TRENDS

Association of Schools of Allied Health Professions

JULY-AUGUST 2018

HIGHLIGHTS

ASAHP
ASSOCIATION OF SCHOOLS OF ALLIED HEALTH PROFESSIONS
Vanguard of Allied Health Education

Trends is the official newsletter of the Association of Schools of Allied Health Professions (122 C St. NW, Suite 200, Washington, D.C., 20001. Tel: 202-237-6481) Trends is published 10 times each year and is available on the Association's website at www.asahp.org. For more information, contact the editor, Thomas W. Elwood, Dr.PH.

TECHNOLOGY'S IMPACT ON THE HEALTH WORKFORCE

Developments in the health technology arena continue to unfold at a robust pace. An aspect that may not attract as much attention as it deserves is how the health workforce will be affected. An example stems from 2007 when direct-to-consumer (DTC) genotyping for genomic risk assessment of common, genetically complex conditions began to become available. According to an article published in the May 2018 issue of the journal *Health Affairs,* among the marketplace options that are accessible, the firm *23andMe* makes it possible to buy a kit and use the plastic tube contained in it to deposit two ml. of saliva and mail it to the company where a search will be conducted of the DNA for specific genetic variants known as single nucleotide polymorphisms (SNPs) associated with particular health conditions.

The purchaser later will receive a report containing some findings that may engender considerable stress because the test reveals the presence of the APOE4 variant, which is associated with the onset of Alzheimer's disease. Association is not causation, yet a result of that kind can be highly worrisome for the individual who produced the saliva. Once a sense of panic is triggered, an expected response would be to seek professional advice regarding what to do next.

Primary care physicians represent a logical source of assistance, but current shortages of them exist and future projections indicate that the situation offers no signs of improvement. Even when they are available, it is likely that some of them may feel unprepared to work with patients at high risk for genetic conditions and also lack confidence in interpreting test results. Another professional group that may be in a favorable position to offer sound advice consists of genetic counselors.

As of May 2017 there were only 4,242 certified genetic counselors in North America. Becoming one typically involves completing a master's program, obtaining clinical experience, and passing an exam from the American Board of Genetic Counseling. According to a 2018 report by a genetic counselors working group, that number is not projected to expand sufficiently even to meet traditional needs, such as genetic screening for a person who has a family history of cancer or who wants to become pregnant. ASAHP member institutions may be in a position to create new programs to add to the current supply. If so, they would need to determine: how much it will cost to do so, if there are enough faculty, and if enough students eventually will apply for admission.

CRISPR (clustered, regulatory, interspaced, short, palindromic repeats) is a gene editing tool that is being investigated for use in genetic modification of living organisms. If it reaches a stage where parents would be able to use it to engineer their offspring to be more intelligent, athletic, or imbued with other desirable attributes, genetic experts will be needed to provide sound advice. A challenge involving heritable genome interventions is to ensure that only the precise genome locations are the intended targets. Inappropriate, permanent gene modifying efforts may produce harmful results not only for the immediate offspring of a pair of parents, but also can influence successive generations.

PRESIDENT'S CORNER—ASAHP MEMBER FOCUS

By Susan N. Hanrahan, ASAHP President

In my message in the November 2017 issue, I indicated that I will be asking some of you to send a photo and answer a series of "fun" questions to be shared with our membership so that we can continue our collegiality through our newsletter. The 6th of many profiles this year is presented as follows:

Name and Title: Barbara Jacobsmeyer, EVP – President, Inpatient Hospitals at Encompass Health

Place of Birth: St. Louis, MO

Industry: Encompass Health, formerly called HealthSouth

How long have you been in your position? 11 years with the company and 1 ½ years in current role

What's the value of a university education? Well-rounded educational experience

What is the value of ASAHP? Focus on allied health professionals and common challenges and opportunities in the field to work on as a group. Great that it now includes the employer side so we can work together on these opportunities.

Before I retire I want to: Leave a legacy of mentoring other successful women executives.

My favorite trip was: Mediterranean cruise

The best advice I ever received was: "People don't care how much you know until they know how much you care."

My hobby is: Running and playing golf.

My passion is: Education on heart disease and stroke

My pet peeve is: Smacking gum.

A perfect day is: When I wake up.

Cats or dogs? Dogs – 2

E-book or hardback? E-book

Beach or mountains? Beach

I wish I could : Sing.

Only my friends know I: Can't sing.

My favorite saying is: Hope is not a strategy.

SOCIAL SECURITY AND PAYING FOR HEALTH CARE

As guaranteed pension plans continue to disappear in the lives of most workers, many retirees will rely heavily on Social Security monthly payments. Numerically, the ranks of the so-called "Baby Boomer" generation reaching the age of 65 increase by an average 10,000 individuals every day, a growth spurt that will continue over a 19-year period that began on January 1, 2011. The Social Security program assumes great importance in the lives of patients who rely on Medicare to address their health care wants and needs.

Participation in Medicare can entail high out-of-pocket costs for some beneficiaries that relate to the nature of their health problems. Approximately one in five Medicare beneficiaries has serious physical or cognitive limitations that require personal care services and supports. A March 2017 report from the National Center for Health Statistics (NCHS) examines health care access and utilization among adults with multiple chronic conditions (MCC). As the number of these conditions increases, the health care costs for those so diagnosed also will grow. The program is expensive and money is spent unevenly: 10% of enrollees represent 63% of expenditures. The 5% who die each year account for 30% of costs, often involving intensive care that prolongs life with no hope of recovery.

The adequacy of retirement income – from Social Security benefits and other sources – can be reduced quite substantially by personal health care expenditures. As reported in a study published in October 2017 by the Center for Retirement Research at Boston College, data for the period 2002-2014 were used to calculate post-out-of-pocket benefit ratios, defined as the share of either Social Security benefits or total income available for non-medical spending. The results show that average out-of-pocket spending (excluding long-term care) was $4,274 per year in 2014, with approximately two-thirds ($2,965) spent on premiums.

In 2014, the average retiree had only 65.7 percent of Social Security benefits remaining after this spending and only 82.2 percent of total income. Nearly one-fifth (18 percent) of retirees had less than 50 percent of their 2014 Social Security income remaining after out-of-pocket spending, with six percent of retirees falling below 50 percent of total income. A conclusion drawn from this analysis is that with less than two -thirds of Social Security benefits available for non-medical consumption, and limited income outside of Social Security for much of the aged population, many retirees likely feel that making ends meet is difficult. Meanwhile, Medicare spending per beneficiary is expected to resume its decades-long rise by the end of the present decade, which will exert even more pressure on retirees' budgets.

A shortfall in Social Security financing poses a significant challenge for policymakers. The Medicare program also is on a short financial leash since its trust fund rapidly is running dry. Alternatives for shoring up these two sets of accounts are not pleasant to contemplate because they entail some mixture of either lowering annual benefit levels or imposing higher tax rates. Finding remedies for certain problems can be deferred for only so long. Eventually, Congress will be compelled to tackle them. No option exists in shifting a portion of the burden to the states. Many of them have crises in the form of significantly underfunded pension and health benefit systems for current and future retired public service employees.

2018-2019 ASSOCIATION CALENDAR OF EVENTS

October 8-9, 2018—Part Two of Leadership Development Program in St. Petersburg, FL

October 10-12, 2018—ASAHP Annual Conference in St. Petersburg, FL

Fall 2018—Institutional Profile Survey Conducted

October 16-18, 2019 —-ASAHP Annual Conference in Charleston, SC

AFFORDABLE CARE ACT DEVELOPMENTS

International comparisons developed by entities such as the Organization for Economic Co-Operation and Development (OECD), which consists of 36 member nations, rank the United States as highest in health care spending, but doing considerably less well in achieving positive health outcomes for patients. Concerns about the cost of health care have resonated for decades on Capitol Hill, with the result that both legislative and regulatory initiatives either of an incremental or a broad sweeping nature (e.g., the Affordable Care Act) have been implemented in an effort to curtail health care spending. Nonetheless, the challenge continues to exist. A factor contributing to the cost dilemma stems from the regulatory environment as discussed below.

Cost And Consequences Of Complying With Hospital Regulatory Requirements

On July 31 of this year, the Senate Committee on Health, Education, Labor & Pensions (HELP) held a hearing to discuss reducing administrative spending in health care. The event was the third in a series of hearings focused on curbing health care costs. Witnesses included the president and CEO of a state hospital and nursing home association, the president and CEO of America's Health Insurance Plans (AHIP), an economics professor from Harvard University, and an advisor to the American Action Forum. HELP Committee Chairman **Lamar Alexander** (R-TN) made reference to a 2017 report from the American Hospital Association (AHA), noting that hospitals and health care providers must comply with 629 different regulatory requirements from four federal agencies. Along with these agency requirements, providers must follow other state and federal regulations. The AHA report indicates that compliance with non-clinical regulatory requirements collectively costs providers almost $39 billion a year. A typical community hospital, for example, must employ 23 full-time workers just to comply with Medicare regulations.

Individual Insurance Performance In 2018

An analysis from the Kaiser Family Foundation shows that despite significant challenges, the individual market remains stable and insurers generally are profitable. Insurer financial results from 2018 – after the Administration's decision to cease cost-sharing subsidy payments, but before the repeal of the individual mandate penalty in the tax overhaul goes into effect – showed no sign of a market collapse. Premium and claims data support the notion that 2017 premium increases were necessary as a one-time market correction to adjust for a sicker-than-expected risk pool, and premium increases in 2018 were in large part compensating for policy uncertainty and the termination of cost-sharing subsidy payments. Without these policy changes, it is likely that insurers generally would have required only modest premium increases in 2018. Low loss ratios and higher margins indicate that some insurers over-corrected in 2018, raising premiums more than was necessary to cover claims and administrative costs and earn a reasonable profit. Even though repeal of the individual mandate penalty and expansion of loosely regulated insurance options will tend to drive premiums up in 2019, increases will be mitigated by this over-correction, and in some cases, premiums even will decline. Some insurers have exited the market in recent years, but in 2019, some insurers are reentering markets they previously had departed.

Final Rule Issued On Short-Term, Limited-Duration Insurance Coverage

The Departments of Health and Human Services, Labor, and the Treasury on August 1, 2018 issued a final rule to help individuals struggling to afford health coverage find new, more affordable options. The rule allows for the sale and renewal of short-term, limited-duration plans that cover longer periods than the previous maximum period of less than three months. Such coverage now can cover an initial period of less than 12 months, and taking into account any extensions, a maximum duration of no longer than 36 months in total. This action has an objective of helping increase choices for beneficiaries faced with escalating premiums and dwindling options in the individual insurance market. Short-term, limited-duration insurance, which is not obliged to comply with federal market requirements governing individual health insurance coverage, is aimed at benefiting consumers who are involved in a transition between different coverage options, such as an individual who is between jobs or a student taking time off from school, as well as for middle-class families without access to subsidized ACA plans.

DEVELOPMENTS IN HIGHER EDUCATION

The opportunity to obtain a quality college-level education is associated with many desirable aspects of life, such as being able to find suitable employment that accords with an individual's capabilities and interests, and also with having an improved chance to achieve a satisfactory level of income derived from participation in the U.S. economy. Public policy as represented by what occurs in the legislative and regulatory spheres is aimed at increasing student access to higher education, making the pursuit of academic degrees and certificates affordable, and guaranteeing an appropriate level of educational quality. Democrats and Republicans often fail to agree on the most effective means of fulfilling these objectives. The Higher Education Act (HEA) represents an important vehicle for enhancing progress, but it is clear that meaningful action needs to occur more swiftly. The HEA has not been reauthorized since 2008 and the prospect of its being enacted in 2018 continues to appear quite dim.

Democrats Introduce Plan In Congress To Reauthorize The Higher Education Act (HEA)

House Democrats on July 26, 2018 introduced their own plan called the *Aim Higher Act* (H.R. 6543) to reauthorize the HEA. It makes higher education more accessible by creating targeted programs that allow traditionally underrepresented students to enroll in college, strengthening existing access programs, simplifying the financial aid application, and ensuring students have access to a quality program. The proposed legislation also makes college more affordable today and addresses the rising cost of college to reduce the burden on students in the future. Generally, the bill offers a set of counterpoints to the Republican version of this legislation, known as the *Promoting Real Opportunity, Success and Prosperity Through Education Reform (PROSPER) Act* (H.R. 4508). Democrats intend to offer legislative choices that are more generous than current programs for students and borrowers by increasing funding levels for Pell Grants, for example, and making loans more affordable. The bill also would revive the Perkins Loan Program, which expired last year, and restructure the Federal Work-Study and Supplemental Educational Opportunity Grant programs. Whereas the PROSPER Act would eliminate regulations on for-profit colleges, drop benefits for student borrowers, such as Public Service Loan Forgiveness, and streamline other student aid programs, the Democrats' bill not only rejects many aspects of PROSPER, it would make current accountability rules tougher and direct new federal funds to student aid and programs for college readiness and completion.

U.S. Department Of Education Proposes New Set Of Higher Education Regulations

The Department of Education on July 25, 2018 proposed a new package of higher education regulations aimed at protecting student borrowers; holding higher education institutions accountable for misrepresentation and fraud; and providing financial protections to taxpayers by at-risk institutions. The Institutional Accountability regulations were published on the Department's website after months of public hearings and negotiated rulemaking that engaged a wide variety of higher education interested parties. These proposed regulations that were open for public comment over the next 30-day period include:

- Establish a borrower defense to repayment adjudication process that is clear, consistent, and fair to borrowers who were harmed by institutional misconduct.
- Replace the current "state standard" for adjudicating claims with a Federal standard that clearly defines misrepresentation and enables more expeditious review of student claims.
- Facilitate collection and review of evidence for deciding claims and ensure that the Secretary of Education can recoup from institutions the financial losses associated with successful borrower defense claims.
- Encourage students to seek remedies directly from institutions that have committed acts of misrepresentation.
- Expand from 120 days to 180 days the period of time during which students who left an institution prior to its closure are eligible for a closed school loan discharge while at the same time incentivize closing institutions to engage in orderly teach-outs, which enable more students to complete their program.

QUICK STAT (SHORT, TIMELY, AND TOPICAL)

Causes Of Death In The United States

Data from the National Center for Health Statistics are based on information from all death certificates filed in the 50 states and the District of Columbia in 2016. Causes of death classified by the International Classification of Diseases, Tenth Revision are ranked according to the number of deaths assigned to rankable causes. Statistics are based on the underlying cause of death. In 2016, the 10 leading causes of death were, in rank order: Diseases of heart; Malignant neoplasms; Accidents (unintentional injuries); Chronic lower respiratory diseases; Cerebrovascular diseases; Alzheimer's disease; Diabetes mellitus; Influenza and pneumonia; Nephritis, nephrotic syndrome, and nephrosis; and Intentional self-harm (suicide). They accounted for 74% of all deaths occurring in the United States. It is of special interest to reflect on the extent to which these conditions stem from human behavior and lifestyle choices rather than from infections or any other external causative agents.

Application Of A Tool To Identify Undiagnosed Hypertension — United States, 2016

Approximately 11 million U.S. adults with a usual source of health care have undiagnosed hypertension, placing them at increased risk for cardiovascular events. Using data from the National Health and Nutrition Examination Survey (NHANES), CDC developed the *Million Hearts Hypertension Prevalence Estimator Tool*, which allows health care delivery organizations to predict their patient population's hypertension prevalence based on demographic and comorbidity characteristics. Organizations can use this tool to compare predicted prevalence with their observed prevalence to identify potential underdiagnosed hypertension. This study applied the tool using medical billing data alone and in combination with clinical data collected among 8.92 million patients from 25 organizations participating in the American Medical Group Association (AMGA) national learning collaborative to calculate and compare predicted and observed adult hypertension prevalence.

HEALTH TECHNOLOGY CORNER

Tumbling Microbots For Future Health Treatments

Microbots are tiny automated machines programmed to perform specific tasks. They are so tiny—as small as a cell—that they can be injected into the body to do tasks, such as clearing out plaque from arteries, performing tissue biopsies, or delivering targeted treatment to tumors. Because of their size and precision, these microbots could provide less-invasive treatments than a typical surgery or deliver medication in a much more targeted way than a pill. According to an article in the July/August 2018 issue of the journal *American Scientist*, researchers have been working on developing these tiny robots for three decades, but recent advancements in engineering have led to a surge in research. Animal testing has shown positive results. Microbots have been propelled by hydrogen microbubbles in live mice to treat gastric bacterial infections. For application in humans, challenges involve enabling microbots to move through wet areas and traverse through air pockets in the stomach, intestines, and lungs. Early studies show potential for a tumbling motion to make it possible to navigate such difficult terrains.

Using Shark Skin Patterns To Halt The Spread Of Infections

Efforts to combat the spread of infections, especially in health care settings, mostly involve the use of antibacterial cleaning agents and antibiotic drugs. Another possible strategy is the use of coatings that are antibacterial (inactivating bacteria) or antifouling (preventing the build-up of bacteria) on surfaces such as doorknobs. As reported on May 23, 2018 in the journal *ACS Applied Material Interfaces*, such a coating was developed with a structure inspired by shark skin. Bacterial attachment is reduced by 70% on the micropatterned, photocatalytic coating, compared with smooth films of the same composition. Most of the bacteria that do settle on the coating are inactivated when the coating is exposed to ultraviolet light. Because the coatings are imprinted onto a flexible substrate, it should be possible to use them in practical applications.

AVAILABLE RESOURCES ACCESSIBLE ELECTRONICALLY

Matching Patients And Their Records

Despite widespread adoption of electronic health records and increasing exchange of health care data, the benefits of interoperability and health information technology have been hampered by the inability to match patients and their records reliably. The Pew Charitable Trusts contracted with the RAND Corporation to investigate "patient-empowered" approaches to record matching — solutions that have some additional, voluntary role for patients beyond simply furnishing demographics to their health care providers — and to select a promising solution for further development and pilot testing. A report recommends adopting a three-stage approach that aims to: improve the quality of identity information; establish new smartphone app functionality to facilitate bidirectional exchange of identity information and health care data between patients and providers; and create advanced functionality to improve value further. The report also suggests that because the solution contains multiple components involving diverse stakeholders, a governance mechanism likely will be needed to provide leadership, track pilot tests, and evaluation, along with convening key parties to build consensus where consensus is needed. The report can be obtained at https://www.rand.org/pubs/research_reports/RR2275.html.

Reasonable Patient Care Under Uncertainty

An article published on August 2, 2018 in the journal *Health Economics* discusses how limited ability to predict illness and treatment response may affect the welfare achieved in patient care. The discussion covers both decentralized clinical decision-making and care that adheres to clinical practice guidelines. The author explains why predictive ability has been limited, calling attention to questionable methodological practices in the research that supports evidence-based medicine. Research is summarized on identification whose objective is to yield credible prediction of patient outcomes. Recognizing that uncertainty will continue to afflict medical decision making, basic decision theory is applied to suggest reasonable decision criteria with well-understood welfare properties. The article can be obtained at https://onlinelibrary.wiley.com/doi/epdf/10.1002/hec.3803.

Patient-Centered Medical Homes And Accountable Care Organizations

Patient-centered medical homes (PCMHs) and accountable care organizations (ACOs) often were considered to be competing models for reforming health care delivery. It increasingly has become apparent, however, that one helps the other, according to the main finding from the new Patient-Centered Primary Care Collaborative (PCPCC) 2018 evidence report, “Advanced Primary Care: A Key Contributor to Successful ACOs,” the first study of its kind to look at how the role of advanced primary care, such as the PCMH, may contribute to the success or failure of ACOs. While these two leading models are transforming health care delivery and payment, little research has been done on how these models interact to promote lower costs and better quality for populations. Using qualitative and quantitative methods, researchers at the Robert Graham Center and IBM Watson Health found that: The attributes of successful ACO’s are necessary to transform the practice of primary care, successful ACO’s are more likely to be built on the basis of high-quality primary care, Medicare ACOs with a higher proportion of PCMH primary care physicians were more likely to generate savings, and Medicare ACOs with a higher proportion of PCMH primary care physicians demonstrated higher quality scores, including on a significant number of process and outcome measures. The report was published with support from the Milbank Memorial Fund for the fifth time. The document can be obtained at https://www.milbank.org/wp-content/uploads/2018/08/advanced_primary_care_report_080118.pdf.

21ST CENTURY CURES ACT, CANCER MOONSHOT, AND PRECISION MEDICINE

Francis S. Collins, Director of the National Institutes of Health, presented testimony on July 25, 2018 at a hearing of the House Energy and Commerce Committee, Health Subcommittee on implementation of the *21st Century Cures Act*. Among specific areas of scientific opportunity supported by the Act, he highlighted two components of its Innovation Fund: the Cancer Moonshot, and the bold new Precision Medicine Initiative, called All of Us. The Cancer Moonshot initiative aggressively is pursuing an ambitious goal to accelerate advances in cancer prevention, diagnosis, treatment, and care. Such advances include immunotherapy, in which a person's own immune system is taught to recognize and attack cancer cells. After years of research supported by NIH, immunotherapy is leading to dramatic cures of some cancers, such as leukemia, lymphoma, and melanoma. Moreover, each year as many as 135,000 American women who have undergone surgery for the most common form of early stage breast cancer face a difficult decision, whether or not also to undergo chemotherapy to improve their odds. TAILORx, a large NIH-funded clinical trial, shows that about 70% of such women actually do not benefit from chemotherapy and a genomic test of tumor tissue can identify them quite reliably, producing a significant cost savings perhaps up to $1 billion a year.

The centerpiece of the Precision Medicine Initiative, the All of Us Research Program, will enroll one million or more individuals. On May 6 of this year when enrollment was launched in seven sites across the nation, 10,000 participants were reached. As of the Congressional hearing on July 25, more than 86,000 volunteers had signed up to contribute their health data in many ways over several years. Some are enrolled through health provider organizations, of which 10 are part of the NIH enterprise, including community health centers and the Department of Veterans Affairs. Other participants enroll as direct volunteers, who sign up over the Internet. Almost half are from historically underrepresented racial and ethnic groups, which will enhance research into health disparities. With each new person enrolled, every biological sample preserved, every electronic health record collected, every survey filled out, these data will hold increased promise for advancing human health.

GENDER BIAS IN HOW PROFESSIONALS ARE SPOKEN ABOUT

A manuscript appearing in the July 10, 2018 issue of the journal *Proceedings of the National Academy of Sciences of the USA (PNAS)* reports evidence for a gender bias in how individuals speak about professionals. When discussing professionals or their work, it is common to refer to them by surname alone (e.g., “Darwin developed the theory of evolution”). Evidence indicates that individuals are more likely to refer to male than female professionals in this way. This gender bias emerges in archival data across domains. For example, students reviewing professors online and pundits discussing politicians on the radio are more likely to use a surname when speaking about a man (vs. a woman).

Gender inequality persists in many professions, particularly in high-status fields, such as science, technology, engineering, and mathematics (STEM). Potentially contributing to this unequal state is gender bias in implicit and explicit forms. This particular PNAS article offers evidence of a form of gender bias that manifests in the way that individuals refer to professionals when speaking about them and identifies the consequences of this bias. Men and women were, on average across studies, more than twice as likely to describe a male (vs. female) professional by surname in domains, such as science, literature, and politics. This simple difference in reference affects judgments of eminence, with participants judging those professionals described by surname as more eminent and 14% more deserving of honors, such as a National Science Foundation Career Award. This gender bias may contribute to the gender gap in perceived eminence as well as in actual recognition and partially may explain the persistent state of women’s underrepresentation in high-status fields, including STEM.