INTRODUCTION
Rebecca LeBuhn, Board Chair, Citizen Advocacy Center

Why is our topic Interprofessional Teams and Collaborative Practice? Because team practice is increasingly the reality of healthcare delivery.

AHRQ defines team-based care as follows:

The provision of health services to individuals, families, and/or their communities by at least two health providers who work collaboratively with patients and their caregivers, to the extent preferred by each patient, to accomplish shared goals within and across settings to achieve coordinated, high-quality care. But education & training, regulation, the structure of clinical practice, and evaluation of quality of care and patient outcomes

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haven’t kept pace. In all these areas, the “system” is only beginning to move away from thinking in terms of individual professionals and treating healthcare disciplines as distinct from one another – as we often say, in separate silos.

The program today and tomorrow will explore changes that are currently underway at academic institutions, regulatory agencies, and clinical settings, and will consider changes in outlook and in policy and process that still need to occur to keep up with the reality of team-based practice.

The Josiah Macy Foundation report, *Transforming Patient Care: Aligning Interprofessional Education with Clinical Practice Redesign* makes this observation:

> Historically, health professions education and healthcare practice have developed and functioned separately, with little recognition that the two are inextricably linked… The two realms should not be changed in isolation. Educational reform must incorporate practice redesign, and delivery system change must include a central educational mission if we are to achieve enduring transformation.

We begin with education. How can we expect an interdisciplinary team to function effectively if its members don’t understand what to expect from one another? That’s not likely to happen if various disciplines never encounter each other during their training.

We will learn about academic institutions where interdisciplinary education is taking place.

We’ll also learn about what is happening in the realm of continuing education (CE) and continuing professional development (CPD) to cultivate a team-oriented mindset and develop the necessary skills among practicing healthcare professionals whose initial academic preparation pre-dated any team-based curricula.
Next, we will examine challenges associated with regulating interdisciplinary teams. How do regulators address quality of care complaints lodged against a team as opposed to an individual provider? What if the causes of a lapse or error cannot be pinpointed? What are the mechanisms licensing boards use or could use to collaborate with regulators responsible for other professions? What efforts, if any, have been made to include the public – patients and their families and caregivers – in creating new patterns of regulation appropriate for changing delivery models? How could scope of practice reform, freeing professionals to practice to the full extent of their training and skills, facilitate the integration of team practice into healthcare delivery settings? The same question could be asked about institutional privileging standards and practices.

Tomorrow’s agenda covers aspects of team practice in the field – in in-patient and ambulatory settings. We will also hear a discussion about team structure and leadership. Experience thus far shows that there are many variables affecting the ability of teams to work effectively.

Preparing for this meeting, I came across an article in Health Leaders Media from 2010 entitled, “Team Training Slashes Surgical Morbidity, Study Says.” The study, which had been published in the October 20, 2010, issue of JAMA, was based on a VA medical team program that trained members of surgical teams to work collaboratively and to “challenge each other when they identify safety risks.” But, wrote HealthLeaders Media:

> The training encouraged team members – the scrub tech, the nurse, the surgeon, the anesthesiologist, etc. – to speak up if they had a safety concern, but simply telling the surgical team they are free to speak up doesn’t mean they will, (according to one of the study’s authors).

To create changes – in culture, in hierarchy – there need to be the structure and tools for change. The briefings and debriefings, explicitly guided by purpose-built checklists, provide the structure and tools that drive dialogue… Mere team training without this structured approach is unlikely to accomplish these same goals…

Our meeting will conclude with a look into the future. How should regulators evaluate the performance of teams and the effects of team practice on the triple aim: patient experience, patient well-being, and the cost of care? What is the proper role of regulation and certification in
evaluating teams? Assessing their performance? What evaluation techniques are available and practical? Direct observation is clearly one way of evaluating the performance of a team. But, is it realistic to expect wide use of such a resource-intensive approach? What other methodologies or metrics might work?

To quote the Macy Foundation again:

There is a paucity of rigorous measures to evaluate the impact of linking interprofessional education and collaborative practice. There is a need to support new scholarship in this area, including the development of evaluation protocols that go beyond process measures and identify the most effective models, tying them the Triple Aim outcomes. There also is a need to apply known scholarship in teamwork from other fields, such as business and education, to healthcare. The Centers for Medicare and Medicaid Services, the National Institutes of Health, the Patient-Centered Outcomes Research Institute, the National Quality Forum, the Health Resources and Services Administration, and the Agency for Healthcare Research and Quality should all share an interest in supporting this work in partnership with private foundations. Academic institutions and healthcare systems need to recognize the importance of this work in allocating resources and in promotion policies…

Performance feedback should be provided with an eye to interprofessional as well as professional competence. Institutional, professional, and government licensure review processes should all incorporate interprofessional elements in their frameworks…

So, also, CAC would argue, should regulatory boards, certifying bodies and their associations. The final session is an opportunity for you -- representatives of regulation and certification -- to brainstorm about what your institutions can do to advance oversight and evaluation of team practice.

KEYNOTE ADDRESS
Team Practice from the Viewpoint of a Practitioner: “What I Wished I Learned in School”

Richard Woolf, PT, DPT, Certified Strength and Conditioning Specialist and Assessment Content Manager, Federation of State Boards of Physical Therapy

I’m going to reminisce a bit and share some experiences from physical therapy school and from my clinical practice to show you how I finally figured out about team practice.
I graduated from to the University of Arizona and applied to physical therapy school at Northern Arizona University in Flagstaff. The medical program was in Tucson, but the physical therapy program was at Northern Arizona University. There are also a nursing program, a dental hygienist program, and a speech & language pathology program there.

Did we interact? I remember going upstairs to the dental hygienist department to get my teeth cleaned by the dental hygiene students. I don’t know that I met a single nursing student the entire time I was there, but a hospice nurse did come once to lecture about death and dying. I know I met at least two speech and language pathology students because they were dating my classmates. That was it. There was not a lot of discussion about knowing what other professions learned. We knew there was a lot of overlap between PT and occupational therapy.

The PT students worked together as a tight-knit group. A lot of very athletic people become PTs, so we got to do a lot of co-ed sports. The girls were usually better than the guys.

I earned my degree and ventured out with a couple of colleagues to the town of Mason, AZ, which had a small rural hospital. There were three PTs working in this hospital. I worked primarily in the outpatient department. This was attractive to me because the community was small, and I also got to work in the hospital and treat a great variety of patients.

I interacted with physicians and nurses. To my surprise, they asked me to sit in on what they called a “team meeting.” So, I got to sit in with physicians, nurses, pathologists, and pharmacists, and we talked about patients. This was the first time ever. I learned a lot through the team meeting.

I realized that there was a very small dating pool in Mason, AZ. So, I moved and found another rural institution close to Phoenix. I lived in a suburb of Phoenix and commuted to this facility. I carpooled with an OT and a speech and language pathologist for many years. We became close friends and we could talk about our patients in the car as we were commuting to and from the clinic. I worked at a skilled nursing facility (SNF) with a lot of different professionals. It was a neat opportunity to get close to the nurses, the social workers, and others. Eventually, I was hired by the hospital of which the SNF was a part.

While, I didn’t move during that three-year period, I had three different employers. This was because of federal legislating mandating a prospective payment system (PPS). We were among the first to adopt the system. We were reimbursed according to the number of minutes we treated patients in the skilled nursing facility. I worked closely with an OT. We also had to get together as a team because we needed to assure the SNF we weren’t wasting their utilization allotment. So, we would get together with PT, OT, speech-language pathology, nursing, and social work to discuss treatment, discharges, and rehab. I learned a lot about working together as a team.

Shortly thereafter, the hospital decided to open an acute rehab unit. Our SNF already worked very much like an acute rehab unit. We actually won an award. In acute rehab, the patient has to be able to tolerate three hours a day of intensive PT, OT, and speech therapy. There’s a podiatrist available 24-7. Nursing care is 24-7. The team conferences we had included physicians, nurses, PTs, OTs, speech, social workers, prosthetists, dieticians, and so on. We had to work closely together. I loved it. As hard as it was, we earned our JCAHO accreditation.

I took a new job as Director of Rehabilitation. So, from teammate, colleague and friend, I became boss, making decisions, figuring out how to utilize personnel and maximize financial
resources. We employed PTs, PTAs, OTs, pathologists, office staff, etc. We provided rehab to inpatients and outpatients and residents of the SNF. We all had to work very closely together. It was a great life experience for me to be in that position.

Education had changed. I graduated with an MA. The role of PT started to change and entry level became a doctoral degree in PT. So, schools introduced what they called a transitional degree program for people already in practice, like me. So, I went back to school and found the role of education is changing.

The World Health Organization defines interprofessional practice as:

when multiple health workers from different professional backgrounds work together with patients, families, caregiver and communities to deliver the highest quality of care”
and interprofessional education “occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes.

The Commission on Accreditation in Physical Therapy Education now incorporates ‘team-based collaborative care,” “interprofessional practice,” “interprofessional care,” and similar phrases throughout its standards.

I work for the Federation of State Boards of Physical Therapy. My main job is developing the national physical therapy examination, which is the entry-level exam that all PTs must pass as one step toward licensure. Part of the process is to conduct a practice analysis at least every five years. We ask new graduates what they are doing on their jobs. We ask experienced clinicians what knowledge and skills they need to safely perform the activities they have to perform.

The practice analysis revealed that PTs need the skills necessary to “gather information/discuss patient/client’s current health status with interprofessional/interdisciplinary team members; and to identify signs/symptoms of change in patient/client’s health status that require intervention by interprofessional/interdisciplinary team members.” Respondents indicate they are using these skills quite regularly – at least weekly. The important thing here is that new graduates think interdisciplinary skills, including interprofessional communication are important. These are not the educators. These are the new clinicians.

The survey that goes out to licensees who have been in practice three years or more also found that interdisciplinary and interprofessional communication is an important part of their practice. Some of these respondents were educated like I was in the traditional silos.

Last weekend I attended a conference of PT educators. I looked for evidence of interprofessional education. Is it really happening, or is this just one of those standards that’s out there but isn’t really being implemented? Poster presentations at the meeting included, “Student Perception of Inter-professional Education,” “Inter-professional Leadership Development at the Epicenter of Student Preparation for Practice,” “Interprofessional Simulation Experience Between Nursing and Physical Therapy Students,” “Inter-professional Collaborative Teaching of Patient Transfers by Doctoral Physical Therapy Students and First-year Nursing Students.”

I walked around to the textbook vendors and found several geared to multiple professions. I checked curricula for interprofessional courses and found multiple ones. We are training better future clinicians. It is such an important concept.
**Question** – When you prepare tests, what kind of questions do you ask to assess a licensure applicant’s ability to function in a team?

**Woolf** – The survey results help develop the test outline. Things that are highly weighted get more representation on the exam. So, a question may be, “You are seeing signs and symptoms of what may be a swallowing disorder, which of the following things would be the most appropriate: talk to nursing staff, give them a big glass of water, etc…” The correct answer may be to talk to rehab, or the ICU nurse who is working with the patient.

**INTERPROFESSIONAL EDUCATION AND LIFELONG LEARNING**

**Mark Speicher, Senior Vice President for Medical Education and Research, American Association of Colleges of Osteopathic Medicine (AACOM)**

I’m glad to see so many people here to talk about such an important topic. There is certainly a lot going on in this area. Interprofessional education is something about which I had personal experience when I was hospitalized recently for an episode of endocarditis. An interprofessional team took care of me; they were mostly students and residents, because they are the ones who are being both trained and assessed on their “interprofessionalism.” To restate the obvious, this is what we need so that we can get good medical care.

Before I started working at AACOM six months ago, I was Associate Dean of Academic Affairs at Midwestern University Arizona College of Osteopathic Medicine, which is a large osteopathic medical school with about 250 graduates every year. There are about 30,000 osteopathic medical students in the country. Previously, I was a faculty member at Arizona State University. Before that, I was the Executive Director of the Arizona Medical Board.

So, let’s talk about the education of healthcare providers, and specifically osteopathic medical students. AACOM is an association of colleges, and is also an association of residency programs. We are the only healthcare provider association that has all the medical schools and residency programs in osteopathic education.

There are two kinds of residency programs. Programs accredited by the Accreditation Council on Graduate Medical Education and residency programs accredited by the American Osteopathic Association. As of 2020, they will all be under the same accreditation scheme. We are working with MD and DO accredited programs to help achieve osteopathic recognition.

Thirty-four schools, fifty-one campuses, forty-two states that have colleges of osteopathic medicine. A quarter of all new medical students are osteopathic medical students, an estimated 30,000 osteopathic medical students this year. Our appreciation for osteopathic interprofessional education is one of the pieces of information we give to residents.

We are part of a three-organization team, if you will, that assesses and revises education or training in interprofessional care. We are still, however, divided into individual schools. Even though I was part of a university that has twelve different healthcare professional training programs, only one of the interdisciplinary care experiences was a combined effort of all the colleges. Even at colleges, we’re just not there yet. But we are definitely heading in the right direction.
I will describe what is going on in the profession of osteopathic medicine with interprofessional care. First, the Commission on Osteopathic College Accreditation (COCA) is a division of the American Osteopathic Association (AOA). The AOA is involved in interprofessional training of osteopathic medical students because COCA standard 6.8 requires that every osteopathic medical school provide interdisciplinary education for collaborative practice in every year of the curriculum. That is a core standard, which means that if you are found out of compliance with that standard you are automatically placed on probation.

The second organization that participates with us is the National Board of Osteopathic Medical Examiners, which is our testing organization. Every osteopathic medical student in the country has to take three levels of the examination. Level one is given in the second year of medical school. Level two is a multiple-choice exam. Additional multiple-choice exams are given at the end of the third and fourth years. There is also an in-person exam in the fourth year where everyone goes to a testing center and is graded on their patient interaction. The level three exam is given a year after graduation. After passing all these exams, candidates can be licensed as an osteopathic physician.

So, the National Board of Osteopathic Medical Examiners developed fundamental osteopathic medical competencies. Competency 5.5 is interprofessional and team practice proficiency. All but one of our exams test interprofessional team practice. The one that doesn’t is the in-person exam on patient interaction. However, interprofessional scenarios are now being developed for that examination.

AACOM has developed assessment tools for colleges of osteopathic medicine to use. These are not mandated, but both the MD and DO medical schools make sure graduates can be trusted to do thirteen things on their first day of residency. Number nine is “collaborate as a member of an interprofessional team.” There are a number of specific things we assess to determine whether they are fully trustworthy as a member of an interprofessional team.

What is the outcome of this emphasis on interprofessional education and assessment? Seventy-two percent of our graduates last year reported having participated in organized interprofessional education activities where they learned with students from different health professions. Why not 100%? Because the accreditation requirement has been in force for only one year. Some of last year’s graduates were in a program that had not yet implemented the accreditation requirement.

The three most commonly reported interprofessional activities were clinical education activities, collaboration with nursing activities, and collaboration in pre-clinical. So medical education consists of two pre-clinical years learning basic science followed by clinical education where students might encounter all different kinds of health professions. If you work at a stand-alone medical school, you have to enter into an agreement with other healthcare professions educators to make sure you have health professions students to educate your students. So, most of these students experience this on clinical rotations during their third and fourth year. Some of the students also experienced it during the second year.

So, most of our students are learning interprofessional care in their engagement with actual patients. Most of our students are learning to work with other professions in clinical settings. Many of our schools are in rural areas and they do a lot of healthcare for poor patients. Many of those student-run healthcare centers involve inter-professional care, especially if they are sponsored by universities that are training different kinds of healthcare providers.
We survey graduating seniors every year. They are sick of medical school and ready to get out, so we take the results with a grain of salt. We are pretty confident that the results are either accurate or underestimates. Asked if they participated in organized interprofessional educational activities, seventy percent said yes and twenty-eight percent said no. Asked with which other professions they have learned, they listed all those who were on their clinical rotation, including nurses, PTs, OTs, respiratory therapists, other kinds of technologists, social workers, counselors, psychologists, and so on. Most students get their interprofessional training in an active clinical setting.

During the first and second year, the education takes on different forms. The most common form is simulation. Some have robotic manikins that respond to what students do, others allow students to go through video or online cases with other professionals. There are also facilitated interactions with a variety of professions.

Most students report positive experiences with interprofessional education. We are trying to move our colleges of osteopathic medicine to use this full range of experiences. Finally, when students are ready for their clinical rotation, they are taught with and by other healthcare professionals. It used to be that the Commission on Osteopathic College Accreditation only allowed physicians to teach osteopathic medical students. Last year, when they incorporated the interprofessional training requirement, they said any licensed independent provider, including nurse practitioners, physician assistants, and others, can teach osteopathic medical students. This is definitely a new direction.

Jennifer Graebe, Director, Primary and Joint Accreditation, American Nurses Credentialing Center

My colleague, Lolita O’Donnell, and I are here to talk about interprofessional development and continuing education within a practice environment. This is what is occurring after professionals graduate from the academic setting.

Before I get into the history of joint accreditation and tell you about the program, I think it is important to reflect on some ideology and theory. One of the things mentioned this morning is looking to the future. Academia has pioneered this and probably is still the leader in interprofessional education. Looking to the future also means filling the gaps and depressing the disparities among learners once they leave the academic environment and enter the professional practice environment. We need to think about providers who are familiar with interprofessional practice from their educational experience who enter a practice environment that does not have an interprofessional culture. There needs to be a continuum from education into professional practice and professional development or CE.

We have an obligation to be two different types of leaders. We hear a lot about transformational leadership in healthcare. We hear a lot about service leadership. We don’t really hear a lot about collaborative and corrective leadership, which underpin interprofessional collaborative practice. There are informal leaders. Everyone is a leader. Everyone’s knowledge, skills, and abilities are leveraged to meet strategic goals, leveraged to meet the goals of the patient, leveraged to meet the goals of the team. And then that collective leadership is aimed at resolving issues. How are we advancing our leadership within the states?

There are some barriers to interprofessional collaborative practice and interprofessional CE. One of those is that professionals learn about new initiatives in quality improvement in a professional
silo and then they are expected to work together. An article by Vlasssis, Cox, and other authors underscores the impact of accreditation on interprofessional CE.

The American Heart Association (AHA) did something really impactful in the late 80’s and early 90’s. They started focusing on team performance. It used to be that learners had to memorize and regurgitate algorithms and other knowledge. It was you and the instructor with no resources in the room and no one to ask for help. What they found was there were adverse patient outcomes by not allowing team members to work together. Healthcare has evolved where we don’t require healthcare providers to memorize. We learn asking questions. We learn working together. We may socialize after work, but we weren’t socializing in the right way in the practice environment. The AHA did something powerful. They said medical students, paramedics, tech nurses, physicians, and residents will all be in classes together and will all rotate through the role of team leader. They will all understand the role and responsibility of the scribe and how to work the medication cart. Over time, adverse events decreased. Emergency responses prevented cardiac arrest and other adverse events before they occurred.

Now, when I teach and ask students to be the scribe, and when they finish, they say “Wow!” When I ask the physician to be the scribe, they say, “Wow!” They come to understand that the role of the scribe is typically played by a nurse who has to be sure to capture everything the physician orders.

Think about the evolution within the AHA. Think about the evolution of approaches to public health, especially after Hurricane Katrina where professional agencies were working in silos and didn’t have coordinated responses. This became even more important after 9/11.

Think about other components of healthcare where a coordinated response and interprofessional CE is critical to collaborative practice. We have patients showing up at a healthcare facility and the response team consists of law enforcement, healthcare providers, social workers, advocates, and in some cases, attorneys. There are clinicians who are part of the healthcare team and there are folks who are not clinicians who should be invited to the table.

I want to tell you more about joint accreditation. It focuses on much of what I have been talking about. This was founded by three professional accreditors in pharmacy, medicine, and nursing. They are the Accreditation Council for Continuing Medical Education, the Accreditation Council for Pharmacy Education, and the American Nurses Credentialing Center. We now have associate members representing physician assistants and optometrists.

Accreditation underscores the need to incentivize organizations to analyze their ability to work interprofessionally. When organizations don’t have that culture, a lot of times, interprofessional CE is how they get there. Some professions may not be ready for a formal way of working together, so assessing readiness is important. There are several ways to do readiness assessment, ideally with patients as a core member of the assessment team.

Another reason why research is valuable is to look longitudinally. We often undertake initiatives and quality improvement interventions but don’t assess their effectiveness over time. We give them a thirty-day roll out and everyone goes back to their professional office without really knowing whether the team is accomplishing anything.

Joint accreditation is useful because it eliminates unnecessary duplication of requirements related to gap analyses, and evaluation of educational interventions. Accreditation evaluates the performance of the team and the impact that team collaboration has on patient outcomes.
Organizations become eligible for joint accreditation when they demonstrate they have a unified process and their CE and professional development activities and interventions are designed for teams. For example, if I have an activity for nurses in the emergency department, that learning has to occur for the team and by the team.

In order to apply, organizations have to demonstrate that 25% of their overall activity profile is interprofessional, meaning that the target audience is interprofessional. We don’t require organizations to be accredited prior to applying for joint accreditation. Currently, we have seventy-four organizations. We have several that are finalizing the review process. This number will probably increase by 20% or more in the near future.

Organizations are benchmarked on adherence to joint accreditation standards for evaluating a team. They must demonstrate adherence to all thirteen joint accreditation criteria. Some of the more important criteria. Organizations are required to demonstrate how interprofessional CE is incorporated into their mission statement. We want them to look at their primary organizational mission and strategic goals because there should be alignment. If there isn’t alignment to support interprofessional CE and collaborative practice, the organization may have to make some cultural changes. The organization is required to demonstrate through evidence how they apply the mission statement to the provision of CE.

Many of the criteria have to do with evaluation: how does the organization direct staff? How does it evaluate activities? How does it know the formats are appropriate for outcomes and objectives? We are asking organizations to do an environmental scan that looks at external as well as internal barriers.

Up until about a year ago, the professions were awarded a professional currency. Now there is an optional Interprofessional CE (IPCE) credit. This demonstrates that the activity has been planned to be interprofessional.

My PowerPoint slides include testimonials from accredited organizations attesting to what they are accomplishing. I once was a manager of an emergency department that was changing its triage system to bypass the triage nursing station and bring patients straight back into the emergency department. We didn’t tell the new hires about the change so there was a lot of confusion. This highlights the importance of thinking about all of the people impacted by a change in procedure.

Another thing to think about is our attitude toward the value of interprofessional CE and what we can do to provide the right environment to promote interprofessional collaborative practice.


I am mandated to disclose that what I am saying today is my opinion and does not reflect the opinion of the Department of Defense (DOD).

The military health system has a huge presence nationwide and worldwide. The system is extremely fragmented. A study in 2012 revealed how disjointed the DOD’s CE program is. Learning from that study, I was asked to see how we could educate our more than 100,000 healthcare personnel. I learned about joint accreditation. At that time, we didn’t have any accreditation at all. The Defense Health Agency is now overseeing all personnel and facilities
worldwide. So, we embraced the concept of joint accreditation to break down the silos. In December 2017, we were lucky to be granted joint accreditation.

One of the biggest challenges for us was the fact that our healthcare presence is all over the world. One good thing is that the military health system has technological capability. We utilize an online platform to meet electronically twice a month for the purposes of planning and collaboration.

For example, one of our programs allows a variety of providers to come to the table and talk about the research they have done and the role of centers of excellence. Centers of excellence address such things psychological health and traumatic brain injury. We are using this platform for professionals to participate. The carrot we give them is educational credit for their activity. That is one way we were able to align the mission of our CE program with the overall mission of the military health system. For example, we make sure we are working together across the services – army, navy, air force, and coast guard. We seek optimal outcomes for health, wellbeing, and readiness. In the military, we have a dual mission. We are sensitive to our patients, families, and healthcare providers. I really capitalize on the team approach and collaborating, treating others.

Being in the military, we are always thinking about readiness. Readiness in health is integral to our joint accreditation mission.

In 2017, we instituted the concept of content review that represents all disciplines. In order to earn CE credits, it is necessary to identify two content reviewers in each area. Content reviewers are all volunteers.

We are also proud that we are accredited by the American Psychological Association. Psychological health is really important to us. We also use physical therapists to help our service members recover. Once injured and not considered 100 percent combat-ready, you are discharged from active duty. We now rehabilitate these individuals and learn from the experience for research and clinical practice.

We talked about the importance of collaboration. One example is pharmacy. It is very important that pharmacists are part of the collaborative team. The pharmacy planners who participate in the bi-weekly meetings and provide content reviewers receive CE credit. The same is true for optometrists. We have added sharing evaluations to the bi-weekly meetings.

The newest part of our collaborative team is the recovery peer coordination program. Every six months they do an orientation for new care coordination staff. They are nurses, counselors, social workers, and paraprofessionals. We helped develop the learning objectives.

We use these meetings to share things from accredited bodies. We developed guidance documents because we are growing and have so many accreditations and are using only one application form for all of this. I recommend using problem-based learning. I find case studies very effective in helping people engage in critical thinking, and also application in practice.

**Question** – You mentioned that you have joint accreditation for CE. How many entities recognize this for approved CE for re-licensure?

**Graebe** – We are launching a new currency at the end of this year for nursing. State boards are already calling to verify that the currency is valid and credible. I can’t tell you how many
learners have submitted that currency to their state board, and I can’t tell you how many providers are actually issuing that currency.

**Question** – How do we encourage certifiers, regulators, and educators to promote the team-based concept? Isn’t accepting joint accreditation CE a way to elevate the conversation?

**Graebe** – The first step is to have the conversation. If you are a certifier, ask whether your organization accepts this credit. If not, ask to change the standard so when a nurse practitioner submits their interprofessional CE, it is accepted, especially in the pharmacotherapeutic field.

**Comment** – The Accreditation Council for Pharmacy accepts any of the joint accredited programming for licensure renewal. The Board of Pharmacy Specialties (BPS) is the organization that offers certification in thirteen specialties. Pharmacists can recertify either by taking the examination again or via a professional development pathway involving taking CE from providers recognized by BPS. Recognized providers offer dedicated CE consistent with the content map of that particular specialty. I am not aware that any of the currently recognized CE is jointly accredited.

**Comment** – My University is jointly accredited. One of the problems we had is that our medical community said that joint accreditation credits would not meet the CE requirements of their specialties. Interprofessional CE is enlightening, but isn’t accepted by specialty certification boards.

**Comment** – The advanced practice nursing community has a requirement to maintain their certification through CE that is specific to their certification. But I think about other requirements licensing boards might have related to interprofessional context, there are many states that have particular CE requirements around an issue such as HIV education, opioid use, or another public health issue. I’m guessing that a lot of the criteria for that education is not profession-specific, but applies to several professions. Could you provide CE experiences related to state issues such as these?

**Graebe** – There are probably a lot of state-specific providers looking at accreditation for the kinds of public health issues your mention that are the responsibility of multiple professions. Can boards be persuaded that interprofessional activities are relevant to improved professional performance? It is important to be strategic about how the activity is designed and even titled to meet the needs of the target audience.

**Comment** – As a nursing regulator, we accept joint accreditation without question at the RN and LPN level, but the nursing specialty certification boards aren’t there yet.

**Speicher** – As an educator, we spend a lot of time and money and resources to be sure students are well trained in interprofessional care. Because of the way medicine is trained, they go into a specialty immediately upon graduation and the specialty is controlled the specialty board. There is a disconnect between what the educators want and the specialty boards require. Regardless of the specialty, there is a gap between what they learned in medical school and residency and subsequent practice.

**Question** – Who are the thought leaders who can change this situation?

**Speicher** – In my opinion, it would be the AOA Colleges and the American Board of Medical Specialties.
Graebe – I agree. Our Commission believes professional development is anything a nurse needs to know to do his or her job. If we recognize some things and not others, I believe that is a huge disservice to not only nurses, but also to patients. Consider the health and wellness of providers. If a nurse is a member of an emergency trauma team that is engaging in interprofessional CE using meditation or yoga to reduce their burnout and stress and improve their resilience, and the board doesn’t recognize yoga as a means to become a better provider, we still have work to do. It is about more than anatomy and physiology.

O’Donnell – Courses in ethics and the medical process are popular in the military health system.

Question – Has there been, or will there be an opportunity to get financing from the National Council to boards of nursing to inform them about interprofessional CE?

Comment – I don’t think boards would object to recognizing interprofessional CE. I do see the same problem as other professions in the maintenance of certification. You have to get the agreement of certifying bodies that the CE meets their criteria.

Speicher – If there is a certifying body that thinks interprofessional practice is not necessary for the successful treatment of patients, we should all be afraid.

Graebe – I agree. Any organization that does not recognize interprofessional practice for recertification is a challenge. This is the way healthcare is going. As healthcare shifts from institutions to the home and the community, the concept of public health is going to become more interprofessional.

REGULATING TEAM-BASED PRACTICE

David Swankin (Moderator), President and CEO, Citizen Advocacy Center

Ron Barbato, System Director, Rehabilitation Services, Ephraim McDowell Health Director, Federation of State Boards of Physical Therapy

Maureen Cahill, Senior Policy Advisor, National Council of State Boards of Nursing

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Zeno St. Cyr, Public Member, National Commission on Certification of Physician Assistants

Swankin – In preparing for this meeting, I contacted several healthcare professional federations and most of them told me that regulating team practice is an emerging imperative, but they don’t yet know what to do about it. They don’t have policy statements. It’s too new. So, none of the panelists is speaking for their organization.

One association, the Federation of State Medical Boards (FSMB), published a document entitled Regulatory Strategies for Achieving Greater Cooperation and Collaboration Among Health Professional Boards, which was adopted by its house of delegates in April 2017. Rather than stating policy positions, this document raises the questions the FSMB believes we ought to be thinking about. Because of a conflicting international meeting, no one from the Federation was available to speak today, so I am going to highlight portions of the FSMB paper and then engage the panelists in a conversation.
The Macy Foundation report referenced earlier today ([http://tinyurl.com/z6jt9tf](http://tinyurl.com/z6jt9tf)) contains a recommendation that reads:

- Revise professional regulatory standards and practices to permit and promote innovation in interprofessional education and collaborative practice;
- Revise accreditation and certification standards to eliminate barriers to efficient and effective team-based care and clinical interprofessional education;
- Revise state and federal laws and regulations to eliminate barriers to efficient and effective team-based care… There is an urgent need for collaboration across the health professions to update state licensure practice acts and scope of practice regulations…
- Create incentives for institutional privileging policies that support linking efficient and effective team-based care and clinical interprofessional education.

The FSMB document at [http://tinyurl.com/y9x3zjvb](http://tinyurl.com/y9x3zjvb) sets the tone exactly right in the introduction by writing:

The high-performing interprofessional health care team is widely recognized as an essential tool for constructing a more patient-centered, coordinated, and effective healthcare delivery system. The team-based model has been formalized and implemented to help address the growing complexities of health care delivery, coordinating and responding to multiple patient needs, keeping pace with the demands of new technology, delivering care across different settings, and responding to recent health care trends such as patient-centered medical homes, accountable care organizations, and an emphasis on population health.

State health professional licensing boards are responding to the changing landscape of health care not only by collaborating to determine discipline of their individual members, but also by seeking opportunities to have a greater understanding of the roles, responsibilities, and approaches of all members of the health care team.

The average person probably can’t distinguish between a PT and an OT. What happens if members of a healthcare team don’t know the capabilities of the other members of the team?

In the section on Background, the FSMB document makes this point:

The delivery of health care has slowly evolved from a sole provider responsible for the patient’s health from cradle to grave to an entire team of health professionals responsible for coordinating the care necessary for a patient’s wellbeing. Health care teams are viewed as tools that help break down the hierarchy characteristic of most health organizations, ensuring that patients receive patient-centered, high quality care. Team-based care is often aligned with enhanced patient-centered care so that patients may benefit from creative, complex problem solving and the diverse academic backgrounds, experiences, and perspectives of many health care professionals. Health care teams can also reduce redundant or duplicative services, affording patients more efficient and streamlined health care solutions…

A team-based care model usually consists of an interdisciplinary group of health care providers, typically organized around a lead provider, where all professionals on the team collaborate to deliver health care to patients. Members of the care team generally take collective responsibility for the care of the patient because their multidisciplinary skills
are blended as care is administered. However, in order to coordinate all health professionals involved, efficient and deliberate delineation of responsibilities is an underlying requirement of a well-working health care team.

I recall many years ago when a healthcare reporter died at a Boston hospital from a medication error. Many professionals made mistakes that contributed to the error. The board of nursing was the only regulatory board to take disciplinary action against several nurses.

The FSMB document identifies several things to take into consideration, including statutory authority, joint rulemaking of authority, joint committees, interagency advisory committees, interagency cooperation, coordinated complaint intake, shared investigatory data, joint investigations, joint meetings, and interdisciplinary duty to report.

It is important that joint committees include representation from every affected board. At CAC, we remember a huge controversy in one state over expanding the scope of practice of a non-medical profession. The legislature instructed the boards to enter into a joint rulemaking. The medical board opposed the legislation and didn’t want a joint committee. So, they refused to be available for a meeting for more than a year.

Complaint intake is another important issue. In the case of an adverse event, the affected patient is usually treated by many professionals. Complaints may or may not be filed with the right board(s). Years ago, CAC engaged in a project in California involving the thousands of complaints received by long-term care facilities. We worked with long-term care ombudsmen to develop a triage system so complaints received by nursing homes were sent to the applicable regulatory board. This project improved the public image of the regulatory system because complainants weren’t being told, “Sorry, we can’t help. You sent your letter to the wrong place.”

In relation to shared investigatory data, the FSMB cites an example from Minnesota and says that:

> Each health-related licensing board has access to any of the offices of the Department of Human Services that relate to a person subject to the jurisdiction of the licensing board. It should be noted that commitments by the state’s health professional regulatory boards to share investigatory information may include statements authorizing the sharing of such information, even if the information is deemed confidential.

Sharing investigative data is a huge breakthrough. So is the concept of joint investigations when several professionals are involved, or the system is the subject of a complaint. Why should there be duplicative investigations conducted by several affected boards?

Joint meetings involving two or more boards are common in several states. The entire boards of nursing and medicine attended a CAC annual meeting in Pennsylvania, where they convened a joint meeting for the first time in their history. This launched a tradition of regular periodic joint meetings between the two boards. The FSMB document reports that the Oregon Board of Medicine meets monthly with sixteen other regulatory boards.

Finally, the FSMB adopted a position statement on duty to report that makes it clear that medical boards want to receive reports from any professional who witnesses a reportable event. Many states have statutes requiring licensees to report misconduct by other licensees.
The FSMB document concludes with a series of recommendations to medical boards. These recommendations are applicable to all regulatory boards. The first is that:

State boards should be authorized and encouraged, within their jurisdictions and where appropriate, to:

- Conduct joint investigations with other health professional licensing boards;
- Share investigatory data with other health professional licensing boards;
- Create or develop processes to facilitate communication and collaboration among professional licensing boards and their representatives.

Let’s start with joint investigations. What experience have the panelists have with joint investigations?

**St. Cyr** – As a public member of two regulatory boards, I believe joint investigations are a very good idea, but there are certainly some challenges. The main one I have encountered is turf. Plain and simple turf. None of the boards in Maryland, particularly the physician’s board, would want anyone else looking in on their licensees. All of the boards are very parochial in that they believe only they are qualified and appropriate to investigate their own licensees, even in instances where there may be several professionals involved in an incident. In addition, it might take a statutory change to make joint investigations a reality.

**Cahill** – A couple of things need to be considered. We are complaint-driven organizations, which means we will take a complaint from anyone and investigate it. Some complaints – in fact, a fair number – are not warranted. It may be a bad result; it may be anger about something. I think that is why many professions like the investigation stage to stay pretty private to protect the individual from non-substantive complaints.

But thinking about pros and cons, one pro might be that joint investigations may result in greater emphasis on safety and quality issues. A con could be diminished individual accountability.

You mentioned the death of the healthcare reporter in Boston. In that case, an oncology fellow wrote an order for a certain chemotherapy agent to be given daily at a certain total dose over three days. But the order didn’t sound like that. It sounded like a certain number of milligrams total over three days. The pharmacy interpreted that as a daily dose. The nurses gave it as a daily dose when in fact a three-day total dose and the patient died as a result. There is a lot of controversy still today because five nurses were disciplined and none of the pharmacy or medical group was disciplined. I will say I understand the perspective of the nursing board because those nurses were the last safeguard for the patient. Someone should have looked at the total dose and asked whether anyone would order that much in a single day. In that case, could a joint investigation have diminished individual accountability?

We are professions that compete with each other, and not always in a friendly way. So, the word collaborate in legislative language doesn’t mean collaborate at all, it means supervise. That’s a problem because even now, the AMA has a model act that says APRNs can only practice on a physician-led team. There are a lot of reasons why that is not in the best interest of patients. There are a lot of confounding variables and we don’t have all the answers about what is best for patients.

**Barbato** – When I first read this paper, I thought how could this ever happen? I read it again and thought I’d look at it as a half full glass rather than half empty. There is huge pressure for
change in the regulatory arena. On the subject of joint investigations, we would need to have some statutory authority to allow this to happen. There are also turf battles, although I think those are softening. I have been part of joint investigations on the federal level. When there was fraud, the FBI was involved. In a joint investigation, there might be a parallel criminal case. There might also be a civil penalty as well as a regulatory penalty.

That said, I’m all for it and would like to see it happen if we can break down the barriers.

Conway – Preparing for this panel, I reached out to OT board administrators and talked with them about their experiences. A few reported to me that there are departments specifically assigned the investigative role. Collectively, all of the people involved in an investigation have the same level of training and have responsibility for conducting the investigation no matter what discipline or profession they are working on. They told me about the efficiencies of working in this collaborative interdisciplinary way. On the flip side, the skill sets of OT and PT are similar. Although that can be an advantage in conducting investigations, it can also be a challenge in terms of identifying who really was ultimately responsible for an adverse event.

Swankin – Let’s talk about sharing investigative data and facilitating communication in general.

Cahill – Presently, we have a database called Nursys that is shared among the boards. It contains discipline information, including investigative details. To my knowledge, we don’t have a prohibition against sharing information, although we may not be able to share all the investigative details. I think we can share information about the categories of investigation with another professional board.

We can share information with certifiers about the category of investigations. So, for example, the CRNA certification arm shares all their certification database and in return, they see those categories of discipline in Nursys.

Barbato – We can share information among the states, but what about someone who has more than one license, say nursing and accounting? I’ve heard of situations like that. Does the accounting board access information from the nursing board?

Conway – Clearly, the public is calling for more accountability. For many years, NBCOT has shared aggregate disciplinary action data and probation with any entities that inquire. When it comes to more specific information, our standard operating procedure is to inform the licensing board or boards where the individual is licensed. That information is more detailed in terms of the allegation, the behavior. We have not shared information across disciplines. In my conversations with board administrators, I did not get a sense of cross discipline reporting. There is no problem reporting to outside certification entities and to the National Practitioner Data Bank.

Question – Where is the majority of the reporting coming from -the public or organizations? My second question relates to “Just Culture,” which is not “just” because it allows for patterns of behavior to develop. At what point is an organization liable for reporting adverse events? What is to prevent a practitioner with a pattern of behavior from moving to another state? Is it one adverse event or ten adverse events that trigger reporting?

Barbato – In the world of physical therapy, when a complaint comes to the attention of the board, the first thing we look at is minimal competency. Then we look for a pattern. I’ve been
involved in many cases in which an individual is disciplined. If we learn that the situation is
typical for the establishment, we look deeper.

St. Cyr – It’s a very good question and an important one. We have duty to report laws in state statutes. Johns Hopkins did a study several years ago and found that over a seven- or eight-year period, the third leading cause of death after heart disease and cancer is medical errors. So, the duty to report is important from the standpoint of the public. Most medical personnel know who the good and bad members of their profession are. They will tell their friends and relatives, but they don’t always report to the authorities.

Cahill – We are always trying to separate the complaint from an action. When something does result in an action, I think we are pretty proactive about making sure that information is available to the board and the public. One of the problems is that an individual may be licensed in multiple states simultaneously and the state that takes the action may not inform the other states where a license is active. Because we have a database that can be shared with other nursing boards, if an individual applies for licensure by endorsement in another state, that board can see an action and inquire for more information through the database. If something shows up in the public domain, that gets added to a different database accessed by our investigators.

Comment – We don’t have a good way of sharing disciplinary information in voluntary certification.

Cahill – That’s discoverable by the public. The trouble is that if you are the certification body, you have to search one by one by one. What happens with CRNA is they are pushing their data into our database every day. It’s already public.

Question – Can the public access your database, because they can’t access the NPDB.

Cahill – The way the public can find out if there is discipline against a nursing license is through license lookup on the Nursys website. They won’t see the details of the discipline.

Comment – Some of the boards do put discipline information online.

Comment – In many states, pharmacists and other professionals have collaborative practice agreements with physicians. So, if pharmacist Jones has a collaborative practice agreement with physician Smith and physician Smith has his licensed disciplined, what impact does that have on Jones, especially if Jones is unaware of the disciplinary action against Smith?

Comment – We are trying to go from regulating a scope of practice to regulating a healthcare team. If there is a pharmacist, a doctor, and a nurse involved, we have created this product that the public can’t find out about.

Comment – Compacts. Many of them require sharing of disciplinary action.

Comment – Collaborative practice agreements do not necessarily ensure quality. They drive geographic access to care disparities. The states that require collaborative practice agreements for nurse practitioners consistently rank lower on healthcare quality outcomes. Collaborative practice agreements are not team-based care. Another example of interprofessional collaboration on the regulatory level is around the level of opioids. Any prescribing discipline’s care standards are the same. The disciplinary measure should be the same. There is cross-sharing among the boards. This is an area where regulating teams makes sense.
**Swankin** – Let’s turn to the FSMB’s next recommendation:

State boards should consider developing, implementing, evaluating, and monitoring a simple and sensible complaint intake processes, in collaboration with other health professional licensing boards and members of the public and/or patient advocacy groups as appropriate and as statutes and rules permit, which are designed to be user-friendly and easy to use by patients who file complaints because they have been harmed and/or have been subjected to professional misconduct by one or more health care professional in a team-based setting.

**Barbato** – I know of some processes that are making it easier for the public to complain. This is a wonderful idea.

**Conway** – I think this is an opportunity to use technology to streamline this part of the process. Some state boards have made strides in streamlining their processes. It is challenging to help the public truly understand discipline from the complaint content side of the equation.

NBCOT recently conducted research around discipline and other topics. One of the findings is that the vast majority of complaints are driven by the consuming public. The most common type of behavior in discipline investigations involved problems with fraudulent documentation and billing.

**St. Cyr** – The devil is in the details. This seems like a good idea, but we know from our experiences in our own states that we do our best to get information out to the public, but few people are savvy enough to use the website or call the board. For this to be effective, states may have to create a central clearinghouse so complaints could be sent to the appropriate board(s) for investigation and discipline. Most individuals, even if they are treated by a team, will have a complaint against one or two people, and usually it’s one or two people in the same profession and not multidisciplinary.

In Maryland, various boards, such as the physician and pharmacy boards had to work collaboratively with some direction from the General Assembly on such things as drug therapy management, regulation involving the opioid crisis, and a law aimed at trying to ensure that physicians in rural areas far from a pharmacy had authority to dispense. There was contention between those two boards about who would do what.

**Cahill** – I would like to say something about framework. I started my oncology nursing career more than forty years ago. In those years, I never worked in an oncology group that did not function as a team with the patient at the center. So, I wonder in all these ensuing years why the focus is on teamwork and regulating teams. Maybe the point is that the team is a product. So, CMS comes in and challenges us to embrace teamwork more fully to get better outcomes at lower cost. It turns out that accountable care organizations have more than delivered. CMA has realized twice the savings they imagined they would from those trials. So, something good is going on there in terms of cost and outcomes and the public. But once you put this in the framework of discipline and regulation, are we shutting down some of the protections that have always existed in the philosophy of team care for the patient. I worry about whether this has become more about all of us as the providers of team-based care and less about what the patient is going to realize. How much are we encouraging complaints based on “I don’t like my outcome,” rather than “I had a problem with some individual contribution to this care.”
Question – Do you have opinions about what would be the best approach?

Cahill – Regulation could put more emphasis on patient safety – methods of safety and quality. You can over regulate. This idea of team takes facilities off the hook to worry about quality and safety except as it applies to a team. We do know that system issues are the most confounding. I don’t want us to take our eyes off the part that already works for patients. But another benefit could be attention on teams would help us understand what actually works.

Barbato – If you look at what regulatory boards do, we are disciplining and we’re protecting the public. There is a movement afoot about risk-based regulation. You identify the risk to the caregiver to avoid the errors. Whether that is self-assessment, or some other method.

Comment – There was a celebrated medication error a few years ago that research found involved over fifty system errors that contributed to the death of the patient. Had any one of those fifty things been corrected, the incident would not have happened. In healthcare, there are almost always multiple variables involved and it is difficult to tease out one cause or one individual.

TEAM-BASED PRACTICE IN INPATIENT AND AMBULATORY SETTINGS
Laura Hanyok, Assistant Dean for Graduate Medical Education and Assistant Professor of Medicine, Johns Hopkins University School of Medicine
Ron Barbato, System Director, Rehabilitation Services, Ephraim McDowell Health and Board of Directors Member, Federation of State Boards of Physical Therapy

Hanyok – I work with a general internist who is a primary care physician and I am also very involved in health professions education. I work on training for resident physicians and fellows. Before that, I worked in interprofessional education training members of different professions to effectively work together.

I will talk a little about team-based education, which will lead to team-based practice. This is something that all licensing bodies now expect of educators. Then I will discuss a couple of models of team-based practice that have been shown to work particularly well in the ambulatory or outpatient setting, and talk about some of the ongoing barriers to working even better and some of the opportunities to improve.

When I talk about interprofessional collaboration, I often start by saying that we need to remember that the patient is the reason we are here and is really the central member of the team. A patient is likely to need many different clinicians in an ambulatory setting and whatever connection is there – whether it is to a social worker, a dietician, a pharmacist, or someone else, any one of them might take a leadership role depending on the circumstance.

Interprofessional education is a really important part of how our students are learning nowadays. The definition I like says that interprofessional education happens when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve outcomes. All three pieces are important. Learning with each other occurs when they are learning together. Learning from each other is deeper; the pharmacy student may teach the nursing student about medications and the nursing student may be teaching others how to do an
assessment to prevent falls. Learning about each other is even more important: what are your roles, what is your scope of practice, what are you personally best at doing?

Some time ago, a group of academics got together and determined what core competencies are for interprofessional practice. What should students and people in practice be able to do to work together effectively as a team? They fit into four areas: values and ethics; roles and responsibilities; ability to communicate effectively with other members of the team; skills around working together as a team.

Accreditors are increasingly putting these competencies into requirements for education. This is a requirement for baccalaureate nurses. Milestones for residency training for physicians all have an interprofessional component. This applies to physical therapy school, as well, and to other professions. Interprofessional leaning is becoming an expectation.

There are some barriers to making this happen in practice. In my opinion, rules about supervision are a barrier because there has to be a physician present or available for something like wound care, even though the nurse may know way more that the physician about this subject. Some of our teachers don’t have the skills to teach how to work together as a team. We’re working on helping our faculty learn how to do this. The number of students in a given school may be much larger than in others, so there may be 30 pharmacy students and 120 nursing students and it’s hard to get them to work together when the numbers are lopsided. Particularly for ambulatory medicine, working with a patient may take longer than the patient expects. Lastly, we are used to living in silos and changing a culture is difficult.

I want to mention two examples of successful interdisciplinary teamwork in ambulatory settings. One model is the “patient alliance care team model.” This is something the Veterans Administration started about 8-10 years ago. They assigned veterans to a primary care team including a primary care provider who could be a physician, a physician assistant, or nurse practitioner, plus a case manager who is an LPN or a medical assistant, and an administrative person. Healthcare trainees are also part of the team. In addition to assigning patients to a team, they changed processes so, for example, patients could always get a same-day appointment. Importantly, they added mental health into the primary care team, which has been happening more and more in ambulatory practice.

The VA realized benefits from this structure. For example, patients went to the emergency department less often; they were hospitalized less often for ambulatory care sensitive conditions; and, staff in teams had lower burnout rates. The VA was able to make these changes more easily than practices that have to bill for services in traditional ways.

The other model I want to highlight is “TeamStePPS. This is a teamwork system developed by the Department of Defense based on some work in the airline industry on evidence-based ways to improve communication and teamwork skills. It has been shown to improve communication and reduce errors. They developed a specific TeamStePPS approach for ambulatory settings, realizing that we work a little differently than impatient teams. Training is available online or in a classroom. It is based on several content areas: leadership, situation monitoring, mutual support for one another, and communication. Team members can go learn how to become a master trainer or the team can get a TeamStePPS trainer to come to them. Where I work, everyone is trained in this, so we all have the same vocabulary and know how to work together.
There are a few things that may limit how well we can work together in teams in outpatient practice. A big limitation has to do with how we get paid. Where I work, this is slowly changing, but it is still the case that a provider has to bill to get paid. Presently, not everyone on a team can bill.

Another inhibitor is the time it takes to communicate with team members. Also, bigger teams need more space to treat patients. More and more ambulatory practices are developing patient family advisory councils to be sure the patient’s voice is heard as changes are being made, which also requires extra space. Another obstacle is that people who have been in practice for a while may not have team practice skills. Hopefully, there will be more continuing education in this area.

The last thing is to think about is the physician patient relationship, or the nurse practitioner patient relationship. Team practice will change the close relationship patients are used to with one provider. This isn’t bad, but it is something that will require adjustment.

The increase in advanced practice providers presents opportunities for team practice. Also, more attention is being paid, particularly in nursing schools to teaching outpatient interdisciplinary skills. The biggest thing we have going for us is that the younger generation gets this. They don’t think in terms of the same hierarchy older practitioners grew up with.

Barbato – I am here as a representative of the Federation of State Boards of Physical Therapy. I will talk about team practice in rehabilitation, and also consider the regulatory realm. I have practiced in both inpatient and outpatient settings.

I like this definition of interprofessional collaborative care:

Team-based health care is the provision of health services to individuals, families, and/or their communities by at least two health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care.

Patients are more informed. We see patients who are sicker. The time we can spend with them is limited by reimbursement formulas. So, it essential to look at all the things in the definition—not just what the patient needs, but also what the family needs, what other caregivers need.

We have about seventy-five million baby boomers in the U.S. Between 2010 and 2030, we will see our population of people 65 and older increase by about 70%. Twenty percent of the population will be eligible for Medicare in 2029. We are currently at about 13%. By 2030, six out of ten baby boomers will have more than one chronic condition; one out of three will be obese, one of four will have diabetes; one out of two will have arthritis. We won’t be able to do healthcare the same way.

Our spending is up more than 4% this year and climbing. I would argue that is not sustainable. We can’t continue to provide healthcare in a reactive way. There is an average of 2700-3000 clinical practice protocols published each year and 25,000 clinical trials. As individual providers, there is no way we can keep up with what we did today and what might change tomorrow. So, we have to count on teams to be able to bring all this to the table to provide better care for our patients.

The literature says there are five values that are most important for healthcare teams. The first is discipline. This means we all have the mindset that we are there to provide the best healthcare to
the patient. It is also multidisciplinary – MD, OT, PT, etc. Another value is honesty. It is important also to have creativity, humility, and curiosity. We need to keep the patient at the center of decision-making and need to want to learn from other members of the team.

Other characteristics of effectively functioning teams are shared goals, clear roles, mutual trust, effective communication, and measurable processes and outcomes. We meet daily, so team dynamics do take time. We don’t want to do things that don’t work, so we have to measure processes, such as hospital readmissions, length of stay, and diagnoses that are especially problematic.

**Question** – What changes in practice have you seen and what do you foresee in the next year or so?

**Barbato** – The most dramatic change we have seen is that doctors have come to the table. The mindset of the younger doctors is different. My internal medicine doctor daughter loves her team; she loves rehab, her nurses. In the rehab world, we’ve always had to work with other interconnected disciplines, so the change is that the doctors and the administration are more on board.

**Question** – We’ve heard about educating, working with, and regulating teams. How can those of us who belong to membership organizations and regulatory bodies promote team practice?

**Barbato** – I can give you one example. Years ago, I chaired Kentucky’s PT Board. At the time, we were at odds with the chiropractic board. It got so bad that we couldn’t agree on anything. That’s one area that needs improvement.

**Hanyok** – I don’t live in the regulatory world, but I think it would be useful to question some longstanding assumptions. Some of our boards are stuck in the past.

**Barbato** – I’ve said it over and over; we aren’t here to protect the profession. We are here to make sure our public is protected.

**Question** – In your work with teams, you mentioned that it is hard sometimes to monetize the value of some of the team meetings and team communication. Have you seen anybody in accountable care organizations, for example, trying to create a formula to help the C-suite understand that these meetings have value? Are you also finding there might be value in imbedding more home care to get to the kind of outcomes you are looking for?

**Hanyok** – At Hopkins, there is a lot of interest in transition to home. Because our primary care practice is closely aligned with our hospital, we have a lot of hospital resources, such as community health workers. We spend time with our nurses making calls for transition and follow up appointments.

**Barbato** – One of the ways we justify our meeting time is to look at readmission rates. Another way is to look at the level of care decisions made by the team. Our home care people have seen a lot of activity moving their way.

**Question** – Are insurance companies an obstacle?

**Barbato** – We are seeing them change to outcomes-based payment. They don’t care how you get there; they care about the outcome. It’s up to us to apply the right skill set.

**Comment** – Departments of Health in every state are working to become more supportive of team-based care. They are also looking at payment at a national level. Departments of Health
and Medicaid agencies should work together. Pharmacy engagement is a huge part of the work we are doing.

**LEADERSHIP OF TEAMS – SELECTING THE TEAM LEADER**

Carol Hartigan, Certification Policy Strategist, American Association of Critical Care Nurses Certification Corporation

My remarks are a response to the American Medical Association’s model legislation asserting that physicians should always lead an interdisciplinary team. Critical care nurses collaborate closely with critical care doctors. So, we were surprised when the AMA’s language was adopted.

Recalling the origins of health professional licensing, physicians were first, so they declared everything the practice of medicine. Nursing followed the precedent of self-regulation. When I was first licensed, I was not authorized to sign a death certificate. That was the definition of nursing at that time.

In 1955, the American Nurses Association (ANA) issued a model definition of nursing, which affirmed that physician supervision was not required for all nursing functions. It did, however, prohibit nurses from diagnosing and prescribing. In the 1970s, Boards of Nursing began adopting modernized Nurse Practice Acts that included a new ANA definition of nursing that incorporated the concept of independent practices.

The consensus model for advanced practice nurses was meant to solve a problem arising from different eligibility requirements from state to state for various levels of nursing practice. The consensus model was developed in 2008, but still isn’t fully in force throughout the country.

There are also compacts for APRNs, RNs, and LPNs that facilitate mobility by allowing nurses to practice in other jurisdictions that have signed onto the compact. The APRN compact is the newest; Idaho, Wyoming, and North Dakota have joined.

In 2017, the AMA adopted a regulation to (1) effectively oppose the continual, nationwide efforts to grant independent practice (e.g., APRN Consensus Model, APRN Compact) for non-physician practitioners (APRNs, physician assistants, Doctors of Medical Science, Advance Practice Respiratory Therapists, etc.); (2) effectively educate the public, legislators, regulators and healthcare administrators; and (3) effectively oppose state and national level legislative efforts aimed at inappropriate scope of practice expansion of non-physician healthcare practitioners.

In 2018, the AMA published a Resource Booklet containing a rationale for why interdisciplinary teams should be led by physicians. The text is insulting to non-physician practitioners. Furthermore, it doesn’t say anything about leadership competencies.

**Q: Why should physicians lead the team?**

**A: Health care teams require leadership, just as teams do** in business, government, sports and schools. Physicians bring to the team the highest level of training and preparation and, as such, are the best suited to guide the other members of the team. Nurses are indispensable, but they cannot take the place of a fully trained physician.

Physicians are trained to provide complex differential diagnoses, develop a treatment plan that addresses multiple organ systems and order and interpret tests within the context
of a patient’s overall health condition. **The training and education of NPs is appropriate for dealing with patients who need basic, preventive care or treatment of straightforward acute illnesses and previously diagnosed, uncomplicated chronic conditions.**

NPs and physicians have skills, knowledge, and abilities that are not equivalent, but instead are complementary. The most effective way to maximize the talents of the complementary skill sets of both professionals is to work as a team.

Q: **Is this campaign an attempt to restrict the practice of non-physicians?**

A: **Quite the opposite is true.** This campaign provides health care teams the flexibility to allow the team’s members to practice to their full capacity. The AMA believes that increased use of physician-led teams of multidisciplinary health care professionals can have a positive impact on our country’s primary care needs.

A team-based approach would include physicians and other health professionals working together, sharing decisions and information, for the benefit of the patient. Physicians, NPs, PAs, nurses and other professionals would work together, drawing on the specific strengths of each member.

This country needs more physicians and it needs more nurses, and it needs them working together in teams. Physician-led, team-based medical practice offers promise for our American health care system—a system that provides the most effective, efficient, and cost-effective care for our growing patient population.

The booklet contains this description of physician led teams:

- Jointly licensed by the Board of Medicine and the Board of Nursing to practice as an APRN in one of the four APRN roles.
- An APRN shall only practice as part of a physician led patient care team.
- Each member of a physician-led patient care team shall have specific responsibilities related to the care of the patient or patients and shall provide health care services within the scope of his usual professional activities.
- APRNs practicing as part of a physician-led patient care team shall maintain appropriate collaboration and consultation, as evidenced in a written or electronic practice agreement, with at least one patient care team physician.

In contrast, this is what the consensus model says about the regulation of advanced practice nurses:

- Boards of Nursing will be solely responsible for licensing APRNs in one of the four roles.
- APRNs will be licensed as independent practitioners with no regulatory requirements for collaboration, direction, or supervision.
- Boards of Nursing will allow for mutual recognition of advanced practice registered nursing through the APRN Compact
- No collaborative agreement required.
And here is a 2016 list of nurse practitioner leadership competencies:

- Assumes complex and advanced leadership roles to initiate and guide change.
- Provides leadership to foster collaboration with multiple stakeholders (e.g. patients, community, integrated health care teams, and policy makers) to improve health care.
- Demonstrates leadership that uses critical and reflective thinking.
- Advocates for improved access, quality and cost effective health care.
- Advances practice through the development and implementation of innovations incorporating principles of change.
- Communicates practice knowledge effectively, both orally and in writing.
- Participates in professional organizations and activities that influence advanced practice nursing and/or health outcomes of a population focus.

Preparing for this presentation, I reached out to the APRN community and they supplied me with some examples of APRN-led teams that have produced positive patient outcomes:

**Holy Name Medical Center, Teaneck, NJ** launched the NP Care Model in 2012. This was a patient-centered collaborative care model for heart failure patients. Goals were:

- Reduce 30-day readmissions by 11% over 12 months
- Decrease cost per care
- Enhance quality patient outcomes through NP-directed patient education on disease self-management.

**OUTCOMES:​**

- 30-day readmission rates dropped to 8% from 26% over a 12-month period.
- Healthcare costs for the group of 312 patients receiving care via the NP Care Model was $311,818 during the 30 days after discharge. Prior to its implementation, cost of care for this patient population during the 30 days post-discharge was $1,019,405.
- The drop-in recidivism went beyond the initial 30-day discharge period. The 60-day and 90-day readmission rates for the group receiving care through the model were 4% and 3% compared to 27% and 29% in a group receiving typical care.  
  [https://www.healthleadersmedia](https://www.healthleadersmedia)

High-risk heart failure (HF) patients with complex clinical and social barriers often do not respond to or qualify for traditional interventions and supportive services. These patients unfortunately fail at home due to a lack of adequate resources. There is a need to provide additional support to this high-risk population.

**TEAM:**

HF Nurse Practitioner, HF Nurse Navigator, HF Clinical Social Worker, Community Paramedic, HF Clinic Nurse and ACO Program Manager

**OUTCOMES:**

Participants in the Multidisciplinary Community Paramedicine Program had a 53% (p<0.01) reduction in hospital admissions when comparing a 3-month period before
program enrollment to the 3 month period after enrollment. This group also had a 25% (p=0.15) reduction in ED visits comparing the same 3-month time periods. Conversely, the control group had a 16% (p=0.36) increase in hospital admissions and a 5% (p=0.82) increase in ED visits in those 3-month time periods.

**Christiana Care Health System**

To expand the Clinical Nurse Specialist (CNS) led, protocol driven, influenza vaccination program to outpatients with coronary artery disease (CAD) undergoing electrophysiology (EP) and cardioversion procedures in an innovative and novel location.

The goal was to maintain current rate of 26.7% or increase vaccination rates by 1% during influenza season.

- Total patients screened – 1,484
- Total patients vaccinated – 110
- Total program cost – $9,695.00
- Per patient vaccination cost – $93.54
- Cost of one adverse cardiac event – $19,642.00

**SAFE at Home (SAH) Program – The Heart Center at Children’s Health, Children’s Medical Center of Dallas**

Shunt dependent patient Algorithm For Effective AT Home Outpatient Management through Education

Newborns with single ventricle (SV) cardiac anatomy are the most challenging and complex of all infants born with congenital heart disease (CHD). The diagnosis of SV physiology is associated with the highest rates of morbidity and mortality in current practice. Surgical interventions have helped but interstage mortality remained unacceptably high for this facility from 2007-2009 at 17%.

**TEAM:** All Advanced Practice Providers (Nurse Practitioners) available to families 24/7/365

**OBJECTIVE:** Their hypothesis was that by successfully teaching the caregivers of these infants to care for them at home during the high-risk interstage period, they could decrease the mortality rate to zero.

**IMPLEMENTATION:** Caregivers are taught to use home equipment such as pulse oximeters, infant scales, nasogastric tubes, and feeding pumps. Prior to discharge, the caregiver “rooms in” for 48-72 hours and are responsible for all needs of the patient including feeding, bathing, medications, and use of home equipment. The home environment is simulated; no monitors are utilized. Caregivers must demonstrate understanding of the child’s needs and their ability to care for them.

**Loyola Pediatric Mobile Health Unit Chicago, Illinois**

Nurse Practitioner staffed and led

The clinicians on Loyola’s pediatric mobile health unit offer the following treatments and services:

- Asthma care
- Health education
• Immunizations
• Injury prevention education
• Nutrition education
• Prevention education for alcohol and tobacco use
• Sports physicals
• Treatment for common colds and medical problems

Similar units – Cedars Sinai Care Coach for Kids in Los Angeles, California.
Care A Van for Children at Norwegian American Hospital in Chicago, Illinois.

**Infection Control Committee Indiana Spine Hospital**

**Team:** Clinical Nurse Specialist (CNS) Lead; chief surgeon, chief of anesthesiology, head hospitalist, chief nursing officer, pharmacist, peri-op team lead, lab technician, inpatient and recovery nurses, and the physician head of the medical executive committee

**Objective:** CNS team lead follows every patient evaluating opportunities to reduce the risk of infection and other complications

**Outcomes:** This has resulted in a surgical site infection (SSI) rate of < 1%.

The success is a combination of the knowledge of the CNS combined with the support and input of the Infection Control Committee. When infections occur, the CNS completes an apparent cause analysis and shares the results with the Infection Control Committee; together they evaluate opportunities to reduce the risk of future infections.

Pre-op decolonization of the patients followed with a 5-day nasal decolonization was researched and evaluated by the CNS; this has resulted in a significant reduction in isolation based on a history of Methicillin-resistant Staphylococcus aureus (MRSA) colonization, improved patient satisfaction, nurse satisfaction and has resulted in zero SSI from MRSA

The CNS also collaborated with the medical director and pharmacist to develop antibiotic guidelines for antibiotic prophylaxis that supported antibiotic stewardship standards

![https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4276559/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4276559/)


Finally, here are some comments by critical care nurses showing that they appreciate the importance of having other professions as part of interdisciplinary teams. (Citations are available on my PowerPoint slides.)

• “...as the medical complexity of the patient population has increased, so too has the complexity of pharmacotherapy, with increased potential for adverse drug events and drug-drug interactions.
• “The addition of pharmacists to the critical care team has been associated with lower rates of adverse drug events and complications related to drug therapy, lower mortality rates in the ICU, and shorter length of hospital stay.
• “As the profession of pharmacy has moved from a product-focused to a patient-focused one, pharmacists have been successful in protocol development and implementation,
therapeutic drug monitoring, adverse drug event surveillance and reporting, orchestration of clinical trials, and provision of drug information within the ICU setting.”

- “Physical therapists identify and treat impairments in strength, range of motion, and potential adverse functional outcomes from prolonged critical illness.”
- “Prolonged immobility in the ICU can lead to ICU-acquired weakness and other neuromuscular impairment”
- “Promotion of early mobility and physical therapy in critically ill patients, including those with ongoing mechanical ventilation, is feasible and safe, and has been associated with reductions in the incidence of pulmonary complications, delirium, the number of ICU and hospital days, and subsequent readmissions.”

Given this information, who do you think should be the leader of the team?

Question – The IOM Future of Nursing Report in conjunction with the RWJ Foundation stated unequivocally that Advanced Practice Nurses need full scope of practice if the nation is going to have health care. What has happened in the intervening eight years?

Comment – Some states have put legislation forward to remove the barriers to APRNs practice every single year since that report came out. A number of those states are still unsuccessful. The Future of Nursing Report is the most widely read report that the IOM has ever produced. A year ago, economist Ben McMichael did a study showing that physicians are successful when put money behind fighting legislation that would remove barriers for APRNs. That’s really why we are still struggling so many years later. Those states where the barriers have been lifted are the top performing states every year in the health outcomes report. The worst performing states are among those that are the most restrictive.

Comment – What is the role for regulation around team-based care? Is it about legal, licensed permission to practice your profession? People should be regulated by people who understand how members of their profession are educated and prepared to practice.

EVALUATING THE PERFORMANCE OF TEAMS – ROUNDTABLE DISCUSSIONS

The audience was divided into discussion groups and asked to discuss the following questions:

(1) What data would be more valuable to utilize to evaluate team practice, and how can/should this data be gathered?

PROCESS MEASURES:
E.g., how well are patients integrated into the team? How do we measure this?
E.g., what are the intra-team communications protocols, if any? Are they effective?

OUTCOME MEASURES:
E.g., compare outcomes from specialized surgery centers with fixed teams in the operating room versus in-patient surgery departments with flexible teams. Which factors make a difference?
(2) Do licensing board regulators have a role to play in evaluating team practice?

E.g., investigating complaints? Requiring focused CE Avoiding unnecessarily restrictive scopes of practice? Collaborating and coordinating with facility regulators?

E.g., Do regulators facilitate or inhibit team-based practice? In what ways?

The following points were made in reports from the roundtable discussions:

- We feel that how well patients are integrated into a team varies from team to team. How do we measure effectiveness? Patient surveys.
- The effectiveness of communication depends on the leadership of the organization in which the team is practicing.
- Where teams are doing the same procedures repeatedly, this is likely to make a difference in outcomes compared to teams that are doing multiple procedures every day.
- We believe regulatory boards play a role in evaluating team practice. However, often the culture is not supportive. There appears to be a level of distrust and even hostility, which inhibits coming together in a spirit of collaboration.
- Rather than team leaders, have team coordinators so leadership is based more on the processes and functions of care at any given time rather than one overall leader.
- Outcome measures involve the expectations of care, better follow-up care, and overall patient satisfaction.
- Licensing boards share with one another when a good root cause analysis is done and the contributing factors that might relate to other professions are communicated to the other boards.
- At this point we regulate based on the individual as opposed to the team, but we think we can facilitate teams by the way we communicate with other boards.
- It is important to periodically evaluate how well individuals are performing their roles.
- The patient could be the team leader – or co-leader.
- It is important for the family to participate on the team.
- Everyone on the team and everything it does should be reimbursable, including administration.
- Patients should be aware of their outcome measures and evaluate them periodically.
- Regulators can refer complaints to the appropriate boards, depending on how many professionals are potentially implicated.
- Regulators may inhibit team-based practice if they impose unwarranted restrictions on scopes of practice.
- If regulators are going to get involved in quality assurance as part of evaluating teams, this will require a change in statutory authority.
- In Canada, all boards use a similar framework and vocabulary around competency measures so it is easier for them to talk together and work together.
- Handling complaints involving more than one profession is facilitated when boards share an attorney and investigators.
- Individual performance evaluations can be done in the context of team performance and the team’s goals. Individual team members get points based on how much they participate, what they do, or how much they contribute.
- When there are complaints and errors, it is rarely one person who is at fault.
- Outcomes are an important measure of how well teams are functioning. Hospital readmission rates, for example, and the number of patient interactions.
- Communication is very important.
- Organizational culture needs to foster team practice.
- It is important to use a variety of methods of communication, including email, EMRs, telehealth, face-to-face meetings. Follow up is important if members of the team do not immediately respond.
- Regulatory boards are set up to regulate individual licensees so it would require a culture shift and statutory revisions to put a team into a practice act or regulation.
- There is a role for evaluating a team in the investigation process.
- A board’s ability to require targeted CE depends on how the statute is written.
CAC offers memberships to state health professional licensing boards and other organizations and individuals interested in our work. We invite your agency to become a CAC member, and request that you put this invitation on your board agenda at the earliest possible date.

CAC is a not-for-profit, 501(c)(3) tax-exempt service organization dedicated to supporting public members serving on healthcare regulatory and oversight boards. Over the years, it has become apparent that our programs, publications, meetings, and services are of as much value to the boards themselves as they are to the public members. Therefore, the CAC board decided to offer memberships to health regulatory and oversight boards in order to allow the boards to take full advantage of our offerings.

We provide the following services to our members:

1) **Free** copies of all CAC publications that are available to download from our website for all of your board members and all of your staff;

2) A **10% discount** for CAC meetings, including our fall annual meeting, for all of your board members and all of your staff;

3) A **$20.00 discount** for CAC webinars;

4) If requested, a **free** review of your board’s website in terms of its consumer-friendliness, with suggestions for improvements;

5) **Discounted rates** for CAC’s **onsite training** of your board on how to most effectively utilize your public members, and on how to connect with citizen and community groups to obtain their input into your board rule-making and other activities; and

Assistance in identifying qualified individuals for service as public members.

Fee Schedule:
The annual membership fees are as follows:

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<th>Membership Category</th>
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<td>Individual Regulatory Board</td>
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<tr>
<td>“Umbrella” Governmental Agency plus regulatory boards</td>
<td>$325.00 for the umbrella agency, plus $275.00 for each participating board.</td>
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<tr>
<td>Non-Governmental organization</td>
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<tr>
<td>Association of regulatory agencies or organizations</td>
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<tr>
<td>Consumer Advocates and Other Individuals (NOT associated with any state licensing board, credentialing organization, government organization, or professional organization)</td>
<td>$100.00</td>
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To become a CAC Member Organization for 2019, please complete this form and email, mail, or fax it us.

**CAC**
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[cac@cacenter.org](mailto:cac@cacenter.org)

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**Payment Options:**

- Mail us a check payable to Citizen Advocacy Center for the appropriate amount (see Fee Schedule on previous page);
- Provide us with your email address so that we can send you an invoice and a payment link that will allow you to pay using any major credit card; or
- Provide the following information to pay by credit card:

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Signature: __________________________________________________________________________ Date __________________________________________________________________________

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