

Association of Schools Advancing Health Professions

FEBRUARY 2021

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Trends is the official newsletter of the Association of Schools Advancing 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.

PALIMSEST AS METAPHOR

The Oxford English Dictionary defines *palimpsest* in various ways, including (1) a parchment or other writing surface on which the original text has been effaced or partially erased, and then overwritten by another, (2) a manuscript in which later writing has been superimposed on earlier (effaced) writing, (3) having been reused or altered while still retaining traces of its earlier form, (4) as a structure characterized by superimposed features produced at two or more distinct periods in physical geography and geology, and (5) a multilayered record. Based on these definitions, the term may be considered metaphorically in relation to this newsletter, with COVID-19 serving as an apt illustration of a topic that has been discussed on several occasions in these pages over the last several months.

The coronavirus pandemic is the equivalent of a verbal diorama under construction where events continue to unfold. Older controversies remain unresolved while new ones appear at regular intervals. Meanwhile, it essentially seems likely that the final chapter will not be written any time soon. Going back more than one year ago, debates continue about the origin of this disease. Did it arise in China and in Wuhan in particular? Was the source a wet market that sold bats and other animal kinds of foods or did this ailment emerge accidentally from an infectious disease laboratory?

Early guidelines from authoritative organizations, such as the WHO and the CDC indicated that the disease was not transmissible and that wearing masks for protective reasons was unwarranted. Moving ahead to the current month, debates are underway regarding whether one, two, or three masks should be worn. Which medications and related forms of treatment to use in treating infected patients and whether to do so in hospitals or elsewhere represent other areas of disagreement. Somewhat alarmingly, social distancing and lockdown policies are viewed as causing more problems rather than producing constructive solutions for them. While health officials advocate having children return to their classrooms, some teacher unions disagree on the wisdom of doing so. Even though vaccines are available, locales around the U.S. differ on which population subgroups should be given priority to receive them while anti vaxxers resist being immunized at all.

Over the years, this newsletter has contained items about improvements in health care as well as concerns worth addressing. Advances in genomics are associated with new breakthroughs that are destined to arise at regular intervals. Another page of the current issue of this newsletter discusses how research soon may allow calculation of polygenic risk scores (PRS) for suicide death, a top 10 cause of fatality in the U.S. The possibility of this development, which could be marketed directly to consumers, is accompanied by ethical concerns. Anticipated benefits are prevention of suicide and reduced stigma that might be offset by an increase in adverse psychological effects. Innovations in the health realm often are perceived as having significant individual and community-level benefits. Yet, there remains a likelihood of other concerns becoming manifested that relate not only to access to insurance and employment, but also to increased anxiety and depression.



AMERICAN RESCUE PLAN AND COVID-19

The new **Biden Administration** arrived in the nation's capital with ambitious plans to work cooperatively with Congress in dealing with the many problems associated with the coronavirus pandemic. The president's *American Rescue Plan* is a centerpiece of that effort. Major committees on Capitol Hill have responded positively and have begun to set in motion

legislation to achieve several important objectives aimed at combining individual bills into a \$1.9 trillion COVID-19 relief package, which the House Budget Committee is "marking up" this week, combining the individual Committee proposals into a single reconciliation bill that will be taken up on the House floor at the end of the week, with enactment expected in mid-March.

As described in the previous issue of this newsletter, reconciliation legislation is a fast-track process that can be passed by a simple majority without having to be filibustered in the Senate. Some limitations exist in this approach because budget reconciliation cannot be used for any and all federal legislation. Instead, bills must contain provisions that affect revenue and spending, with no extraneous items allowed, according to a restriction known as the "Byrd Rule."

The *House Education and Labor Committee's* portion of the reconciliation bill provides \$170 billion to K-12 and postsecondary education, with \$40 billion dedicated to higher education to make necessary COVID related improvements on campus and provide additional student supports. Funding will be provided to institutions via the Higher Education Emergency Relief Fund (HEERF) created in the CARES Act.

The *House Energy and Commerce Committee* bill includes more than \$46 billion for COVID-19 national testing efforts and \$20 billion to improve vaccine distribution. Additional funds will be used to incentivize states to expand their Medicaid programs, allow new mothers to stay on the program for up to a year, and eliminate a cap on Medicaid drug rebates beginning in 2023.

House Ways and Means Committee legislation has features that include capping the cost of coverage in the individual health insurance market through increasing Affordable Care Act (ACA) tax credits for 2021 and 2022. ACA plans would be available at no cost for individuals making up to 150% of the federal poverty level and also for unemployment insurance beneficiaries. The bill includes additional direct payments of \$1,400 to individuals and an extension of temporary federal unemployment benefits.

Proposed legislation by the *House Oversight and Reform Committee* focuses more on providing assistance to state and local government jurisdictions. Aid would be split with states receiving 60% of funding and localities obtaining the other 40%. This funding can be utilized for a host of different COVID related needs as determined by state and local officials, including further assistance to postsecondary institutions.

The *House Small Business Committee* would add \$7.25 billion for the Paycheck Protection Program (PPP) and also create a new program to support the restaurant industry.

2021-2022 ASSOCIATION CALENDAR OF EVENTS

October 20-22, 2021—ASAHP Annual Conference in Long Beach, CA

October 19-21, 2022—ASAHP Annual Conference in Long Beach, CA

HEALTH REFORM DEVELOPMENTS

During the early days of cinematography, it was common for the lights in a movie theater to be turned on as an employee mounted the stage to make the following announcement, "One minute please while we change reels." Federal health policy in the United States often is implemented in a similar manner. Regardless of the many alterations made during any presidential administration, as soon as a new president arrives on the scene from the opposing political party, several items are at a high risk of being reversed. Some examples of changes that have been made by the **Biden** Administration are as follows:

The regular Affordable Care Act sign-up period ended on December 15, but **President Biden** signed an executive order launching a special 90-day enrollment period for ACA coverage, which began on February 15. The Administration seeks to increase public awareness of the extended timeframe through a \$50 million marketing campaign.

An executive order directs the U.S. Department of Health and Human Services (HHS) to review the interoperability of public health data systems across the nation. The objective is to improve COVID data sharing throughout the federal government, enhance vaccine distribution, and increase the understanding of the scope of the pandemic in communities throughout the country.

The following rules proposed by the Centers for Medicare and Medicaid Services (CMS) during the **Trump administration** have been withdrawn: Conditions for Coverage for End-Stage Renal Disease Facilities—Third Party Payments; Strengthening Oversight of Accrediting Organizations (AO) and Preventing AO Conflict of Interest, and Related Provisions; and Revisions to Medicare Part A Enrollments.

Unwinding Medicaid Work Requirements

The **Biden Administration** has expressed strong interest in beginning the process of rolling back Medicaid work requirements, an initiative developed when **President Trump** was in office, which generally mandated that beneficiaries log 20 or more hours on a job, look for work, perform community service, or take educational classes to be eligible for Medicaid benefits. Kentucky, Arkansas, and Nebraska are among 12 states that received federal approval to impose such requirements, although some plans were blocked by the courts. A possibility remains that some states may elect to challenge these roll back efforts.

Concentration Of Health Care Expenditures

A significant portion of health legislation is aimed at controlling health care costs. In the newest Statistical Brief, data from the Agency for Healthcare Research and Quality (AHRQ) *Medical Expenditure Panel Survey Household Component (MEPS-HC)* describe the overall concentration of health care expenses across the U.S. civilian noninstitutionalized population in 2018. Spending on health care that year accounted for 17.7% of the U.S. gross domestic product, yet the majority of this spending was concentrated in a small percentage of the population. Older individuals disproportionately were represented in the higher health care spending tiers. Among the entire U.S. civilian noninstitutionalized population in 2018, 16.8% were 65 and older, while 22.6% were under age 18. Among the top 5% of spenders, however, 39.0% were 65 and older, while only 5.8% were children under age 18. In contrast, among the bottom 50% of spenders, 30.6% were children while only 6.0% were 65 years and older.

Steady growth in the portion of individuals age 65 and older in the population will have an impact on efforts to lower health care spending due to the amount of money that will be spent on addressing their health care needs. The most commonly treated condition among the top 5% percent of spenders in 2018 was hypertension (48.8%), followed by osteoarthritis/other non-traumatic joint disorders (44%), and nervous system disorders (40.0%). While these conditions are the most common among high spenders, they are not necessarily the most expensive ones to treat. Instead, the top spending group is more likely to include patients with multiple chronic conditions or expensive treatments (e.g., surgeries, and hospitalizations) related to these conditions.

DEVELOPMENTS IN HIGHER EDUCATION

During the campaign for the presidency in the 2020 election, several Democrat candidates expressed an interest in taking actions that will have a strong impact on higher education, such as making it free for many students at public institutions. According to a study released in January 2021 that was commissioned by the Campaign for Free College, it is estimated that if a plan supported by **President Biden** ever becomes law, enrollment at four-year private institutions over "several years" would be reduced by 12.3%. During the same period, enrollment at four-year public institutions would increase by 17.7%. Unfortunately, not all institutions in the private sector would be able to withstand a shift of this magnitude and it is anticipated that some of them would be forced to close their doors permanently.

Public institutions also experience some unique problems of their own, such as a steady decline over the period of many years in obtaining financial support from state governments. A related concern is that by increasing enrollment at these schools, it is highly likely that additional resources will be required to accommodate the growth in student numbers. The **Biden** plan does not take that possibility into account while based on recent history, it seems unlikely that support from state governments will be available to reduce the added cost burden. Related policy developments entail the provision of health insurance coverage for state residents who lack it. Medicaid programs, which are funded jointly by the federal government and the states, already exert a heavy toll on finances in many states. As some jurisdictions around the U.S. struggle in their efforts to cope with ever rising health care expenditures, their ability to support the higher education sphere is lessened concomitantly.

Forgiveness Of Student Debt

A related higher education policy issue is to forgive some portion of student debt incurred by individuals who found it necessary to borrow money to meet costs associated with attending colleges and universities. Similar to supporting free education at public institutions, Democrat candidates during the 2020 campaign for the presidency were in favor of reducing the \$1.6 trillion in student debt that currently exists. Most of that amount was made by the Treasury Department and is held by the U.S. government. A portion of the total represents loans that originally were made by private lenders and guaranteed by the federal government. **President Biden** is in favor of forgiving both kinds of loans and has indicated that he is in favor of doing so in a manner that would be covered by federal taxpayers.

Assuming such a policy is enacted, it is reasonable to ask in the name of equity which groups should be the chosen beneficiaries. One segment consists of post-baccalaureate students who in pursuit of higher degrees awarded by prestigious business schools, law schools, and medical schools assume mountains of educational debt. The other side of the coin is that upon completion of their studies, they tend to be in a favorable position to earn highly satisfactory levels of income during their subsequent professional careers. Should their debt-oriented financial plight be viewed with the same degree of concern as students who are less fortunate? For example, proposed forms of debt absolution, such as writing off as much as \$50,000 per student, will not be as beneficial for large numbers of individuals who decided not to attend college or who instead chose to work either before or during their college years to offset educational costs.

Vaccinating College Students

It is not all that uncommon to see photographs of students attending crowded social events while not wearing masks. Not generally perceived as a group that will suffer the worst effects of the coronavirus if they become infected, a bigger concern is the potential they have to be part of the super spreader portion of the community. Now that more colleges and universities have reopened their campuses, institutions such as the University of California, Berkeley; University of Massachusetts at Amherst; and the University of North Carolina at Chapel Hill have found it advisable to impose lockdowns in residence halls and encourage students to avoid travel. A related issue is the possibility of ensuring that students are vaccinated prior to leaving campus at semester's end to prevent them from spreading the disease to older individuals.

QUICK STAT (SHORT, TIMELY, AND TOPICAL)

Sexual Orientation Disparities In Risk Factors For Adverse COVID-19–Related Outcomes

Sexual minority individuals experience health disparities associated with sexual stigma and discrimination. Lesbian, gay and bisexual persons in the U.S. have higher self-reported prevalence of several underlying health conditions associated with severe COVID-19 outcomes, compared to heterosexual persons, according to the February 5, 2021 issue of *Morbidity and Mortality Weekly Reports*. Between 2017 and 2019, sexual minorities, whether part of the overall population or among racial and ethnic minority groups, reported higher rates of asthma, chronic obstructive pulmonary disease, stroke, kidney disease, cancer and heart disease. Based on these findings, CDC indicated that including information on sexual orientation and gender identity, along with race and ethnicity, in COVID-19 data collections could improve knowledge about disparities in these communities. Current surveillance systems lack information on sexual orientation, hampering examination of COVID-19–associated disparities among sexual minority adults.

Instant Death More Common In Absence Of Physical Exercise

Heart disease is the leading cause of death globally and prevention is a major public health priority. Until recently, an aspect involving little information has been the effect of an active versus sedentary lifestyle on the immediate course of a heart attack. Now, there is evidence that an active lifestyle is linked with a lower chance of dying immediately from a heart attack based on a study published on February 12, 2021 in the *European Journal of Preventive Cardiology*. Researchers used data from 10 European observational cohorts including healthy participants with a baseline assessment of physical activity who had a heart attack, 62.3% of them died instantly. Patients who had engaged in moderate and high levels of leisure-time physical activity had a 33% and 45% lower risk of instant death compared to sedentary individuals. These numbers were 36% and 28%, respectively at 28 days.

HEALTH TECHNOLOGY CORNER

Identifying Candidates For Drug Repurposing For SARS-CoV-2

When COVID-19 arrived, researchers began seeking effective treatments, but producing new drugs can be a lengthy process. The only expedient option may be to repurpose existing medications. As reported on February 15, 2021 in the journal *Nature Communications*, a team from MIT's Department of Electrical Engineering and Computer Science, the Institute for Data, Systems and Society, and the Broad Institute of MIT and Harvard developed a machine learning-based approach to identify drugs already on the market that potentially could be repurposed to fight COVID-19, particularly in the elderly. Given that SARS-CoV-2 pathogenicity is highly age-dependent, it is critical to integrate aging signatures into drug discovery platforms. To identify robust druggable protein targets, researchers propose a principled causal framework that makes use of multiple data modalities. The investigators pinpointed the protein RIPK1 as a promising target for COVID-19 drugs, and they identified three approved drugs that act on the expression of RIPK1.

Affordable CRISPR App Reveals Unintended Mutations At Site Of CRISPR Gene Repair

Scientists have developed an affordable, downloadable app that scans for potential unintended mistakes when CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) is used to repair mutations that cause disease. During CRISPR-directed gene editing, multiple gene repair mechanisms interact to produce a wide and largely unpredictable variety of sequence changes across an edited population of cells. Shortcomings inherent to previously available proposal-based insertion and deletion (indel) analysis software necessitated the development of a more comprehensive tool that could detect a larger range and variety of indels while maintaining the ease of use of tools currently available. As reported on February 10, 2021 in *The CRISPR Journal*, researchers developed *De*convolution of *Complex DNA Repair* (DECODR) to determine the identities and positions of inserted and deleted bases in DNA extracts from both clonally expanded and bulk cell populations. The software is accurate in making these determinations.

OBTAINABLE RESOURCES

Voluntary Support Of Education

Since 1957, the Voluntary Support of Education (VSE) annual survey from the Council for Advancement and Support of Education (CASE) has collected data on fundraising outcomes in higher education institutions in the United States. It is regarded as the definitive source of information on philanthropic support of those institutions. Data from the survey are used to estimate total charitable support of all institutions of higher education in the nation, including nonrespondents. Survey respondents must adhere to the Reporting Standards and Management Guidelines, first published jointly with the National Association of College and University Business Officers (NACUBO) in 1982. CASE updated the standards in 1996, 2004, and 2009. According to the VSE survey, voluntary support of higher education institutions in the United States essentially was flat in the fiscal year that, for most institutions, ended June 30, 2020. While support edged down two-tenths of a percent, at \$49.50 billion, nearly half, 48.6%, of responding institutions reported that giving rose in 2020. A CASE analysis of institutions that responded for the past four reporting cycles reveals that varying frequencies of rising and falling gift receipts are the norm. Indeed, even an institution that posts lower levels of giving in a particular year may have had a good year. Sometimes a very large gift the previous year results in a percentage decline that is not really a negative event. The report can be obtained at https:// www.case.org/system/files/media/file/VSE%20Research%20Brief%20Key%20Findings%202019-20.pdf.

National Healthcare Quality And Disparities Report

The National Healthcare Quality And Disparities Report Chartbook On Patient Safety is the product of collaboration among agencies across the U.S. Department of Health and Human Services (HHS). It is part of a family of documents and tools that support the National Healthcare Quality and Disparities Report (NHODR). The NHODR is an annual document to Congress mandated in the Healthcare Research and Quality Act of 1999 (P.L. 106-129). The NHQDR provides a comprehensive overview of the quality of health care received by the general U.S. population and disparities in care experienced by different racial and socioeconomic groups. The purpose of the reports is to assess the performance of the U.S. health care system and to identify areas of strengths and weaknesses along three main axes: access to health care, quality of health care, and NHQDR priorities. The reports are based on more than 250 measures of quality and disparities covering a broad array of health care services and settings. Data generally cover 2000 through 2018. The reports are produced with the help of a Federal Interagency Work Group led by the Agency for Healthcare Research and Quality (AHRQ) and submitted on behalf of the Secretary of the U.S. Department of Health and Human Services (HHS). Chartbooks are organized around six Priority Areas. Patient Safety is one of them. They are interrelated and work to support all priority areas and can support necessary and critical improvements in making care safer. The Chartbook can be obtained at https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/ nhqrdr/chartbooks/patientsafety/2019qdr-patient-safety-chartbook.pdf.

50-State Survey Of Telehealth Commercial Insurance Laws

States are stepping up requirements that insurers pay for telehealth at the same rate as in-person services, according to a new report from Foley and Lardner. Four more states required payment parity amid the pandemic last year, bringing the total to 14 states. The law firm argues that without such laws, insurers might set reimbursement rates so low that health providers feel no incentive to adopt telehealth. State-mandated coverage of text messages, images, and other "asynchronous health care" also has grown, with 27 now requiring reimbursement. Telehealth has skyrocketed, driven by patient concerns about contracting the virus during in-person visits to clinics or doctors' offices. What remains unknown is whether Congress and the **Biden Administration** will make permanent some of the temporary federal payment policies set for the pandemic once it subsides. The report can be obtained at <u>https://www.foley.com/-/media/files/insights/publications/2021/02/21mc30431-50state-telemed-reportmaster-02082021.pdf</u>.

THE PRODOME: DIAGNOSIS, DISADVANTAGE, AND BIOMEDICAL AMBIGUITY

According to an article published in the March 2021 issue of the journal *Society and Mental Health*, diagnostic standards are consequential, as diagnoses can label and stigmatize, while conferring or denying access to social resources. Diagnostic criteria also are fluid and malleable, with the boundaries between health and illness subject to redefinition and reorganization. Technology may be an engine driving such redefinition of diagnoses. Viewed from that perspective, science and technology can create, reveal, or redefine disorders, making some diagnoses possible while hindering others. In this article, the author engages with the intersection of science and diagnosis by demonstrating how the prodrome, an emerging phase of illness characterized by neuroscientific research, creates problems for patients, their families, and health care institutions. In biomedical research, the prodrome is a period wherein someone experiences some symptoms of an illness before meeting formal diagnostic criteria. The prodrome ends once a patient meets formal criteria and is diagnosed with a disorder. It is of biomedical interest because these symptoms might provide advanced notice of impending illness.

The focus of this particular article is on Huntington Disease (HD), while acknowledging that neuroscientific research suggests the presence of prodromal phases for a growing list of conditions, including schizophrenia and autism. In this instance, the prodrome is examined from the standpoint of its social, experiential, and institutional consequences. Based on interviews with individuals and their informal caregivers, an explanation is provided regarding how the prodrome is a site of healthcare disadvantage. Although participants suffer from psychiatric and cognitive prodromal symptoms (e.g., hallucinations, mood changes) and associated challenges (e.g., job loss), they do not receive necessary support because they do not meet formal diagnostic criteria. The prodrome is viewed as being connected to; (1) the inability to access health care, (2) the inability to access health resources, (3) the depletion of personal resources, and (4) extensive caregiver burden and burnout. The HD prodrome also provides a contrast to research on the negative repercussions of diagnostic expansion, as prodromal individuals report struggling with symptoms that are well-characterized in neuroscientific research, but remain unacknowledged and under supported by health care institutions. An argument is advanced that prodromal individuals are shut out of health services as a result of such institutional ambiguities.

IMPLICATIONS OF GENETIC TESTING FOR SUICIDE RISK

The article on page one of this issue of *TRENDS* has a reference to how research soon may allow calculation of polygenic risk scores (PRS) for suicide death. Data reported in a study in the February 2021 issue of the journal *Nature Genetic Medicine* indicate that suicide claims the lives of over 47,000 individuals annually in the U.S. and the national rate has increased by 33% between 1999 and 2017. Genetic factors are viewed as playing a major role in suicide risk, with an estimated heritability of close to 50% for suicide death and as much as 30% for suicide attempt. Research during the past decade has begun to characterize genetic variation associated with suicide and suicide attempts. Notably, this genetic risk seems independent of variants associated with developing depression or other mental illnesses. Similar to other psychiatric genetic research, suicide research has not yet identified well-replicated genes and gene pathways leading to functional mechanisms, but increasing momentum and support for large-scale research suggests that investigators rapidly are approaching this goal.

Even before specific risk genes and pathways are discovered, studies of suicide risk may allow the calculation of polygenic risk scores for suicidality. Once these data are available, they may rapidly be commercialized and marketed to the public as direct-to-consumer testing that currently is not subject to extensive regulation. Given these rapid developments, there is an urgency to understanding how individuals may interpret and act on this information. The aforementioned journal article reports the results of initial focus group research related to knowledge about and perceived acceptability of genetic testing for suicide risk among suicide attempt survivors and family members of individuals who died of suicide. The findings from the study highlight the importance of extensive engagement with potential stakeholders before such genetic technologies are made available for clinical or public use.