THE MARCH OF HEALTH SCIENCES

The pursuit of improving health status is the equivalent of a never-ending lengthy march. Successful interventions can take many routes, such as advances in technology. Other remedies may be more of an administrative nature. For example, a typical student finishing medical school today may be encumbered with a mountain of educational debt in the form of loans that may include money borrowed during undergraduate preparation. When choosing a branch of medical practice, it does not escape attention that specialty care is more remunerative than primary care. Hence, it is not surprising that many graduates are more attracted by a specialty, but meanwhile throughout the U.S., shortages of primary care physicians exist. The Centers for Medicare & Medicaid Services (CMS) recently pursued new billing codes and primary care demonstrations to reduce this income disparity by modernizing how primary care practitioners are paid.

A notion that a way to improve health care would be to emphasize the importance of interprofessional education and practice has been in existence for more than five decades, but it is only in recent years that various initiatives have been undertaken to achieve that objective. For example, the Association’s *Journal of Allied Health* added a special feature in 2017 to highlight this topic and in 2018 a new ASAHP award was created as a way of recognizing achievements in this area.

Advances in technology play a fundamental role in health care improvement. A scourge of youth known as polio essentially was defeated in the 1950s with the introduction of Salk vaccine. Its development was preceded by acrimonious disputes about: how the virus invaded the body (respiratory system vs. intestinal tract), which approach to use (killed virus vs. weakened virus) and mode of administration (oral vs. injection). The Salk killed-virus injection eventually was supplanted by the Sabin weakened-virus oral administration method. The debate over which approach works most effectively raged for decades as exemplified by the occurrence of polio cases that were attributed to the Sabin vaccine.

Pharmaceutical interventions continue to hold great promise in health care. Efforts to produce a magic pill to prevent or cure Alzheimer’s disease represent one enterprise that has yet to bear fruit. Meanwhile, more progress still needs to be made in the realm of medications. For example, should the same dose of a drug that is effective in a 35-year-old individual be used on a frail 85-year-old patient? The latter already may be taking 10 or more medications and is at risk of the problem of therapeutic competition since, for example, a medicine for heart failure can exacerbate urinary incontinence. Unless the heart drug is changed, any new medication for the urinary incontinence problem could trigger a cascade of potential harmful drug interactions. Professional literature helps to shed light on such matters, but almost every study comes with limitations that need to be taken into account before the results can be applied widely in different situations among population sub-groups. The long march of progress still has a long way to travel.
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 third of many profiles is presented as follows:

Name and Title:
Stanley H. Wilson, Dean, College of Health Care Sciences

Place of birth:
Grenada, West Indies

University:
Nova Southeastern University

How long have you been in your position?
Four years as Dean, 21 years at the university in various other positions.

What’s the value of a university education?
A university education provides tremendous opportunities for growth, building productive relationships, and achievement. Of course, it also allows one to achieve fulfillment for career objectives.

What is the value of ASAHP?
ASAHP provide opportunities for collaboration, collegiality with peers, learning from others, and advancement of important initiatives for allied health education.

Your philosophy on education in seven words:
Lifelong, passion, emergent, achievement, growth, fulfillment

If I could teach in another field, which one and why?
Philosophy--The subject matter promotes deep and thoughtful discovery.

Before I retire I want to:
Establish a faculty mentoring program.

In college, I was known for:
My easy going style

What music is playing in my car/office?
Christian Music

The last book I read for fun was:
Good to Great by Jim Collins

My favorite trip was:
Gatlinburg, Tennessee
FY 2018 OMNIBUS FUNDING BILL ENACTED

Another temporary government shutdown was averted when President Trump agreed to sign into law on March 23, 2018 the Consolidated Appropriations Act, 2018 (H.R. 1625), a $1.3 trillion omnibus 2,232-page bill that will fund the federal government through fiscal year 2018. The omnibus passed the House of Representatives on March 22 by a vote of 256-167. The Senate followed suit the next day by a vote of 65-32.

Enactment was in doubt until the final day. Similar to previous efforts to fund the operations of the federal government, controversies erupted over how the money should be allocated, with disputes regarding whether money should be appropriated for building a wall along the border with Mexico and for Planned Parenthood. As is usually the case, the final result is a mix between a feeling of satisfaction that agreement finally was reached on how to fund programs for a fiscal year that already is half over and dissatisfaction over provisions that reflect major competing views between Democrats and Republicans.

The omnibus spending package includes all 12 annual spending bills. Some components of the Labor-HHS-Education Appropriations spending bill that are of interest to the health community are as follows:

The U.S. Department of Health and Human Services (HHS) will receive $88.1 billion in FY 2018, a $10 billion increase compared to FY 2017 levels.

The National Institutes of Health (NIH) will receive $37 billion. The additional $3 billion is the largest funding increase in more than 15 years. The omnibus includes an additional $414 million for Alzheimer’s research, an additional $40 million for research on a universal flu vaccine, and $140 million more for brain research.

The Centers for Disease Control and Prevention (CDC) will receive $8.3 billion, a $1.1 billion increase over current spending.

The Agency for Healthcare Research and Quality (AHRQ) is provided with $334 million, a $10 million increase over FY 2017 levels.

The Health Resources and Services Administration (HRSA) Workforce Programs will receive $645.7 million for HRSA Title VII and Title VIII programs, a $102 million (19%) increase over the comparable FY 2017 level.

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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

Deliberations over the Omnibus appropriations bill that is described on the previous page of this newsletter involved a substantial number of tradeoffs. Taking into consideration that the Senate did not obtain the 2,232 page bill from the House until March 23 and it was signed into law on that same day suggests that not all lawmakers were able to absorb its entire contents. Although a celebratory note was expressed over increased funding for the military and for major health entities, such as the National Institutes of Health and the Centers for Disease Control and Prevention, there remains concern about important programs and initiatives that did not fare so well. Also, the fate of the Affordable Care Act was a key portion of the spending law that eventually unfolded.

Stabilizing the Individual Health Insurance Market
Many Republicans would like to see the Affordable Care Act disappear and be replaced by something quite different, but that outcome does not appear to be on the near horizon. Instead, a more immediate objective is to stabilize the individual health insurance market. An allocation of $39 billion over a three-year period was advocated by Senate Health, Education, Labor, and Pensions (HELP) Committee Chairman Lamar Alexander (R-TN), House Energy and Commerce Committee Chairman Greg Walden (R-OR), Senator Susan Collins (R-ME) and Representative Ryan Costello (R-PA). The outlines of their plan indicate that it would accomplish the following aims:

- Increase flexibility for states through reforms to the 1332 waiver process
- Pare back copper health plans
- Allow insurers to sell across state lines
- Expand access to some short-term insurance plans that don’t meet ACA coverage requirements
- Fund three-years of cost sharing payments for those earning less than 250 percent of the federal poverty limit (FPL)
- Apply the Hyde Amendment to restrict federal money from being spent on abortion to any funds aimed at lowering Obamacare premiums

Regarding the latter provision, Democrats expressed opposition by indicating that the government would be prevented from spending money on any insurance plan that offered coverage for abortion. They also objected to expanding access to short-term insurance plans because they omit important health benefits. President Trump was amenable to funding health insurance subsidies, but House Republicans were not so inclined and they did not include the stabilization proposal in their omnibus funding bill.

Market stabilization is viewed favorably by groups, such as America’s Health Insurance Plans (AHIP), American Hospital Association (AHA), and American Medical Association (AMA). It is expected that their representatives and other supporters will continue to press Congress to take constructive action prior to when insurance companies set their rates for 2019.

Right-To-Try Legislation To Benefit Terminally Ill Patients
Although not directly related to the Affordable Care Act, certain proposed legislation if enacted could influence how benefits are administered under the ACA. House Republicans favor allowing terminally ill patients who are ineligible for clinical trials and who have exhausted other available treatments to request access to experimental medicines that have not yet been approved by the Food and Drug Administration (FDA). Patients could request access without the permission of or oversight from the agency as long as the product has gone through a small-scale clinical trial and currently is under FDA consideration. Opponents are concerned about patient safety and the possible erosion of safeguards for vulnerable patients.
Now that a decade has elapsed since the Higher Education Act (HEA) last was reauthorized, discussions continue to focus on H.R. 4508, proposed reauthorization legislation. That bill was passed by the House of Representatives Education and Workforce Committee in December, 2017 and continues to await action on the floor of that chamber. Much of the discussion thus far has involved student financial aid issues. A component of considerable importance for the higher education community is that the bill's accreditation provisions have far-reaching implications for determination of quality, quality assurance, and quality improvement in higher education.

**Provisions of H.R. 4508 To Reauthorize The Higher Education Act**
The February 2018 issue of this newsletter listed some challenges that could occur if this legislation ever is enacted. Powerful repercussions for both recognized accrediting organizations and the institutions and programs they review are expected. The bill also could affect the role of the federal government in the following ways:

- Allows a newly appointed Secretary of Education to replace prior Secretary appointments to the National Advisory Committee on Institutional Quality and Integrity (NACIQI), the advisory body that recommends to the Secretary whether an accrediting organization is to be recognized.
- Limits the authority of NACIQI to making recommendations only on recognition status and no longer providing general advice to the Secretary.
- Provides for Title IV support to students taking coursework or other offerings from non-institutional (alternative) providers without accredited status.
- Removes the federal definition of credit hour and the introduction of program-level evaluation for purposes of Title IV, along with removal of the gainful employment requirements, the borrower defense requirements and the state authorization requirements.

**Omnibus Funding Bill Legislation Involving Higher Education**
- The bill boosts the maximum Pell Grant award by $175, to $6,095 for the 2018-19 academic year.
- The Supplemental Educational Opportunity Grant program receives an additional $107 million, for a total of $840 million.
- The Federal Work-Study program receives an additional $140 million for a total of $1.13 billion.
- The TRIO programs receive an increase of $60 million, bringing total FY 2018 funding to $1 billion. The GEAR UP programs see an increase of slightly over $10 million, to a total of $350 million.
- The Public Service Loan Forgiveness (PSLF) program receives $350 million in funding targeted to borrowers who would be eligible to participate, but were enrolled in the wrong repayment plan. It also includes $2.3 million in new funds for the secretary of education to perform outreach to borrowers about PSLF.
- NIH is funded at $37 billion, an increase of $3 billion, or 8.8 percent, above FY 2017. The report also includes language that prohibits the agency from capping Facilities and Administration costs.
- The National Science Foundation receives $7.77 billion, $295 million above the FY 2017 level and $1.1 billion above the president’s request.
- The National Endowment for the Arts and the National Endowment for the Humanities each receives a $3 million increase, while the president’s budget had called for both to be eliminated.
- The Title III and Title V programs receive across-the-board increases of 14.3 percent, which represents more than $82 million in new funding.
QUICK STAT (SHORT, TIMELY, AND TOPICAL)

Out-Of-Pocket Health Care Expenses For Non-Elderly Families By Income And Family Structure
Data from the Medical Expenditure Panel Survey Household Component (MEPS-HC) released in 2018 indicate that about one of every eight dollars spent on health care for the U.S. civilian non-institutionalized population in 2015 was paid out-of-pocket by families. These out-of-pocket expenditures can constitute a significant financial liability for some families. The overall median amount paid out-of-pocket by non-elderly families for health care was $451, but median out-of-pocket expenses increased substantially with family income. Overall, about 14 percent of families had out-of-pocket expenses exceeding $2,500. This proportion ranged, however, from four percent of poor families to 22 percent of high income families. Regardless of the presence or absence of children, out-of-pocket expenses were notably higher for families with two or more adult members than those with only one adult.

County-Level Differences In U.S. Drug-Related Mortality Rates
Using data from several federal agencies, an article published March 26, 2018 online in the American Journal of Preventive Medicine indicates that the average county-level age-adjusted drug-related mortality rate was 16.6 deaths per 100,000 population (2006–2015), but there were substantial geographic disparities in rates. Controlling for county demographic characteristics, average mortality rates were significantly higher in counties with greater economic and family distress and in counties economically dependent on mining. Average mortality rates were significantly lower in counties with a larger presence of religious establishments, a greater percentage of recent in-migrants, and counties with economies reliant on public (government) sector employment. Healthcare supply factors did not contribute to between-county disparities in mortality rates.

HEALTH TECHNOLOGY CORNER

Overhauling The Process Of Obtaining Bloodwork And Urinalysis
As described in the journal Biosensors and Bioelectronics with a publication date of 30 April 2018, the often costly, time consuming process of obtaining bloodwork and urinalysis soon may undergo a major overhaul. Researchers at the University of South Florida in Tampa have developed a Mobile Enzyme Linked Immunosorbent Assay (MELISA), a device that accurately measures progesterone levels, a key hormone that has an impact on female fertility and is indicative of some cancers. It is designed to make biomedical testing simple and affordable. The basic idea is that low cost testing can be integrated with routine clinic visits to improve the quality of healthcare and detect worrisome signs earlier. The portable MELISA weighs just one pound, dramatically helping older patients suffering chronic conditions and those across the world. MELISA is being calibrated for a variety of tests including testosterone. With those results, FDA approval will be sought so that clinics can start using the device.

Treating Attention-Deficit/Hyperactivity Disorder Without Medications
The National Institutes of Health provided researchers at Florida State University with $2 million for a new clinical trial to test the effectiveness of two new non-medication treatments for children with ADHD. Adderall and Ritalin are considered the most effective treatments for ADHD, but they are not a cure and wear off quickly. Moreover, children must take the prescription drugs daily to maintain benefits. The treatment under investigation, called Central Executive Training, uses computerized brain-training games. The computer programs look and feel like video games, but use advanced algorithms that adapt training based on a child's performance. The games become more challenging as the child's abilities grow and, as they do, an objective is to boost a player's cognitive functions in underdeveloped areas of the brain. The games aim to boost a child's "working memory" and "inhibition" abilities, which are the primary brain executive functions that seem to cause symptoms for most children with ADHD.
AVAILABLE RESOURCES ACCESSIBLE ELECTRONICALLY

Behind The Mask Of Online Learning

Online learning has been part of higher education for almost 30 years. Students who study either fully or partially online make up 3 percent of U.S. undergraduate enrollment (as of fall 2016), and 37 percent of graduate enrollment. What does “online learning” really mean? The term masks a range of styles and features. The publication CHLOE 2: A Deeper Dive, an annual survey of online learning leaders recently became available. Short for Changing Landscape of Online Education, CHLOE is produced by Eduventures and Quality Matters and is supported by iDesign and ExtensionEngine. An objective of CHLOE 2 is to break online learning into different pedagogic dimensions, which is not an easy task. A basic distinction is synchronous versus asynchronous online learning. The former type of learning means that students and faculty engage in class activities at the same time (e.g., a video conference), but do so at different times for asynchronous learning (e.g., threaded discussions). In the CHLOE 2 sample, 82 percent of respondents said their online programs are wholly or mainly asynchronous. The report can be obtained at https://encoura.org/products-services/eduventures-research-and-advisory-services/chloe-2018-deeper-dive/?mkt_tok=eyJpIjoiTVRVeFkyVm1NhU0zWWpNdylInOiJoMXJSSFJTaW9tU0piazJ6SzhJWENjWUIOY3pMck44OVVms1FiTIBHR2IxTEFDZHlbzRYUks1VTIVjiBaKzRHN3p3bHhZcUNWVFwvM1RKd1kwZjVhNmxNcFRVUjezTDd0THcngrOWxFTXUyQWpjQzZuR05nOGYsbiZydXRZU0YifQ%3D%3D.

Vital Directions For Health And Health Care

On March 21, 2017, the National Academy of Medicine released its capstone publication in the Vital Directions for Health and Health Care series, marking the culmination of an 18-month policy initiative to identify the most promising opportunities for improving health and health care in the United States. Calling on over 150 of the nation's health experts, leaders, and scholars, the NAM commissioned and published 19 peer-reviewed papers covering major topics in health policy with recommended opportunities for action. The capstone publication, authored by the initiative's distinguished steering committee, synthesized the nearly 70 recommendations of the 150 experts. The steering committee's synthesis presents a unified vision of an optimally performing health system, along with a streamlined framework - built on a core set of eight strategic action priorities and essential infrastructure needs - for achieving better health and well-being, high-value health care, and strong science and technology for the nation. In 2018, the NAM released its special publication, Vital Directions for Health and Health Care: An Initiative of the National Academy of Medicine, which includes the steering committee's synthesis along with the 19 discussion papers. It can be obtained at https://nam.edu/wp-content/uploads/2018/02/Vital-Directions-for-Health-and-Health-Care-Final-Publication-022718.pdf.

Achieving Rural Health Equity And Well-Being

The Proceedings of a June 2017 workshop provides an overview of showcased initiatives and approaches to meeting the particular challenges and opportunities in improving health in rural communities. It can be obtained at http://www.nationalacademies.org/hmd/reports/2018/achieving-rural-health-equity-and-well-being-proceedings.aspx?utm_source=HMD+Email+List&utm_campaign=bf36c7f07d-EMAIL_CAMPAIGN_2018_03_05&utm_medium=email&utm_term=0_211686812e-bf36c7f07d-180272941&mc_cid=bf36c7f07d&mc_eid=24d54e7091
OBTAINING GRANT MONEY FROM THE NIH

Readers of this newsletter also receive a biweekly publication from the Association of Schools of Allied Health Professions called the \textit{ASAHP UPDATE}. Periodically, it contains descriptions of upcoming funding opportunities from the National Institutes of Health (NIH). It remains unknown how many readers submit a funding proposal, but one fact is certain, i.e., as funding rates have declined over the past decade, obtaining grants has become increasingly competitive, which means that many proposed investigations go unrewarded. In order to allocate relatively scarce funding resources, peer reviewers must differentiate the very best applications from comparatively weaker ones. Despite the importance of this determination, until recently little research has explored how reviewers assign ratings to the applications they assess and whether there is consistency in their evaluation of the same application.

An article that appeared in the March 20, 2018 issue of the \textit{Proceedings of the National Academy of Sciences of the United States of America} sheds light on this matter. Replicating all aspects of the NIH peer-review process, investigators examined 43 individual reviewers’ ratings and written critiques of the same group of 25 NIH grant applications. Results showed no agreement among reviewers regarding the quality of the applications in either their qualitative or quantitative evaluations. Although all reviewers received the same instructions on how to rate applications and format their written critiques, there was no agreement in how reviewers “translated” a given number of strengths and weaknesses into a numeric rating. It appeared that the outcome of the grant review depended more on the reviewer to whom the grant was assigned than the research proposed in the grant. The authors state limitations in their study, but note that nonetheless, the results do show that for grants above a certain quality threshold, the peer-review process is completely random.

COPING WITH FAILURE

Failure to obtain grant support can be disheartening, but it is just one of many ways in which failure is experienced over the life development course. Children might be shielded from its effects to some degree by making sure, for example, that participants on an athletic team that came in last place without winning a single game still will receive large trophies at the sports banquet. Adulthood tends to lack similar emotional cushions, so it is more challenging to find suitable mechanisms for dealing with failures that life manages to serve at different intervals, such as not being selected for a highly sought after new job.

If research findings are correct, then a simple remedy may be close at hand. According to a paper published on March 23, 2018 in \textit{Frontiers of Behavioral Neuroscience}, researchers examined whether expressive writing about a past failure reduces one’s cortisol response to a new psychosocial stressor. Acute stress has been shown to activate the hypothalamic-pituitary-adrenal (HPA) axis, resulting in the release of the hormone cortisol in both animals and humans. They hypothesized that experiencing a psychosocial stressor would result in an increase in cortisol, but writing about a failure before experiencing the stressor would attenuate this cortisol response. They also examined whether expressive writing about past failures improves performance on a task requiring persistent, sustained attention directly after experiencing psychosocial stress. They predicted that stress would harm performance and that writing about a past failure would attenuate this effect. They found that when individuals wrote about a past failure before experiencing the psychosocial stressor, their cortisol response was attenuated, suggesting that writing about a past failure before experiencing a new stressor may lead to some reduction in one’s physiological experience of stress. Moreover, higher stress responses were associated with poorer performance on a sustained attention task, but writing about failures before a stressor protected against the typical detrimental effect of acute stress on performance.