LANGUAGE TRANSMISSION AND TRANSLATION

Samuel Beckett, a Nobel Laureate in literature from Ireland, produced some of his work in the French language. What may seem odd is that this highly gifted linguist subsequently found it difficult to translate his own material into English, his native language. Apart from variations in vocabulary that distinguish one language from another, even within the same one, communication impediments may arise.

Depending on their level of health literacy, patients can be at a disadvantage in understanding terminology and jargon used by clinicians. Superimposed on differences in understanding spoken and written words is the impact semiotics has on the process of communication in the form of facial gestures, tone of voice, clothing (e.g., white coats worn by health professionals signifying knowledge authority status), and personal appearance (e.g., age, gender, race/ethnicity, body weight, and presence of tattoos and piercings).

Hundreds of millions of interactions occur between clinicians and patients in the U.S. each year, and the quality of the experiences shared by them will help to govern what eventually transpires in the form of beneficial health outcomes. For example, an evaluation of patient-reported outcome measures (PROMs) that appeared on April 15, 2019 in the journal *Cancer* indicated that more than half of the most commonly used cancer PROMs do not meet plain-language best practices. This finding may have implications for the quality of care, safety, and experience/satisfaction involving patients characterized by low health literacy.

Access to electronic health records has made it possible for patients to review information written about them. Nevertheless, depending on the branch of health care involved, there is ample room for misinterpretation. Sociolinguistic differences between patients and clinicians can lead to variable misunderstandings of written words that may limit patients’ engagement in their own health care. That outcome should come as no surprise because even within the professional community itself, a veritable Tower of Babel may exist. As an illustration, a radiologist might communicate imaging results to other members of the health care team using terms, such as “probably represents,” which in turn could be interpreted differently by referring clinicians.

Interprofessional education and practice currently is a topic of considerable interest and importance in health care. Data reported on March 22, 2019 in the *Journal of Interprofessional Care* reveal, however, that there was little consistency in the terminology used by accreditors to describe the learning outcomes that healthcare professions educational programs were expected to embrace. A conclusion reached was that inconsistency in terminology across accreditors found in this study is a clear impediment to healthcare professions educational programs creating a shared mental model for their IPE outcomes. A risk is that until accreditation bodies agree to one such model for all aspects of education, IPE may continue to be perceived by students as an ‘add-on’ to their curricula rather than as an integral part of becoming a health professional.
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 13th of many profiles and the fifth in 2019 is presented as follows:

Name and Title: Ken Johnson, PhD, FASAHP  
Place of birth: Blackfoot, Idaho  
University: Weber State University  
How long have you been in your position? 13 years  
What’s the value of a university education? Increased options, increased income  
What is the value of ASAHP? Making friends, sharing solutions to problem.  
Your philosophy on education in seven words: To help learners learn how to learn.  
If I could teach in another field, which one and why? Occupational Psychology – it’s another field that promotes wellness in a variety of ways.  
Before I retire I want to: I think I’m good…just increase my retirement fund.  
In college, I was known for: Being part of the International Folkdancers as a band member and dancer.  
What music is playing in my car/office? Classic rock  
The last book I read for fun was: Saints  
My favorite trip was: Edinburgh, Scotland  
If I could travel anywhere it would be: Back to Northern England and Scotland.  
Four people I’d take to coffee or have a glass of wine with: I don’t do either of those, but I’d love to visit with some of my ancestors.  
The best advice I ever received was: I’ve received too much good advice to just pick one thing.  
My hobby is: Woodworking, golfing, fishing  
My passion is: My family  
My pet peeve is: Bad drivers, I suppose.  
A perfect day is: In a peaceful setting with my family  
Cats or dogs? Dogs, although we have cats.  
E-book or hardback? Hardback  
Beach or mountains? I live in and love the mountains. I like to visit the beach.  
I wish I could: Travel more.  
Only my friends know I: No comment  
My favorite saying is . . . on my wall: “Med dig vill jag bli gammal och lite halv blind.” (You’ll have to look it up).
Even under ordinary circumstances, it is common for competition between Democrats and Republicans and also between the two legislative chambers to serve as obstacles to passing important bills. Given that a presidential election occurs next year, it can be expected that partisanship will play a role in complicating attempts to pass legislation that would be perceived as accruing to the advantage of one political party over the other party’s fortunes. So, it always is refreshing that at a time of potential conflict, there is evidence that opponents can join forces to advance the common good.

The introduction of H.R. 2781, a bipartisan bill to amend Title VII of the Public Health Service Act to reauthorize certain programs relating to the health professions workforce, and for other purposes, is an example of one such effort. The proposed legislation would increase the authorization for most Title VII programs by 5% over the fiscal year 2019 appropriated levels, 7.2% for Area Health Education Centers (AHECs), and 25% for Geriatric Programs. The legislation also provides flat funding authorization for the Pediatric Loan Repayment program, which has yet to receive an appropriation.

Title VII programs are under the direction of the Health Resources and Services Administration (HRSA). They have been created to enhance the health professions pipeline through a wide variety of education, and training programs that play a critical role in addressing major health problems in rural and underserved communities. One aim of H.R. 2781 is to respond to the problem of an emerging shortage of physicians in the United States. It is anticipated that the House Energy and Commerce Committee will conduct a hearing on Title VII reauthorization in June 2019.

Meanwhile, despite partisan differences on important funding legislation for the Departments of Labor, Health and Human Services, Education, and Related Agencies (Labor-HHS), the House Appropriations Committee on May 8, 2019 approved its FY 2020 spending bill by a party line vote of 30-23. The committee also approved 302(b) allocations for all twelve appropriations subcommittees. Among the various provisions are the following:

- The approved legislation provides a program level of $41.084 billion for the National Institutes of Health (NIH), which amounts to a $2 billion or 5.12% increase over the comparable FY 2019 level. The bill provides an across-the-board increase of approximately 5% for all Institutes and Centers to maximize the across-the-board increase for all these entities in order to ensure a significant boost for the best peer-reviewed research across all scientific disciplines.

- Other funding allocations include $734.9 million for HRSA’s Title VII health professions and Title VIII nursing workforce development programs, a $93.25 million (14.5%) increase over FY 2019 enacted levels. The amounts include increases for diversity pipeline programs, such as the Health Careers Opportunity Program, which received $20 million in funding for FY 2020, a $5.8 million (41%) increase over FY 2019 levels. Other kinds of programs, such as Children’s Hospital Graduate Medical Education would benefit by an allocation of $350 million, which is a $25 million (7.6%) increase over FY 2019 levels.

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**2019-2020 ASSOCIATION CALENDAR OF EVENTS**

**May 31, 2019**—ASAHP Summit at Saint Louis University

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

**October 26-30, 2020**—ASAHP Annual Conference in Long Beach, CA
HEALTH REFORM DEVELOPMENTS

A chronic health workforce challenge facing nations throughout the world is a maldistribution of personnel. Approximately 60 million inhabitants of the United States, roughly one of every five individuals, live in rural areas. Significant obstacles face patients and providers in rural communities where rates for the five leading causes of death are higher, poverty is more common, higher rates of uninsurance or underinsurance prevail, greater transportation difficulties exist in going to a hospital or to the offices of health professionals, and residents lack access to high-speed Internet, which limits their access to information. The patient-to-primary care physician ratio in rural areas is only 39.8 physicians per 100,000 individuals, compared to 53.3 physicians per 100,000 in urban areas, to cite just one example of a health professions workforce shortage. A worrisome trend according to the Centers for Medicare & Medicaid Services (CMS) is that since 2010, more than 100 rural hospitals have closed and nearly 40% of rural hospitals currently running are operating with negative margins, limiting the ability of providers to compete based on high value care and leading to fewer choices for beneficiaries.

Similar to other U.S. presidential administrations, the Trump administration has launched initiatives aimed at ensuring improved access to health care services in rural areas. A Rural Health Strategy has been undertaken to increase access to telehealth and other virtual services across the Medicare program. One way of doing so is to pay for virtual check-ins that allow a patient to check in with his or her clinician by telephone or other telecommunication system, along with remote evaluations of recorded videos or images that a patient submits to a clinician to help in making a joint decision whether a trip needs to be made by this individual to be seen in-person. An example of coping with the threat of hospital closures is a proposal to enhance their stability by transforming the way CMS pays certain rural hospitals and facilities in other low wage areas. A related action is a proposed change in the way Medicare factors local labor costs into hospital payments by increasing the wage index of rural and other low wage index hospitals to address payment disparities.

Provision Of Health Coverage For The Uninsured: Medicare For All

The Affordable Care Act of 2010 has been instrumental in reducing the proportion of the U.S. population lacking health insurance coverage. Despite many impressive gains that have been made, an estimated 9.4% of U.S. residents, or 30.4 million individuals, lacked health insurance when surveyed in 2018, according to a report released by the Centers for Disease Control and Prevention (CDC) on May 9 of this year, a rate not significantly different from the survey’s uninsured rate in 2017, but 18.2 million persons fewer than in 2010. The uninsured rate for adults under age 65 was 9.9% in Medicaid expansion states, compared with 18.7% in non-expansion states.

An effort gaining momentum in Congress is a proposal by Democrats called Medicare for All legislation. Generally, this universal health care program would include coverage of primary care, hospital stays, mental health treatment, prescription drugs, along with dental, vision, hearing, and home and community-based long-term care services. Meanwhile, an annual report from the Medicare Board of Trustees that was released last month indicates that the Hospital Insurance (HI) Trust Fund is expected to be depleted in 2026. Also, a report from the RAND Corporation on May 19, 2019 states that the prices paid to hospitals by private health plans averaged 241% of what Medicare would have paid. Since Medicare for All has the prospect of terminating private health plans, an interesting question is what rate will an expanded Medicare program pay and how will these costs be financed?

Predictive Analytics And Social Determinants Of Health (SDoH)

A report from Deloitte on April 30, 2019 discusses how addressing the housing, nutrition, and other social needs of Medicaid members could result in fewer ambulance rides, fewer emergency room visits, and fewer hospitalizations. Predictive analytics could help Medicaid departments and managed care organizations more accurately target these services by using a state’s resources more efficiently and effectively. Officials of SDoH programs also might want to determine how to ensure that spending is aimed at individuals who are most at risk of a decline in health status so that they can leverage the lessons learned from the experience of Medicaid home and community-based service programs.
American Council Education (ACE) President Ted Mitchell sent a letter on May 9, 2019 to members of the House Ways and Means and Senate Finance Committees, urging swift action to correct a mistake made in the Tax Cuts and Jobs Act (TCJA) of 2017 that inadvertently has resulted in harm to many low- and middle-income students who rely on scholarship aid to pay for their college education. The letter notes that the TCJA made changes to the so-called “kiddie tax” that sharply increased the tax levied on the portion of scholarships set aside for expenses, such as room and board that colleges and universities award to students from families of little or modest means. A consequence is that many low- and middle-income students are being taxed at the same rates as wealthy individuals.

Academic, need-based scholarship students are not the only ones who will feel the impact of the amended kiddie tax. College athletes on full scholarships, which include money for housing and other non-tuition expenses, also are affected by kiddie tax changes, many of whom come from economically disadvantaged families. Based on Department of Education data, the increased tax on scholarship/grant aid could exert an effect on nearly 1.4 million students and their families. A related concern is that problems caused by the change to the kiddie tax extend beyond higher education. For example, “Gold Star” Families (immediate family survivors who receive benefits resulting from a fallen service member who died while serving in a time of conflict) also may be affected negatively.

Student Loan Borrower Bill Of Rights Act Of 2019 Re-Introduced
Senators Dick Durbin (D-IL), Elizabeth Warren (D-MA), and Jack Reed (D-RI) on May 8, 2019, re-introduced the Student Loan Borrower Bill of Rights Act of 2019, which would amend the Truth-in-Lending Act, to create consistent disclosure and servicing standards across federal and private student loan programs. Its provisions include:

- Requiring various disclosures to borrowers when a loan is sold or transferred,
- Standardizing the application of payments and the allocation of payments among multiple loans in a manner that is most beneficial to a borrower, and
- Limiting when borrowers are subject to late fees and other consequences.

Trump Administration Proposes To Reduce Pell Grant Surplus
An effort by the Trump administration that was announced in May 2019 to make a deep reduction in the Pell Grant surplus was criticized by several groups representing colleges, universities, and student aid advocates. A concern is that the proposal, which is in the form of a revised budget request for FY 2020 that would shift $3.9 billion from the Pell surplus to aid in funding a National Aeronautics and Space Administration (NASA) mission to the moon, not only will hurt students, but also make attending college more expensive. Previously, White Office officials sought to take $1.3 billion from left-over Pell funding in 2017. Fiscal year 2018 and 2019 budgets also proposed multibillion-dollar cancellations, but these proposals eventually were withdrawn.

States Pass Laws Aimed At Student Loan Companies
Stimulated to some extent by Democratic gains in state houses around the nation in the November 2019 election, coalitions involving liberal groups, consumer advocacy organizations, and labor unions have launched efforts to regulate student loan companies operating in their respective states. For example, a new law in New York places student loan servicers under the jurisdiction of the state's financial services regulator as a means of protecting student loan borrowers and reducing their financial loan burden by cracking down on unscrupulous lending practices. Both the Trump administration and student loan industry groups oppose these initiatives on the grounds that states don’t have the power to regulate companies collecting federal student loans. Such issues await further resolution in the courts.
QUICK STAT (SHORT, TIMELY, AND TOPICAL)

Pregnancy-Related Deaths, United States, 2011-2015
According to a Morbidity and Mortality Weekly Report posted online May 10, 2019 by the CDC, approximately 700 women die annually in the United States from pregnancy-related complications. Among such deaths for which timing was known, 31.3% deaths occurred during pregnancy, 16.9% on the day of delivery, 18.6% on days 1–6 postpartum, 21.4% on days 7–42 postpartum, and 11.7% on days 43–365 postpartum. Leading causes of death varied by timing relative to the end of pregnancy. Approximately three in five pregnancy-related deaths were preventable. Contributing factors can be categorized at the community, health facility, patient, provider, and system levels. The national pregnancy-related mortality ratios (PRMRs) was 17.2 per 100,000 live births. Non-Hispanic black women and American Indian/Alaska Native women had the highest PRMRs (42.8 and 32.5, respectively), 3.3 and 2.5 times as high, respectively, as the PRMR for non-Hispanic white women (13.0).

Severe Joint Pain And Physical Inactivity Among Adults With Arthritis-United States
An estimated 54.4 million (approximately one in four) U.S. adults have doctor-diagnosed arthritis. Severe joint pain and physical inactivity are common among adults with arthritis and are linked to adverse mental and physical health effects and limitations. According to an analysis of 2017 Behavioral Risk Factor Surveillance System (BRFSS) data, the median age-standardized state prevalence of arthritis among adults aged ≥18 years was 22.8% (range = 15.7% [District of Columbia] to 34.6% [West Virginia]) and was generally highest in Appalachia and Lower Mississippi Valley regions. Among adults with arthritis, age-standardized, state-specific prevalences of both severe joint pain (median = 30.3%; range = 20.8% [Colorado] to 45.2% [Mississippi]) and physical inactivity (median = 33.7%; range = 23.2% [Colorado] to 44.4% [Kentucky]) were highest in southeastern states. Maintaining a healthy weight or being physically active can reduce arthritis pain and prevent or delay arthritis-related disability.

HEALTH TECHNOLOGY CORNER

Wireless Sensor System To Monitor Babies In The Neonatal Intensive Care Unit (NICU)
According to an April 30, 2019 report from Deloitte, approximately 300,000 premature babies are delivered each year in the US. Multiple wires and adhesive patches can damage fragile skin and prevent parents from holding and nurturing their babies. A team from the Northwestern University Feinberg School of Medicine has been working for five years to develop a wireless sensor system that uses Bluetooth technology to monitor babies in the neonatal intensive care unit (NICU). The new system appears to be as precise and accurate as traditional monitors. Two lightweight wireless patches are attached to the baby's chest and foot to collect a wide range of data, including temperature, respiratory rate, EKG, oxygen saturation, and blood pressure. The patches are flexible and gentle on a newborn's skin. The wireless device allows for more physical contact between baby and parents. Researchers note that the sensor system could be sent home with a patient, so monitoring can continue beyond the hospital if necessary.

Electric Field-Based Dressing Disrupts Bacterial Biofilm Infection To Restore Healing
Bacterial biofilms are thin, slimy accretions that form on some wounds, including burns or post-surgical infections, as well as after a medical device, such as a catheter, is placed in the body. These bacteria generate their own electricity, using their own electric fields to communicate and form the biofilm, which makes them more hostile and difficult to treat. Researchers at Indiana University School of Medicine have found a way to advance the fight against bacterial infections using electricity. Work has led to the development of a dressing that uses an electric field to disrupt biofilm infection. Findings were published in the April 2019 issue of the journal Annals of Surgery. As an alternative to pharmacological intervention, this effort is the first pre-clinical porcine mechanistic study to recognize the potential of electroceuticals as an effective platform technology to combat wound biofilm infection.
AVAILABLE RESOURCES ACCESSIBLE ELECTRONICALLY

Advancing Patient-Centered Care For Individuals With Multiple Chronic Conditions

As part of a series of blog posts from leaders of the Agency for Healthcare Research and Quality (AHRQ), a posting on May 10, 2019 discusses how every day many patients and their caregivers struggle to find care that effectively addresses their needs. Clinicians also are frustrated, experiencing epidemic levels of burnout while working in systems often ill-designed to support them in addressing these fundamental objectives of healthcare delivery. This challenge is particularly pronounced for the nearly one in three American adults, and four of five Medicare beneficiaries, who are living with multiple chronic conditions (MCC). Patients with MCC account for 64% of all clinician visits, 70% of all in-patient hospital stays, 83% of all prescriptions, and 71% of all healthcare spending. Alarmingly, the number of children and adolescents with MCCs is growing as well. Currently, there is a critical mismatch between the way care is delivered (disease-specific) and the needs of patients with MCC, who require whole-person (patient-centered) care. This disconnect too often results in care that is fragmented and of suboptimal quality, leading to poor outcomes and increased costs. Furthermore, practice guidelines that help clinicians make testing and treatment decisions tend to guide the care of each of the patients’ conditions in isolation. One consequence of this narrow scope is that recommended treatments for one condition may interact harmfully with recommended treatments for another one. As a first step towards realizing this vision, AHRQ needs to have a well-conceived and effectively executed research agenda. The Care-and-Learn Model, developed by AHRQ researchers to map the work of the Agency and its research portfolio, will help identify areas of unmet need and prioritize research questions with the most value for advancing the care of individuals with MCC. The blog can be obtained at https://www.ahrq.gov/news/blog/ahrqviews/learning-while-caring.html

Effects of Early Care And Education On Children’s Health

The journal *Health Affairs* released a Health Policy Brief as part of an ongoing series on the social determinants of health. In “The Effects of Early Care and Education on Children’s Health,” an overview is provided of the landscape of nonparental early care and education (ECE). The focus primarily is on center-based care, including public and private preschool, child care centers, and Head Start. While the impact of ECE on children’s educational, social-emotional, and behavioral outcomes is well studied, its impact on health has become a subject of significant research interest mainly in the last 10 to 15 years. Challenges in studying the health impacts of ECE are identified and an extended summary of key studies in this area is provided. In short, while such programs are not necessarily designed to improve child health, a growing body of research indicates that they may lead to short- and long-term improvements in health-related outcomes. Additional research needs are discussed and the Brief notes that, moving forward, ECE policy must attend to promoting parental employment and improving children’s outcomes, including health outcomes. The Brief can be obtained at https://www.healthaffairs.org/do/10.1377/hpb20190325.519221/listitem/HPB_2019_RWJF_11_w.pdf.

Addressing Social Determinants Of Health Through Housing Improvements

Improving the health of individuals and their neighborhoods and communities as a whole is one of the most complex and pressing challenges in healthcare today. Given the inextricable link between affordable quality housing and good health, housing is one area that hospitals and health systems are starting to focus on more resolutely. A new American Hospital Association (AHA) issue brief describes how hospitals are investing in affordable housing. The brief can be obtained at https://www.aha.org/system/files/media/file/2019/05/AIHC_issue_brief_final.pdf.
RANDOMIZED CLINICAL TRIALS AND THE WEIGHT OF A SOUL

Randomized clinical trials (RCTs) are considered to be the preferred criterion standard in research for assessing the effectiveness of clinical interventions. Yet, a level that lofty has not always prevailed in experimental work. At the turn of the 20th century, a physician from Haverhill, Massachusetts by the name of Duncan MacDougall conducted an experiment that involved weighing six terminally ill patients immediately before and after being pronounced dead. Upon recording a reduction in a single patient’s weight of 21 grams, he believed the loss represented that individual’s departed soul, while excluding data from the other patients. His findings were reported in both a 1907 issue of the *Journal of the American Society for Psychical Research* and the periodical *American Medicine*. A reference to the study also was mentioned in the *New York Times*.

Progress has been made since then as evidenced by the fact that a lot more rigor characterizes clinical investigations conducted today. Nonetheless, as noted in an article that appeared in the May 2019 issue of the journal *JAMA Network Open*, scientific lapses committed by MacDougall, such as excluding potentially eligible patients, using unreliable measures, and selectively reporting results that are favorable to the investigator’s hypothesis remain distressingly common. A possible explanation is that confirmation bias may lead to accepting data that support a researcher’s preconceptions and to rejecting data that do not.

Another manuscript in the same issue of that journal entails a systematic review of the level and prevalence of spin in published cardiovascular randomized clinical trial reports with statistically nonsignificant primary outcomes. Spin in this instance is defined as the use of specific reporting strategies, from whatever motive, to highlight that the experimental treatment is beneficial, despite a statistically nonsignificant difference for the primary outcome (i.e., inappropriate use of causal language), or to distract the reader from statistically nonsignificant results (i.e., to focus on a statistically significant secondary result). The authors of the review found that RCTs with statistically nonsignificant primary outcomes were published in high-impact cardiovascular journals and that considerable manipulation of language occurred in both the abstracts and full texts of the reports. Their observations have significant implications for the integrity of clinical science, the translation of clinical evidence at the bedside, peer review, and the rate of medical progress. Indeed, manipulation of language to distort findings also may contribute to further public distrust in science.

VALIDATION OF DIGITAL HEALTH SOLUTIONS

According to an article published on May 13, 2019 in the journal *npj Digital Medicine*, despite the growth in the number and capabilities of digital health solutions, the confidence of patients, clinicians, payers, and representatives from industry and the regulatory sphere in medicine remains quite low. A need exists for objective, transparent, and standards-based evaluation of digital health products that can bring greater clarity to the digital health marketplace. Investment in the digital health sector is enormous, with nearly $6 billion in funding in 2017, compared to $4.4 billion in the previous year. For mobile health applications alone, there exist more than 3,000,000 of them, with another 200 added daily.

Currently, no reliable mechanism exists to identify validated digital health solutions. Payers also cannot easily identify quality in this crowded field. Regulatory guidance and oversight are limited, with enforcement restricted to companies that make claims out of proportion to the evidence or where application failures might lead to risks to patient safety. For example, a recent evaluation of 280 diabetes mobile applications found only five associated with clinically meaningful improvement and none were of high methodological quality. A more standardized, objective, rigorous, and transparent process for validation is warranted. Specifically, the validation domains would be: technical validation (e.g., how accurately does the solution measure what it claims?), clinical validation (e.g., does the solution have any support for improving condition-specific outcomes?), and system validation (e.g., does the solution integrate into patients’ lives, provider workflows, and healthcare systems?).