

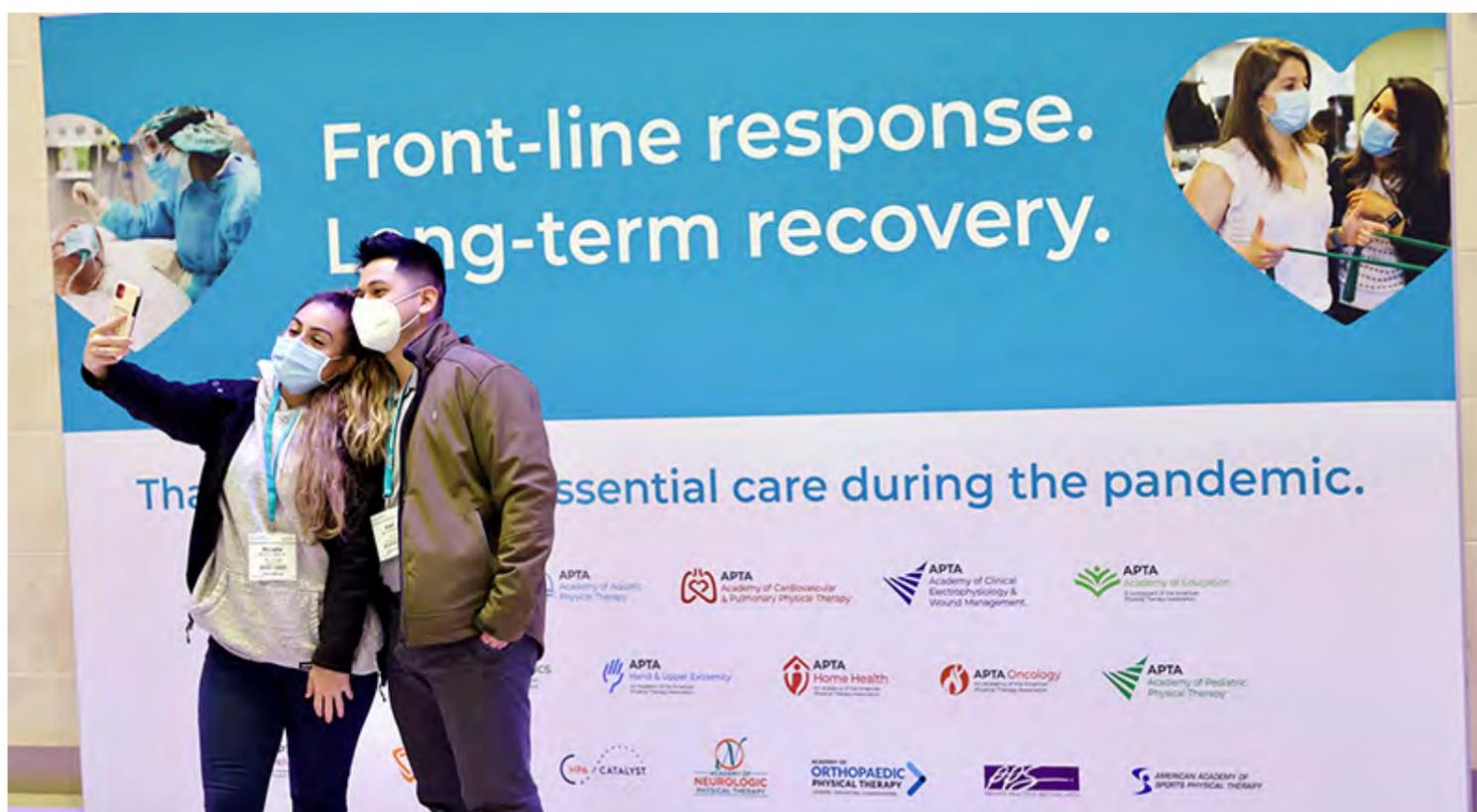
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Highlights From APTA Combined Sections Meeting 2022

With the apt theme "Better Together. Together Again," APTA CSM 2022 brought the physical therapy community to San Antonio.

Feature

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Much about the meeting was familiar: ample educational sessions hosted by APTA's sections and academies, networking opportunities such as breakfasts and receptions, an exhibit hall for viewing and trying out products and services, and the inspiring feeling of community that many attendees said was particularly meaningful this year.

But having learned a few things in the past couple of years, APTA also switched up some meeting elements, such as bringing the esteemed Mary McMillan Lecture and the annual Celebration of Diversity to APTA CSM, and adding an on-demand element that made over 100 recorded sessions available online following the meeting.

Enjoy these highlights from the in-person event.

Better Together. Together Again.



McMillan Lecturer Calls on 'Pandemic Whisperers' to Address Ethical Challenges

In her delivery of the 53rd Mary McMillan Lecture, Laura Lee (Dolly) Swisher, PT, MDiv, PhD, FAPTA, examined the ethical challenges to the profession's collective identity posed by the COVID-19 pandemic and made recommendations for the future.

The title of her lecture, "Ethics and Moral Agency for a Postpandemic Era: Beyond the Storm," echoed the title of the 43rd lecture by Alan Jette, PT, PhD, FAPTA. "When Alan Jette urged us in 2012 to 'Face Into the Storm,'" she said, "we could not have predicted that the storm would be a pandemic."

Given the experiences of the early physical therapy profession with the polio epidemics, Swisher said it was fitting that the profession pause to reflect on this current pandemic and what we might learn from it. "I am proposing that we spend a little time as 'pandemic whisperers,'" she said.



While the profession can take pride in its accomplishments since 1975 to define our identity in the movement system, promote research, move to DPT education, and advance practice, Swisher said there is "unfinished business" with fully integrating ethics into our professional identity. "Full development of the ethical dimensions of our identity represents a 'hanging chad,'" she said, referring to the indication of an incomplete vote in the punch ballot system that characterized the controversy in the 2000 presidential election.

Among developments since the 1970s that stood in the way of our profession to fully integrate ethics into our identity was a shift in how health care was being viewed. It was increasingly being seen as a business and viewed through a corporate lens. As a result, Swisher said, ethics began to focus on organizational issues, beyond the traditional individual patient-provider relationship. "From the perspective of health care professionals," she said, "a focus on the bottom line and efficiency may create conflict between organizational goals and professional obligations."

Now enter the pandemic, and there is what Swisher characterized as two "wicked problems": moral distress and the "syndemic." Moral distress (knowing the right thing to do but feeling constraints against doing it) is not new and has been increasing steadily since 1984, "presumably in response to changes in

health care delivery with a focus on efficiency and profits," but the pandemic may have magnified organization pressures, she said.

"The lasting lesson from the pandemic is the need to change organizational and systems to ensure that physical therapy is indeed a 'moral enterprise,'" she said.

As for the second "wicked problem," Swisher said she uses the term "syndemic" to highlight the problem with the interaction between the disease and health inequities. Regarding that, she said that diversity, equity, and inclusion represent perhaps the most important challenge that we face as a profession."

Moving beyond support statements and into action requires change that "begins with each of us," she said. When early physical therapists faced a changing world, they did not abandon their core values of caring but instead layered new techniques, skills, and expertise on the foundation of those values. "Our challenge is not to abandon excellence in professionalism with individual patients," Swisher said, "but to transform organizations into moral communities to support those individual caring relationships."

Look for the full text of Swisher's lecture later this year in PTJ: Physical Therapy & Rehabilitation Journal.

Cerasoli Lecture: Physical Therapy Education Must Prepare PTs and PTAs to Innovate



"What would excellence and innovation look like in physical therapy education if we were looking outward and addressing what society needs from us?"

Gail M. Jensen, PT, PhD, FAPTA, posed that question in her presentation of the Pauline Cerasoli Lecture, hosted by the APTA Academy of Education. Referring to the "master adaptive learner" model, which is based on preparing individuals to embrace life-long learning and innovation in response to practice challenges, Jensen responded to the opening question in terms of three critical areas: reimagining the role of curriculum, preparing students for a lifetime of learning, and

innovating through education research. Under each area, she addressed several issues with thought-provoking questions and assertions; the following were among them.

Reimagining Curriculum

Curriculum is considered the foundation of our education programs, and all curricula have structure, content, and process, yet "education continues to suffer from a technocratic view ... of equating process with accountability and quality," she said. The focus on course credit hours and degree requirements are often perceived as barriers to innovation.

Further, she asserted that as higher education has focused on increased accountability for ensuring that student learning meets outcomes, the emphasis on assessment has created an entire industry of software products and administrative positions. "I can attest that we are drowning in processes," she said.

As for making decisions about what to include or leave out of the curriculum, Jensen pointed to the growing population of adults over age 65. When students think about a career path and specialization, she said, "very few raise their hand and say, 'I can't wait to work with older adults,' even though that will be the reality for many of them." Her question: "Should an indicator of excellence in physical therapy education include evidence in preparing all learners to meet the needs of an aging population?"

A Lifetime of Learning

Learning environments generally focus on extrinsic motivation, Jensen asserted: normative reward-punishment structures such as "grades, passing the next exam, and getting the best clinical experience." But intrinsic motivation is necessary for deep learning, positive well-being, and higher creativity and engagement. Jensen said, "We need to remember that education is not the filling of the bucket but the lighting of a fire" that intrinsically motivates a student to continue to learn.

And continuing to learn is essential in the health professions. "Given rapidly developing knowledge coupled with the complexity of health systems, we cannot keep pace with everything that needs to be in professional education," Jensen said. "We need to prepare learners to become expert learners who are building a foundation for future learning."

Education Research

The 2017 "National Study of Excellence and Innovation in Physical Therapist Education" by Jensen and colleagues, published in *PTJ: Physical Therapy & Rehabilitation Journal*, included nine action items that identify potential areas where education research is needed. Jensen noted that four of them "address urgent health needs and providing grounding for programmatic research:

- Develop a continuum of professional performance expectations.
- Focus curriculum content on societal needs for physical therapist practice.
- Devote significant resources to enhance diversity in the profession.
- Educate students to become moral agents as health care practitioners.

"If we are serious about challenging social injustices," Jensen said, "then we need education researchers who understand and apply critical theory that can examine, expose, and challenge inequities that can in turn be a powerful voice for change."

Returning the Athlete to Performance After Shoulder Injury

Presented with humor and science, "Examination and Rehabilitation of Upper Extremity Injury in Athletes Part I," sponsored by APTA Hand & Upper Extremity, provided the audience a wealth of information. George James Davies, PT, DPT, ATC, MEd, FAPTA; Todd S. Ellenbecker, PT, DPT, MS; and Robert C. Manske, PT, DPT, MEd, contributed to the session.

Speaking for Manske (who was snowed in in Kansas), Davies said that it is vital to determine the pathology by first doing a subjective history with the patient. "The subjective examination includes such things as MOI, previous injury, onset, activities that cause symptoms, loss of sensation, and popping," he said. He continued that it's important to note whether it was a traumatic or insidious onset and what process bothers the injured area the most, such as throwing, serving, or pushups.



Patient-reported outcomes are useful tools to address patients' limitations, continued Davies. He mentioned the Disability of Arm Shoulder Hand; American Shoulder and Elbow Score; Simple Shoulder Test; and Shoulder Pain and Disability Index. In addition, Davies noted that the Kerlin-Jobe Clinic Orthopedic Score is especially useful, "as there is no ceiling attached."

Ellenbecker noted that the shoulder examination does not occur in isolation. "C-Spine clearing is extremely important," he said. He suggested the Spurling's Maneuver and elbow joint screening to look for replication of the patient's shoulder symptoms. "Do neurovascular tests to look at responses to certain positions in order to rule out nonshoulder areas."

Ellenbecker said that documenting shoulder range of motion is necessary. "Checking an internal rotation measure is so important in treatment. Don't just guess, use a measurement device. By eyeballing you can be 10 degrees off, and that is not accurate enough," he said. "Also, it is important to know if the athlete can reach across their body, so perform the Shoulder Horizontal Cross Body Adduction."

Davies said that returning to sport is not so simple. For example, 62% of baseball players return to their sport, but only 45% return to same performance level. The percentage is even lower in overhead sports. "There is an absence of agreed upon sports metrics for returning to a sport," Davies noted. "No one test is the Returning the Athlete to Performance After Shoulder Injury best test, so we need to use multiple tests for corroboration and to find the cause of the problem and then develop the clinical treatment."

Saying that better tests are needed, Davies continued, "A checklist for clinical decision making to discharge the athlete back to activity should be designed, so that treatment is based on an algorithm. If the patient can't do a test, focus on that activity in rehab. If they can do the test, progress them to next level test."

Davies said that we can never replicate in the clinic what the actual demands are in returning to the sport. Variables such as the crowd, adrenaline, the routine, warmups, etc. can affect performance. However, he said the Closed Kinetic Chain Upper Extremity Stability Test is the "gold standard. Research in collegiate football showed that those who scored 21 touches had fewer injuries."

Encouraging Annual Physical Therapy Visits for the Aging Population

Speakers Tara Connors Smith, PT, DPT, and Michael Puthoff, PT, PhD, described how to best introduce an [annual physical therapy visit](#) into practice in their presentation of "Integrating the Annual Physical Therapy Visit for the Aging Population Into Clinical Practice," sponsored by APTA Geriatrics. Contributing to the session but not available to present were Hadiya Green Guerrero, PT, DPT, and Gina Pariser, PT, PhD.

Puthoff began by citing the APTA House of Delegates position, which recommends, in part, that "all individuals visit a physical therapist at least annually to optimize movement and promote health, wellness, and fitness."

The physical therapy annual visit focuses on movement function and falls as opposed to the Medicare annual visit, which covers medications, risk factors for disease, cognitive impairments, and more. "Setting up the physical therapy Encouraging Annual Physical Therapy Visits for the Aging Population annual visit benefits both the clients and the therapist – to promote and broaden physical therapist services," said Puthoff.



He listed the following factors to focus on during the visit, noting that the session can be completed in about 30 minutes: fall prevention; sarcopenia (muscle and bone loss); ability to do activities of daily living; social determinants of health; and postural changes that might predict other issues.

"Our screening tools shouldn't be the same as a physician's," said Puthoff. "We don't want the client to feel like this is a waste of time." He then referred to the "Annual Physical Therapy Visit for the Aging Adult" documents that APTA and APTA Geriatrics developed, which includes intake forms, a four-page report card, tools, and tips.

Connors Smith gave instructions on how to implement the various tools in the documents. "This is just a screen to show the client how they are doing," she said, noting that it can be used virtually or in person. "The results lead to actional recommendations if there are concerns or deficits found."

Connors Smith said the intake form is completed prior to the visit. The sections of the annual visit form include the interview, performing resting vitals, a general movement screen, physical function tests, and consultation. "Detailed descriptions and scripts are included, she said. "All documents are [posted on the APTA website](#) in Word for easy adjustments to meet your clinic's needs."

The Pandemic Doesn't Mean Curtains for Performing Artist Conditioning and Wellness

The disruption caused by the coronavirus pandemic affected everyone, but performing artists were especially hard-hit. For artists whose genres involve more intense physicality – dancers, musical theater actors, figure skaters, and singers, for example – the situation was even more dire: Many lost not only performance opportunities (and often, income) but potentially technique, as studios, rinks, and practice spaces shut down.

Marisa Hentis, PT, DPT; Brooke Winder, PT, DPT; Tiffany Marulli, PT, DPT; and Kristen Schuyten, PT, DPT – four physical therapists who work with performing artists – saw, firsthand, how hard the pandemic was on performers. But they saw something else, too: how the disruption forced artists, teachers, and therapists to take a new look at how to maintain skills and stay healthy, both physically and emotionally.

The four therapists shared their experiences in the session "Performing Arts Care in a New World: Reimagining Our Approaches to Training, Rehabilitation, and Resilience-Building," sponsored by the APTA Academy of Orthopaedic Physical Therapy. The session covered not only how the performers dealt with their time in lockdown (with or without having COVID-19), but how providers screened for return to performing, the opportunities that emerged for emphasizing wellness, and lessons learned about providing telerehabilitation.

Hentis gave the audience a sense of what the pandemic lockdowns were like for dancers, musical theater performers, and figure skaters. While their training challenges differed, the bottom line was that none could do all that they needed to do to stay in top condition. Without safe, large-enough studio space, dancers couldn't jump or go on pointe (and partner work was out of the question); theater actors cooped up in smaller living spaces couldn't speak or sing at high enough volumes; and figure skaters lost ice time entirely or opted for outdoor rinks with sometimes-unstable surfaces.



Studios, trainers, and coaches — sometimes informed by PTs — often introduced other activities to help round out the performer and keep them healthy, Hentis explained. The disruption put a brighter spotlight on rest and mental health, potentially leading to more extensive, remotely delivered wellness plans that often prompted performers to attend to parts of their bodies that they may have overlooked during more focused training.

Winder reviewed how the biopsychosocial model applies to performing artists and explored ways that PTs are uniquely positioned to provide performers with wellness education — not just during the pandemic but as an ongoing facet of care. "We need to continue to zoom out as we focus on talking to performers about their wellness," she said.

Marulli shifted the focus to return to performance for the artist who's had COVID-19. One of the main dangers, she explained, is the tendency for recovering performers to underestimate the deconditioning they experienced while sick and then taking on too much too soon when they feel better. Injury is often the result.

The key, Marulli said, is periodization — minimal training at first with a gradual buildup in volume or activity before introducing modifications to those activities, being careful to adequately space out training sessions. Skaters may find the slow return a little more challenging than other performers, she added, because "it's very hard to simulate the feel of the ice and the grip of the skate on the ice."

Schuyten looked at the role of telehealth in the treatment of the performing artist. Given the absence of national telehealth regulatory policy, telehealth use depends on state laws and regulations, Schuyten explained. In almost all cases, providers need to be licensed in the state in which the patient resides and must abide by that state's regulations. However, she added, that doesn't mean a provider can't practice across state lines (provided telehealth is permitted) — something that can be facilitated when states participate in the Physical Therapy Compact.

Besides the obvious advantages of virtual care delivery when in-person care isn't possible, telehealth has other things going for it, Schuyten said — among them is the opportunity to collaborate with other providers, coaches, and trainers.

Complexity of the Movement System Lends Itself to Nonlinear Data Analysis

Sarah M. Schwab, PT, DPT, MA, and Francis M. Grover, PhD, were the presenters of "Theme and Variation: Capturing the Complex, Adaptive Nature of Motor Behavior With Nonlinear Data Analysis," a session sponsored by the APTA Academy of Research. James Cavanaugh, PT, PhD; Paula L. Silva, PT, PhD; and Michael A. Riley, PhD, collaborated on the presentation but were not present.

Schwab talked about the difference in using linear and nonlinear analytic approaches in research and emphasized the benefits to using nonlinear approaches. "The movement system has a complex adaptive nature that lends itself to nonlinear approaches. There is nothing wrong with linear approaches, but are we capturing the complex motor behavior when we use this approach?" she asked.

Schwab continued, "The human movement system must be able to achieve contrasting goals — stability and flexibility." The body needs adaptable, flexible mechanics for different environmental conditions, social situations, and tasks, she said. "Our clients' complex symptoms exhibit nonobvious and non-linear causal dynamics."

Linear time-independent metrics collapse all trial values into a single metric, such as the mean, she said: A change in x creates a proportional change in y. "Nonlinear time-series analysis, in contrast, considers the order of presentation and finds meaning in what a time-series looks like. The structure of a time-series can be very informative about underlying motor behaviors – for instance, how adaptable a system is." She added that nonlinear analyses are able to quantify differences in structure to inform human motor behavior.

Schwab said that entropy indicates the probability that a pattern of behavior will be followed by a similar pattern of behavior. "Entropy metrics may be able to provide insight into nonobvious changes to the motor control system that are unable to be detected through traditional clinical assessments," she added.

Grover provided an overview of recurrence quantification analysis. RQA identifies moments when something has visited a state that they have previously visited. "It is a visual analysis where you are able to plot your values on a grid to see where values match up on the x and y axes. In RQA, every plot will have a diagonal line but not necessarily a reoccurrence," Grover said. For data with reoccurring points, you can see a mirror of moments of repetition on each side of the diagonal line.

"RQA of continuous behavioral data is not, however, a simple matter of comparing values against themselves over time," he added. "The movement system is a complex system, with a large number of components interacting nonlinearly across many different scales. One-dimensional observation of that system, like force or position, may not reflect the full dimension of the system's behavior."

More Research Needed on Impact of Social Media on Pediatric Pain and Health

While evidence is lacking about the relationship between social media, mental health, and pain, there are indications of correlations between bad social media experiences and chronic pain in children. Presenters for the APTA Pediatrics session "The Social Dilemma: The Impact of Social Media Use on Pediatric Pain and Health" gave their insights on those correlations, given that it's well within the scope of physical therapist practice to address mental health in terms of its impact on the effectiveness of physical therapist interventions.

Megan Steele, PT, DPT, opened the session with definitions of social media, digital media, and social networking and networks, noting that the largest social network sites are Facebook (and Facebook Messenger), YouTube, WhatsApp, and Instagram. She discussed some indicated impacts of social media use on physical health, such as vision problems (increases in and earlier onset of myopia diagnoses), poor posture, overuse injuries, obesity, cardiovascular disease, and sleep disturbance – the last of which is linked to chronic pain.

She recommended limiting screen time at least 30 minutes before bedtime, keeping screens out of the bedroom, and positioning devices to reduce stress on the head, neck, and upper extremities.

Adamiak-Pellow, PT, DPT, described studies on the impacts of screen time on children, such as one study of children up to age 5. The results were inconclusive, she said, but they indicated social isolation, cyber-bullying, and predatory behaviors, among other impacts.

In adolescents, she described studies indicating that individual responses to social acceptance or rejection were similar between social media and in-person life, but that the responses to social media came at a greater rate. Getting "likes" on social media, she said, activated brain responses similar to those for

pleasant taste and monetary rewards.

The final presenter, Derrick George Sueki, PT, DPT, PhD, discussed links between social media use and mental health and, subsequently, changes in pain perception. The connections aren't well-researched, he said, but one small study (25 participants) tracked college students for a week, assessing their volume of social media use and whether their experiences were positive or negative. The indications? Higher incidence of negative experiences, and particularly the most recent experience, impacted measures of pain pressure threshold and quantitative sensory testing. "It is not so much the amount of use," he asserted, "but more the experience of the use." Because the study was so limited, Sueki called for expanding research to more participants and to include factors such as age, gender, ethnicity or race, and socioeconomic status.

In the ongoing debate over whether social media is good or bad, Steele noted studies saying that social media as an academic or public health tool can be beneficial in reducing BMI and influencing nutrition interventions. Sueki pointed to its use in finding connections and support in tough times. Adamiak-Pellow asserted that social media "isn't going anywhere," so parents need to engage in conversations, provide guidance to promote safe and appropriate use, hold designers accountable for their products, and understand how their children use it.

Plugging Into Wound Care: Leveraging Evidence for Biophysical Energies to Gain FDA Approval

The use of biophysical energies for wound healing is supported by solid evidence, but its use – and U.S. Food and Drug Administration approval – are lagging behind. What's up with that?

That disconnection was the focus of a presentation sponsored by the APTA Academy of Clinical Electrophysiology and Wound Management. Presenters Daryl Lawson, PT, DSc; John Tawfik, PT, DPT; and Thomas Nolan, PT, DPT, led attendees through the basics of electrotherapy, its effectiveness, and what needs to happen to facilitate FDA approval for use in wound management.

Although he wasn't the first speaker, Tawfik was the presenter who made the case for electrotherapy in wound management. His presentation explored the research that supports electrotherapy's use in assisting healing in pressure injuries, arterial insufficiency ulcers, venous insufficiency ulcers, and diabetic ulcers.

According to Tawfik, the research supporting the use of electrotherapy should be used "as an opportunity to say that e-stim is a very underutilized intervention."

Lawson explored the potential for electrical stimulation to be officially recognized by the FDA, given that the FDA's current "intended use" doesn't include wound care.

He pointed out that, currently, the use of electrical stimulation for wound care is considered an "off-brand" approach, and he spelled out the ways the case could be made for FDA approval through evidence related to the effects of temperature, leveraging the so-called "skin battery," and stimulation of cytokines that trigger healing.

Nolan focused on diathermy, pulsed electromagnetic fields, and pulsed radio frequency – areas of wound healing that are sometimes overlooked.



According to Nolan, the use of radiofrequency energies shows promise as a way to facilitate healing — particularly through the use of pulsed electromagnetic fields and pulsed radio frequency. "There's a need for further investigation, but the promise is good," Nolan said.

Using Data — and a Commitment to Care — to Inform Post-Acute Care Payment

"Theory is nice. Practicality is nice. But what we can't afford to do is impact access and quality of outcomes."

That's how Ronald "Bud" Langham, PT, MBA, describes at least part of the debate around what could be a major federal payment shift: the adoption of a single prospective payment system that would apply across all postacute care settings. Langham offered the observation during a presentation focused on a study, sponsored by APTA and the American Occupational Therapy Association, that helps to make the case that therapy tailored to a patient's circumstances and individual needs is crucial to achieving the best outcomes.

The APTA Home Health session, "Therapy Outcomes in Postacute Care Settings Study: Implications for Postacute Care Reform," featured a dive into last year's APTA-AOTA study of 1.4 million Medicare beneficiaries who received post-acute care, bookended by discussions of why the study's findings are so timely.

Langham is familiar with the policy discussion: He's APTA's representative on a technical expert panel advising the firm in charge of developing a prototype single prospective payment system for post-acute care, referred to as a PAC PPS. He was joined in the presentation by Kate Gilliard, APTA director of health policy and payment; and Jason Falvey, PT, DPT, PhD, who served as a methods advisor for the APTA-AOTA study, also known as TOPS.

Gilliard explained one of the biggest whys for the study — a 2014 federal mandate for the Centers for Medicare & Medicaid Services to develop a one-size-fits all PAC payment system for consideration, possibly as early as this summer. Many provider and patient organizations have serious concerns about how a poorly conceived system could affect patient care, she explained, and the TOPS study underscores the need for a careful approach.

"What we're saying is, if you're going to do it, you should do it right and base it on valid data," Gilliard said.

Falvey provided highlights of the study, which offers three major findings: the PAC patient population is composed of people with distinct, complex conditions and comorbidities; the intensity of therapy is strongly associated with improvement in everyday function among patients; and the PAC patients with the fewest minutes of therapy are at the highest risk for rehospitalization and PAC readmission. According to Falvey, those findings were consistent across all PAC settings.

Transitioning to policy implications, Falvey told attendees that the data should give CMS pause.

In addition to paying attention to the data, policymakers should be mindful of context and the sheer practicalities of implementing a PAC PPS: that was the message Langham delivered in his portion of the session. While he's prevented from sharing details of the policy development meetings he's attended, Langham did explain the perspective he brings to the table.



"There are other things to consider outside of sterile claims data," Langham said.

According to Gilliard, the work product of the closed-door discussions could be revealed as early as this summer, when the prototype is expected to be presented to Congress. Legislation to change the requirement for a PAC PPS is already in the works, she added, and stakeholders should be prepared to make their voices heard.

The Patient Wins When You Engage Them in Gamification for Therapeutic Exercise

Head-to-head competition among those attending the American Academy of Sports Physical Therapy session "Gamification of Youth Sports Physical Therapy" resulted in the crowning of the "U.S. Balance Champion." Determining who would be the last one standing after several balance contests showed how physical therapy with competition can be fun.

In their presentations, speakers Mitchell Selhorst, PT, DPT, PhD; Megan Marks, PT, DPT; Brittany Selhorst, PT, DPT; and Kristin Bastian, PT, DPT, further provided reasons to add gamification to physical therapy for young people.

Mitchell Selhorst said that up to "70% of patients are nonadherent to prescribed exercises. Many patients find no value in the task and so they drop out." But a good game is addicting, he said, and "we want our kids to become addicted to therapy." Certain steps should be taken when designing games in physical therapy, said Selhorst. These include:

- Have a therapeutic intent.
- Create an objective win or loss criteria that is clear to the patient.
- Add a few rules (but call them goals) to make it the right difficulty, such as a measure of time or distance, or competition between gamers.
- Make it fun.
- Consider safety: There's no need to treat for another injury.

Also, "Remember HIPAA," said Selhorst. "The patient's initials are protected health information. The kids can come up with fun code names to put up on a bragging board."

Brittany Selhorst said that special tech equipment is not needed for gamification. "Physical therapists have common equipment that can be used for gaming such as the half-foam roll, stretch band, therapy ball, Jenga, scooters, etc. These can all be turned into games for athletes," she said. In fact, something as simple as Post-it Notes can be used: Patients can jump up and stick one on the wall above other people's. Or "do bear crawls, bunny hops, scorpion crawls, or frog hops beside the patient, with the goal to cross the finish line first," Selhorst said.

One of the favorite things her young clients enjoy is to slam the therapy ball down and run under it without letting it touch them. "They do as many as they can in 30 seconds. This helps them work on endurance and agility."

Sometimes equipment can create more engagement and excitement, however. Marks and Bastian described both low and high-tech equipment that PTs can buy. Low tech includes items such as multisided reaction balls, while high tech refers to virtual reality games and programs, Bastian said.

"By using different levels in your therapeutic exercises, you can design the appropriate level of difficulty for your patient and allow them to continue to improve," Mitchell Selhorst said. "Not every idea is a winner; keep adapting as necessary."

Openness and Gratitude: Crane Lecture Takes Attendees on a Powerful Journey

Coming away from the 2022 Linda Crane Lecture delivered by Steven Tepper, PT, PhD, FAPTA, it was hard to nail down what had just taken place. Was it a treatise on mindfulness? An exploration of cardiovascular cell differentiation? A testimony to the value of friendship? A call for reimagining physical therapy education? A participatory clapping concerto (more on that later)?

The answer, of course, is all of the above – which probably comes as no surprise to anyone who knows Tepper's reputation for combining clinical insight, philosophy, humor, and his own life story to get his message across. During his presentation of the APTA Academy of Cardiovascular & Pulmonary Physical Therapy event, Tepper provided a kind of rhetorical fugue, introducing and expanding themes, working in counterpoints, turning surprising corners, but ultimately delivering something that held together – even if it was hard to say how, exactly.

Titled "Heart Strings: Stories of Love, Appreciation, and Cycles," the lecture at its core was a call for gratitude, mindfulness, and openness to possibility. "Don't expect anything too intellectual; that's not me," Tepper told attendees.

But that wasn't exactly true. In addition to his calls for savoring life's most seemingly insignificant moments, bolstered by quotes by everyone from Benjamin Franklin to Lester Burnham (lead character in the 1999 film "American Beauty"), Tepper's presentation also managed to slip in some fairly clinical content on "the structural and functional components of a cardiomyocyte" – even if it served as a way to make a point about his own life experiences.

Tepper said that his path was instilled in him by his parents early on. "I learned from them that money was not important," he said. "What's important is doing something that's going to benefit people." For Tepper, becoming a physical therapist and an educator has enabled him to pursue that goal.

Tepper's emphasis on taking a breath, reconsidering assumptions, and focusing on what's truly important extended to physical therapy education, where, he said, "we teach too much." "Our students are coming out of programs and they're saying, 'I don't want to learn anything again. I can't take it,'" Tepper said. "We've got to start thinking foundational."

Later in the lecture, Tepper described the vision of his company, Rehab Essentials, which provides curriculum support to physical therapy programs via hybrid learning models that deliver agreed-upon core knowledge.

Tepper also shared his own diagnosis of HPV-related throat cancer in 2020, and the ways it reinforced his belief in the power of gratitude.



As if that weren't enough, near the end of the lecture Tepper took a musical turn. Inviting many of the people he had recognized who were present onstage, he asked them to close their eyes. Then, wielding a conductor's baton, Tepper led the audience through an impromptu performance that followed his directions for applause, from right to left, from soft to loud. The result was mesmerizing for the audience; the attendees onstage seemed genuinely blown away.

"I have always used death as my advisor," Tepper said as part of his concluding remarks. "It sits on my shoulder and reminds me that life is not permanent. Even while most of the time I live in the illusion that life is permanent, having knocked at its door I know this isn't true. We are but soft squishy animals that could work together and become much, much stronger, and this is my dream."

Using Teaching Strategies That Help Students Build Adaptive Expertise

Faculty should ask students what would they do, not what could they do, said Susan Perry, PT, DPT, MS, in opening "Engaging Students in the Evidence: Active Learning Strategies for Physical Therapist Education," a preconference course sponsored by APTA's Academy of Neurologic Physical Therapy. And then, she continued, "ask why they chose a particular intervention."

"To build adaptive expertise," she explained, "educators should consider how to facilitate students' ability to make decisions under uncertain conditions." Perry added that learners must:

- Stop to reflect on practice.
- Recognize when a routine approach will not work.
- Think critically to challenge assumptions and beliefs.

Other presenters were Laura S. Plummer, PT, DPT, EdD, MS; Wendy M. Romney, PT, DPT, PhD; Heather Elizabeth Knight, PT, DPT; Kirsten A. Potter, PT, DPT, MS; Martha Freeman Somers, PT; and Jane S. Baldwin, PT, DPT. Plummer, Romney, Knight, and Baldwin are board-certified clinical specialists in neurologic physical therapy.

Plummer told attendees that in traditional education, learners sit in lectures for three hours but that this can stifle the learning process. "We have changed that to using three hours of class time focused on practicum learning," she said.

Plummer said that teaching retrieval strategies strengthens the neural pathways, noting that retrieval needs to be spaced out so that there is effort put into it. Retrieval practice can include using clickers to answer questions, brain dumps, and using scratch ticket multiple choice cards.

Baldwin said that learning occurs in realistic settings and that prior knowledge affects current learning, suggesting, "when planning learning activities, think about how to activate students' prior knowledge." In addition, she said, "learning strategies that are likely to result in errors mean stronger learning."

One way Baldwin uses retrieval in her teaching is to revisit cases after her students have learned new information. For instance, after learning more about balance tests, the student uses new information to potentially change their strategy on treatment for a particular patient case study.



Potter spoke to integrating the clinical practice guideline "A Core Set of Outcome Measures for Adults With Neurologic Conditions Undergoing Rehabilitation" into the classroom. The CPG was developed in an effort to streamline assessments used across patients with neurologic conditions. The guidelines establish the minimum measures needed to quantify function in the constructs of balance, walking speed, walking endurance and distance, and transfer ability.

Potter compared the 11-week course to an odd mix of a sprint and a marathon. "We want to know what foundational knowledge the students have," she said. "What is their familiarity with EDGE resources and the Rehabilitation Measures Database? Do they understand psychometric data and how to use and interpret data?"

"Students need to develop a comprehensive examination plan for clients," she continued. "They need to decide which core set measures are appropriate and what should be incorporated into the plan for examination. Students should leave our program knowing how to interpret the seven-core set and how to use EDGE or RMD," said Potter.

She described using a flipped classroom. "Prior to the first lecture students watch a prerecorded video covering EDGE and RMB taught via case methodology. They then come to class and start with an initial activity of creating a word cloud on what comes to mind when you see 'outcome measure?'" Lecture comes next with lab activities that include exploring online resources and practice administering and scoring core measures.

Research on Individuals With Limb Amputation Highlights the Role of Physical Therapy

As research on care for individuals with limb amputation continues to grow, so does appreciation for the physical therapy profession's potential to improve outcomes and advocate for more equitable access to appropriate devices and treatment. This year's annual APTA CSM roundup of relevant studies made that connection abundantly clear.

Sponsored by the APTA Federal Physical Therapy Section, presenters Ignacio Gaunnaurd, PT, MSPT, PhD; Chris Doerger, PT, CP; Sheila Clemens, PT, MPT, PhD; and Benjamin Darter, PT, PhD, took attendees on a quick tour of recent research that covered everything from the effectiveness of platelet-rich plasma for chronic wounds to guided motor imagery. While the research topics varied widely, the common message was clear: PTs and PTAs need to be paying attention, because the issues being explored have direct relevance to their work.

Here's how the roundup unfolded: Gaunnaurd focused on biomedical research areas that included the platelet-rich plasma study (bottom line: potentially useful for lower-extremity diabetic ulcers, the jury's still out on pressure ulcers), ankle brachial index testing, Research on Individuals With Limb Amputation Highlights the Role of Physical Therapy targeted muscle reinnervation, and the long-term success rate of bone-anchored prostheses.

Doerger devoted her presentation to research on microprocessor-controlled knee prostheses and their potential for wider use. She shared research about whether these devices are cost-effective (they are), whether individual patient characteristics should at least partially determine the use of the prosthesis (yes), and the idea that the devices should be available to individual patients at a wider range of functional status (they should).



Clemens targeted assessment of individuals with limb amputation, sharing the results of five studies that addressed gait asymmetry, strength deficits, the use of the two-minute walk test, assessment of fall risk, and the selection of outcome measures.

Darter brought the discussion around to research on interventions, focusing on the importance of rehabilitation training, dual-task balance training, gait rehab, and guided motor imagery. His remarks on the studies he shared could be applied to nearly every study presented in the session: "I think this is a call to us as PTs to say, 'Hey, we need to see these things start translating out for us to be able to use.'"

Hiring and Keeping Talent Takes Strategic Thinking and Planning

For the many smaller private practice owners or managers who've been affected by "the great resignation," the APTA Private Practice Section session "Innovative Employment Models for Private Practice PTs," offered ideas to transform staffing challenges into opportunities.

Among other things, speakers Will Humphreys, PT; Bart McDonald, PT, MPT, board-certified electrophysiologic clinical specialist; and Dimitrios Kostopoulos, PT, DPT, MD, PhD, DSc, board-certified electrophysiologic clinical specialist, outlined strategies for acquiring and maintaining physical therapy talent in their practices. (Kostopoulos' and McDonald's presentations were via video recordings.)

Kostopoulos identified several hiring challenges for private practices, such as competition from larger hospital organizations and physician-owned practices, and payment from insurers that has not kept up with inflation. A solution? Attract the right staff and motivate them to produce additional low-cost revenues, such as electromyography and musculoskeletal ultrasound diagnostics. He then walked the audience through phases of hiring, even providing a sample job ad for a physical therapist.

He described a pre-interview and interview process that starts with questionnaires sent to all applicants that are reviewed to select candidates for an interview. For initial interviewing, he suggested a group approach, with two or three candidates together either live or remote, allowing the interviewer to observe interactions. Next comes a problem-solving skills assessment, and, finally, one-on-one interviews with each remaining candidate.

Once someone is hired, adequate job orientation and training are essential. Kostopoulos also stressed the importance of creating a game atmosphere – in which employees can overcome barriers to achieve "wins" such as with key performance indicators. "Organizations without games for their employees and associates become stagnant and cultivate a '9-to-5' job culture," he said.

Building on Kostopoulos' discussion of hiring practice, Humphreys outlined steps for success, starting with investing in talent acquisition. "Our team," he said, "is more valuable to us than our patients or referrals." He focused next on the job offer, saying that "a perfect job ad can't make up for a bad offer." Five components of a powerful job offer, he provided, are compensation, education opportunities, insurance, special programs such as loan repayment and relocation assistance, and opportunities for growth.

Finally, he addressed the job ad. "A poorly written job ad can make it harder to hire PTs," he said. It should contain five elements: a hook, a value-based description, benefits and features, job requirements, and a call to action. Mistakes to avoid, he continued, include not spending enough time on them, being unoriginal, having unrealistic expectations, and adopting a tone that emphasizes "me, not you."



Echoing the payment challenge in hiring PTs, McDonald said the two greatest threats were enormous student debt and limited job stability, the latter of which refers to factors such as increasing copays that keep patients from seeking services.

Like Kostopoulos, one solution he suggested for a private practice to consider is implementing diagnostics such as electromyography and musculoskeletal ultrasound in the practice. This could improve patient outcomes, potentially save money in avoided MRI and surgical costs, and increase revenues at the practice that can be passed on to employees, "creating a success plan for therapists to become debt-free."

Acute Care Physical Therapy Provides Opportunity to Develop Master Adaptive Learners

Kristin Curry Greenwood, PT, DPT, EdD, MS, offered her thoughts on using master adaptive learning in acute care in her delivery of the Acute Care lecture, "Adapt and Fear Less: Leadership in Acute Care Practice, Education, and Research."

Greenwood drew from several definitions of "leadership," including anthropologist Margaret Mead's "Never doubt that a small group of thoughtful, concerned citizens can change the world." From that, she noted, "APTA Acute Care may be small, but we are mighty, vast in experience, and well-positioned to change the future of health care because we have access to all the interprofessional health care entities during our day-to-day interactions."

Regarding adaptive leadership, she said it was a cultural shift from relying on technical challenges to fix a system that's "broken" toward creating a team that is adaptable to what comes its way. "The acute care profession has undergone several adaptive changes in recent decades," she said, "including development of entry-level core competencies for physical therapists and physical therapist assistants, defining specialty practice, and development of multiple clinical practice guidelines to advance our practice."

The acute care setting, she said, is a rich opportunity to develop master adaptive learners. "Acute care is known to foster the development of interprofessional collaboration, individual contributions, and individualized care amid a complexity of sometimes answers not known."

But knowing this, and knowing that adaptability is key to all facets of physical therapist practice, "then why don't we have students in all teaching hospitals all the time?" Greenwood asked. By doing so, we foster our own learning and keep practice current.

She asked the audience to "consider how decisions on limiting students, sometimes out of our own control, miss opportunities to expose our students to our care. Consider where we may be missing opportunities to further our clinicians as adaptive learners through a more robust student program to further our workforce."

Greenwood said true leadership is developed "in a fearless culture where individuals feel safe, know their expectations, and, more important, have permission to fail." She continued, "when we make someone fearful of their place or their performance, we limit their ability to learn. We promote their ability to fail."

Greenwood closed by calling on the audience to "be wide as you think about the profession." She then directed advice to specific cohorts within the profession: Students: Learn and study knowing someone's life depends on everything you learn. Emerging leaders: Seek all the mentorship you can; ask questions, be

curious, and seek opportunities. Established leaders: Consider how you can do more to promote an adaptive, fearless culture.

Speakers Encourage More Men to Practice in Pelvic Health

The APTA Pelvic Health's session "Representation in Pelvic Health: Experience of Men Treating Pelvic Health Disorders – A Panel Discussion" started off with a question: Why are so few men in pelvic health physical therapy? A survey that the presenters conducted of DPT students provided insight on barriers that dissuade men from learning and practicing in that field.

"The biggest response was concern about liability and being sued," said Jake Bartholomy, PT, DPT. "I don't think a question about foot and ankle treatment would have the same response," he added, indicating the sensitivities of practicing in pelvic health.

Other concerns were related to knowledge gaps. Bartholomy explained that most learning happens post-professionally, and when students consider the years they already have spent in school, they don't want to immediately go back for continuing education learning, with its added costs and time.

Training also can be a challenge, with some women and men being uncomfortable in each other's presence in the labs. Someone who's the only male learner might have to provide their own partner when students need to be paired up.

From there, the presenters discussed how the profession might encourage more men to take up pelvic health physical therapy. Bartholomy said learning can happen beyond continuing education, for example, by networking with others in the field. In fact, he said, "All PTs would be better PTs if they had pelvic floor training, even if they don't do internal pelvic physical therapy." It would help for back, hips, and other musculoskeletal issues, he asserted.

Discussing his path to pelvic health physical therapy, Daniel J. Kirages, PT, DPT, said it began when he was asked if he had interest in pelvic health physical therapy early in his career. "I thought, this might make my patient schedule a little more interesting," he recalls, "and my skill set could be a little different from some of my colleagues," which would create opportunity.

To be clear, the need to include more men in pelvic health is two-fold: It involves men seeking help as pelvic health patients as well as men who are pelvic health physical therapists. Two presenters spoke from both perspectives.

Via video recording, Chad Woodard, PT, DPT, explained that after being approached by a urologist about treatment for the pelvic floor, he took an introductory course. And he realized that he was experiencing issues that pelvic health physical therapy could address. Once he began treating male patients and seeing how much good he could do, he said he felt impassioned to help men with urinary incontinence and dysfunction.

Grant Headley, PT, DPT, shared the experiences he had after being injured in a cycling accident that caused pain and sexual dysfunction. He was being seen by urologists while in PT school, with little success. Eventually, he was diagnosed with hypertonic pelvic floor muscle disorder and began physical therapy. "I



finally had a real diagnosis, and someone in my field – physical therapy – had an answer," he said. "My own treatment became the gateway" to books, courses, and other learning that led him to pelvic health physical therapy.

Aquatic Therapy as Part of Effective Stroke Rehab Program

"Stroke and aquatics have been explored quite a bit with positive findings," said David Morris, PT, PhD, FAPTA, in opening the APTA Academy of Aquatic Physical Therapy session "Aquatic Rehabilitation to Promote Stroke Recovery." In addition, he said, "Gait, balance, and aerobic capacity all show better results in aquatics compared with land therapy."

Morris said that every year more than 795,000 people in the United States have a stroke. "Fifty percent will have long-term movement problems," he continued. "The damage goes beyond the lesion in the brain. Over time the patient may have continued problems because of lack of muscle use." These problems may include tightness, limited range of motion, and overexcited reflex reactions or spasticity.

"The deconditioning after a stroke is severe and rapid," said Morris, and the pool is an ideal place to recondition.

Morris cited numerous studies that showed aquatic therapy is more effective than no intervention for walking, balance, emotional status, spasticity, and physiological indicators. He also reminded attendees that "people have lots of potential throughout their life poststroke. Don't give up on someone just because their stroke happened long ago."

Morris also referenced studies that compared aquatic intervention with land-based interventions. "In 21 trials with 691 participants, aquatic therapy was superior in balance, walking, muscular strength, health-related quality of life, physiological indicators, and cardiorespiratory fitness," he said.

Fellow presenter Emily Dunlap, PT, gave the audience a list of things to consider before putting a patient in the pool the first time. "Land therapy might be better for patients who don't like water, are able to perform land exercise without significant challenges, or need to practice functional activities in their own environment," she said. "The pool is good for patients who need assistive devices and/or physical assistance, have limited ability to do a single-leg stance, have severe pain, have extreme weakness, or love the water."

She named some concerns to think about in placing subacute patients into the pool:

Dysphagia. Screen for appropriate behavior, provide close supervision, select low-risk pool activity, make sure their face is not exposed to water, and watch for signs of dehydration.

Orthostatic hypotension. Make sure the patient is hydrated, use compression garments if needed, be sure to exit the pool slowly, have them take cooler showers, and make grab bars and/or shower chairs available.

Incontinence. If the issues are urinary, have them empty their bladder before entering pool. If fecal, have them empty their bowels before entering pool, use an adult diaper, and if there is diarrhea, do not use the pool.



Diabetes. Monitor glucose, educate the patient and therapist on signs and symptoms, and keep a source poolside. "Warmer water and exercise will increase production of glucose," Dunlap said.

Open wound assessment. There may be waterproof dressings available but think about how much of a problem it will be if the dressing fails.

"Due to buoyancy in the pool, we are able to address weakness. You can allow the patient to lose their balance, as they will not fall as they would on land," Dunlap said. "You can provide less assistance, and the patient can do more. You can work on motor control in a more functional way."

Using Yoga as an Integral Part of Physical Therapy for Cancer Survivors



The science and practice of physical therapy interspersed with yoga practice and breathing was the focus of "Yoga-Based Physical Therapy for Survivors of Cancer: The Journey From Recovery to Wellness," a preconference course presented by APTA Oncology.

Marisa Perdoma, PT, DPT, demonstrated techniques that could be used with clients, including many breathing practices – some meant to calm, some meant to energize, and some meant to restrict, she said.

Ujjayi breathing, a sounded breath made by closing and opening the glottis, is used to create postural stability. "Controlling of the glottis helps create strength," said Perdoma. She had participants close their eyes and try to make a sound when exhaling from the back of their throat.

Kapalabhati breathing is used for cleansing. "This is a rapid, forced exhale [in short pumps/ breaths] while allowing the inhale to passively happen ... like a bellows," Perdoma explained. She suggested starting with a round of three, five, or 10 exhales and progressing from there. She said that research on this type of breathing indicates "improvement in cognitive function, reaction time, and pulmonary function."

Bhastrika breathing is rapid on the inhale and the exhale, like a sniffing breath. "The breath is from the navel," said Perdoma. This does not involve counting breaths but is timed for a number of seconds. Bhastrika breathing, she said, "can provide improvement in sleeping, quality of life, and anxiety or depression level."

Ellen Anderson, PT, PhD, provided a practical example of using sounds and breathing while working with clients. "Often, in the geriatric population, when we ask them to sit, they plop down and their feet go up in the air rather than stay on the floor," she said. "Have them hum or use vocalization while exhaling as they sit. It helps them control their descent."

Lori Zucker, PT, DPT, reviewed clinical trials on the effects of yoga on stress. "Populations showed a positive change in cortisol level, reduction in heart rate and blood pressure, and improvement in quality of life," she said. One study examined 25 clinical trials on yoga for the management of cancer treatment-related toxicities. These showed improvement in sleep disruption, cancer-related fatigue, and cognitive

impairment. Another study indicates that women with breast cancer can use yoga as supportive therapy for improving their quality of life and mental health, in addition to standard cancer treatments. "If you aren't addressing psychosocial and emotional treatment," Zucker said, "you are short-changing your clients."

Zucker said that the level of difficulty in any yoga pose can be modified. "Look at what the client needs, such as range of motion, strength, or balance," she suggested. Zucker led a Kundalini yoga session. This type of yoga uses chanting, music, breathing exercises, and repetitive poses. "The music resonates with your body," said Zucker. "I tell clients to pick songs that make them feel good. You have a physiological response to music."

The Right Tool for the Job: Outfitting an Equity Toolbox

If you want an action plan for your clinic, academic program, research project, organization, or community that promotes equity in health and wellness, Kathryn D. Lent, PT, DPT, PhD, and Shawn Marie Rundell, PT, DPT, board-certified pediatric clinical specialist, have just the resource.

Their recorded presentation sponsored by the APTA Health Policy & Administration Section, "Creating an Equity Toolbox for Physical Therapy," described numerous tools for all levels of engagement. But first, they provided assumptions and background to put the resources in context.

Lent acknowledged that we need to expect some discomfort and tension in addressing equity issues. And we will make mistakes, but that's part of learning, and "it's more harmful if we don't take action because we're afraid of it." She reminded participants that context and language change over time. For example, "a word such as 'queer' can be considered derogatory when it comes from an external source, but it was reclaimed over time by the community itself for empowerment."

It's also important to look at history from different perspectives, as "history" is different for each individual depending on their lived experiences. "This is not about blaming and shaming," Lent said, "it's about acknowledging, and then where do we go from here so we can be better in the coming years."

As for the practical tools, Lent and Rundell divided the toolbox into individual, organizational, and systemic levels.

General principles for the individual level are establishing trust by being authentic; asking rather than assuming a person's preferences, such as in language and pronouns; repeated training and communicating; and owning mistakes. "Sometimes we misstep," Lent reiterated, "and it's important to own and correct mistakes, rather than pretend they didn't happen."

Lent described how these principles would be acted on not only by clinicians with patients, but also by administrators with employees, educators with students and colleagues, researchers with participants and colleagues, and members of the community with each other. For example, equity goals should be part of employees' annual performance evaluations; educators should make time and space for check-ins; and community members should disrupt microaggressions in the moment.

Rundell discussed organizational and systemic toolkit elements. At the organizational level, general principles include creating connections, building community, minimizing bias, creating safe spaces, adopting accessible and universal design, and meeting foundational needs of individuals.



To create connections, she recommended storytelling, or narrative medicine, as it "allows us to listen, reflect, and learn from one another's experiences, and grow in our understanding of the complexities behind disparities and inequities." She noted studies that have shown that narrative medicine in medical school education can positively influence empathy and foster peer relationships.

Among other recommendations for organizations was minimizing biases by setting high expectations for patients, students, and employees. "When we lower our expectations based on assumptions, this can lead to inequities in care, may impede progress, or may change our expectations of certain individuals," she said. "For example, you may assume that a child in a wheelchair won't be able to rock climb. But with appropriate supports, it's completely reasonable that it's possible."

As with the individual toolkit, an organizational toolkit applies to clinicians, administrators, educators, and researchers.

Finally, a systemic toolkit involves advocacy, policy change, and interacting with government agencies, such as advocating for funding to create healthier communities with safe, accessible physical activity spaces.

Other Notables

- A banner in the convention center recognized the tireless work our PTs and PTAs have performed as essential health care providers in the face of the ongoing public health emergency due to the COVID-19 pandemic.
- APTA displayed this banner to acknowledge that the conference site was on the traditional land of indigenous peoples. From left are Genna Locklear, Duke DPT student and member of the Lumbee tribe; Pat McAdoo, PT, MEd, retired U.S. Public Health Service PT from Anchorage, Alaska; Nicole Taniguchi, PT, MPT, director of rehab for the Alaskan Native Tribal Health Consortium; Sarah Lyrata, PT, DPT, of the USPHS; and Natalie Weeks-O'Neal, PT, educator and member of the Fort Peck Nakoda tribe.
- Patient-first care. Strategic simplicity. Elite teamwork. These were some of the themes promoted by Lt. Gen. Robert Place when he addressed APTA's chapter and section/academy leaders prior to the start of the conference.
- Attendees flocked to an abundance of popular sessions such as this one, "Impact of Poor Nutrition on Pain Mechanisms and Central Sensitization," presented by Joseph D. Tatta, PT, DPT, CNS, and Carolyn Byl Dolan, PT, DPT.
- APTA's annual Celebration of Diversity made its debut at APTA CSM. As a fundraiser for the PT Fund, which includes the Minority Scholarship Fund and the Dimensions of Diversity Fund, it provided attendees a fun evening of food and dancing.
- Scenes From APTA CSM in San Antonio: The weather was cold, but APTA CSM remained hot, with over 9,500 registrants and 1,800 exhibitors for a total attendance of more than 11,000. Everyone brought their enthusiasm, curiosity, and attention to health and safety.
- APTA's [Fit for Practice](#) initiative provided morning yoga sessions open to all attendees.
- A morning event with Street to Feet was just one of several outreach efforts from PT in the Community, a grassroots initiative to help the local underserved communities in cities that we visit for national conferences – aligning with the House of Delegates charge that APTA "identify and promote opportunities ... to make a positive impact on the needs of vulnerable health populations." Street to Feet is a local group that facilitates 5K training of people experiencing homelessness in San Antonio. Volunteers helped participants work on strengthening and recovery techniques.