher copayments for low-value services), to invest in their health capital and long-term outcomes.

Optimizing lifelong health trajectories doesn't depend solely on medicine; there are many other important contributors. For example, ensuring good health for children during their first 8 years entails not only pediatric risk screening but also appropriate nutrition, the ability to exercise and play, exposure to rich language environments, and having parents who are educated, skilled, and available to guide, supervise, coach, and direct their children toward healthy choices.[3] Success therefore requires not only medical services that are vertically integrated but also horizontally integrated health, education, and social services that promote health in all policies, places, and daily activities. Such integration is a major challenge in redesigning primary care: with few financial incentives, it's difficult to create local networks that connect medical homes to all necessary prevention and health promotion activities.

Two approaches used in other markets to manage risks and returns over long time frames may be applicable here: warranties and trusts. Some manufacturers offer lifetime warranties on their products; if something goes wrong, they repair or replace the product. Many societies use trusts to manage long-term investment in public goods; trusts provide stewardship for valued assets, such as public lands.

What if health plans or providers offered warranties on some services — perhaps not on every procedure, but general warranties on a "market basket" of products and procedures or for specific conditions or interventions? Some innovative health systems have experimented with warranties, especially for surgeries and other

procedures. Health plans could give providers incentives to offer warranties on surgeries such as hip replacement — perhaps paying for a bundle of services with a guarantee of a certain level of quality and refusing to pay for certain complications. They could also offer patients incentives to undergo "prehabilitation" before surgery and rehabilitation afterward and to commit to other activities that improve outcomes. Lifetime or 25-year warranties might be untenable, but 1-to-3-year warranties on specific services might make sense. To promote long-term relationships and goals, health plans and employers might also develop loyalty programs, rewarding enrollees when they use a preventive rather than a treatment service, lose 10 lb in a year, or quit smoking, for example.

Wellness trusts have been proposed as a way of pooling assets and authority to create an infrastructure supporting prevention activities whose returns aren't large enough or rapid enough for commercial health insurers.[4] Community health trusts could determine which services have the greatest long-term value for their population and offer incentives for using them. They could also provide a mechanism for connecting health care with social and public health services, enabling the formation of "health utilities" (shared services and supports) that improve horizontal integration and create community platforms for high-performing, networked health systems. Government, health plans, employers, providers, and others could collaboratively fund mechanisms that support community health and contribute to a high-performing health system.

Accountable care organizations (ACOs) are meant to take responsibility for health outcomes over long periods of time, defined by episodes of care lasting a year or more. ACOs could evolve toward accountable health systems that have a greater stake in long-term population health outcomes. They might test innovations, including providing service warranties to patients and using community health trusts to finance investments in long-term health capital. Some staff-model health maintenance organizations have cultivated long-term relationships with enrollees, invested in community partnerships, and more recently, in farmers' markets and other community health interventions, partly to foster a more integrated approach to prevention. Robust ACOs and communities focused on improving health will also need to generate private investment, a range of adaptive innovations, and strategic partnerships with private and public entities.

Health insurance exchanges are being established to facilitate the purchasing of health insurance. Although exchanges must initially focus simply on providing consumer choices, they might eventually consider innovations for improving long-term health and slowing cost growth. As exchanges adopt policies for managing and equalizing risk, they might consider payment adjustments for insurers that are based on changes in a population's health status over time, to encourage investment in health promotion. They could also adapt successful approaches from other sectors. Just as the auto-insurance industry offers lower deductibles for long-term customers who remain accident-free, health insurers or exchanges could provide financial rewards for health-promoting choices and good health outcomes.

The main challenge to creating a lifelong health system lies in moving from a fee-for-service model with short time frames to paying for value and better outcomes over the long term. But innovation in care delivery, integration of services, and development or adaptation of new fiscal tools can all contribute to strategies for improving health.

The views expressed in this article are those of the authors and do not necessarily reflect the policies or views of the Centers for Medicare and Medicaid Services or the authors' institutions.

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