COUPLED HUMAN-ENVIRONMENT DYNAMICS

A geocentric view of the universe prevailed for centuries until it was supplanted by heliocentrism, demonstrating that the earth revolves around the sun rather than the reverse. Although this astronomical clarification may have diminished the importance of human beings to some degree as the ultimate measure of all things in the cosmos, it remains true that at least from an anthropogenic perspective, our species plays a significant role. As the global human population continues to grow, so too does the impact that we exert on the environment.

According to a series of papers that appeared in the December 20, 2016 issue of the Proceedings of the National Academy of Sciences of the United States of America, activities such as mining, refining, and fossil fuel consumption now extend beyond occupational or proximate risks to global climate change. Storms, droughts, and floods cause direct destruction, but also have pervasive repercussions on food security, infectious disease transmission, and economic stability. For example, within weeks of the catastrophic wind and flood damage from the 2016 Hurricane Matthew in Haiti, there was a dramatic surge in cholera, among other devastating repercussions.

Compounding the impact of natural disasters, progressively more intimate types of interactions with fragmented environments have given rise to an era of disease emergence and re-emergence at unprecedented rates, as exemplified by recent outbreaks of the Ebola and Zika viruses. Globalization to an extent that includes airline travel by more than eight million passengers every day has enabled such disease outbreaks to disseminate rapidly and pose a threat far beyond their areas of geographic origin. Addressing these challenges requires an understanding of coupled human–environment dynamics, whereby human activity modifies an environmental system (often detrimentally), and the resulting environmental repercussions then have an impact on humans.

Sustainable and equitable solutions are required to address the interconnected challenges of protecting the health of the natural environment and protecting the health of human populations. Determining solutions that optimize trade-offs between short- and long-term objectives of resource consumption and sustainability requires analyses of the multilayered interconnectedness of environmental, social, epidemiological, and political systems.

The aforementioned papers build on recent momentum in the development and implementation of transdisciplinary collaborations that simultaneously consider human, nonhuman, and environmental health and the nonlinear relationships among them. The studies illustrate myriad applications of cross-sectoral approaches in coupled human–environment systems to solve public health and environmental conundrums. They underscore the importance of complex ecological interactions for these issues, along with advanced methodologies to integrate the complexity of human–environmental systems into analyses that underlie effective solutions.
Happy New Year colleagues!

A year of accomplishments has been realized and captured in ASAHP’s 2016 Annual Report that will soon be released. As you review the report I am sure that you will feel pride in the work of the Association and see evidence of the value of your membership in ASAHP. As we reflect on the many accomplishments it is important to begin our new year with a focus on our work ahead.

I ask that we revisit our strategic direction and recommit to the broad tactical objectives that were identified for special emphasis (2015-2017): Advocacy; Clinical Education; Corporate Alignment and Partnerships.

**Advocacy**

I anticipate that our advocacy efforts on behalf of our member institutions and their constituents will receive renewed attention. The current political scenario, one like we have not seen before, creates the necessity to closely watch the impact on not just allied health but various issues impacting higher education in general. We of course continue to monitor state authorization as it impacts clinical rotations and externships necessary for the preparation of our allied health students. It does appear that advocacy may need to include issues that were not on the horizon last year: Visas for international students, faculty employees, scholars and faculty researchers; immigration initiatives and regulatory changes that alter faculty and student behavior; educational cost/affordability measures; student loan repayment; utilization of endowments; borrowing and lending regulations for students; Deferred Action for Childhood Arrivals (DACA) program; and more not yet announced.

**Clinical Education & Research**

The Clinical Education Committee has been working on identifying issues relevant to advancing clinical education in allied health professions. The membership can expect a well researched and thoughtfully composed white paper that addresses the issues and challenges in the provision of clinical education as well as the identification of best practices. Interprofessional education will continue to be advanced through the work of our IPE/IPP committee and our relatively new inclusion at the table with the Interprofessional Education Collaborative Institute (IPEC).

**Corporate Alignment and Partnerships**

We will see the development of the newly established Student Assembly, (ASAHP-SA); further exploration of global rehabilitation programming from the work on the International Task Force; and the recruitment of additional corporate partners as ASAHP members will add to our diversity of experience.

The aforementioned examples of work taking place during 2017 illustrate exacting and somewhat demanding work for committees and directors. There is uncertainty ahead as to new challenges we will encounter, however the certainty rests in the strength and commitment of ASAHP to fulfill its mission:

“To Improve Health...through excellence in interprofessional education, collaboration, leadership, research, and advocacy.”

Have a great year!

Linda
LEGISLATIVE ACTIONS AFTER THE ELECTION

Following the 2016 election on November 8, the 114th Congress remained in session to undertake some key legislative actions. Prior to adjourning for the December holidays, lawmakers passed the 21st Century Cures Act (H.R. 34) with overwhelming bipartisan support. The House did so on a vote of 392-26 on November 30 and the Senate on a vote of 94-5 on December 7. Signed into law on December 13, 2016 by President Obama, the purpose of this legislation is to accelerate the approval of new therapies and make new investments in medical research. The final package contains a total of $6.3 billion in spending, with $4.8 billion in funding over 10 years designated for the National Institutes of Health (NIH).

A continuing resolution (CR) was approved in December as a stopgap measure to fund the federal government through April 28, 2017. House lawmakers approved the CR by a vote of 326-96 on December 8, with just over 24-hours to spare before the previous CR expired at midnight on December 9. The CR is in accord with the fiscal year 2017 spending cap of $1.07 trillion.

The new 115th Congress came into existence in January 2017. A fiscal year 2017 budget resolution was released on the first day of the session. Not only did it provide an outline of how Republicans would like money to be allocated, it also contained reconciliation instructions for two committees in both the House and Senate to repeal the Affordable Care Act (ACA). The two chambers subsequently passed the fiscal year 2017 budget resolution, which furnishes a means of repealing the health reform law. The budget resolution serves as a non-binding legislative tool that outlines congressional budget priorities. It is not necessary to be sent to the president to be signed into law.

One of President Trump’s initial acts on his first day in office was to sign an executive order aimed at easing the burden of the Affordable Care Act (ACA). Although the executive order did not direct any specific actions, it signifies a broad authority to regulatory agencies to loosen requirements of the 2010 health care law, particularly any that imposes a fiscal burden on states or a regulatory burden on individuals or on business entities. Overall, the extent of any effects that might stem from the order are unclear since it still remains necessary for Congressional action to make most major changes to the law.

If January 2017 was any indication, Congress should be a most lively place during the rest of this year. Democrats will serve as a loyal opposition to any measures that are not to their liking and some sparring also can be expected between President Trump and congressional Republicans over which legislative priorities to pursue.

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**2016-2017 ASSOCIATION CALENDAR OF EVENTS**

**September 12, 2016**—Institutional Profile Survey Data Collection Period Opened

**January 20, 2017**—Institutional Profile Survey Data Collection Period Ended

**February 2017**—2016 ASAHP Annual Report Expected To Be Available

**October 18-20, 2017**—ASAHP Annual Conference in San Antonio, TX

Note: Efforts are underway to identify future conference locations and dates.
AFFORDABLE CARE ACT DEVELOPMENTS

The ACA was signed into law on March 23, 2010 (P.L. 111-148). One week later, the Health Care and Education Reconciliation Act (HCERA; P.L. 111-152) also became the law of the land. Since then, congressional Republicans have vowed to repeal and replace this legislation. Initially, they lacked majorities in both chambers. Eventually, they took control of Congress, but a huge obstacle remained in the form of President Obama who indicated that he would veto any bills sent to him that would result in repeal either in whole or in part. As of January 20, 2017 the White House has a new occupant in the person of Donald J. Trump who during his election campaign vowed to replace the Affordable Care Act with an alternative that he believes will be much more to the liking of the citizenry.

Now that Republicans have gained ascendancy in the legislative and executive branches of the federal government, it remains to be seen what they will do to modify the course of health reform. The ACA is a massive piece of legislation that already has led to the generation of thousands of pages of regulations. During the almost seven-year period in which it went into effect, different portions of the ACA have been rolled out at different times. Parts of the law have been enormously popular, such as allowing individuals to remain on their parents’ health insurance plan until age 26, ending insurance company prohibitions on coverage for patients with preexisting conditions, and providing subsidies to offset the cost of monthly insurance premiums in the health marketplaces. Just as it took months and years for parts of the ACA to become operational, it is reasonable to expect that unraveling its constituent parts also may take considerable amounts of time in order to avoid mass disruptions that could have adverse impacts on patients, health care providers, and the insurance industry.

Worries About Incorrectly Repealing And Replacing The Affordable Care Act

Some alarm bells began to be triggered with the release in January 2017 of estimates from the Congressional Budget Office (CBO), indicating that repealing the ACA without a replacement would leave as many as 32 million individuals without health insurance by 2026. This non-partisan budget agency also estimates that repeal of the law could result in an increase in premiums for policies purchased through the marketplace or directly from insurers of 20% to 25% in the plan year following enactment of repeal. This latest CBO report was requested by congressional Democrats. Estimates are based on the 2015 repeal bill that was passed by Congress, but vetoed by President Obama.

Also, according to new research from The Commonwealth Fund and the Milken Institute School of Public Health at the George Washington University, a repeal of key provisions of the ACA could lead to significant economic disruption and substantial job losses in every state, such as in 2019 when 2.6 million workers could become unemployed and perhaps even rising to 3 million by 2021. The study examines the impact of a potential January 2019 repeal of two parts of the ACA: (1) federal premium tax credits for low- and moderate-income beneficiaries, and (2) federal support for Medicaid expansion.

Republican Views On What Needs To Be Altered

Senate Majority Leader Mitch McConnell (R-KY) has indicated that Republicans plan to repeal the ACA through reconciliation early next year, before a replacement system is implemented. He also stated that repeal would include a transition period so as to avoid disrupting marketplace enrollees’ health coverage, but did not specify the length of time GOP lawmakers are considering for the transition.

Meanwhile, President Trump began his first day in office by issuing an executive order to “ease the burden” of the ACA. The order directs the Department of Health and Human Services (HHS) and other federal agencies to “exercise all authority and discretion available to them to waive, defer, grant exemptions from, or delay the implementation of any provision or requirement of the Act that would impose a fiscal burden on any State or a cost, fee, tax, penalty, or regulatory burden on individuals, families, healthcare providers, health insurers, patients, recipients of healthcare services, purchasers of health insurance, or makers of medical devices, products, or medications.”
DEVELOPMENTS IN HIGHER EDUCATION

Many facets of higher education involve federal policy. Similar to previous Administrations, the new Trump Administration may elect to focus on the following situations in 2017.

**Repayment Of Federal Loans Provided To Students**

According to a report from the U.S. Government Accountability Office (GAO) released on the last day of November 2016, for the fiscal year 2017 budget, the U.S. Department of Education estimates that all federally issued Direct Loans in Income-Driven Repayment (IDR) plans will have government costs of $74 billion, which is higher than previous budget estimates. That subsidy figure is derived from estimates showing that $355 billion in loans were made to borrowers during the period 1995-2017 while $281 billion represented payments made by borrowers. IDR plans are designed to help ease student debt burden by setting loan payments as a percentage of borrower income, extending repayment periods from the standard 10 years to up to 25 years, and forgiving remaining balances at the end of that period. While actual costs cannot be known until borrowers repay their loans, GAO found that current IDR plan budget estimates are more than double what originally was expected for loans made in fiscal years 2009 through 2016.

Some congressional legislators are interested in looking at some other ways of financing the costs of obtaining a higher education. Several bills were filed in the recent 114th Congress involving the possible creation of tax incentives for employers to help employees pay down and manage education debt. Examples are the Employer Participation in Student Loan Assistance Act, the Student Loan Employment Benefits Act of 2016, the HELP for Students and Parents Act, and the Student Loan Repayment Assistance Act of 2015.

**Federal Oversight And Expectations Of Public Accountability Of Accreditation**

Judith S. Eaton, President of the Council for Higher Education Accreditation (CHEA), wrote an article that appeared in December 2016 in *Inside Higher Ed* stating that for accreditation, 2016 will be remembered as an inflection point, a pivotal moment, a culmination of a multiyear revamping, which means this space is now dominated by two features. One is strengthened federal oversight and the other is expectations of public accountability. She indicated that they are not temporary disruptions and will remake accreditation for the foreseeable future. Both an expanded federal role and public accountability are in significant contrast to longstanding practice of accrediting organizations as independent, nongovernmental bodies accustomed to setting their own direction and determining their own accountability. This disruption can result in serious drawbacks for accreditation and higher education -- and students.

**State Authorization Impact On Clinical Education And Online Course Offerings**

The U.S. Department of Education released final regulations on December 19, 2016 to improve oversight and protect distance education students at degree-granting institutions by clarifying the state authorization requirements for postsecondary distance education. The final regulations clarify state authorization requirements for institutions to participate in the Department’s federal student aid programs and also address state and federal oversight of American colleges operating in foreign locations worldwide. This matter has been of longstanding interest to the Association of Schools of Allied Health Professions (ASAHP) and its views have been conveyed to agency and legislative officials regarding (1) the impact on member institutions that lack a sufficient number of in-state clinical education, and (2) exorbitant fees associated with administrative mandates.

The Trump Administration has promised to eliminate many kinds of onerous regulations. It remains to be seen to what extent any changes will occur that pertain to state authorization.
QUICK STAT (SHORT, TIMELY, AND TOPICAL)

U.S. National Health Expenditures Highlights
According to the Centers for Medicare & Medicaid Services (CMS), U.S. health care spending increased 5.8% to reach $3.2 trillion or $9,990 per person in 2015. The coverage expansion that began in 2014 as a result of the Affordable Care Act continued to have an impact on the growth of health care spending in 2015. Faster growth also was driven by stronger growth in spending for private health insurance, hospital care, physician and clinical services, and the continued strong growth in Medicaid and retail prescription drug spending. Some major categories of expenditure were distributed as follows: Hospital Care (32%), Physician and Clinical Services (20%), and Prescription Drugs (10%). Health Spending by major sources of funds was as follows: Medicare (20%), Medicaid (17%), Private Health Insurance (33%), and Out-of-Pocket (11%). The federal government accounted for the largest share of health care spending (29%), followed by households (28%), private businesses (20%), and state and local governments (17%).

Decline In Hospital-Acquired Conditions
Hospital-acquired conditions (HAC) declined by 21% (3.1 million) between 2010 and 2015, saving an estimated 125,000 lives and $28 billion in health care costs, according to results reported by the Agency for Healthcare Research and Quality (AHRQ). Central line-associated bloodstream infections fell by 91%, post-operative venous thromboembolisms fell by 76%, catheter-associated urinary tract infections fell by 33%, adverse drug events fell by 29%, and ventilator-associated pneumonias fell by 24%, among other reductions. The findings are based on the AHRQ National Scorecard, which provides summary data on the national HAC rate for measurement activities associated with the Centers for Medicare & Medicaid Services’ Partnership for Patients initiative.

HEALTH TECHNOLOGY CORNER

Promise Of Chimeric Organisms For Science And Medicine
Rapid advances in the ability to grow cells, tissues, and organs of one species within an organism of a different species offer an unprecedented opportunity for tackling longstanding scientific mysteries and addressing pressing human health problems, particularly the need for transplantable organs and tissues. As revealed in the January 26, 2017, issue of the journal Cell, scientists at the Salk Institute report breakthroughs on multiple fronts in the race to integrate stem cells from one species into the early-stage development of another. Combining cutting-edge gene-editing and stem-cell technologies, the scientists were able to grow a rat pancreas, heart and eyes in a developing mouse, providing proof-of-concept that functional organs from one species can be grown in another. They were also able to generate human cells and tissues in early-stage pig and cattle embryos, marking the first step toward the generation of transplantable human organs using large animals whose organ size, physiology, and anatomy are similar to humans.

Improving The Conduction Of Electrical Impulses Across Damaged Heart Tissue
A team of Australian and British researchers has made a significant advance in heart attack research by developing a polymer patch to improve conduction of electrical impulses across damaged heart tissue as reported in the November 1, 2016 issue of the journal Science Advances. The flexible patch, which has been shown to work in animal models, is long lasting and has the significant advantage that it can be attached to the heart without the need for stitches. Heart attacks create a scar that slows and disrupts the conduction of electrical impulses across the heart, leading to potentially fatal disturbances of the heart rhythm. The electrically conductive polymer patch is designed to address this serious problem. No stitches are required to attach it, so it is minimally invasive and less damaging to the heart, and it moves more closely with the heart's motion.
AVAILABLE RESOURCES ACCESSIBLE ELECTRONICALLY

Report To Congress On High-Priority Evidence Gaps For Clinical Preventive Services

In 2016 in its 6th annual report, the U.S. Preventive Services Task Force (USPSTF) continued to fulfill its mission of improving the health of all Americans by making evidence-based recommendations about clinical preventive services such as screening tests, counseling about healthy behaviors, and preventive medications. These recommendations help clinicians and their patients make informed health care decisions. The USPSTF identified six recent topics for which the current evidence was insufficient for the Task Force to make a recommendation, including autism screening and tobacco smoking cessation with electronic nicotine delivery systems. The USPSTF also identified evidence gaps that prevent it from making recommendations for specific populations or age groups, such as screening for breast cancer in African American women. Future research in these areas can help fill these gaps and would likely result in important new recommendations that will help to improve the health of Americans. The report can be obtained at https://www.uspreventiveservicestaskforce.org/Page/Name/sixth-annual-report-to-congress-on-high-priority-evidence-gaps-for-clinical-preventive-services.

Strategies To Improve Mental Health Care For Children And Adolescents

Approximately one in five children and adolescents living in the United States has one or more mental, emotional, or behavioral health disorders according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria in any given year. These disorders contribute to problems with family, peers, and academic functioning. They may exacerbate coexisting conditions and may reduce quality of life. They also increase the risk of involvement with the criminal justice system and other risk-taking behaviors and suicide. Despite advances in the evidence base, some outcomes for children with mental health problems remain suboptimal because of issues with access to care and the failure of systems and providers to adopt established quality improvement (QI) strategies and interventions with proven effectiveness (e.g., evidence-based practices [EBPs]). Given the gap between observed and achievable processes and outcomes, one way to improve the mental health care of children and adolescents is to adopt QI strategies and develop strategies to implement or disseminate interventions with known effectiveness. The strategies can be obtained at https://www.effectivehealthcare.ahrq.gov/ehc/products/599/2372/mental-health-children-executive-161219.pdf.

Higher Education’s Funding Challenges

The University of Virginia’s Miller Center and the nonpartisan National Commission on Financing 21st Century Higher Education released a comprehensive report that offers an in-depth analysis of higher education’s current funding challenges as well as nine recommendations for addressing these impediments to increase degree and certificate attainment. The report can be obtained at http://web1.millercenter.org/commissions/higher-ed/higher-ed-FinalReport.pdf.

American Undergraduate Enrollment Trends Of Immigrant And 2nd Generation Students

A Statistics in Brief from the National Center for Education Statistics (NCES) profiles the demographic and enrollment characteristics of New Americans (undergraduates who are immigrants or children of immigrants). The Brief can be obtained at http://nces.ed.gov pubs2017/2017414.pdf.
TRANSFORMING HEALTH CARE DELIVERY

An old wise saying advises to avoid throwing out the baby with the bath water. Congressional Republicans, along with new U.S. President Donald Trump, have promised to repeal and replace the Affordable Care Act (ACA). The challenge in doing so will be to preserve components of legislation that function satisfactorily and make sure that valuable lessons learned since the law’s inceptions are not lost.

The Center for Medicare and Medicaid Innovation (CMS Innovation Center) was established by section 1115A of the Social Security Act as added by section 3021 of the Affordable Care Act. Congress created the CMS Innovation Center for the purpose of testing “innovative payment and service delivery models to reduce program expenditures…while preserving or enhancing the quality of care” provided to individuals who receive Medicare, Medicaid, or Children’s Health Insurance Program (CHIP) benefits.

Prior to 2010, there had been only modest efforts to improve care and reduce costs. Medicare, the country’s largest health care insurance program, was largely paying for health services based on volume – where providers were paid for every service they ordered or performed – which didn’t necessarily improve the health of beneficiaries or preserve the program for future generations. To improve the health care system, as the largest payer CMS sought partnerships with providers, physicians, and other clinicians, states, private payers, consumers, and other key entities to spur innovation.

Some Achievements Of The CMS Innovation Center

- Over 30 new payment models have been launched over the past six years.
- Investments in electronic medical records and a data and analytics infrastructure are sparking a new set of innovative companies.
- The CMS Innovation Center’s portfolio of models has attracted participation from a broad array of health care providers, states, payers, and other partners. An estimated 18 million individuals, including CMS beneficiaries and individuals with private insurance included in multi-payer models, have felt the impact, received care, or soon will be receiving care furnished by more than 207,000 health care providers participating in CMS Innovation Center payment and service delivery models and initiatives.
- Medicare exceeded – earlier than predicted – the goal to tie more than 30% of fee-for-service payments by the end of 2016 through alternative payment models to quality and cost metrics. Medicare is on pace to reach 50% by the end of 2018.
- The Medicare Diabetes Prevention Program expanded model, set to begin in 2018, will pay for services to prevent the onset of diabetes to all eligible Medicare beneficiaries, improving their health and that of the Medicare program both now and in the future.
- Three new payment models—the Acute Myocardial Infarction Model, the Coronary Artery Bypass Graft Model, and the Cardiac Rehabilitation Incentive Payment Model—will support clinicians in providing care to patients who receive treatment for heart attacks, heart surgery to bypass blocked coronary arteries, or cardiac rehabilitation.
- Through the Comprehensive Primary Care Plus Model, primary care doctors can care for their patients the way they think will deliver the best outcomes and they will be paid for achieving results and improving care.
- Thirty-eight states and territories are engaged in the State Innovation Models initiative where they are testing their own best ideas to improve health, quality of care, and lower costs. Additionally, Vermont and Maryland have entered into global payment arrangements to improve care for the whole state’s population.

These developments suggest that after more than six years, health is safer while Medicare is on the road to becoming more financially secure for future generations. Gains of this sort are worthy to preserve.